Freie Universität Berlin
Fachbereich Erziehungswissenschaft und Psychologie

CULTURE, DIVERSITY AND EDUCATION

Mimetic Learning for Sustainable Development

Inauguraldissertation

zur Erlangung des akademischen Grades

Doktor der Philosophie (Dr. phil.)

vorgelegt von Dipl.-Päd.

Julian Bomert

_____

Erstgutachter: Univ. Prof. Dr. Christoph Wulf

Zweitgutachter: Prof. em. Dr. Jürgen Zimmer

Tag der Disputation: 11.01.2012

Berlin 2012

Outline

CHAPTER I   HUMANKIND AND CULTURE

CHAPTER II   THE CHALLENGE OF GLOBALISATION

CHAPTER III   GLOBAL ETHICS AND SUSTAINABLE DEVELOPMENT

**CHAPTER IV   WHICH EDUCATION FOR SUSTAINABLE DEVELOPMENT?
                 PEDAGOGIC CONCLUSIONS**

Introduction

Education that aims to promote sustainable development must not (uni)form the human being but rather strengthen the attributes and competencies, which make the human being human(e). This is the central thesis, which the text systematically deduces and explores.

What is "meaningful" and hence what could "sustainable" mean? What could education for sustainable development look like? And how can such a concept of (education for) sustainable development not be ethnocentric? It is difficult to answer these questions, but possible to discuss them. Therefore, it seems crucial to look closely at the anthropological attributes, the "cultural making" of human being and the processes of human cultural development.

The human being is of cultural texture, or as Geertz states, "there is no human nature apart from human culture" (Geertz 1973: 49). Culture is the medium of human development and constitutional characteristic of the Homo sapiens, which translated means the "wise" human. Human "wisdom" seems to be synonymous with human cultural potential. Thus, for human being, culture is instrumental as well as an end in itself. Human beings, defined by culture, develop through culture.

Sustainability entails the striving to secure human development, the integrity of human existence in a heterogeneous world community and the integration of humankind into the ecosystem of the planet earth. Adjusting human development to the idea and need for sustainability, one must look at culture and at the tools, which culture provides.

In Chapter I, the text concentrates on the phenomenon of culture. The text perceives culture as a principle, matrix or mode (modus) of human organisation. Human organisation denotes the general arrangement between different cultural protagonists who mutually "expand the horizon of their possibilities" (Iser 1978) and hence increase their power through cooperation rather than through competition.

The microbiologists Margulis and Sagan found out in their research that "life didn't take over the globe by combat but by networking" (Margulis/Sagan 1986: 15). which relates to the stance of this text, considering culture as a medium for networking and the Human being a "Homo reciprocans" (Dohman/Falk/Huffmann/Sunde 2006), or a "Homo sociologicus" (Dahrendorff 1977).

Looking back at the successful expansion of the very elaborate human network (humankind) over the planet (globalisation), culture has enabled us to arrange ourselves with each other fairly well and to integrate ourselves into the life-enabling ecosystem. Culture has led humankind to become the dominant species on earth. The human population has increased and generally the health and life expectancy has improved, but particularly since industrialisation in the 19th and 20th centuries, global challenges have arisen from the same power, threatening humankind and the ecosystem.

Culture is the mode that regulates human existence and development and can activate powerful potential, for quite simple reasons: Culture facilitates arrangement between protagonists. Together these protagonists can deal with more complexity. A good example is the division of work: Community, generated through shared meanings, values, (e.g. political, economic, or religious) structures and cooperation makes it possible to afford specialisation. Community members categorise different jobs, and divide them to skilled members of a society, so that different members complement another, increasing reciprocally the complexity of their organisation. In this sense societies are synergetic systems based on the principle of unity in diversity, or respectively of cooperation. This is indeed an example for the cultural organisation and self-regulation (autopoiesis) of social life.

The reason for human self-regulation is that as matrix (or mode) of human organisation, hence of social and societal life, culture provides the preconditions for any human existence and development, for example, of political organisation, food production, or health security.
How does culture organise human networking and self-regulation? Culture, as such, provides a set of principle techniques, which all human beings apply across the globe and in every context. These techniques generally comprise verbal, and non-verbal forms of communication, such as ritual, symbols, language and narration. These techniques not only facilitate communication, but moreover they create something, which both communicating parties have in common; they create unity in diversity, communion and community.

Cultural techniques are means for strengthening the cultural reference system, a social system in which different protagonists arrange with one another. Culture is more than an abstract term that intends to compress the complex phenomenology of human being. Speaking more precisely about culture and approaching a definition of it, the text detects and explores different parameters of the abstract phenomenon "culture".

Networking and arrangement, communication and mutual regulation always involve the other; the other person or group, but also the other perception, truth, value, causality, desire

or limit, etc. The interchange between self and the other challenges the self and impacts on the self-identity. Consequently, Habermas (1981) states that identity is an "act of integration" and Rimbaud (1871) declared "je est un autre" (French: I is someone else). David Perkins recommends, "not to handle the person as a pure and everlasting entity, but as the sum and *swarm of participations.*" (Perkins 1992). This means that even on the micro-level of social organisation (society), concerning the individual identity, there is no homogeneity, but complex heterogeneity, which transforms dynamically throughout time. Moreover, according to Perkins, the other participates in the self. The self requires the other for its "own" self-making. The self can not create meaning without the other, since meaning is the concertedly negotiated, intentional agreement about how to integrate and arrange with another. This interchange with the other is, if it succeeds, mimetic. The text perceives mimetic interchange as the process of arranging with the other. Arrangement means that self and other remain different before, during and after the interchange, yet they create a certain relationship in which cooperative attempts generally prevail over competitive attempts. Hence, mimetic interchange promotes unity, just as it fosters diversity. Mimetic interchange is a lifelong-learning process. Throughout that learning process the cultural protagonist in its role as learner and (co-)creator of meaning, meaningful identity and society, bridges antagonisms. This means that through mimetic learning one can develop the capacity to build bridges, for example, between the self and the other, unity and diversity, the possible and the impossible, chaos and cosmos, competition and cooperation, contingency and continuity, knowledge and non-knowledge, and also between challenges and opportunity.

Human beings with sovereign mimetic competencies are able to experience the other not only as a challenge, but also as an opportunity, because through mimesis the other becomes an ally in order to deal more efficiently with difference and complexity. Dealing with complexity is an imperative necessity in a world with very complex, global challenges.

The United Nations Commission on Culture and Development states in its report "Our Creative Diversity":

> "People, however, are not self-contained atoms; they work together, cooperate, compete and interact in many ways. It is culture that connects them with one another and makes the development of the individual possible. Similarly, it is culture that defines how people relate to nature and their physical environment, to the earth and to the cosmos, and through which we express our attitudes to and beliefs in other forms of life, both animal and plant. It is in this sense that all forms of development, including human development, ultimately are determined by cultural factors. Indeed, from this point of view it is meaningless to talk of the 'relation between culture and development' as if they were two separate concepts, since development and economy are part of, or an aspect of, a people's culture. Culture then is not a means to material progress: it is the end and aim of 'development' seen as the flourishing of human existence in all its forms and as a whole." (Cuéllar 1998: 24).

Chapter I, accordingly, articulates the central thesis, that culture, constitutional characteristic of the Homo sapiens' (Lat: the wise human), mode of social organisation and human development, itself determined through mimetic arrangement, learning, meaning-making and identity-progression, provides techniques to help maintain itself as a referential, networked system by means of autopoiesis.

In this regard, culture appears as something unifying. This seems to contrast strongly many common perceptions of "culture" as an expression of – for example ethnic – differences. When people travel on vacation, they visit and eventually explore the other "culture". Huntington even tries to argue that cultures could "clash", which presumes difference as well. 2010 was declared, by the United Nations Educational, Scientific and Cultural Organisation, to be the International Year of the Rapprochement of Cultures.

The text assumes that culture is organised not only into theoretically abstract, principle modes as described above, but also through the practical interpretation of these modes, denoted as "patterns". The modes define how patterns evolve. This means that the patterns are unique, societal expressions of such modes, which they express diversely. In this sense the abstract, theoretical modes of culture are practically applied in society, unfolding socio-cultural diversity, (usually denotes as cultural diversity). While "culture" defines communicative, community- and meaning-making techniques, such as narration and performance, socio-cultural patterns are the expressions of particular stories, rituals, meanings, values, symbols, perceptions, etc.

Socio-cultural diversity is the expression of human agility, dignity and uniqueness as an end in itself. It isn't a disturbance factor in the promoting of a global ethics of human co-habitation and sustainability. Instead socio-cultural differences are mutually stimulating. Differences evoke friction and conflict, which can contribute to the innovation of socio-cultural meanings and societal structures. Mimetic learning "allows to suspend the self and to experience as well as regard it from the perspective of the other", states Wulf (2002: 84). Current meanings, represented in lifestyles, in consumption and production patterns, in national politics and the supra-national neo-liberal market-economy, have caused complex, global challenges that are growing. The "Limits of this Growth" (Donella/Club of Rome 1972) suggest that it is necessary to access and assess development alternatives. In is in this context that socio-cultural diversity becomes functional. Globalisation evokes global interdependences. These are not only economical or political (institutional), but also socio-cultural interdependences. Global challenges, such as climate change, the spread of poverty and population growth affect, at least in the long-run, all socio-cultural protagonists, all people and all societies.

Globalisation involves not only an increase in "complex connectivities" (Tomlinson 1999), but also the intensification of worldwide social relationships, through which remote places become connected to one another in such a way that occurrences at one place are formed through events that play out at a place many miles away, and the other way around (cp. Giddens 2001).

Through globalisation, the self and the other approach one another. This omnipresence of the other impacts and transforms the canon of socio-cultural meanings, identities and societal organisation patterns. In the case that the respective protagonists are able to conduct mimetic interchange and mutual arrangement, both can benefit ("win-win"):

Socio-cultural diversity ensures that different protagonists have different perspectives on shared challenges. Hence by means of this multi-perspectivity, which resembles swarm or collective intelligence, socio-cultural diversity provides the required development alternatives, which make it easier to head towards sustainability.

In this sense, "Our Creative Diversity" (Cuéllar 1998) represents and unfolds the human, autopoietic "treasure within" (Delors 1998), capable of overcoming the "Limits of Growth" (Donella/ Club of Rome 1972) and sustaining "Our Common Future" (Brundtland 1987).

Multi-perspectivity requires unity in diversity, a certain cooperative attitude and the capacity to cope with the other, with differences and complexity. Moreover, it requires protagonists, who evade discrimination and domination and who are sovereign, maintaining their own uniqueness by resisting the pressures of conformity, homogenisation and self-assimilation.

Mimetic interchange is not only beneficial, but challenging for all who are involved. Obviously it is important that the frictions and conflicts (in terms of diversifying, opposing, competitive attempts), which arise from socio-cultural differences and appear throughout mimetic interchange, are not more powerful than the arrangement between protagonists (in terms of unifying, affiliating, attempts at cooperation).

Harmony between different protagonists is important, but it is the "pragmatic harmony" between cooperation and competition, between self and other, and between diversity and unity, not the "absolute harmony" between the protagonists as individuals. That is why the text speaks of arrangement, rather than of peace in the absolute sense. Moreover, is that arrangement and "(socio-) cultural capacity building" a dynamic continuous process, connoting the development of sustainability, rather than sustainability as a (static) status quo. Dealing with difference and coping with complexity, friction and incertitude are competencies, which socio-cultural protagonists in their roles as shapers and learners can acquire. Learning with the other and hence generating, communicating, consolidating and innovating socio-cultural meanings, shapes perceptions of meaningful lives and meaningful development.

Such learning must not only occur implicitly by means of "socialisation", but can be explicitly invented, for example, through adequate formal education. Before the text analyses the criteria of such education, chapter II regards the context, which learning and human autopoiesis as such would have to address.

Chapter II explores the terminology and the phenomena of globalisation. The term "globe" is a spatial, geographic description of the planet. The term "globalisation", just as the term "glocalisation" (Roberston 1992) seems to refer to the human population, communication and action that spans over the entire planet earth.

Not only the globalisation of potatoes and spices, of certain conference rituals and the football game, but also results from archaeological research, for example about the Sumerians, Vikings, or the Roman Empire prove that globalisation is not something new. What is new is the depth of the human impact on the social system and the ecosystem, which increases global interdependence. Beyond this global, still spatial, geographic dimension of the human impact, there is a new temporal dimension of this "globalisation". Innovations such as industrial breakthroughs, capitalism, or scientific knowledge have pushed human development forward, but on their way they have also caused climate change, an increase in poverty and have led humankind to engage in risky actions, such as the usage of atomic energy, genetic modification and a neo-liberal market-economy. At this point the discussion is not whether these innovations are sustainable or not, the point is rather that we are taking risks which will affect not only all people on earth (spatial dimension), but also affect future generations (temporal dimension). More and more rapidly profound global issues emerge, challenging humankind and the ecosystem. Thus the new quality, or episode of human development – commonly denoted as "globalisation" – seems better described as a process of increasing tempo-spatial complexity. This complexity concerns different "worlds" of perception, such as the social, economic, or environmental "worlds", which lead to increasingly complex "mondialisation" (French, le monde = the world), which indeed seems to unfold the diversification, rather than the homogenisation of socio-cultural meanings, identities and expressions. Whether it is called mondialisation or globalisation, it threatens the social integrity of mankind as well as the integrity of the ecosystem, so that alternatives are required. Moreover, it is man-made and as such, it can be shaped.

Chapter III concludes that the principle challenge for promoting sustainable development seems to be, to overcome complex challenges (such as global issues) through even more complex reactions. Remembering chapter I, cultural techniques, and particularly mimetic learning with and through the other, enable protagonists to deal with complexity; they improve one's ability to access and explore alternative socio-cultural meanings and to

mutually "expand the horizon of possibilities" (Iser 1978). Mimetic learning is a very creative and intrinsically ludic process. Creativity is the ability to deal with the unknown, creatively human beings can create meaning beyond (the demarcations of) existing meanings. This is a crucial capacity to have in times when humankind is suffering from the effects of hitherto and previous socio-cultural meanings. Examples are the perception that nature is an eternally exploitable resource, or that neo-liberal economy contributes to sustainable development. Accordingly a paradigmatic change is required which brings humankind into the position to critically proof and eventually adjust socio-cultural meanings to fast and profound transformation of "worlds". The text therefore argues that mimetic learning empowers socio-cultural protagonists to create and shape functional and hence sustainable meanings, capable of transforming unsustainable consumption and production patterns, lifestyles, or political and economic systems.

In this context chapter III concentrates on concepts of sustainability and concludes that sustainability can neither be taught nor disseminated as any kind of ideology, scientific or even practical concept. Sustainability is rather the participative process of creating meaning, which different socio-cultural protagonists continuously generate and innovate through mimetic interchange. This meaning is not singular, but just as socio-cultural identity, it is a "swarm of participations". That means, this meaning is a heterogeneous bricolage, a cluster of diversified and further diversifying meanings. The elementary function of sustainability meaning is to endure the arrangement of the different meaning-making protagonists, hence to secure their community through arrangement with the respective other. In this sense, sustainability is a tool for socio-cultural protagonists to maintain their ability to arrange with the other and access multi-perspectivity. This multi-perspectivity and reciprocal self-other-arrangement increases the possibility of socio-cultural protagonists to invent sustainability meanings (e.g. desires, strategies, lifestyles, etc.), which *are* sustainable in the sense that they foster social equity, economic prosperity and environmental intactness, today in in respect to future generations.

Chapter IV argues that as a mode of human being and development, the concept of mimetic interchange is capable of building a bridge from the challenges of the very abstract "human development" to the tangible learning and shaping-experience of individuals. This means that every individual, in one way or another, brings with him the intrinsically human and humane "cultural competencies", which allow him to generate, communicate, consolidate and innovate socio-cultural meaning and hence to (co-) shape human development. This human potential can – and in times of increasingly complex challenges must – be potentiated. This can be achieved through adequate learning, which calls for formal education to empower learners to learn from and with the other and to deal with complexity and differences.

According to Wulf, such education can:

> "help young people to manage knowledge and arising desires independently and responsibly, and through the acquisition of knowledge, experimentation and experience to unfold personal abilities that help them deal with the increased complexity of life and lifestyles.", as says Wulf, (2002: 81).

Beck states:

> "This is a crisis. It is a result of the new incertitude and chaos of the world society. According to Albrow, "the identity" is of central importance. Who am I? Where am I? Where and to whom do I belong?" (Beck 182)

For the "culturally competent" self, that means a protagonist who is able to mimetically learn with the other and hence capable to "perceive itself from the perspective of the other" (Wulf 2002:84), it is easier to answer these questions. Though it is important to recognise the potential of mimetic learning it is as crucial to recognise that its importance does not only lie in its function. Mimetic learning and learning itself are not only functional, constructivist means to an end, such as the fostering of sustainable development. Mimetic learning is rather the ludic and lively expression of human agility and dignity, it is the basic attribute of the human being as "Homo ludens" (Huizinga 1939) and as such it is an end in itself. Therefore (mimetic) learning not only develops but in general it also constitutes sustainability. This simple conclusion calls for formal education to provide open space for learners to unfold their uniqueness and intrinsic learning desires, which rules out all forms of "factory schooling" (Manish Jain), "instructionism" and memorisation that takes place in "museum-like school institutions" (Zimmer 2000, 2007). Learners (and this can involve teachers in their roles as learners) do not require "interventions" from others who allegedly know what is good and meaningful for them to learn or to be and who allegedly provide them with non-inherent societal value through dominative "education". Learners rather require guidance, curiosity and competencies, which empower them "from inside" by means of "intravention".

The text argues that sustainable development requires socio-cultural protagonists who are sovereign in dealing with the other by cooperative means of mimetic arrangement. Protagonists are sovereign when they posses strong "cultural competencies"; lifelong learners, they know how to orient themselves in moments of contingency through the ascertainment, creation and usage and of "content-based", "technical" and particularly of "methodological" knowledge. Mimetic interchange means dealing with one's own limits, so that a learner is culturally competent and in this sense sovereign if he accepts his limits, e.g. limits to know and to succeed. Hence a culturally competent, sovereign learner is able to accept and eventually learn from mistakes.

On this basis and through such mimetic, cultural learning the learner can acquire "shaping-competence" (de Haan 2002, 2007). Shaping competence is a very elaborated set of criteria to measure education for sustainable development.

The mentioned concept of "cultural competencies" provides not only basic measures for the allocation and prioritisation of different categories of knowledge; it particularly provides measures for the pedagogical unfolding of shaping competence. Culture is transmitted through the cultural techniques of human networking, such as narration and performative learning. Taking these techniques into account as learning opportunities is essential for an education which aims to "educate the human to be humane" (a premise of the age of enlightenment, cp. Rousseau 1762) and to promote what is written on the entrance of the temple of Delphi: "Recognise yourself, become who you are". "cultural competencies" cannot be acquired per se because every human being possesses these competencies, but they can be strengthened. Strengthening these competencies involves the complete human being, the human intellect (e.g. cognitive knowledge) and the human body (e.g. body-knowledge); it involves all of the senses, the desires and fears of the learner.

Sustainable development is based on three elements: society, economy and environment. Education for sustainable development empowers learners to experience, comprehend and shape each of these three dimensions as well as their systemic cohesions. Another remarkable approach to education is found in the report "Learning: the treasure within" (Delors 1998), a result of global analysis over a period of three years by the International Commission on Education for the Twenty-First Century, headed by Jaques Delors.

The "Delors Report" (ibid.) focuses on the concept of "education throughout life". This is an education that involves four categories of learning, "learning to do", "learning to know", "learning to be" and "learning to live together". In the context of the United Nations Decade on Education for Sustainable Development a fifth category was added, "learning to transform oneself and society". The text combines the three dimensions of (education for) sustainable development, society (e.g. community and peace education), economy (e.g. entrepreneurship education) and environment (e.g. environmental education) with the five categories of "learning throughout life". As a result fifteen measures for education throughout life and for sustainable development are developed. Furthermore, examples are provided that show how these measures could be practically implemented in a secondary school. This innovative approach of "education throughout life for sustainable development" invigorates "shaping competence" (de Haan 2002, 2007) and the culture-anthropologically argued "cultural competencies". The presented concept of education for sustainable development is philosophically deduced and pragmatic so that it can inspire pedagogues, curriculum developers and policy-makers. Moreover, it may be interpreted in various ways and adjusted to different socio-cultural contexts.

Sustainable development is a global challenge, which means that education for sustainable development is as well. Hence, this (and probably any other) perception of education for sustainable development may run the danger of being ethnocentric. This is why it is important for the text to concentrate on the concepts of culture, mimetic learning, human autopoiesis, socio-cultural multi-perspectivity and "cultural competencies" as the core elements that legitimate globally – adjustable – measures for what education for sustainable development could be like. Indeed the mimetic principle of reciprocity is found in the Golden Rule. In "A dictionary of Philosophy", Flew states about the golden rule:

> "The maxim 'Do unto others as you would have them do unto you'. Various expressions of this fundamental moral rule are to be found in tenets of most religions and creeds through the ages, testifying to its universal applicability." (Flew 1997: 134).

The sustainability-principal of unity in diversity requires that education for sustainable development is heterogeneously interpreted and implemented. To make education for sustainable development concepts practical and to provide an idea of how diverse education for sustainable development approaches can and should be, the text presents various good-practices. It examines for example the life-situational approach, the School for Life concept and models, as well as the education initiative of the Zero Emissions Research and Initiatives, Boal's Theatre of the Oppressed as an example for performative education, as well as democratic education and the learning by teaching approach.

Obviously the text does not intend to reinvent the wheel concerning pedagogical and educational sciences, but to contribute to the philosophical discussion about what education for sustainable development could be. Moreover, it tries to collocate and integrate different educational theories, concepts as well as practices and to equip education for sustainable development with an all-inclusive bias and global mandate.

In other words, the text aims to draw a framework, provide criteria and measures for educational sciences and philosophy, which in themselves are as heterogeneous as possible and as universal as necessary for sustainable development. Moreover, the text aims to draw the framework, criteria and measures for a pedagogy (educational concepts and practice), which empowers socio-cultural learners to be as unique as possible (unfolding diversity) and as united as necessary to develop sustainably.

Annotation:
Wherever in this text, the masculine pronoun (he) is used for the sake of convenience, the feminine pronoun should, of course, be understood to be included.

The author translated German quotations into English language. The attached bibliography also clarifies the original language of the quotations.

Overview: Theses, Key Questions and Structure of the Text

Principle Thesis

Education that aims to promote sustainable development must not (uni)form the human being but rather strengthen the attributes and competencies, which make the human being human(e).

Accordingly, education for sustainable development strengthens the attributes and competencies, which inherently constitute the "wise human" (Lat.: Homo sapiens) and which regulate sustainable development. Such education is an end in itself (sufficient), celebrating the learner's uniqueness, and simultaneously it is functional, promoting sustainable development (efficient).

Annotation about Structure and Content of the Text:

Addressing education in the context of sustainable, "human development", involves the following questions:

1. Who are we? (What characterises the human being?)
2. What is the status quo of human development? (What is our context?)
3. What do we aspire to do (in order to live sustainably)?
4. And how can we achieve these goals (in a humane, dignified manner)?

These questions support humankind as well as individual persons in the analysis of gaps in organisation and integration. Moreover, they facilitate the adjustment of socio-cultural meanings, fostering adequate – thus sustainable – development. As such, these questions draw a "plot for sustainability". Education for sustainable development supports learners in the process of posing these questions and exploring unique answers to them.

Consequently, the text at hand applies this "plot for sustainability": This means that the text elaborates upon these questions chapter by chapter according to their sequence.

Following, the different chapters are briefly introduced:

HUMANKIND AND CULTURE

Chapter I: What is human autopoietic potential? ("Who are we?")

Questions: What characterises the human being? What are the "wise" attributes of Homo sapiens (Lat.: the "wise human")? How are culture, socio-cultural diversity and human regulation inter-connected? What are the human capacities to regulate human existence at present and human development by means of social, environmental and economic integrity?

Thesis: The human being is culturally defined. Culture as a mode of being human(e), provides techniques for interaction, communication and socio-cultural organisation. As such, for example, language, narration and rituals are cultural techniques, which make it possible to deal, arrange and learn with and from the other. Human cultural potential consists of different parameters, such as mimesis, socio-cultural meaning-making, socio-cultural identity progression and self-other arrangement. Mimetic arrangement with the other "expands the horizon of possibilities" (Iser 1978) and creates unity in diversity and multi-perspectivity, which allows humankind to have different perspectives on shared (e.g. social, environmental and economic) challenges. Gaining access to the perspective of the other allows for the assessment of one's own status of integration, hence to be able to see how functional one's own socio-cultural meanings are for the endurance of an existence in dignity. Mimetic learning is a ludic, creative process, an act of integration with others as well as an act of shaping and innovating the common. This means that, beyond assessing gaps in integration and organisation, mimetic interchange with the other provides socio-cultural meaning alternatives. These meaning alternatives can impact - or provide alternatives to – one's own socio-cultural identity-composition as well as societal organisation and human development patterns. Human beings inherently possess "cultural competencies", the competency to arrange with the other and deal with complexity.

THE CHALLENGE OF GLOBALISATION

Chapter II: What is the status quo of human development? ("Where are we?")

Questions: What is the context of the challenges to social, economic and environmental integrity? Does globalisation cause the degradation (homogenisation) of cultural diversity or does it also promote cultural heterogeneity and particularisation? What causes the global issues that we face and which development alternatives are required address them?

Thesis: The human ability to deal with complexity, to organise efficiently and accumulate powerful knowledge, is an expression of the success of human cultural potential. The resulting human (e.g. technical, industrial) innovations, socio-cultural meanings (e.g. lifestyles, production and consumption patterns) as well as societal organisation patterns (i.e. national states and politics versus globalised neo-liberal market economy) temporarily fostered human development. Simultaneously, they impacted the human system and the eco-system in a way that has evoked global issues, such as poverty and climate change, which turn out to become a threat to dignified human existence and development. These global, complex challenges do not only represent effects of previous socio-cultural meanings and human actions, but also bestow the human (socio-) cultural system with a new quality, since these challenges evoke spatial (i.e. global, or "glocal") and temporal (i.e. intergenerational, or enduring) interdependences and new, diversifying socio-cultural compositions.

_____

GLOBAL ETHICS AND SUSTAINABLE DEVELOPMENT
Chapter III: What do we aspire to do in order to live sustainably? ("Where do we want to go?")

Questions: What could meaningful development look like? Which principles, concepts, visions and ethics exist already and are they ethnocentric?

Thesis: The complex global challenges we face require mankind to mobilise the human cultural potential for autopoiesis. This requires an ethics of mutuality, represented for example by the Golden Rule, as well as an "ethics of sustainability". This ethics connotes that mimetic interchange with the other is not only beneficial for the self, but is an end in itself. Such an ethics does not anticipate what sustainability is supposed to mean for different (individual or societal) socio-cultural protagonists; it rather provides an open space of cooperation to negotiate what sustainability could be. Hence, such ethics fosters unity in diversity; it is neither static nor homogenous, but dynamic and heterogenic. It is participatory, inclusive and promotes the generation, communication and consolidation of possibly sustainable socio-cultural meanings, identities and patterns of societal organisation. In this sense it would be sustainable to achieve a society, which is as heterogenic as possible and as unified as necessary. Socio-cultural diversity (heterogeneity) is valuable because it constitutes and develops sustainability. Socio-cultural diversity, however, also evokes frictions and conflict. As long as these frictions and conflicts remain "discursive" (Apel 1972, Habermas 1991), they inspire the innovation or "creative destruction" (Marx, Engels 1848:

226, Schumpeter 1989) of socio-cultural meanings and organisation patterns (e.g. lifestyles, state and economic systems) as much as necessary to foster human social, environmental and economic integration. Sovereign socio-cultural protagonists, who have the capacity and motivation to mimetically deal, learn and arrange with the other, without feeling the need to discriminate (e.g. dominate, or assimilate) the other, are required Formal education should contribute to the mobilisation of human cultural potential for autopoiesis and empower socio-culturally sovereign lifelong learners.

WHICH EDUCATION FOR SUSTAINABLE DEVELOPMENT?
PEDAGOGIC CONCLUSIONS
Chapter IV: How can we achieve these goals in a humane, dignified manner?
         ("How do we get there?")

Questions: Which education and pedagogy convert human cultural potential (chapter I), context (chapter II) and vision (chapter III) into sustainable development? Which competencies must be strengthened in order to define, explore, participate in and shape sustainable development? How can "cultural competencies" for mimetic interchange, arrangement and regulation with the other be systematically promoted through social life and education?

Thesis: Education that aims to promote sustainable development must not reinvent the human being but rather strengthen the attributes and competencies which make the human being human(e). Instead of intervening in the development of socio-cultural protagonists in their roles as learners and shapers, education for sustainable development should support protagonists by means of "intravention" in order to strengthen and mobilise what they already possess; their "cultural competencies". Such education empowers learners to engage mimetic interchange with the other, performatively and intellectually. Interchange with the other involves exposure to difference; it involves friction and conflict. Thus, protagonists are sovereign if they accept and eventually learn from mistakes, are responsible for themselves and do not attempt to compensate for their failure by diminishing the freedom of others. Hence, it is crucial for them to remain cooperative and reduce competitive attempts even in moments of contingency. Sustainable development is a global challenge and opportunity, but how can educational concepts be globalised without being ethnocentric? The concept of "cultural competencies" reduces the risk of educational ethnocentrism and contributes to an important discourse. Moreover, it provides an anthropological backing and mandate for – and validates – the concept of "shaping competence" (de Haan), which defines measures of

education for sustainable development precisely. With "education throughout life and for sustainable development" a unique scientific approach is developed, connecting the three dimensions of sustainability with Delor's five categories of "learning throughout life" (Delors 1998). This approach is able to combine the concepts of "cultural competencies" and "shaping competence" with the acquisition of methodological (mimetic), technical and content-based knowledge.

Learning for sustainable development particularly requires performative learning in order to complement established cognitive dimensions of learning. The education presented in this text constitutes and simultaneously develops sustainability. That means, such education, based on mimetic learning is an end in itself (sufficiency) and it is simultaneously a functional means to empower learners to regulate and shape human development sustainably (efficiency).

The assessed measures for education for sustainable development are not only presented in their theoretically abstract form, but diversely applied in different pedagogic concepts and practical (school) models of which numerous examples are presented in the text.

CHAPTER I   HUMANKIND AND CULTURE

1.1   Introduction to the Role of Culture for Development

What is culture? The manifold existing definitions help us to understand mainly one thing: Culture involves complex human interaction. It is the mode with which human beings interact, and simultaneously the reason why they interact. In this regard, culture is a self-referential system. It organises and regulates "human being and becoming". This means that culture is a tool, which enables humans to live in dignity at present as well as to develop sustainably. In other words, culture provides orientation to every individual. This cultural orientation provides human beings with answers to the question of "how to live with security and in dignity?". Finding answers to this question is possible, in part, because culture incites certain behaviours and social values, which integrate different people in a social group. Moreover, culture provides the structures, which allow one to find answers to the basic question "why live?", in that it gives life meaning and sense. The ethnologist Geertz defines culture as:

> "a network of meanings, in which men interpret their experiences and to which men orient their actions". (Geertz 1983: 99).

Culture is represented and expressed in diverse socio-cultural meanings. Such meaning connotes collectively validated assemblies of information which function as guidelines to promote meaningful self-identities and meaningful lives. Such meanings are represented and expressed for example through behaviour, or social values, which in turn enable cultural protagonists (people) to reciprocally relate to one another. This in turn "sustains" the cultural reference system.

A commonly quoted definition deriving from the early Cultural Studies declares that:

> "A 'culture' contains the 'maps of meaning' that impart things [annot.: i.e. objects, subjects, actions, impressions] to their members. Those 'maps of meaning' are not simply in one's mind: they are objectified through the form [pattern] of societal organisation and relations.", (Clarke et al. 1981: 41).

A UNESCO definition, interesting because of the organisation's global, though political legitimacy, declares:
> "that in its widest sense, culture may now be said to be the whole complex of distinctive spiritual ritual, material, intellectual and emotional features that characterise a society or social group. It includes not only the arts and letters, but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs", (UNESCO 1998).

The term "culture" is derived from the Latin "cultura" stemming from "colere", meaning "to cultivate", (Harper 2001).

Culture places us in a social position and links us with society; it integrates us. Culture unites people within societies. In this way, culture provides the information needed for individuals to integrate in the "human community" and to know how to act, think, behave, feel, and express

in order to ensure this integration and "cultivation" in a continuous, potentially sustainable manner.

Every child is born into socio-culturally particular context. The child is socialised culturally through the respective socio-cultural context, represented for example through people who are close to the child, (especially the parents). Culture impacts on the child and makes it to who it is. Furthermore, from the first day on, the child also transforms culture; takes part in modifying it. For example, a child may shape culture by disagreement, (criticism) or support (affiliation), as forms of socio-cultural stimulation and construction. Culture does not only *integrate* human beings into society, it *involves* them directly and actively.

It can be concluded that culture creates the human being as well as it emblems humankind. In terms of function, the "culturalisation-process" is composed of two phenomena: the cultivation of its members (the human being) and the creation of culture through those members.

The World Conference on Cultural Policies (1982) states that culture "characterises a society or a social group". But culture is more than a parameter for distinguishing the different societal systems (e.g. societies or virtual communities); it is the description, the central constitution of human being as such, the Homo sapiens.

This text conjectures that culture is organised in modes and patterns. The modes define how patterns evolve. The patterns are unique expressions of such modes, they express diversely. That means for example, while "culture", generally defines communication and more specifically communicative techniques, such as narration and performance as such, socio-cultural patterns define (or respectively they are the expressions of) particular stories, rituals, meanings, values, symbols, perceptions, etc.

❖ Example:

Culture fosters self-referential systems, particularly through communication. That addresses the phenomenon "language" as cultural phenomenon, or respectively as a medium, or mode to maintain the cultural reference system. Language, hence is a cultural mode. German language, English language, Spanish language and all the other languages in turn are patterns. They are patterns because they are particular interpretations, or socio-cultural (hence socially relevant and society-defining cultural) expressions. Other examples of cultural modes are play, imagination, agreement, criticism, value, symbol, ritual, and meaning. They are culture-anthropologically abstract phenomena. Particular plays, imaginations, values, symbols, etc. in turn are bestowed with societal (society-generating and maintaining) specific meaning, so that these particular expressions are socio-cultural patterns.

Culture is the principle; socio-culture is the social or respectively societal interpretation and expression of culture in societies. The culture-principal is comparable to an operation manual or framework, which defines society (as a network). In other words, culture is the matrix of society. This does not mean that society is a unified and therefore singular or static construct.

Socio-cultural patterns (e.g. expressions, interpretations or applications of cultural modes) are always heterogenic and dynamic. Hence, socio-cultural expressions define societies, which therefore are socio-culturally diverse. But what is a society? Who belongs to it and who doesn't? The term seems to assume that a society is indeed definable and exclusive. Instead, society "only" signifies an open (not monolithic and autonomous, or defined) community system which is influenced and connected with other societies and which shapes the life situations of certain people. In the end, the term "society" is indistinct; it is a compromising, imaginative construct and this text uses it as such.

In this regard, humankind is organised, interrelated and connected through social groups, movements (e.g. virtual internet communities or the global scientific-, football-, or ecological movements) and societies. These organisations create a patchwork; they merge internally and inter-societally. This patchwork-layer covers the planet earth, however, it is not two-dimensional. One does not belong to the one society or to the other, but rather one belongs a bit to this society and bit to that one.

❖ <u>Example:</u>

One can feel and hence be German and Algerian (independent of what their passport indicates). At the same time, one can believe in Islam and appreciate Christianity, belong to the society of migrants and to the "society" of company managers, and because their partner was born in Ireland, this individual now belongs to his/her Irish family, while this partner belongs to the individual's Algerian family, etc.

Culture is a dynamic, dynamising, diverse, diversifying and therefore lively system of meanings. These meanings are codified and interpreted as socio-cultural patterns, such as symbols, rituals, narrations and languages. Not only are those socio-cultural patterns – symbols, rituals, narrations and languages – organised meaning-bearing entities, but they facilitate the organisation of those protagonists who apply them. Human organisation and continuous re-organisation (innovation) is a cultural performance; it calls throughout for the dynamic, continuous interaction of human beings. "On the surface" this organisation is as dynamic as it is heterogenic, which leads to contradictions and connections, frictions and affiliations, differences as well as commonalities.

This stimulates and even provokes a multi-dimensional dialogue between varied and unique cultural actors: individuals and social groups. That dialogue, or referring to and relating with "the other", is driven by the desire to overcome uncertainty. Uncertainty emanates from the confrontation with the unknown "other", and from the desire, as well as necessity, to establish oneself in relation to others. The dialogue is multi-dimensional in that the subject of interchange can refer to ritual, narrative, traditional, intra- or inter-generational, economic and philosophical facets of cultural, social life.

Culture shapes us by means of cultivation and provides the guidelines of how to conduct, organise, educate, empower and, finally, be and become ourselves. Simultaneously relevant for individuals as well as for society, this cultivation is a socialising process. It signifies "social development". This means that culture is the main parameter for human development. Moreover, because humankind decidedly affects the environment, culture becomes the parameter for development on a planetary scale.

Culture has elementary, identifying functions for human beings:
The new-born has an existence. But this existence is more than the pure physical function of the body as bio-system and the bio-dynamic life that the body conveys; this existence is more than the sum of its proteins. Human culture endows this existence with value (meaning), including the highest of values: the *value of life.* That value represents human dignity as it shall be implemented and protected in the way as it is stated for example in the Human Rights Convention, or found in each of the world religions (cp. the Golden Rule chapter 3.1.5 and 3.2.7).
Because culture involves a great number of diverse "members" (the world population in 2010 is 6,8 billion people), who all contribute their individual as well as societal input, culture is necessarily dynamic. Socio-cultural compositions transform, and modify, just as arts, lyrics/literature, music, science, politics and other human performances change over the time.

Culture shapes individuals, the environment and the human situation and places human beings in a position which endows them with socio-cultural values and the resulting social rights and duties. This can result in the absolutist perception that human beings act like oppressed robots without free will, and follow a precise cultural directive. Instead, the cultural matrix or mode functions as a framework.

❖ Example:

The constitutional state enables people to relate to one another according to the patterns of national state organisation, and it outlaws certain behaviour. This defined and confining framework supports citizens of the state to live in freedom, hence another term for the constitutional state is "free government under law". Obviously this requires that the wealth of the citizens is central aim of the respective national state.

In this regard, culture enables the unfolding of diversity within a framework. Culture is a reference system which provides techniques of social (for example societal) construction and destruction. A certain destruction – creative destruction – can be very important for a living system, since this incites innovation. Social criticism for example fosters the adjustment of socio-cultural patterns, such as meanings and institutional structures. However, the cultural framework, which promotes arrangement between protagonists, "suggests" that the cooperative construction should rule over competitive destruction. In this regard, cultural

techniques for, or patterns of human interaction signify a potential for human regulation. They offer possibilities to shape and participate in human development. That also means that the cultural regulation is not imperative: mutual regulation between people and between social groups must not automatically result from applying culture through socio-cultural patterns. Wars and environmental degradation are destructive socio-cultural phenomena, thus they can seriously endanger the security of the entire human species. War, for example, is a way to accumulate power and to define identity. But culture and cultural techniques, such as language, rituals and symbols enable individuals to interchange with one another; to cooperate and to compete, to differentiate from and relate to the other; to construct and to destruct. Thereby the cultural reference mode incites win-win situations which provide security, power and identity in very efficient ways (this will be further developed and further differentiated in the subsequent chapters).

At this point of the discussion it shall be re-emphasised that human beings do not only react to, adapt to and identify through culture: we equally create culture. And since human beings create culture, which permits them to live together (i.e. social construction, integrity and organisation) – and not to die together (i.e. social "laissez-faire" and "arbitrariness", "social destruction") – the entire meaning of culture is to continuously re-modify itself in order to promote cohesion. Individuals and societies are involved in co-creating and modifying culture through socio-cultural implementation and interpretation. Culture intrinsically strive for peace, because it aims for organising humankind in an accurately and timely manner. This does not, however, prevent social collapse.

❖ Example:

There are many different "high cultures", such as the Egyptians and Sumer, the Inka and the Xia Dynasty. The suspicion is, that they were not able to activate the cultural potential to regulate themselves and deal with competitors, whether these came from inside or outside the social group. Internal organisation can be strengthened and innovated ritually, through adequate government. Rituals are cultural techniques, that means they facilitate socio-cultural networking and mimetic arrangement. Cooperation can be established with external competitors using incentives to ensure security. Culture offers manifold techniques for dealing with the unknown and handling relations with the other, apart from polarising options such as assimilation, or neglect. Disaster preparedness is possible if a society accumulates adequate knowledge and communicates appropriately. Knowledge accumulation and communication are main aspects of meaning-making. Culture equips human beings with techniques to generate and innovate meaning efficiently and effectively.
Of course it is always possible to have inadequate disaster preparedness, internal organisation and inappropriate relationships, or respectively arrangements with competitors. But the more a society mobilises its cultural regulation potential, the better it can deal with complex challenges.

Huntington speaks of a "clash of civilisations" (Huntington 1998). He says:

> "It is my hypothesis that the fundamental source of conflict in this new world will not be primarily ideological or primarily economic. The great divisions among humankind and the dominating source of conflict will be cultural. Nation states will remain the most powerful actors in world affairs, but the principal conflicts of global politics will occur between nations and groups of different civilisations. The clash of civilisations will dominate global politics. The fault lines between civilisations will be the battle lines of the future." (Huntington 1993).

The diversity of socio-cultures, or respectively civilisations are relational systems. Their mode to operate relations is a (socio-) cultural mode. Relating and communication include friction, controversy and conflict. Their operation modes are not autonomous creations, but are impacted as well by other modes, so that different patterns indeed become shapes or interrelated expressions of a principal cultural mode. This cross-cutting, and principal interrelation shows that modes of culture are inclusive and cooperative, they seem to seek for the other. The term "clash" in turn connotes and promotes polarisation which refers to exclusion, competition and destruction as modes of operation. Socio-cultures and civilisations as such can not "clash". What seem to be "clashes of civilisations" or "cultures", are not conflicts of socio-cultural identities, but rather of economic and political interests, which can be aspects of socio-cultural identity.

In his novel "Imarat Ya'qubian" the Egyptian author Ala Al-Aswani (2007) reflected about taboos of the Egyptian society, such as corrupt politics, sex morals, daily violence, homosexuality and caste-like sub-societies. In an interview he said:

> "I do principally not believe in Samuel Huntington's 'Clash of Civilisations'. The collisions, the conflicts in history, they were always political; they were distribution conflicts about power, land and money. Historians should write this down. Literature refers to human history. It refers, among other things, to racism, prejudgments and to people who can simply not imagine how it looks on the other side." (Aswani 2009)

Indeed, politics are social, and anything social is defined culturally. "Economic or political clashes", however, are not representing cultures or civilisations as such; they represent *one* (contextual and particular/paradigmatic) aspect of it, an aspect with a destructive impact on an otherwise relational system or network. In this regard Huntington's theory is also problematic because of its polarising character: the term "clashing civilisations" requires further explanation. Who clashes with whom? Where are the border-lines? Such distinctions of boarder-lines require strong abstraction, which must fail to describe vivid and highly diverse cultural contexts.

Instead, socio-cultures or civilisations are not distinct but mutually generated, consolidated, communicated/expressed and innovated.

Culture is responsible for planetary development. Moreover, human beings create and shape socio-culture. Therefore, the human's responsibility to obtain sustainable, holistic socio-cultural development is definite.

It is in human hands to navigate the planetary development with a "culture of peace" – peace between humans and with the environment. Such a condition entails a culture or ethics of sustainability. This culture of peace, or respectively this ethics of sustainability, is a duty and a challenge, but it is also an opportunity beyond comparison.

The most important catalyst for a culture of sustainability is (the maintenance of) cultural diversity and its dynamic multifaceted potential for social innovation (cp. multi-perspectivity,

chapter 1.6 and 1.6.6). Cultural diversity holds the potential for the adaptation to, and overcoming of, planetary challenges because it provides different perspectives on shared problems.

Coming back to the linkages between human beings and culture, how does culture incorporate the newborn child? The parents' words, the sounds of their voices, the melodies of their narrations, the hands of the nurse, the room architecture, smells and gestures, etc.; all these elements are shaped by culture and, thereby, they represent culture. Culture is omnipresent and fundamental; it is absolute to human beings. Whatever human beings do is cultural and interpretive. Culture, first of all, operates implicitly. One example is the experience that the child has in different rooms. Wulf writes:

> "The mimesis of rooms and the action that takes place in those rooms generate the symbolic, culturally swayed character of apperceptions, movements and plots." (Wulf 2005: 99).

Through our physical and psychological capacities, and the complex usage of all senses, human beings are able to 'read', de-code or interpret cultural representation. Human beings have the ability to reconfigure the inherent cultural matrix of any experience-able object, subject or action. This cultural "classification" or "sequencing" allows us to experience random impressions as meaningful subjects, objects and actions. There are two interdepending dimensions of the powerful and profound process of "learning" culture:

1. The more passive dimension is to understand and comprehend culture. For a learner this involves, for example, the question: "What is meaningful for me and the people who influence me?"

2. The active dimension is to learn to integrate oneself in the experienced system, and beyond, to co-create and modify this system.

The cultivating learning process enables us to assess two sub-dimensions of the active dimension.

- First, our sense of unity and solidarity: the commitment to, and the integration in, the experienced, surrounding system. For a learner this reflects the questions: "What connects me with others? What do we have in common, and how do I relate to others?"

- Second, the potential of difference to the system: despite the solidary conformance to the system, everyone is also unique. That uniqueness is defined as a relative difference from the others and does not hinder integration; it is uniqueness within a certain unity. For a learner this reflects the questions: "How am I different from others, what makes me unique, where do I disagree with others?"

These two sub-dimensions convey so called "inter-cultural learning". Moreover, this inter-culturality exists, not only between societies, but also between individuals and even within

individual identity. From this perspective, intercultural learning is always cultural learning and cultural learning is always intercultural.

Recapitulating, it can be asserted that the human is a cultural being. He accumulates socio-cultural meaning, and disseminates, controls, transforms, modifies, creates and navigates socio-culture.

Culture reaches us through socio-cultural expression. Any expression is culturally swayed and, with representative character, disposed to communication. Human beings generate their socialisation, "culturalisation" or "culti-vation" through and from their socio-cultural environment. That environment is more than parents, peer group and media; it is the entire direct and indirect learning environment; the entire socio-cultural context. Only by its manifold expressions, such as rituals, traditions and values, can culture reach us. Through expression it can be communicated, interchanged and modulated.

Special attention should be given to rituals. Rituals transport implicit values, structure social organisation, and renew these structures of societies. Rituals appear throughout human life, they shape and represent socio-cultural meaning, so that the application of rituals promises its performers to live meaningful lives (cp. chapter 1.8).

❖ Example:

The implicity of ritual can also be illustrated by the example of the phenomenon of 'time'. Wulf states:
"Throughout the cultural organisation of time and the introduction of the individual into the time-system of a society, rituals play a decisive role. Very early, parents try to relate the rhythms of the infant to the time-rhythms of their lives and thereby accustom the infant to the societal normative acquaintance with time. (…) The order of time structures life: It determines the period of sleep; it canalises the infantile hunger and thirst. Very early time becomes *the* ordinal power of the infantile life. Through time, societal norms and values are mediated. By means of ritualisation these values are linked to the infantile body. The small child experiences time as social time and incorporates the structurally related schemes and values. From the ritualised acquaintance with time, a general assumption results about the formation of ritual knowledge and social competencies. The (timely) rhythms are modified to converge with the rhythms of the parents. By means of the ritual attitude, the parents try to influence the child." (Wulf 2005: 104).

Another tool of "cultivation" is narration, which appears to be ritualised as well. Bruner describes how narration, the process of "form-ulation" puts unsorted primary impressions into form by wording them, (cp.: Bruner 1997). This enables the individual or societal protagonists to organise impressions and bestow them with meaning and sense. In the moment that the impression has a form we can deal with it, put it into relation to our value system, and communicate it. This is the process of education and (lifelong) learning, of exchange, and of relating meaning to our lives.

This profound process applies to *all* humans and unites them, while the manner, type, and character of expression strongly differs between individuals as well as between societies, generating socio-cultural diversity.

❖ Example:

As mentioned above, a striking example for such diversity is language. There are 6,000 languages in existence. For Wilhelm von Humboldt, language was "the organ of the thought", (Humboldt 1836), the medium to construct our world. For Humboldt the plurality of languages is in accordance with the plurality of "world views" (ibid.).

Further examples for diversity can be found in the dual – the socio-cultural and economic – nature of products, services, music, instruments, literature, stories, dances, forms of agriculture, administration, fashion, alimentation, gender relations, etc. Sometimes expressions are so different that their meanings can even be antithetic. For example, touching the head of a child in France may be an expression of appreciation of the child. In Thailand, the same action could be understood as an insult because the head is perceived to be the spiritual center of the body, and to touch it would be disrespectful.

Bell discusses the ritualised process of expression:

> "The deployment of ritualisation, consciously or unconsciously, is the deployment of a particular construction of power relationships; a particular relationship of domination, consent, and resistance. As a strategy of power, ritualisation has both positive and effective aspects as well as specific limits to what it can do and how far it may extend. While it may be an effective way of acting in certain places at certain times, under other conditions it may be useless and counterproductive." (Bell 1992: 206).

Wulf explains the "culturality" of humankind:

> "The human being is not found 'behind' the diversity of his historical and cultural appearances, but inside them." (Wulf, 2002).

It is only within the cultural "frame of meaning" that we can construct a position from which we are able to act. This position can also be called identity. Identity describes, not only the integration in a cultural system, but also the involvement in the system and in the system's evolution. In this text the term "identity" will be used in the broadest sense; it is understood as a compromising description that consolidates a heterogenic diversity of socio-cultural streams and influences as the unified voice of a socio-cultural participant.

Every socio-cultural identity, whether an individual or social-group identity, has a heterogenic character. At every moment our identities are nothing more and nothing less than a temporary, or fluctual, cultural composition that continuously evolves and modifies. However, our identities put us in position to *be* and to be reactive, hence to develop and become. Beneath this temporary dimension there is a more quantitative dimension of socio-cultural identity. Identity emerges on different levels and depicts:

- individuals
- social groups, movements or civilisations; including religions
- the species Homo sapiens; humankind as global anthropologic community

Without identity, values, meaning, sense, and orientation for behaviour, humankind can simply not exist. Without these tools, one would not be able to make priorities and choices, which are essential for survival. Culture is fundamental, even existentially important for humankind. It is the status quo of our existence, although it is a very lively and dynamic status quo.

Geertz explains:

> "Without the orientation of culture-systems – organised systems of significant symbols – the behaviour of man (annotation: individually as collectively) would be uncontrollable, a complete chaos of random, confused, aimless, unfocussed actions and erupting feelings, and his experience would be without form or meaning. Therefore, culture, the entirety of such systems is not only an adorning by-product, (…) but a necessary condition of human existence", (In: Geerz, et al. 1992).

And with the words of Jerome Bruner:

> "The creation of a [cultural] frame governs the 'construction' of our world; the frame identifies the transformation (flow) of meanings, validates occurrences in this world, etc. If we would not be able to create such a frame we would loose ourselves in a swamp of chaotic experiences and presumably would not have survived as a species.", (Bruner 1997: 72).

Since culture equips us, our society, history, future, presence, our existence with value and meaning, culture and its various forms of expression – the socio-cultural diversity – are more than instruments for cultivation, socialisation and social integration. Culture and its diversity are ends in themselves. They are the ensign of human life.

To summarise, socio-cultural diversity refers to the differences in the expressions of culture in the sense of sociological phenomena. Such differences can be ethnologically, religiously and locally specific, to give some examples. A web of culture unfolds over the entire planet; it is a mosaic of cultural diversity, in different "colours and shapes", of different ages and histories.

This image of cultural diversity is transferable to bio-diversity, which draws a picture of a bio-system with manifold species and characteristics. What characterises biological- and cultural diversity is first of all its dynamism and heterogeneity. Both diversities are naturally transforming and diversifying over time, following the laws (modes) of their evolution.

In nature, evolution refers to the process where an archetype of a species, which is stimulated by mutation, transforms over the centuries and thereby adapts to changing living situations. Socio-culture is stimulating itself by the various forms of cultural expression called socio-cultural diversity. One cultural protagonist (e.g. an individual or a social group) affects the other: For example, two people start to exchange or to dispute, affiliate and oppose in the moment of confrontation. In most cases, this leads to further communication. The interactions and dialogues between socio-cultures always keep them in a productive process and create progress. This intercultural dialogue is essential for the flexibility of culture as such; the "culture of humankind".

The „culture of humankind" is a uniting, although not unifying or standardising, cultural frame for the dynamic unfolding of socio-cultural diversity. This dynamism is not accidental, because the transformation has a meaning as profound as the meaning of culture itself. The purpose of culture is to create an integrated and social group of humans. Thus, the assessment of the success of culture must be based on the present condition of human

integrity (peace), an appropriate environmental condition, and on the present visions of a "better" future. Both, the present situation as we experience it (e.g. climate change) and the *visions* of a "better" future (e.g. "What is sustainable development?"), predefine and empower a sustainable future. "The future (…) is an act of the imagination", Ziegler states. (Ziegler 1987)**.**

During the entire process of human evolution, humanity was regularly confronted with innovations. These innovations were mostly self-made and they challenged the established canons of meaning. Examples of such innovations are: the development of language, politics, media, religion, science, technology, the division of work, etc. These and other innovations regularly bring profound changes into the lives of people. Transforming innovations are rooted in desires, visions and the imagination of people. Subsequent to their establishment and achievement they, reciprocally, demand for a new and adequate adaptation of socio-cultural meanings. With the resulting new lifestyles, people's self-conceptions re-adapt to the new situation. This empowers people to develop an "up-to-date" operational mode to re-organise society, rationally and with a minimum of conflict. Today, humankind is organised in an increasingly complex and interdependent manner affecting the entire globe, and communication technology accelerates the accumulation of knowledge. Therefore, the sovereign empowerment of the human cultural ability and the competent use of cultural techniques to regulate human being and becoming are increasingly required and challenged. The reactions to innovations (examples mentioned below) must be increasingly complex, quick and consequent. The process of overcoming complex challenges and inertia by even more complex responses is called "human development". The following figure presents some of the main challenges to human development.

Figure1: Socio-Cultural Innovations: Human Development Input and Challenges

---

Human development often connotes the socio-culturally driven creation of all kind of innovations. Simultaneously, different innovations challenge human development. These are examples:

- genetic engineering and manipulation
- industrialisation's effects on society and environment
- mass media development
- information and communication technologies (ICT)
- transportation
- scientific insights
- nuclear power
- globalisation

Knowledge is not necessarily supportive of social well-being. Only in the case that knowledge is socially (and environmentally) embedded, is it valuable for human

development. This means that socio-cultural innovations require socio-cultural organisation to adjust in order to allow for human development. Some of the most relevant "global issues" are mentioned in the figure below. These issues signify the gaps in human organisation in terms of human existence at presence and human development.

Figure 2: Examples for global issues

• climate change	• food shortages
• loss of bio-diversity	• lack of basic hygiene
• poverty	• spread of incurable diseases
• HIV/Aids	• ethnic cleansing
• war and errorism	• lack of (access and quality of) education
• corruption	
• population growth	• food dumping
• water and nutrition problems	• international migration rules
• social and economic inequality	• gender inequality
• drinking water supply	• the crisis of democracy
• desertification	• disfunction of the world economic system (including global financial architecture, trade rules, investment rules, competition rules, intellectual property rights, E-commerce rules, international labor rules. etc)
• human rights violations	
• human trafficking	
• child mortality	
• crime and corruption	

A question that the text will follow is how to organise humankind more efficiently.

Every human development input and every innovation (cp. figure1) have in common that they are potentially dangerous for development. Simultaneously some of them are excellent resources for development – mostly for a certain historic (limited) period of time. It appears to be difficult to assess and conclude what is innovative, and whether this innovation is productive or destructive to human development. To unfold the potential, for example, of mass media to contribute to human development and to overcome dangers, such as HIV/AIDS, requires an applied ethical orientation, critical analysis and adequate management by individuals, groups and organisations (such as states). It is necessary to identify the problem, recognise the challenge and, subsequently, to develop an adequate ethical position to the respective innovation in order to (re)act. There is not – and must not be – a singular authority to assess and make conclusions about innovations from a top-down approach. Therefore, the overall network of people in their political functions and socio-cultural roles participate in developing humankind. The term 'political function' refers, for example, to civilians, state or business representatives, scientists, media recipients, artists,

etc. They are socio-culturally swayed, explicit participants in – and constituents of – societal organisation. Rather implicit, bottom-up approaches to participation in meaning-making, and hence in conducting human development, are socio-cultural roles which refer to identities such as parents, friends, neighbours, colleagues, individuals etc. With every thought and action, every individual contributes to the confirmation or innovation of the societal status quo, creating and maintaining meaningful communities.

Taking the example of a child, Bruner describes how the mimetic arrangement generates meaning and community:

> "The child does not begin his life within his group as an autistic match ball of primary processes, but rather as participant in a larger, public process which negotiates public meaning. And such meaning is only advantageous if the child can share it with others." (Bruner 1997: 31).

In this context he mentions:

> "Clyde Kluckhohn, (…) used to re-emphasize that the human beings do not end up on the surface of their skin, they would rather be incorporations of culture.",(ibid.)

Everybody participates and co-shapes socio-cultural meaning, organisation and regulation. This participation is a great potential for comprehensive adjustment of meanings, organisation and regulation. Furthermore, this participation is the basis of individual uniqueness and dignity. It is true that the power and the "amplitude" of influence varies greatly, for example between the rich and the poor, so that there is not equal opportunity and equal participation by far. However, the global interdependence and the opportunity for individuals to participate in meaning-making has never been as great, or as necessary, as it is today.

Considering the massiveness and simultaneous intensity of various challenges, a new positioning and self-perception of humanity is crucial. Only this can ensure orientation and meaning for the individual, as well as for societies and the heterogenic world-society as a whole. The challenging inputs in human development, deriving from socio-cultural diversity and the above mentioned innovations, demand for a new frame, or set of meanings, of values and of socio-cultural identities. Such culturally possible and socio-culturally heterogenic paradigmatic shift of socio-cultural settings would signify the ability of humankind, indeed as such, to deal with complexity and difference. That shift in turn will affect for example social structuring, decision making, knowledge accumulation, lifestyles, economy (i.e. production patterns), and consumption. It would promote a reduction of poverty, of environmental degradation and of violent conflicts.

In order to proceed a paradigm shift a fruitful, heterogeneous and lively "network" of socio-cultures, or socio-cultural protagonists such as individuals, social movements and groups is required (cp. global issues, above; and multi-perspectivity, chapter 1.6/ 1.6.6). The challenges have socio-cultural effects and roots, but they are cultural challenges. In other

words, culture – the human mode for cohesive regulation – provides the techniques to organise society in socio-cultural terms.

The challenges, such as the mentioned global issues derive from complex and collective perceptions, desires, visions and imaginations as they represent socio-cultural meanings, facilitated by cultural techniques.

❖ Example:

The spread of the HIV virus is not only a biological incident, but is significantly impacted by socio-cultural factors, such as the supply of medicaments, prevention-patterns, the influence of religion and national policy.

Challenges, such as HIV/Aids or globalisation, are irreversible and must be managed through the activation of cultural techniques, or respectively by the empowerment of culturally competent socio-cultural protagonists.

In this regard, the challenges we face demand complex socio-cultural reactions and collective, nowadays global, re-positioning of humankind. It is evident that in order to be reactive to such situational challenges, humankind depends existentially on its socio-cultural diversity. The need for complex solutions calls for a (re-)active, complex organisation. In this regard "complex" denotes diverse. Socio-cultural diversity is a pool for complex innovation, integrity and arrangement, essential for human development and integrity on earth. It is not only the most probable complex organisation of humankind; it is also the only possible organisation of humankind (cp. "heterogenisation" in chapter 1.2 and 2.2).

A paradigm shift can not be promoted through top-down management of institutions, such as states. It rather demands for the participation of all socio-cultural protagonists to comprehensively innovate previous meanings, structures, values, lifestyles, etc. Slaughter, therefore, considers socio-cultural participation "in processes of social innovation, recovery and renewal", (Slaughter 1991).

The cross-stimulating socio-cultural diversity constantly transforms in terms of a "regular irregularity". The target of this transformation or, respectively, of human development is:

- to re-adapt socio-cultural meaning and organisation (society) to current social and socio-economic situations as well as to the environmental context

❖ Example:

Subsequent to industrialisation, it was "discovered" that the environmental degradation was harmful to human well being. As a result, environmental values and criteria for environmental integrity were developed. Hence, environmental meanings increasingly accomplish the overall set of socio-cultural meanings.

- to shape situations and contexts through adequate meaning-making

❖ Example:

Besides discussions about CO_2 emissions, courses of action are implemented. Whether the "amplitude" of socio-cultural meanings and the motivation to reduce the emissions will suffice, is not yet determined. Different socio-cultural protagonists, such as citizens, NGO's and governments as well as the private sector, media and scientists all participate in assessing and implementing alternatives to CO_2 emissions. They do this so that the environmental context and the social situation (i.e. consumption and production patterns, policy, media attention) are influenced constructively, or at least less destructively.

- to anticipate and prevent dangers for integration and integrity.

❖ Example:
Science and politics, as well as non-governmental organisations and movements, promote the assessment of environmental dangers. Subsequently, meanings which influence the lifestyles and self-identification of people, social groups and movements, can be adopted (see above) and situations can be constructively (responsibly/sustainably) shaped.

Adequate meaning, or respectively the re-constitution of appropriate, innovative, accurate and therefore meaningful perceptions deal with the questions of "Who are we? How do we relate to each other and to humankind as a whole? And what is our purpose?". Every individual, society or social movement will answer differently, but still there are trends, so that differences can also be perceived as variations of common perceptions. This results in a pool of locally as well as globally relevant alternative perceptions and development options. These options are generated (assessed and created), they are communicated (expressed, disseminated and accessed), consolidated (maintained and conserved) and innovated (questioned, renewed and creatively destroyed) through the support of cultural techniques.

Cultural diversity is therefore the parameter to the sustenance of human culture in terms of sustainable human existence (integration and integrity) and becoming (development). The entire cultural system itself, the fundament of human existence, is a complex creation and continuously creative process. As mentioned earlier, the system provides different techniques, such as language, rituals, cognition, modes of perception. They all facilitate the communicative proceeding of socio-cultural meaning.

❖ Example:
It is not sufficient to understand how to utilise the knowledge, for example, of fire (1), oil (2), nuclear energy (3) and trade (4). We have to be creative in developing and establishing new, more appropriate guidelines for the use of such powerful innovations. The task of such efforts is to potentiate the constructive potential of innovations for human development and to decrease their destructive risks. For the individual, the deriving standard-setting implications could be: "Don't throw a cigarette in a dry forest (1); use a filter if you drive a car, or go by bike (2); deliberate about using nuclear or renewable energy in your household (3) and be aware of your consumption patterns (4)."
For society, a similar framework could be: "Implement action plans for disaster reduction, such as fire (1); develop alternative engines and technology,such as filters (2); analyse the danger of nuclear energy/ create and control resolutions against weapons of mass destruction (3); set up restrictions and make appeals for sustainable production patterns (4)".

Creative innovations (e.g. the mobile phone, internet, or industrialisation) lead to new lifestyles, rituals, traditions, and values. They incite the development of even more accurate technologies, which in turn elicit the creation of new technology and meaning-solutions. Humankind seems to be "condemned" to development and dynamism.

Admittedly, to this day, human beings profit from this intense "developmental vacuum pull", even as the condemnation of development is also being heard. Humankind established dominance on the planet and is constantly amplifying the potential for raising the living standard. Due to this ceaseless development, creative, complex innovations are essential in order to ensure control over the newly accessed or "activated" powerful potential (empowerment) to sustain life as such on the planet.

Cultural diversity is equitable with creativity, because it signifies a global pool of meanings. This variety of perspectives, possible imaginations and perceptions, have made the evolutionary success of the human species possible thus far.

From the perspective of cultural diversity as a creating force, it becomes clear how essential, even existential, the role of creativity is. The report of the World Commission on Culture and Development, accurately titled "Our Creative Diversity" states:

> "It is ever more necessary to cultivate human creativity, for individuals, communities and societies can adapt to the new and transform their reality only through creative imagination and initiative." (Cuéllar 1998).

Individuals affect others simply through their presence; this means that the expression of identity, intentionally or not, necessarily stresses *unity with* others and *difference to* others stimulates the involved people. Being with others co-affects the collective canon of what is socio-culturally meaningful. Throughout the interplay with others the protagonists affiliate with, or oppose to the canonical, hence they confirm the canon, or work on its innovation. This "canon" is what is experienced as and expected to be sequential, linear or "normal", in other words, anticipatable. The canonical is meaningful. Besides applying collective, cohesive and therefore canonical meaning, everyone is unique and different. This difference can evoke innovation. Meaning does not homogenise differences. As a homogeneous project and process, or respectively as a cluster of heterogenic participations, it connects differences and refers them to one another.

Human being and becoming are connoted by unity and the cohesion with others *and* being is connoted by difference. Therefore being and becoming are creative phenomena.

The diversity of human beings signifies a network of unique identity creations. Due to the uniqueness of any human being, a person co-creates his/her socio-cultural environment. In this context, it is helpful to consider the socio-cultural difference of identity-expressions, experienced, for example, as friction, dispute, conflict, or criticism. It is mostly an unconscious, rather indirect form of criticism that arises from differences and tensions between people. Such tensions must not be reduced to indifference and "clashes", but rather can be considered controversial and "friendly" tensions or frictions arising from a difference in character or personal meanings. These differences may arise in forms such as: perceptions, emotions, personal experiences, biographies, imaginations, expectations,

priorities, fears, dreams, hopes, desires or visions. Depending on the moment, day, year and from situation to situation, the individual has different characters and different forms and means of characteristic expression. In this regard, the individual configures differentiated and heterogenic "personal culture" and identity. This means that every individual, as the smallest constituent of socio-cultural identity (micro-level), is a unit, cluster, or component of intra-individual socio-cultural diversity (macro-level), affected by and affecting the societal socio-cultural diversity.

❖ Example:

A simple example of this is fashion. When one begins to dress differently, they may remain alone with their propositio, or incite a new fashion trend. Admittedly, it seems that the individual is rather activating a fashion, which was prepared by a collective process, than causing it. In other words, the "trend-setter" uncovers a concealed collective trend, and, as social benefit, will be recognised for the discovery. This means that setting a new trend is usually not a coincidental "accident", caused exclusively by an individual. It is rather the break through of an already existing collective and complex desire, demand or vision, which is brought to the surface by a particular protagonist. Nevertheless, this protagonist plays a crucial role; a role which is understood differently in the different regions of the world. While, for example, in Europe the individual seemingly tends to define the meaning of the group, in Asia the group seemingly tends to define the meaning of the individual, (although such comparisons run the danger of stereotyping). Whatever the patterns of meanings in different societies, the fact that they are different to other meanings and moreover heterogenic in themselves evokes social stimulation. This confrontation is the initial moment of communication which leads to reciprocal reference and the possibility of exchange between individuals.

Auernheimer argues that for social innovation only such expressions are selected which promise to be tools for the overcoming of challenges. He states:

> "Generally it can be assumed that only those cultural impacts [annotation: or stimulations] are considered, which promise solutions for an experienced problem. This leads to the strongest driving force of cultural transformation: the change of our living-conditions. However, no automatism shall be presumed – therefore the use of the word "change" is problematic. Men are rather compelled to deal with economic- and socio-structural shifts. In this regard all people work on their culture. The deriving innovations do not preclude the relevance and adduction of tradition.", (Auernheimer 2003: 75).

Nevertheless, since culture is an end in itself, the non-target-oriented cultural dimension is meaningful too. Art, for example, has a functional and socio-culturally constructive dimension as it interprets, expresses, provokes, summarises, reflects, criticises, or parodies the established socio-cultural canon, and stimulates meaning-(re-)making processes. Simultaneously, art is dignified socio-cultural expression, and besides its functional, constructive or destructive function, it is an end in itself. Therefore, human existence and development signifies, in essence, art (of living).

Because of the multiplicity of participants in social transformations, innovation is always a group process. This applies to fashion, as well as to technology or the natural sciences. The fashion case is - due to its transparency of operation - an explicit, visible and therefore tangible example of social stimulation (see example above). However, social stimulation most often remains "quiet", or intangible; it is the performing, communicating, expressing and exchanging of invisible social messages in everyday life, (as in the example of the mimesis

of rooms mentioned above). Follet emphasises the potential value of social group processes based on her observation of groups in different educational settings in "The New State: Group Organisation, the Solution of Popular Government" (Follet 1918). Referring to her conclusions Fox and Urwick accurately remarked:

> "She noticed that people in groups produce results both in thought and action that could not have been produced by any of the participants acting or thinking separately. Each person contributing to the process influences the thinking of the others, but in turn the person is influenced by them so that the final product is not the sum of what each had to offer at the outset, but something new and different from anything the participants could have produced individually." (Fox, Urwick 1973).

Socio-cultural diversity enables human self-regulation. Any socio-cultural identity is a creative and creating composition of socio-cultural meanings. These meaning-compositions are not autonomous, or isolated; instead, they refer to meaning-aspects of other socio-cultural protagonists' identities. All meaning-aspects have common biographical roots and function within a shared, meaningful framework, which facilitates the safeguarding of diversity and connection simultaneously. In this way, socio-cultural identity is heterogenic. Moreover, as other socio-cultural protagonists continuously communicate different, hence stimulating meaning aspects, socio-cultural identity is a dynamic phenomenon. The identity of any socio-cultural protagonist is nourished by socio-cultural interchange; unifying a diversity of nuances to form an overall, comprehensive, unique, and meaningful plot. In its essence, the protagonist *is* relation. As connector and synthesis of cultural meanings the cultural protagonist nurtures cultural interdependence.

This also means that difference- and development-stimulating friction occurs throughout the processing of socio-cultural identity and meaning-making. Individuals as well as societies are heterogenic and internally diverse as well as externally different and unique. Moreover, individuals are linked with other individuals and with societies, and societies interrelate with other societies as well. Together, all socio-cultural protagonists build a comprehensive, interdependent network. The thesis of this text is that this network, the cultural reference system, not only signifies the human being, but that culturality is also responsible for the well-being and sustainable development of humankind. The aim and duty for any socio-cultural protagonist (for example in education), should, therefore, be to activate cultural competences in order to relate to and arrange with others so that diversity and unity coalesce, promoting uniqueness and integration.

The resulting socio-cultural network or system is a comprehensive, inclusive form of human organisation. It specifies the human to be "wise"; (Homo sapiens, Lat.: the "wise human"). The configuration of the socio-cultural system is constructed by the interaction between intra- and inter individually diverse identities on the one hand, and by societal socio-cultural

diversity on the other. The interrelation between different socio-cultural protagonists configures an overall, pluralistic and dynamic socio-cultural system that processes a commonly shared, omni-participative culture of humankind.

The Homo sapiens is not only successful and powerful because he is able to walk on two legs and thereby gets an overview on complex situations in nature. The Human is "wise", because he is generally able to generate and communicate an analysis of almost any complex challenge. The source of his wisdom is culturally determined as culture provides the techniques to refer to, and relate with, the unknown other. This enables all involved socio-cultural protagonists to assess challenges and access solutions which are potentially more complex than the respective challenges. Culture equips humankind with the ability to generate, communicate, consolidate and innovate meaning which, in turn, effects identities, organisation and orientation and thereby regulates human being and becoming in term of sustainability. Sustainability, in this case, refers to human dignity, integration and integrity.

1.2 Socio-Cultural Identity – A Dynamic Swarm of Heterogeneous Participations

As stated earlier, every socio-cultural protagonist compounds the elements of socio-cultural diversity and is simultaneously a component, and a cluster, of socio-cultural diversity as such. The socio-cultural protagonist, a person or social group, is irregularly constituted and "framed" through a phenomenon which is called "identity". Identity represents socio-cultural meaning interpretively, and, reciprocally, it shapes this meaning. This chapter addresses the different aspects of "identity".

Identity is a concept which aims to describe a complex aspect of socio-cultural protagonists as they represent socio-cultural meaning and participate in socio-cultural meaning-making. Indeed, the term "identity" arose around the same period as the discovery and large scale production of the mirror (the early sixteenth century). This indicates the correlation between identity and conscious- as well as unconscious dimensions of self-perception. The author Hanif Kureishi explains:

> "In the moment when humans were able to study their own faces, emotional expressions and bodies, they could ask, who they were and to what extent they differ from others or resemble them." (Kureishi, H., 2003: 43. "In fremder Haut". London, Kindler).

This example is conferrable to shifts in human self-perception affected by the first photographs of earth from space.

The term "identity" is a conceding social arrangement; a compromise that seems to pretend a singularity where there is actually pluralism. Every person has manifold, varying, overlapping, interweaving, multileveled identities, and, what is more, these identities transform over time. This makes it difficult to constitute an overall identity or "mental body". At the same time, physical bodies are also not persisting; they are alive, and therefore continuously exchanging

matter with their environments through alimentation, the renewal of cells, and through the physical configurations of growing, aging and dying. Both, the mental and physical bodies of human beings are metabolic and both comprise and incorporate a variety of constitutional fragments.

Due to its inconceivability, in science, the term "identity" was and is rightly discussed in a very critical manner, often used with proviso and abstinence. This text deals with identity as "socio-cultural identity", and perceives it as a heterogenic and dynamically transforming phenomenon.

Wulf states:

> "No individual is a unit; every individual is composed of contradictory pieces, each with its own desires for action." (Wulf 2002: 83).

By the end of the nineteenth century the French lyricist Arthur Rimbaud formulated the phrase: "Myself is another." (French: "Je est un autre."), and Wulf, in turn, declares:

> "The complexity of the relation between the self and the other originates from the circumstance that they are not confronted as two separate entities. Rather, the other is incorporated into the genesis of the self. The other is not only outside, but also within the individual." (Wulf 2002: 83).

In this context, Bruner speaks about the "self as a transactional act" and highlights the dynamic as well as the pluralistic character of identity. He asks:

> "Is not the self a transactional relation between a speaker and another person, in fact, a generalised other? Is it not a mode of framing one's own consciousness, innate position, identity, and responsibilities towards others? In this regard, the self becomes dependent on dialogue; it is constructed for the recipient of our discourses as well as for intra-psychological aims." (Bruner 1997: 110, 111).

Claude Levi Strauss emphasises that "the human is a narrating as well as narrated creature", (Levi-Strauss 1963), thus identity is generated within the stress field of self-determination *and* heteronomy. Bruner argues:

> "The Self must be understood as a construction, which –in a manner of speaking- arises externally as well as internally; on the way from the culture to the mind as well as from the mind to the culture", (Bruner 1997: 117).

He summarises:

> "The psychologists began to question whether the large circle of persons which interest an individual, do not play a role as accomplices in their narratives and self-constructions. Would this circle of accomplices not be something like a "distributed self"? (…) In the same manner that our knowledge is captured by the net of culture, our selves are involved in a (annotation: socio-cultural) network of fellow men." (ibid.: 122).

David Perkins utilises the metaphor of a shoal. He recommends, "not to handle the person as a pure and everlasting entity, but as the sum and *swarm of participations.*" (Perkins 1992). Participation refers to the fact that one's identity is not an autonomous and independent, but rather a participatory and inter-active phenomenon in which far not only the respective self is involved. A swarm is lively and dynamic. Moreover, in nature, a swarm consists of many different swarm "protagonists" or members. They are affected by the overall community, and

they shape the group's organisation, knowledge and regulation in a participatory manner in terms of collective intelligence (cp. "multi-perspectivity" in chapter 1.6/ 1.6.6).

Because of its preciseness and tangibility, Perkins' perception of "identity as a swarm of participations" shall define the concept of identity in this text.

The generalised other must not necessarily be an individual; it can be represented by the individual's entire learning-environment and socio-cultural context. The generalised other particularly appears "throughout" life in the dynamic organisation of communities. Höffe elaborates on the diversity of communities, composed of many different characters and comprising a multitude of others. He writes:

> "The question of what the decisive (annotation: "identity-causing") community is can not be answered in a singular way, but rather in plural ways. (…) The nuclear or extended family (clans) can be important, as well as neighbourhoods, towns, or states; they can be ethical as well as religious or linguistic communities. Communities may be based on the affiliation with a profession, school or university, sport clubs, orchestras, citizen clubs. (…) None of these communities is mono-causal, autonomous and distinct." (Höffe 1999: 167).

Habermas speaks about identity as an "act of integration" (German: "Integrationsleistung", cp. Habermas 1981: 214ff); it is an open and uncompletable "project" (cp. Keupp/Höfer 1997: 11-39).

> "Identity is activated, initiated, and stimulated again and again through (critical) incidents; it is a complex of (re-) constructions and something which has to be regularly negotiated. Metaphors such as 'patchwork' or 'bricolage' appropriately describe the development of identity.", (Auernheimer 2003: 69).

He explains more precisely:

> "The individual is confronted with the task of switching between his needs on the one hand and the expectations of his environment on the other, in order to continuously 'negotiate' his identity. These influences are often different from one another, and even contradictory. Identity, therefore, is the ever temporary result of a negotiating process." (ibid.).

In this context, "identity" is understood as the cultural composition *of a* person (or respectively of a persons socio-cultural attributes) *as a* person; it is the dynamic processing of transitory being and continuous becoming.

The strength, but simultaneously the dilemma of language, is its ability to condense complexity into rather limited terms. Through this limitation, the complexity of the phenomenon can be explicated and, thereby, more easily communicated. Although there are alternative and more complex forms of communication, such as performative rituals, science is rather based on simplification. Empiricism is a good example of the scientific condensation of complexity into a matter of apperception, negotiation and reasonable consideration. Nevertheless, science is interwoven with rituality; they are inseparable (cp. "rituals" in chapter 1.8). The heterogeneity and dynamism of life urges science to consider diffuse issues, such as identity, and to use rather open, inclusive definitions. This also applies

considerably to the issue of sustainable development, which will be assessed later in the text (cp. "sustainable development" in chapter 3.2).

With the term "identity", the compromise to condense the subject's complexity, appears especially problematic. To imagine and define "identity" as an exclusive and definable unit is almost impossible. On the other hand, for democratic values such as participation, human rights and freedom, it is essential to identify the identity of persons. Such identity-identification and differentiation may run the risk of stereotyping and acting as a relative differentiation. However, within the concept of identity, it is still possible to consider every socio-cultural protagonist as unique and irreplaceable socio-cultural incorporations of life.

The consideration of "socio-cultural identity" is valuable if it is perceived as a temporary "moment of relation" or a heterogeneous and dynamic "swarm of participations" (Perkins 1992, see above), which is interdependent with other "identities" and, therefore, not an autonomous entity. This means that identity is not a separable unit or component of socio-culturality; it is rather an "act of [socio-cultural] integration" as Habermas (1981:214ff) explains it.

Although we often may not know who we actually and entirely are, the idea of our own identity is an idea of who we seem to be. Socio-cultural identity empowers us with sovereignty, with certitude, meaning, security and immunity from assimilation. It prevents self-annulment and the disorganisation of the overall socio-cultural system.

Auernheimer explains:

> "Simplified, the topic "identity" can be translated into the questions of "Who am I? Who do I want to be?", without the need for asking those questions expressively." (Auernheimer 2003: 64).

Our socio-cultural identity is not written and imposed in a determining, secret script. We experience, and ask ourselves implicitly about, our mental texture, structure and appearance. We measure the accuracy and integrity, hence the functionality, of our socio-cultural identities on our perception of what is meaningful meaning and throughout the interaction – hence together – with others (feed back). This enables us to identify, assess, compose and re-compose our identities. Moreover, such supple and sovereign socio-cultural identity is not only able to adjust itself to a socio-cultural situation; it is also able to co-shape this situation competently.

It is the questioning of oneself, which appears to be primarily essential for the identity building process. In order to question our selves, it is helpful to attain a certain distance. This distancing can be playful and requires "the other" (the other person, meaning, perception, lifestyle, causality, etc).

❖ <u>Example:</u>

If a company manager imagines, or even experiences what it is like to be an employee who works on his team, it enables the manager to perceive and adjust his own self-perception, or even to develop, or respectively to confirm, his manager identity.

Central to this discussion is the point that the questioning of and search for identity is not about finding the "right" or "real" perception of who we are and who we want to be. (Auernheimer 2003: 64, cp. above). The idea of self-identity does not aim to "read" reality, but rather to create it continuously. In the words of Keupp: There exist no "predetermined patterns for biographic design" (Keupp, Höfer 1997: 35); identity is a design that is derived from the heterogeneous socio-cultural interchange, for example, between individuals and society. Significant is to *have* (eventually proceeding, transient) ideas of our self-identities, regardless what the actual pattern of this idea finally is. To have an idea of our identities, dynamic and temporary as they may be, bestows us with the orientation necessary to organise living together with others, and to live in dignity. The idea of their own identity empowers the protagonist to give meaning to being and acting. Because meaning is a complex socio-cultural phenomenon, sovereign identity enables individuals to participate in meaning-making, and hence integrates the protagonist in the community of meaning-makers. In this sense, community is the intentional assembly of protagonists who process meaning in order to live meaningful (for example secure) lives.

Through the consolidation of a diverse and dynamic socio-cultural identity, we place our actions and beliefs in a socio-cultural position, which refers to a certain place, and to an actual moment. We situate ourselves, project ourselves and, finally, create our own existence. The concept of identity follows the principal of a "dynamic framing"; it draws demarcations (exclusive framing) that separate us from others and, at the same time, affiliates us with others (inclusive framing), it relates us to environmental contexts and social situations. Identity is the process and result which, emerges from relation-setting, communication and negotiation with the other, i.e. with environment, with persons and communities.

To recapitulate, socio-cultural identity is the inward formation and outward expression of a person as a person; it is the condensation of being and precondition for acting. Moreover, the idea of socio-cultural identity is a basic element of socio-cultural diversity. Or, put differently, socio-cultural diversity is a "swarm of cross-participating identities".
This socio-cultural perso-diversity (diversity of individuals/persons) is the condition for socio-cultural meaning-making; it stimulates and innovates meaning. Every person has different fantasies, different opinions, may write different books and songs, dances differently, expresses themselves differently, has different lifestyles and different life-rhythms, etc. Thereby, for every person, another person signifies a pool of meaning alternatives.

Moreover, every person is continuously re-configured and differs from himself from day to day and moment to moment. To go a step further, not even for a single moment could this

person be considered a singularity; instead he is a plural, heterogenic and contingent "swarm of participations"; a cluster or grouping of the manifold.

This equips every person with unique characteristics – the person's character. Without uniqueness there is no difference, hence there is no diversity. Such uniqueness does not mean that beneath all differences there is no connecting meaning, bond, or socio-cultural thread. As individual identities are compositions, or clusters of various, vibrant, socio-cultural impacts, (opinions, affections, values, etc), they are compelled to cluster in socio-cultural groups or communities (i.e. the nation, an ethnic group, a social movement, etc) and those groups finally converge to compose the human being on earth. This being is heterogenic and dynamic.

The term "identity" cloaks diversity, because it gives the impression that there is a universal word, which captures something originally unique, complexly divers and dynamic. Paradoxically, this term is also indispensable for the recognition of uniqueness and socio-cultural diversity, because – in the compromising manner of language – it tells us what the subject of this diversity and uniqueness is about: they address and describe identity.

To recapitulate, it can be assumed that no identity is a fixed, static and hermetic "block" of homogeneous being, but is rather a dynamic, processing and interrelated, heterogenic open system. Concerning "mentality" and "socio-cultural identity", Wulf argues that they are, "(…) not self-contained blocks; but rather they are reciprocal, penetrable and alternating linked up." (Wulf 2002: 93). Flechsig states, that "the insight, that 'cultural identity' is a theoretical as well as social construction", (Flechsig 2002: 65).

Despite its limitations, the term "identity" and synonymously "socio-cultural identity" are integral concepts for this text.

1.3 Mimetic Learning – About Meaning, Self and the Other

The development of the socio-cultural identity requires self-reflective negotiation. Not to be misunderstood as a self-determined formation, this development is made up of interchange with the other. We depend on the other, and the other depends on us. The term, "the other" addresses representations of "the other" meaning, such as the other person, opinion, value, perception, or even, the "other self". Contact with the other is the generalised source of socio-cultural stimulation. Such stimulation is essential for the individual's adaptation and integration into their social and natural environment. On the macro-level, this also applies for different socio-cultures, represented for example by: societies, communities, movements, ethnic groups and other social groups. Just as individual persons, these groups depend on other socio-cultural influences in order to remain reflective and re-active. Thereby the different social groups become integral co-determents of the human societal system – shaping it throughout different historic epochs and in respect to different circumstances.

The following passage emphasises the creative formation of individual socio-cultural identity through the interchange and *interplay* between self and respective other. This process of self-other referencing is denoted as mimesis or, respectively, as mimetic learning. Wulf describes mimetic processes:

> "They refer elements of a symbolic and imaginary world to cultural elements of another world. This can occur by tangency, by convergence or by differentiation (…). In any case, through mimetic processes, something new arises. The contact with the symbols of other cultures, for example, leads to new images, shapes, forms and metaphors. The mimetic reference to African painting at the beginning of the 20th century, and the appearance of modern jazz or reggae are examples. The contact with a foreign, artistic practice inspired European and American artists to create a new kind of music. Today, however, those processes of exchange are not confined to artists, musicians and authors; they influence the daily life of many people. The marked globalisation and new media disperse goods, patterns and practices, which come upon regional traditions. Through mimetic processes they produce new lifestyles and new [annot.: socio-] cultures of performance. This results in profound changes to local, regional and global cultures; new interactions, mixtures and hybrids appear which cause new cultural identities." (Wulf 2002: 84).

He further explains:

> "Through interaction with other cultures, with the other within their own culture and the other within themselves, the competence is developed, to experience and think from the position of the other. During this change of perspective it is important to avoid the consuming reduction of the other into an aspect of the self. The task is to suspend the association with the self and to experience and observe it from the perspective of the other." (ibid.).

Hegel (1770-1831), emphasised this sort of alienation in his speech at a secondary school in the year 1809 as one of the conditions for theoretical education, (Hegel 1809). In order to become an actor (i.e. a socio-cultural protagonists and participant in societal processes), nature and spirit must have obtained „the character of something peregrine", (ibid.). Hegel mentions that the occupation with the world of antiquity would be useful for education, because it represents the "historical other". The self could train, consolidate and review its own configuration through the process of dealing with this historical other. This confrontation would include the questioning, confirmation, criticism, and consideration of socio-cultural meanings inherent in the (in this case historic) respective other.

We need the other in order to generate and develop ourselves through the relation-setting with, and positioning to it.

The change of perspective that Wulf describes above is synonymous with a bird's eye view of the self and one's own socio-cultural identity. Due to this meta-perspective, the self has more information at its disposal, which allows for a more accurate apperception of oneself. Moreover the other can uncover possible disintegration of the respective self in his social environment.

❖ Example:

If a person has trouble with their neighbours and friends, who all criticise the persons politeness, then these others reflect a possible gap in the individual's social integration. This gap in integration represents a moment of discontinuity in the common organisation. This means that the friction between the person and their neighbour and friends is a friction between self and other which uncovers the potential fragility and instability of the overall arrangement between all involved parties.

What does the individual do in the case of a crisis, for example, if they lose the keys of the house? Do they sleep at a friend's place? Do they go to the neighbour and fetch a spare key? These actions would be difficult in the case of trouble between the parties. What do the neighbour, or the person's friends do when they lose the keys to their house? It may be difficult to ask the friend who makes trouble for help. Hence, the individual requires feed back from others for accurate (integrated) identity-formation and socio-cultural meaning-making (i.e. adopting the appropriate politeness). The individual also requires the other in order to maintain functional social networks and secure integration. Reciprocally, the respective other (neighbour, or friend) requires the individual (respective "self") for the stability of their network and secure integration. Moreover, they also require the individual's feed back in order to understand, stimulate and even to modify or develop their own implicit identities and socio-cultural meanings (i.e. of politeness). Sound and supple socio-cultural networks provide security and a framework for dealing with complexity and, particularly, with complex challenges. (Cp. "multi-perspectivity" in chapter 1.6 / 1.6.6).

Konersman describes culture as the „mobilisation of the possible. The extent of the cultural horizon evokes from moments of contingency." (Konersman 1996) and creates moments of cohesion. Konersman's perception of "contingency" can be described as stimulating and hence constructive frictions, controversies and ambivalences, which appear throughout self-other relations and interchanges. The other assists in the extension of the "horizon of the possible", according to Iser. (Iser 1978).

This text, therefore, refers to the mimetic principle as a process of arrangement between self and other. In this text, the mimetic principle shall, therefore, be defined as the "mutual extension of the horizon of possibilities".

Following this logic, the other allows the self:

> "to comprehend and participate in shaping the entire fullness of conjunctions of the inconvenient as well as of the convenient. In this context it shall be evocated that Ricoeur even denoted mimesis to be a ‚metaphor of reality'." (Bruner 1997: 76).

Keupp argues that the other empowers the assessment of „alternative options, possibilities and utopias", (Keupp/Höfer 1997). To substantiate this abstract concept, Luhmann's theory of art (cp. Luhmann 1995/2000), serves as an example.

❖ Example:

According to his theory of art, literature serves a unique function in society; it produces "world-cohesion". This means that literature generates an alternative, fictitious, second reality apart from the "real reality". Literature provides an inexhaustible pool of ideas from which new conceptions of how our reality could be better, more beautiful, more interesting, or simply different, are derived. It possibly provides the individual, for example, with conceptions of how to love differently, how to consume differently, how to act more politically, how to re-conceive the relations with their parents, how to reorient priorities, and how to perceive oneself and the other from new perspectives.
Literature represents various complex historic, cultural and ethnic settings. It illustrates alternatives and takes the reader on a journey to discover the perspective of the other.

Furthermore, the mentioned alternatives can be assessed from other, often more abstract sources than literature, such as utopic projections, interpretation of history, artistic expressions, perceptions and traditions as they are communicated throughout societies. This

means that "the other" must not always be a person. In any case, central to mimetic learning is the interplay between self and other.

Wulf writes:

> „The mimetic movement resembles a dance between the unknown other and the self. It does not rest in the proximity of one or the other; it sways between the two. Representations of the other are controversial. They must appear as they appear; they could also have different appearances. The representation to which the mimetic process will lead is open and determined through fantasy as well as on the symbolic and social context. (…) The many different and heterogenic appearances resemble to dances; they are chosen figures, evolving throughout the mimetic movement. The mimesis of the other leads to aesthetic experiences, which imply the gamble with the unknown and result in an expansion of the self into the other." (Wulf 2002: 89, 90).

This passage alludes to the performative character of mimetic processes and denotes the relevance of the mentioned rituals in such processes (cp. "rituals" in chapter 1.8).

The "mimetic dance" occurs not only as mental performance, but as a development, empowerment and hence learning process which involves the human being in its totality; mind and body:

> "Mimetic learning is a sensual, body-based learning, which enables us to learn patterns, schemes, and the movements of practical action. That learning proceeds unconsciously and creates effects which are essential in all areas of cultural development", (Wulf/Gebauer 2004, 2005).

Mimesis allows the individual to arrange, or build a relationship with the other; a situation which is advantageous for both. Mimetic movements create socio-cultural, and hence meaningful, win-win situations.

In other words, the mimetic process can be imagined as a sort of pact which relates the two parties and arranges them. The effect of mimesis is the "subjectification" of the respective other, which means that the other is de-stereotyped, or "de-objectified" and bestowed with value and dignity. Symbolically, the other attains equal status, which enables negotiation between self and other. Indeed, the other becomes an associate of the self; the self reciprocally becomes an associate of the other, which empowers self and other to negotiate about the most stable relationship. Such negotiations take into account the different elements which make up a meaningful life. In addition to the social dimension, these elements include environmental and economic dimensions of human existence.

Through mimetic movement the respective other moves back and forth, from the unbeknown to the acquainted, from the "transcendent" to the "immanent". By cooperative, mimetic means the self enlarges his "world" by relating it to and sharing it with the "world" of the other. This may give rise to new perspectives on values and the successional (life-) coherences and meanings. Based on this mutual association, respect can be built and/or opposition can be communicated between self and other, different positions can be debated and tolerated and fruitful stimulation can be evoked: Mimesis potentiates, what's more, it enables, human development.

It is by the mimetic process of making contact with, relating to and positioning oneself in relation to the other, that socio-cultural diversity unfolds its potential for creative innovation and constructive development. Such "mimetic success" – in its simplicity as well as in its aesthetic performance – allegorises the utopia of peace.

Human being and development is determined by diverse and dynamic, creative and complex organisation. In this regard, the human being presents himself as "Homo ludens"; the man as player. "Homo ludens" is the title of a book written in 1938 by the Dutch historian Johan Huizinga, which discusses the importance of the play-element in culture and society. Huizinga writes:

> "Now in myth and ritual, the great instinctive forces of civilized life have their origin: law and order, commerce and profit, craft and art, poetry, wisdom and science. All are rooted in the primeval soil of play." (Huizinga 1939).

The Homo ludens generates his abilities through the process of playing, in the widest sense. He discovers himself in (relation to) the world and he uncovers the features of his character - particular abilities, talents, motivations, knowledge, knowledge-gaps, weaknesses, or desires - in terms of various commonalities with and distinctions to others. In this way, he develops himself. Playing is synonymous with freedom of action and presumes innate thinking or consciousness. Thus, Homo ludens becomes what he is through self-generated experiences involving interplay with the other.

Just like creativity, play is a force, a cultural technique to deal with the unknown and with complexity and to endeavor to comprehend it. Through play, one can experience the "other", i.e. the other strategy, causality, perception, role within a safe framework.

❖ Example:

Role play for example enables the protagonist to leave his own role and to play another. That experience, again, can stimulate one's own role and cause its modification. Playing cards, on the other hand, is about dealing with complexity; trying to comprehend and anticipate the others cards and actions.

Current global issues which unite human beings, such as climate change and poverty, are rooted in socio-cultural meanings, such as societal structures and trends. Creativity is the ability to deal with these trends, to experiment with other courses and to assess human development alternatives. Socio-cultural diversity entails a network of socio-cultural protagonists who all – within a more or less successful associating framework – experiment with different meanings, perceptions and strategies to deal with these challenges. There are protagonists who consider the challenges as urgent and others who do not believe in climate change, or think that poverty can be solved through economic growth. Many protagonists discuss or debate these issues. In this way, different socio-cultural protagonists can create new, cohesive and thereby meaningful perceptions of an issue, such as climate change or

poverty. Subsequently, more appropriate structures and trends may be developed. This meaning-making is a creative, playful process, able to deal with difference and complexity. This, in turn, is a condition for human regulation, or, respectively, for sustainable human development, which assesses current gaps in organisation, i.e. in social, economic and environmental arenas, and implements solutions to bridge these gaps.

❖ Example:

Just as literature provides to access the perspective of the other, poetry as well is an example for socio-cultural meaning-making, for ludic meaning expression and negotiation. Lucian Blaga (1895 - 1961) in his poem, "3 Faces", writes:
"The child is laughing: The Game is my wisdom and my love
The young is singing: Love is my wisdom and my game
The elder is silent: Wisdom is my love and my game" (Lucian Blaga – 3 Faces)

The "love", which Blaga speaks about, can be interpreted as human dignity, accessed through relations with others. Furthermore, "wisdom" can be understood as the "wise" attribute of Homo Sapiens, which means in English "wise human". Blaga, thereby, describes the attributes of the Homo Ludens; the human being who self-regulates in a ludic manner.

It was Friedrich Schiller in his letters "Über die ästhetische Erziehung des Menschen", (Schiller 1795), who first emphasised the importance of play, and who opposed the homogenising specialisation and mechanisation of lifestyles.

According to Schiller, the game unfolds the completeness of human abilities (cp. "cultural competencies" in chapter I and 4.1.2). Schiller phrased the famous sentence: "The human being is fully human only when he plays", (ibid.). To reiterate:

"it can be denoted that the game is a basic human activity which through the friction of the mimetic process sets free energy, force and creativity. (…) The game seems to be a human activity, which is able to transform a situation in that it leads to innovation and provides access to the hitherto unknown. It enables one to find solutions to apparently unsolvable problems", states the online lexicon Wikipedia. (Wikipedia, Feb. 16th 2011; about Wikipedia cp. chapter 2.2.3).

Mimetic movements with the other are often implicit but intense (powerful) processes of creating socio-cultural added value. Mimesis enables human beings to learn to re-confirm, question, innovate, stabilise, transform, reconfigure, consider, negotiate and adjust their culturally swayed lives, including the meanings, senses, values, rituals, actions, acknowledgements and apperceptions which denominate these lives.

Auernheimer discusses the interrelation between different, respective selves: "Only through difference, can meaning emerge." (Auernheimer 2003: 72).

Meaning represents socio-cultural cohesion and is the result of complex, implicit social negotiations, involving different "meaning-shareholders". In this sense, meaning results from networking (cp. chapter 1.4). This networking-bias is typical for the human cultural relational system which equips human beings with techniques, or with competences to maintain the relations (cp. chapter I and for "cultural competences" chapter 4.1.2). Furthermore, human sustainable development (cp. chapter 3.2) is related to the phenomenon of meaning in the

way that it can be translated into "meaningful development". Moreover, Auernheimer's statement directly relates this development to the phenomenon of difference. In other words, sustainable, hence meaningful development requires (and fosters) socio-cultural diversity (cp. "autopoiesis", chapter 1.4.1). Therefore, Auernheimer's claim, that difference is essential for meaning-making and sustainable development, is a fundamental concept for this text.

Diversity generates confrontation, which in turn provokes mimetic discourse. Discourse, in this context, is not exclusively understood as a verbal negotiation, but refers to mimetic movement in terms of non-verbal communication as well. Mimesis, therefore, has something profoundly discursive and fosters relations between socio-cultural protagonists. It sets free the inherent force of difference to maintain the sense- and meaning-supplying human system of culture. In other words, diversity evokes discourse and this discourse is relational. Moreover, due to the dynamic evolving of socio-cultural diversity in terms of diversification and transformation, discourse is a metaphor of socio-cultural diversity.

Indeed, Schiffauer defines socio-culture as a "field of discourse" (Auernheimer/Schiffhauer, 76). In this sense socio-cultural interchange by means of mimetic arrangement between self and respective other, is a collective, participatory work on socio-cultural meanings. Keupp calls this, "discursive construction", (Keupp/Höfer 1997).

Nevertheless, discourses are not "innocent", as Hall explains. Through discourses "power circulates", (Hall 1994: 153f). The fact that an issue is negotiated or discussed does not guarantee a balance of power between the discussing parties. Arrangements do not preclude inequality. This is, certainly, an important consideration. However, the results of the discourse and arrangements, and who is dominant, appear to be secondary considerations. The aim of a mimetic discourse is not to overcome dominance or to usurp power; it is rather to channel this power. Culture provides the necessary tools for conciliation and peace. It does not preclude ambiguity, controversy, friction and conflict, which are incited through socio-cultural differences. Shutting out such features of human life would disable socio-cultural diversity, which, in turn, would lead to inertia. Without these features, humankind would be deprived of "free will", and would require strict rules and structures, comparable to animal life. Homo sapiens have the choice between self-regulation and self-destruction. Therefore, we must permit friction and conflict to exist within a framework of socio-cultural meanings, which safeguard relative conciliation and a maximum potential for peace. Conciliation and peace must not be thought of in absolute terms; they promote a "circuit" of human cultural being (dignity at present) and becoming (development).

The alternative to such compromise and discourse is war and the "circulus vitiosus" of violence. By means of culture this pretended alternative is in fact no alternative to (discursive) development and must be ruled out, as it is not meaningful as such. Meaning-

making involves different "meaning-shareholders", it is a collective work which creates community, so that the actual meanings have a rather mediating effect in the sense that they generate and maintain the meaning-making and therefore meaningful community. War, discrimination and assimilation are threats to socio-cultural diversity. How could something be meaningful, which destroys the precondition of meaning-making? And how can humankind afford such destruction and the diminishment of its comprehensively human-development-conducting socio-cultural diversity. Certain aspects of destruction in turn are meaningful, as long as they are temporary and tend towards creative destruction, which stimulates human regulation.

Essential for meaningful construction, rather than unreasonable destruction, is the process of confronting one another and interacting with the aim of creating a relationship. In practice, culture evokes relationships, relationships, in turn, are meaningful to culture, because they maintain the relational, cultural system, the emblem of human being and the medium for human development.

Relationship is usually a very "positively" connoted term, bringing to mind concepts such as 'affiliation' and 'friendship'. However, it is not necessary to be the friend of or related with the respective other. The other must not necessarily have to be a partner of the respective self in person. The other is rather a virtual partner, a mimetic fellow or complice. This means that self and other are socio-cultural protagonists who become allies in mimetic inter-play. Throughout and following that mimetic process, self and other create a common sphere where they may transform and develop their respective identities. Indirectly, they incorporate (aspects of) one another. Their relationship is rather virtual, imaginative, hence, socio-culturally abstract.

In order to prevent such misunderstandings, this text speaks about "arrangements" rather than about 'relations'. Moreover, the term "arrangement" is a more neutral expression, close to – but connoting agency and therefore more appropriate than – the term "reference", which rather depicts a notion of passive recognition.

Even a mimetic movement, which seems not to produce tangible results, is, in fact producing results in terms of arrangement, because the position of both actors to one another is either confirmed, or questioned. Both possibilities, the affiliation and opposition to the other, are socio-culturally relevant because both possibilities virtually embrace the other and connote mutual arrangement. Even opposing protagonists seek for the allocation of the other into their system of meanings. This process is assured by the dynamic nature of culture, which precludes absolute or universal conclusions. Instead, culture entails a steady negotiation of the status quo in terms of socio-cultural standard-setting, regulation and organisation.

Follet argues:

> "The first objective of getting people together is to make them respond somehow, to overcome inertia. To disagree, as well as to agree, with people brings you closer to them. I always feel intimate with my enemies. It is not opposition but indifference which separates men." (Follet 1918: 212").

Knowing more about socio-cultural meaning-making and identity-building, the role of identity becomes clearer.; only a sovereign and self-conscious protagonist is able to distance himself from his established position (meaning), in order to contemplate this self from the perspective of the other. This "sovereignty" belongs to a rather self-confident cultural agent, able to act and perceive purposefully, and able to reflect critically about the self as well as the other. Relations develop not only by taking (i.e. being stimulated) but also by giving (i.e. stimulating). It is due to this dual nature that relations (and arrangements) perform in terms of reciprocity and cohesion. This means that a culturally agile "sovereign identity" is qualified to take a meaningful position, able to deal with controversy, difference and complexity, which appear, because of conflict or change of environment (e.g. globalisation). The own position, socio-cultural allocation, comprehension, sovereign self-confidence and competence function as basis for meaningful living and participation in social life. It empowers the self to move mimetically with the other, without losing orientation and commensurability. Moreover that sovereignty empowers the self to explore new "horizons of possibilities" (Perkins 1992), set limits, deal with the unknown and return to its basis whenever the mimsis-inherent friction is overwhelming. Such a sovereign identity or self is not an autonomous, infallible unit, or hermetic block. It is not the stereotyped cliché of the "strong man". Instead, it is a new image of dignity; a human, or rather "humane" being with weaknesses and failures, capable of dealing with crisis and backlashes, and capable of activating his "cultural competencies" to arrange with others, not ideally, but as well as possible, (cp. chapter 3.2 for "suatainable development" and particularly chapter 3.2.4, "integrative sustainable as convergence concept", figure 38 a well as chapter 3.2.5).

Wulf writes about mimesis:

> "The mimesis of the other (…) causes approximation to the unknown. (…), it does not cause fusion with the other. (…) Such a movement would be equalisation, mimicry of the other, and the loss of the self. Mimesis of the other implies approximation and distance at the same time; dwelling in the inconclusiveness of the in-between; it is a dance on the edge on what is self and what is foreign (unknown). Any dwelling on one side of the edge would undermine either the self or the other, and this would be the end of the mimetic movement." (Wulf 2002: 90).

The undermination, for example through discrimination or domination and particularly the assimilation of either the self or the other prevent and retain mimetic interchange, which builds on reciprocity. In an increasingly interrelated, interdependent world, this may have serious consequences.

Esser finds three alternative reactions to "foreign cultures" (representing the other):

The partial adoption of elements of the foreign culture (selective processes), the refusal of elements of the foreign culture (rejective processes) and the transformation of elements of the foreign culture (transformative processes), (cp. Esser, 1980: 56f).

Nevertheless, as mentioned, any measurement of the outcomes of mimesis must be relativised because mimesis remains a complex proceeding and no mimetic "result" is final or ultimate, but, rather, a temporary situation. For example, to deny an experience in one particular moment (rejective process) must not signify a mimetic "terminal stop": A rejective process can cause another opportunity to open up. Thus, a rejection can uphold a subsequent opportunity for a transformative or selective process. Mimesis, or, respectively, mimetic learning are processes.

Different phases of the mimetic act can be observed and these phases convene to create the phenomenon of so-called "culture shock". This text differentiates between culture as a matrix of human self-identity and human development on the one side, and the socio-cultural specific (for example ethnic) patterns, interpretations, variations and applications of this matrix on the other side.

From this perspective, so-called "culture shock" is not cultural, but socio-cultural. The friction arises when a protagonist moves "in-between" different socio-cultural environments. The culture shock describes the difficulties that a protagonist encounters when confronted with socially specific meanings (representing the other) which are different from the canon of his own meanings (representing the self).

This shock occurs especially during long-term experiences in foreign countries; often in a period between, approximately, one and ten months. But the phenomenon of culture shock is applicable in a broader context: In the end, it is nothing more than the intense version of an intercultural confrontation, which comprises the potential for mimesis. During a culture shock the mimetic experience is particularly intensive. The concept of the culture shock therefore amplifies the general structure of mimetic processes, so that different phases can be classified. Metaphorically spoken, the concept of culture shock, makes it possible to look at mimetic processes like through a magnifying glass.

According to Oberg, the course of culture shock has 5 phases (Oberg 1960: 170f). Wagner further developed this theory, (Wagner 1999). Originally he aimed to prepare travellers for the confrontation with other cultures, to demystify exotic "postcard-expectations" (stereotypes) and thereby to prepare a prosperous intercultural learning process on both sides. The phases described are decidedly simplified and misrepresent a process, which may proceed in this manner, or not. This process may also stagnate in the midst of one of its phases.

Nevertheless, the phases of culture shock can provide a picture of the course of mimetic learning with and through the other. In the context of this text, the phases signify the general confrontation with the other, regardless whether:

- the respective protagonist has this experience in another country or at home
- it is a profound and existential crisis (high intensity: shock), or a simple experience of difference (low intensity: friction)
- it denotes a short moment or a long period
- it applies to an individual or a societal socio-cultural identity, or the self-perception of humankind as such

  Annotation: Global issues, such as climate change, poverty, neo-liberalism, etc. uncover a stagnation of human development, a gap of (sustainable) meaning and in this regard an abstract identity crisis. This crisis can be perceived as a deficit in successful learning with and from the other, i.e. other forms of organisation, co-existence, environmental responsibility, etc.

The first phase of mimetic movement – in terms of socio-cultural shock, or socio-cultural friction – begins with the initial confrontation of the self with the respective other.

In this first phase, the other is experienced as exotic. The self, in this phase, is observing from the outside, feels strong and rather open minded, sometimes euphoric.

In the second phase, a tension between the self and the other occurs. The self leaves his protective cover, or "cocoon" of the expectable and canonical and he experiences difference. The result is a certain confusion and disorientation of the self.

The third phase, denoted as an "escalation", describes a critical moment in which a tension caused by high contrasts between the self and the other unfolds. This phase involves the destabilisation and temporary disabling, or suspension of the self. Although uncomfortable, this phase enables the protagonist, "to suspend the self and to experience and observe it from the perspective of the other." (Wulf 2002 : 84)

Depending on the severity, this phase of escalation can also be understood as "shock" or, less dramatically, as friction or irritation. For the respective protagonist, that shock experience is not only a moment of confusion, distress and possible stagnation of the mimetic interchange, but it can be described as a potential turning point where one might approach arrangement with the other. In the third phase, the socio-cultural protagonist's sense of self is weak, the other, in turn, has an overwhelming presence. This phase represents the peak of the mimetic challenge. It connotes indifference to and heavy friction between self and other, as well as it connotes complexity. This phase can be a threat to the mimetic interchange, but it provides as well immense potential for mimesis. Oberg argues that stagnation is possible in any of the phases, especially in the third phase. In order to prevent stagnation and promote the continuity of the mimetic interchange, the protagonist

requires sovereign socio-cultural identity. That sovereignty does not prevent the experience of difference and complexity, but rather facilitates to deal with difference and complexity. In other words, strong mimetic competencies are required of the socio-cultural protagonist; the competency to continue the mimetic process while resisting the destruction of the self, or of the other. Examples of such destruction are: racism, ethnic cleansing, or assimilation of the other, (further examples and explanations above).

The fourth phase, denoted as "misunderstandings", signifies the ambition to understand the other, although appropriate communication and arrangement have not yet been achieved. Friction decreases and failed communication is perceived as misunderstanding. These misunderstandings result from difference, and neither the other nor the self are directly accountable for them. This encourages the self to "risk", hence to explore and consider a more appropriate apperception and valuation of the other.

Phase five is characterised by a new dimension of mutual respect. With this phase, the mimetic movement results in the consensus of the participating parties. The self feels familiar in the close presence of the other, so that it acts sovereign in both socio-cultures. It profits from the advantages of a knowledge, which has been expanded by the other. Self and other are on the same eye level; they remain different but harmonized.

Figure 3: The U-course of the cultural shock by Wolfgang Wagner (Wagner 1999: 12)
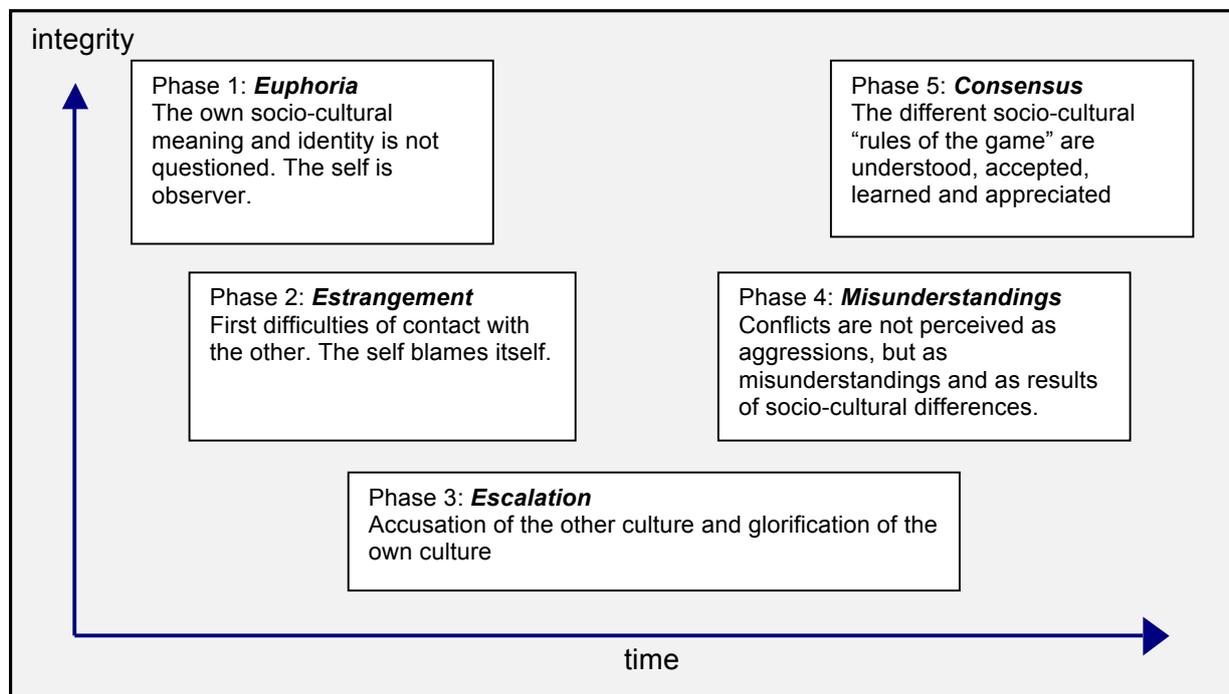
In conclusion, mimesis is a learning process. In its essence, learning is mimetic. Different from conventional perceptions of learning, mimetic learning is not only functional. It does not only intervene in development, but it conduct development throughout. In this sense, mimetic learning is not only a means to development; it also celebrates human life at presence, and

determines human being as such. Mimetic learning is, therefore, an end in itself. Mimetic learning is cultural learning, and dignifies Homo sapiens on an individual as well as on a societal level of socio-cultural identity.

1.3.1   The Mimetic Co-Evolution of Socio-Cultural Identities

Further connecting mimetic learning and socio-cultural identity, this chapter assesses five central phases of the identity-formation process. These phases are highly inter-dependent. Indeed, a sequencing of the phases is possible, yet there is no evidence of which phase the process would start with. Furthermore, these phases are greatly abstracted and can also occur differently in reality. Still, the abstraction facilitates to perceive aspects of human cultural organisation in terms of socio-cultural meaning making and mutual arrangement with the other. Actual human life is, of course, much more complex, differentiated and specific than theoretical abstraction can illustrate.

First phase of identity-formation: (Primary) Impression

This text argues that the (co-) evolution of identity-formation, or –progression, begins with a phase of "*impression*". The term "impression" signifies the individual's registering of outside information. This information is taken in, and finds itself in a state prior to valorisation; it is "preliminary information" and leads to a primary impression. This means that, at this point, the meaning of this impression is not yet decided. C.S. Peirce emphasises that meaning does not only depend on a signal (message) and an addressee, but on the interpreter, (cp. Peirce 1960: 228f). It is the self which will bestow the impression with subjective meaning.

The self uses its available socio-cultural canon of meanings in order to analyse this impression, to allocate it and to give it form and sense.

❖ <u>Example:</u>

That a ball is flying through the room, is a rather detached primary impression. It does not yet mention why the ball is flying through the room, who threw it, or if it may hit the observer. The primary impression, however, incites immediate contextualisation and valorisation, so that the observer may answer quickly whether the ball may hit him, who threw it and if the throwing was an act of play or aggression, which would then cause different reactions. Communication begins at this point.
Another example: That glaciers are melting is perceived as neutral and detached primary information at first. Glaciers start out enormous, then they begin to melt. Human beings aim to provide this random information with meaning. Through complex communication and communicative sciences, media and eco-social movements, individuals are able to feed their discoveries into an increasingly complex perception of global warming. This, in turn, enables humankind:
- to cope with difference (climate is differently considered than before the discovery of climate change)
- to develop adequate (more sustainable) strategies and thereby
- to address complex situations (such as climate change, human impact on climate change).

The process of bestowing random and detached primary information with meaning is ritualised. Rituals are "cultural techniques" for generating, consolidating, communicating and innovating socio-cultural meaning. Rituals enable individuals to extract meaning out of a

random impression (cp. "rituals" in chapter 1.8). Bestowed with meaning, the impression will be re-fed into the socio-cultural meaning system and incite socio-cultural reactions.

Second phase of identity-formation: "Positioning"

This process is known as the "rebound effect" or "feed-back loop" and is typical of the human mode of cultural arrangement through communication. It enables the self to relate to other socio-cultural protagonists, who provide new information. The "other" allows the respective "self" to reconfirm or innovate (re-locate, adapt) his position in the perceived world: This is the phase of "*positioning*". Positioning cannot be described by the term "localisation", because of this term's geographical connotations, but it can be described as "contextualisation", or the process of "situating" (cp. "life-situational approach", chapter 4.2.1).

In other words, the impression represents the receiving of new information, from other protagonists. The message (detached information which is sent out from the other) represents the other. Throughout the process of validating this information, the self can measure his/her integration in the social environment. The self can, thereby, develop his perception and consideration of the self and of the other as well as his relation to the other. It takes a position to the other. The process of "positioning" is the second phase of identity-formation or -formation. In a process of adding value to detached information, primary impressions are "valorised". The valorisation of primary impressions signifies the integration of these impressions/information into a framework of socio-cultural meaning. But it is not only primary impressions that are transformed into meaning. The overall meaning-making network, i.e. the network of meaning-making protagonists and "meanings-shareholders", is also adjusted in this process.

❖ Example:

Realising the tragedy of climate change, understanding that it is a threat to the own security and also comprehending the human impact on climate change, leads to the question: Are the respective socio-cultural patterns still meaningful?
Accordingly, for example related production- and consumption patterns may be discussed and eventually adjusted. That shows, how new, concertedly validated and processed information leads to the innovation of meanings, possibly modifies human self-identities and hence transforms the network- and networking patterns of socio-cultural protagonists.

Third phase of identity-formation: "Expression"

Socio-cultural protagonists act and express itself, through narrations, rituals, symbols, such as dress codes and any other form of expression of meaning in terms of habitus.

In this third phase, called "*expression*", the self "erupts" (appears) in the arena of inter-personal, socio-cultural interplay and stimulation. It is the phase of "pre-reciprocity". The self emancipates; it increasingly builds out a unique identity-profile and begins to communicate

socio-cultural meanings and habitually encoded identity signals – it expresses itself. This expression indicates the beginning of mimetic, socio-cultural movements with the other.

❖ Example:

Wearing clothes in a particular fashion, or perfume, moving in a specific way, or being at a certain time at a certain place, are expressions of socio-cultural identity. Watching particular TV-shows or talking in a certain style, buying particular products, such as books or bicycles and all other habitual actions of a socio-cultural protagonist express aspects of the protagonist's identity. Other people can be attracted or repulsed by this identity; it can stimulate them or not, and it can incite communication, which leads to the next phase, a phase in which the other plays a greater role.

Fourth phase of identity-formation: confrontation – communication - interchange

The fourth phase is titled "*confrontation – communication – interchange*". First, it denotes the confrontation between a self and the respective "other". The characteristics and outcome of this confrontation are as open and preliminary as the meaning of a primary impression (cp. first phase). What the meaning will be, depends on the moment of "communication", when both actors intentionally express their positions and begin to "interchange".

❖ Example:

If a ball flies through a room, the observer ignore the ball, catch the ball and throw it back or far away. Whatever the reaction is the two protagonist begin to interchange (or respectively interplay). The one reacts on the other and the other reacts to the one. They may struggle or play and hence relate to another.
The act of throwing the ball can also be a metaphor for an expression of the one, who approaches the other. The ball, moreover, can be a metaphor for message which the one sends (expresses) to the other. As soon as the other recognises the flying ball and reacts on it, reciprocity in terms of interchange starts.

Any meaning and identity expression (phase three) has communicative aspects, yet the expression itself is a passive communication. In phase four, self and other approach one another; they begin a process of reciprocity. This phase is a phase of pre-arrangement. The phases one to four of Wagners "cultural shock" diagram further differentiate this phase four of identity-formation (cp. figure 4, below).

Fifth phase of identity-formation: mutual arrangement and innovation

The above examined "*mutual arrangement*" (cp. "mimetic learning" in chapter 1.3 and 1.4) of both actors, self and respective other, occurs as the fifth phase. To recapitulate, this arrangement signifies the subjectivation of the other, the mutual establishment of relationship. Both actors remain different from one another, while mutually complementing (innovating) each other. Complementation connotes both, the consolidation of differences between the protagonists as well as the establishment of unity and a common sphere by means of community. In this phase, there is the creation of synergy and mutual benefit. Arrangement is, in this context, not understood as the fusion of the different socio-cultural identities and meanings, but rather as mutual accomplishment through difference within a

setting of association and communication. Arrangement enables self and other to measure and assess the status of integration. The arousal of strong frictions throughout the mimetic arranging process for example indicates a low degree of integration.

❖ <u>Example:</u>

Wars are absolute expressions of tension and friction between different societal parties. In this sense depict civil wars a strongly disintegrated society.

Furthermore, support mimetic arrangement processes protagonists to proof and eventually innovate their respective self-identities and socio-cultural meanings in order to maintain integration. Throughout this process, self and other create a common sphere, they adapt to one another and, thereby, they mutually "expand the horizons of their possibilities" in terms of mimetic learning, being and becoming. Phase five can also be understood as the phase of mutuality, or respectively, as the mimetic peak.

This phase corresponds to phase five of Wagner's "cultural shock" diagram (cp. figure 3, chapter 1.3), termed "Consensus". However, arrangement must not necessarily lead to an ideal consensus; it is a moment when (not the differences but) the frictions are abolished. Arrangement is rather a moment in which cooperative aspects of a "relation" prevail over competitive aspects (cp. "mimetic learning" in chapter 1.3/1.4 and "competitive cooperation" in chapter 1.8.7).

The following figure illustrates the dynamic progression and co-evolution of socio-cultural identities. The figure concentrates on the interplay between an individual and the generalised other. Both are representatives of culture and both simultaneously create culture through the mimetic interplay.

The five distinguished phases overlap in the figure. This moment of overlap is labelled "com", which stands for "cultural competencies". In chapter IV, (cp. particularly chapter 4.1.2) this text concentrates in a more detailed manner on the subject of such competencies. "cultural competencies" are such competencies, which permit a constructive mimetic process: they capacitate the construction of meaning. Meaning maintains cohesion and effects personal identities as well the construction of inter-personal arrangements and relationships. In turn, throughout these processes of arranging between "selves and others", meaning is generated, consolidated, communicated and innovated. An example of a cultural competence would be the ability to communicate commensurably. As in the mimetic process, communication plays a crucial role. The related competence would, for example, be the ability to put the information we send out to others and the environment into a decipherable and therefore aesthetic form: linguistic competencies, performative competencies, but as well the capacity to curiosity, fantasy and imagination. Mimetic competencies enable individuals

to arrange with the other and that means that cooperative aspects of reference overwhelm competitive aspects, although both aspects are present.

The simplified five phases examined above precede isochronically (parallel), rather than chronologically. New impressions arrive constantly, and are metabolised into information. Invariably, the self encounters other persons, other structures, and other environments. The self is continually confronted with the other and modifies and develops itself in terms of a powerful, mostly implicit life-long-learning and ludic composing of socio-cultural meaning and identity. Many impressions arrive simultaneously so that the self, similar to the functioning of an eye, radically selects and bundles different impressions into a single piece of information. This information, or meaning, will then be fed back to the socio-cultural meaning framework and condensed into the self's (intentional) perception of "reality" (cp. chapter 1.7). This means that the initial criteria for selection is meaning. On the basis of this (meaningful) reality the self can be expected to act and react in a constructive, rational, cohesive, adequate and logical/rational manner; it can be expected to act reasonably, which promises to promote security in terms of integration and integrity. Throughout mimetic movements the self creates itself: it generates its own meaning, value, its unique qualities and dignity.

Figure 4:   Phases of Identity-formation – A cultural process

1. Impression:
Cultivation and Socialisation, towards (socio-cultural) identity

5. a) **Mutual Arrangement** of both actors' positions; the other (A) and one Self (B):
A + B = A x B
b) **Innovation**

2. The own **Position** in the society/ the socio-cultural identity (called "B")

Com

Com

Com

Culture

Com

Com

4. a) **Confrontation** with the expression of the other
b) **Communication**:
Lingual, ritual and aesthetic
c) **Interchange** ("+")

3. Expression of the own position (towards the other, called "A")

Com = ,cultural' competence
cp. chapter I and 4.1.2

1.3.1.1 The Mimetic "Peak"

Assuming that the other would be called "A1" and the self would be "B1", the situation before the confrontation would relate the two as "A1+B1". The "+" signifies the rather passive co-existence of both parties during the above-mentioned phases, one to four.

In the next phase, both react to the confrontation, or respectively to each other. Throughout the subsequent interchange they adjust their perceptions of the respective other and they create a common sphere. That "common sphere" refers to the above mentioned phase of mutual arrangement (phase five). Arrangement means that self and other mutually "expand the horizons of their possibilities".

These "possibilities" enable them to modify and develop their respective world perceptions and re-locate themselves in this world in terms of maintained integration. This means that due to the potential for stimulation produced by the confrontation with the respective other,

"A1" as well as "B1" may innovate and revise their socio-cultural meanings. Furthermore, they modify their socio-cultural identity compositions.

After the mimetic process, provoked by the confrontation, both may have (co-)evolved. After the process, both are different than before the process and both remain different from each other. Throughout the mimetic process, the socio-cultural identity constellation "A1" would transform into "A2" and the constellation "B1" would become "B2". Not only have both actors changed, but their relation has also changed. Before the process began, they existed in "blind", or passive co-existence. This relation is represented by a "+" in the formula. A1+B1 becomes then (A2+B2)². The "$(x)^2$", which stands for "potentiation", signifies the new potential for creating an added, multiplied value concerning the integrity and cohesion of both actors. Mimetically, complexity is created and this creative complexity is required in order to innovate socio-cultural meaning and to overcome complex challenges such as the global issues mentioned earlier (cp. "global issues" in chapter 1.1 and figure 2) and in order to live in dignity.

The described potential shift, incited throughout the (phases of the) mimetic process is represented by a "<" (math. "greater than"). This mathematic symbol relates the state of co-existence (phase one) and co-evolution (phases two to four) to the new and more complex state of socio-cultural arrangement (phases four to five).

The formula is then expressed as: " $A1 + B1 < (A2 + B2)^2$ ".

This mimetic process and especially the "outcome" and "culmination" of this process, the "mimetic peak", could be described as the creation of something new, a cultural genesis with synergic effects for self and respective other. This is possible because of the mutual accomplishing of the involved socio-cultural protagonists (or socio-cultural meaning bearing identities) who reciprocally stabilise, fertilise, improve, refine, re-configure and adjust their own identity constellations.

Beside the identity-formations of the respective actors by means of difference (and diversity), the new arrangement connotes commonality by means of unity. This unity in turn is connoted for example through attributes, such as sharing, association, alliance, mutuality, reciprocity and cooperative inter-relation. This unity in diversity creates synergy, added value and mutual benefit; it is a win-win situation. The German term, "Gestaltung" describes this process of creation: At the turn of the 19th century, inspired by Aristotle's book "Methapysica", the philosopher Christian von Ehrenfels characterised a "Gestalt" by asserting that, "the whole is more than the sum of its parts", (cp. Ehrenfels 1890). However, what Gestalt theory (Max Wertheimer in the 1920s) actually says about this relationship is that a Gestalt is "a whole which is different from the sum of its parts".

Kurt Koffka explains:

> "It has been said: The whole is more than the sum of its parts. It is more correct to say that the whole is something else than the sum of its parts, because summing up is a meaningless procedure, whereas the whole-part relationship is meaningful." (Koffka, 1935: 176).

Mimetic learning and mimetic interchange are processes which traverse the border between the parts (e.g. individuals) and the whole (e.g. arranged individuals). In this sense, mimesis is the cultural technique that signifies and dignifies Homo sapiens, the "wise humans" and that enables human beings to sustainably regulate their organisation.

The mimetic "Gestaltung" (German: shaping, or co-creation) is coequal with the ability to shape and regulate sustainably. In this regard, the mimetic (competence for) "Gestaltung" is closely linked to "Gestaltungskompetenz" (shaping competence, de Haan 2002; cp. chapter 4.1.2.1), although they are not congruent. The mediating role of such competencies is depicted as "com" in the figure above. Education aims for inciting the competence of learners to shape and participate in human sustainable development. For this reason the detection and exploration of such shaping-competency as well of the mimetic principle of such competency is crucial to education for sustainable development (cp. chapter IV).

1.3.1.2 Dimensions of Socio-Cultural Identity

This chapter endeavours to further expand the concept of socio-cultural identity. Socio-cultural identity does not only concern individual persons, it also concerns groups. Besides the five phases of mimetic co-evolution of socio-cultural identities, four dimensions of socio-cultural identities can be detected. These dimensions signify four (inter-related) levels on which the mimetic progression of socio-cultural identities takes place. This text differentiates between different individual and societal dimensions of socio-cultural identity, or respectively different levels of identity-formation.

The intra-individual dimension of socio-cultural identity

The first dimension of socio-cultural identity configures on the "*intra-individual level*" of identity-formation. First, the self is composed of various participations, facets and influences of the other. The differences and hence the diversity of other people functions for the self as a pool of identity-alternatives. The other is represented for example in narrations, rituals, or in the habitus, in values, perceptions and causalities of other people or societies. The self is stimulated through these alternatives. It does not invent socio-cultural identity from scratch, but chooses, assembles and varies existent identity-alternatives and composes indeed in a unique way itself. That is no determinable process. Self-formation is rather a process, which is intrinsically continuous, proceeding throughout (the whole) life of individuals, societies and humankind as such.

In this sense, the other becomes a shareholder of the self. The self's identity is indeed an "act of integration" (Habermas 1981:214ff). This integration does not primarily connote

mimicry, the copying of the other. The self-identity rather involves as well the mimetic variation of impact of the other. The uniqueness of the self derives from the unique "combination" of participations and influences, which, moreover, transforms over the time. Therefore the self is not only a coherent unit, challenged by the outside world. Rather, the self can claim internal diversity displayed in different moods, motivations, values and characters. This means that it is controversial in itself. Frictions and ambiguities arise and challenge, but also develop, the self internally. Therefore self identity is – indeed in an artistic sense – a composition and it involves not only the other, but also the "other self", hence the contradictory and contingent aspects for example of a character.

Second, random primary impressions from outside are received by an individual, who transforms these impressions into information and meaning. This meaning, in turn, adds to the development of the socio-cultural identity-composition of the receiver, (or perceiver). Through this "internal inter-change" the self itself emerges; it creates and recreates itself and through this genesis it becomes capable of expressing itself and communicating with others (or respectively "other selves"). As already mentioned, none of the socio-cultural identity dimensions are self-sufficient; instead, they inter-depend (cp. next chapter).

The inter-individual dimension of socio-cultural identity

This interchange between individuals and social groups in the sense of communities, movements, or societies makes up the second, the "*inter-individual level*" of socio-cultural identity-formation. According to the "mimetic peak" this level depicts particularly the confrontation, communication, interchange and arrangement with the other person (cp. figure 4, phase four and five, chapter 1.3.1.1). Self and other arrange with another. That means that throughout the recognition of the respective other, both reciprocally negotiate and produce common meaning. This inter-individual mimesis generates social groups, such as communities, movements, or societies. These in turn provide the individuals with options, or guidelines (through rituals, narrations, etc) to proceed meaningful intra-individual identity-formation and meaning-making. That means, while individuals create societies and societal meaning, societies reciprocally form individuals. This shows that mimetic interchange fosters networking and it shows that these networks are proceed on individual and societal levels, subtile as well as tangible.

The inter-societal dimension of socio-cultural identity

The third level of socio-cultural identity-formation depicts the interchange between different socio-cultural groups; it is the "*inter-societal level*". Different societies (or societal influences) represent a particular socio-cultural "identity-design" with specific intrinsic values, orientations, and meanings. Those societal "macro identities" create meaning(s) through mimetic movements in the same manner as individuals, however, their movements are less

tangible, more abstract and more complex. Such "macro-identities" represent "macro-meanings" and appear, for example, in the form of epochs, such as the era of capitalism, democracy, globalisation and industrialisation, or lifestyle-trends (i.e. consumption patterns).

The supra-societal dimension of socio-cultural identity

The fourth level of progressing identity is the *"supra-societal level",* which signifies the phenomenon of culture itself as an overall ensign of humankind. The supra-societal level approaches the human being anthropologically. It is a very abstract and purely theoretical (self-) perception of humankind.

In other words, this level describes the cultural "playing field" or framework for mimetic identity-formation and meaning-making as such. Beyond individual socio-cultural patterns, it signifies culture as the mode of human being and becoming (development).

This very abstract fourth level interrelates and unites the different protagonists, arranging the intra-individual level with the inter-individual with the inter-societal level as one human-cultural system within "One World" and in terms of "one human community".

Any dimension of socio-cultural identity, on whatever level, is heterogeneous and dynamically transforming; it is a "swarm of participations". Therefore, all of the four identity-levels are profoundly interwoven, coequally and reciprocally evolving open systems. Thus the distinction made between different identity levels is a theoretical act and a tool used to support the comprehensive understanding of a complex issue. Inappropriate thinking in blocks must be avoided; identities on whatever identity level are no static, monolithic blocks, but they evolve dynamically. Moreover is no identity autonomous and in this sense independent from other identities on the same, or on another level. For example, the apperception of primary impressions, and their generation into information on the intra-individual level is not determined by the individual alone. The individual and his specific patterns of mimetic operation, in terms of identity-formation and meaning-making, are rather inspired by inter-individual and societal socio-cultural systems. That means, primary impressions are filtered and validated with support of socio-cultural measures. None of the different (levels of) identities can operate without the others. They make up a coherent, cohesive, networked – and explicitly networking – system, so that the distinction made between different identity-levels is an abstract, theoretical reduction.

Spectacular is the cultural efficiency, characteristic of all dimensions of socio-cultural identity. Socio-cultural identities arrange mimetically and thereby they organise chaos and create something from nothing by means of Gestaltung. The terms in this sentence mean the following: *"Organisation"* stands for the organising of identities as clusters of socio-cultural meanings. *"Chaos"* stands for unframed, random impressions and detached information,

which evoke contingent stimulations. *"Creating something"* stands for the bestowing of detached information and of the role of other with meaning by means of mimetic meaning-making together with the other. *"Nothing"* stands for the pre-state of meaning (cp. "chaos", above). *"Means of Gestaltung"* stands for creating added value, complex cohesion and human development or evolution (cp. creating something). (For "Gestaltung" cp. Ehrenfels 1890, for "Gestaltungskompetenz, cp. de Haan 2002/chapter 4.1.2.1).

Furthermore, the radical strength and implicitness of identity-formation processes in terms of the omnipresent socio-cultural performances and other influences throughout the human lifetime, is something to take note of. Understanding the performance of human development through mimetic learning and arrangement, these, so far abstract and theoretical acknowledgements, can be reoriented to educational mandates, concepts and practices, (see chapter IV).

Differentiating the identity-formation on *different* levels does not aim for a categorisation but rather for the systematisation of processes and socio-cultural protagonists. That means, the differentiation tries to show that human socio-culturality poromotes *one* inter-depending, dynamic system. This cultural system is maintained and cross-regulated through all participants and through socio-cultural impact on different levels, it is a concertedly proceeded "product" or situation which reciprocally proceeds certain cohesion. Hence the human cultural system consists of a dual diversity: first, the diversity of socio-cultural patterns on the same socio-cultural identity level (e.g. one society is different from another society). Second: the diversity of complexities among socio-cultural identity constellations (e.g. societal identity is more complex than individual identity).

The different levels of identity-progression seem to function intrinsically in a similar manner, and function with the same purpose: the mimetic and therefore mutual making of innovative, socio-cultural meaning. These meanings are represented by socio-cultural protagonists on all socio-cultural identity levels. Ideally, these protagonists are competent in generating, consolidating, communicating and innovating their socio-cultural identities. These identities are sovereign if they are able to act in a rational, ludic, creative, meaningful, and concerted manner, capable of dealing with complexity (or chaos, friction, contingency and controversy).

1.3.1.3 The Dynamic Inter-Progression of Individuals and Societies

This chapter focuses further on the similarity between processes of creating individual identity and societal identity. According to the previous chapter, individual identity develops on the intra- and inter-individual level and societal identity develops on the inter- and supra-societal level. The following chapter assesses how different identities reciprocally stimulate one another. The figure at the end of the chapter will illustrate the inter-digitation (relation) of individual and societal identities.

Socio-cultural diversity describes a diversity of socio-cultural identities and meanings. These meanings have social functions and are culturally configured. Therefore, socio-cultural diversity can be understood as an "incubator" for social construction, innovation and evolution.

The entire process of mimetic identity-formation can be understood as a looping system; feed back connotes circular inter-affection, reciprocal stimulation and mutual integration of different identities.

The circular inter-affection, reciprocal stimulation and mutual integration of different meaning-bearing identities, reinforces the human capacity to deal with complexity. Complexity appears, for example, in form of complex challenges (cp. "global issues", chapter 1.1 and figure 2). Referential, dynamic (living) systems, such as the cultural system, typically maintain themselves through feedback. In this regard, the cultural principles and modes of mimetic interplay and mimetic arrangement represent such feedback. This feedback enables meaning and meaningful socio-cultural patterns to emerge, which in turn maintain the agility of the overall cultural system and humankind.

Mimesis particularly describes mutual (referential, reciprocal) meaning-making and socio-cultural identity-formation. It is essential for the dynamic adjustment and responsiveness of socio-cultural identities on all levels. Therefore, it is essential for the dynamic adjustment of humankind (human organisation and regulation) to global challenges. In this regard, the general term "culture" is denotative of the idea of the supra-societal identity-level: It unites all other levels of identity-formation and directs them towards one common focus. The focus is to overcome inertia and steadily adjust the common orientation system for the benefit of all members and their "community" (or society) as such.

This common and inclusive community or "world-society" doesn't mean that everyone and every society share the same meanings and values. Instead, it signifies that all cultural protagonists generate their values and meanings according to the same mimetic operation modes. Human operation modes determine socio-cultural inter-actions, which include integrating cooperative aspects and conflicting competitive aspects. They are mimetic, or mimetically sustainable, if the cooperative aspects predominate the competitive aspects. The "predominance" of cooperative aspects does not mean the assimilation of competitive aspects, which come along with socio-cultural differences. It is rather the overbalance of cooperative (affiliating) versus competitive (opposing) aspects of arrangement with the other. Mimetic operations are, in this regard, mutual arrangement processes, which provide a framework for social arrangement and relative cohesion. This framework allows a maximum of internal controversy, ambiguity and friction. It also allows for a maximum of socio-cultural diversity, which in turn maintains and fertilises the overall human cultural system (cp. "multi-perspectivity" in chapter 1.6/1.6.6). Within that system, any socio-cultural identity on any

identity-level can create its particular "place", or respectively it can perform its unique socio-cultural biography. Hence, it is not the homogenisation of socio-culturally particular identities (achievable through mimicry) that is meaningful, self-sufficient and security promoting. It is rather the agile unfolding of socio-cultural diversity and the active participation of many sovereign socio-cultural protagonists in meaning-making that is the emblem of the mimetic and sustainable capacity of a society.

Personal and societal identity-formations inter-depend. Moreover, individual and societal identity-formation processes are identical; they perform a reciprocal reflection. This means that the progression of an individual socio-cultural identity is similar to the progression of a societal identity and that both proceedings are closely interconnected.

The subsequent figure illustrates the double feed-back loop of individual and societal identity-formations. The loop of individual development is presented in green colour. The societal development is presented in red. The numbers one to five correspond to the phases of identity-formation in figure 4 of chapter "1.3.1 The Mimetic Co-Evolution of Socio-Cultural Identities".
As both processes are firmly interrelated, interdependent and mutually powering, the directing arrows of each loop run over to the other loop: Green arrows activate the red loop and red arrows activate the green loop. Or, in other words, individuals activate societal meaning-making and identity-formation and societies activate individual meaning-making and identity-formation. Together, loops and socio-cultural identities on different identity-levels, illustrate a movement.

In the figure below, this movement is indicated by a horizontal eight. The horizontal eight symbolises the cross-circulation of personal and societal identities. Furthermore, the horizontal eight symbolises the infinite nature of the processes, in terms of time, complexity and intensity. A dotted line connects the intra-societal development with the inter-individual development to illustrate that both address the same issue from a different perspective: inter-individual identity-formation is commensurate with intra-societal identity-formation.

The figure shows mimetic identity-formation through feed-back loops. Moreover, the figure has the advantage of highlighting the important role of the individual in human development. Simultaneously, it shows that socio-cultures or educational approaches that do not promote western individualisation still play a crucial role in meaning-making. This is possible because meaning-making and identity-formation processes do not necessarily require sovereign individual identities. Socio-cultural identities with a stronger tendency towards collective organisation and less individualised structures can contribute to meaning-making and identity-formation processes to the same extent as individuals. Agile (integer) socio-cultural

diversity and dignifying societal organisation (and education), do not depend on individualisation. Individualisation is, rather, one socio-cultural pattern; it is one contribution to human development.

In figure 4 (chapter 1.3.1) so called "cultural competencies" facilitate the transition from one phase to the next. According to this deduction, the following figure depicts "culture" as the facilitating mode; as incubator and mediator of the inter-progression of individual and societal identities.

Figure 5:   The Dynamic Inter-Progression of Individuals and Societies

The numbers apply to the content depicted in figure 4, cp. chapter 1.3.1

1. Impression
2. The own „Position"
3. Expression
4. Confrontation, Communication, Interchange
5. Mutual arrangement and Innovation
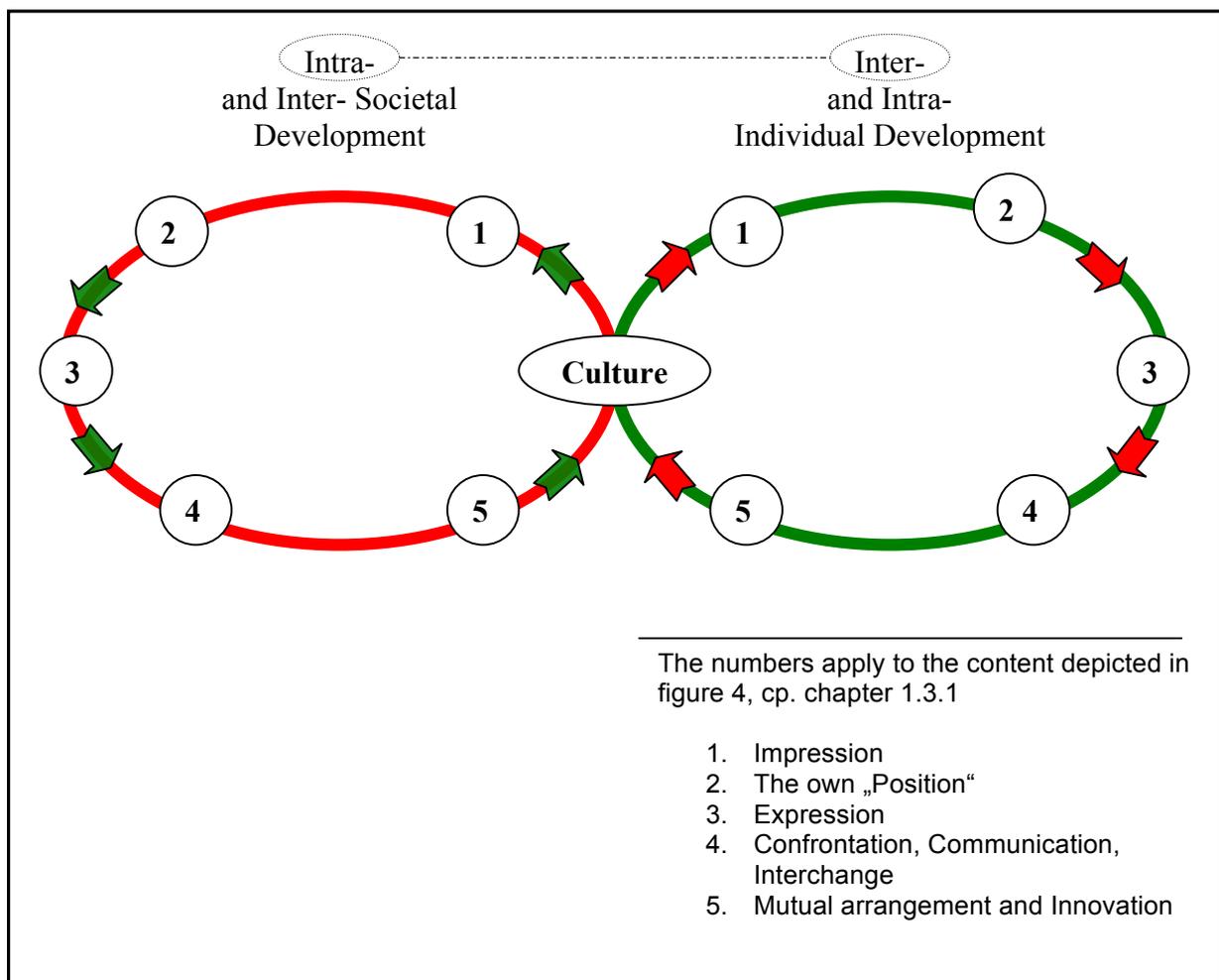
1.3.1.4   The Self-Similarity of Socio-Cultural Protagonists

The cultural system is a referential system; it promotes the arrangement of socio-cultural protagonists so that they build networks. The cultural system, applied, practiced and represented through socio-cultural networks, functions as a framework which organises cultural protagonists and integrates their socio-cultural identities. Within this framework, socio-cultural protagonists complement one another reciprocally. Moreover, the framework – the cultural mode – determines how this reciprocal complementation of socio-cultural identity

functions: The cultural mode is the same as the mimetic principle, which enables human beings to organise in intelligent networks.

Culture enables socio-cultural protagonists, on all identity levels, to create one heterogenic global learning society (on the macro-level). This unifying society consists of many socio-culturally different learning societies (e.g. social/ethnic groups and movements). These societies, in turn, consist of many socio-culturally different individuals (on the micro-level). In the end, the human cultural system is a diversified system or network of inter-related socio-cultural identities.

In this regard, every cultural protagonist, from the intra-individual to the inter-societal identity-level, builds up micro-structures which concertedly compose the cultural macro-structure of human being as such. The composing – the generation, consolidation, communication and innovation – of any socio-cultural identity, features the same constituting modes. Thus, identities, in their function as cultural protagonists on all levels, are reciprocal reflections, interpretations, participations and representations. Just as the cultural system, humankind is a referential macro-system, whereas socio-cultural identities are referential micro-systems. Socio-cultural identities refer to one another and allude to the respective other. Norbert Wiener explains in his book "Cybernetics" such principal operation, or communication mode of cultural protagonists:

> "It is certainly true that the social system is an organisation like the individual, that is bound together by a system of communication, and that has a dynamics in which circular processes of a feed back nature play an important role." (Wiener 1948: 24).

Fritjof Capra expands upon this concept; instead of the "cultural" or "human system" he speaks about living systems in general. Fritjof writes:

> "Indeed, an outstanding property of all life is the tendency to form multileveled structures of systems within systems. Each of these forms a whole with respect to its parts while at the same time being a part of a larger whole. Thus cells combine to form tissues, tissues to form organs and organs to form organisms. These in turn exist within social systems and ecosystems. Throughout the living world we find living systems nesting within other living systems." (Capra 1996: 28).

The principle of "systems nesting within systems" can also be applied to socio-cultural identity. As "swarms of participations" socio-cultural identity constellations are complex clusters and heterogeneous associations.

In this regard, Mandelbrot's theory of "fractal geometry" can be used as a metaphor for the "self-similarity", as he describes it, of socio-cultural identities, regardless of which identity level. The term "self-similarity" refers to the fact that many natural systems (living systems, including the human cultural system) can be broken into parts, which again resemble the entire system.

❖ Example:

Mandelbrot illustrates this property of "self-similarity" by breaking a piece out of a cauliflower. He continues his demonstration by dividing the part further, taking out another piece, which again looks

like a very small cauliflower. Thus, every part looks like the whole vegetable. The shape of the whole is similar to itself at all levels of scale. Mandelbrot provides some other examples including mountains, snowflakes and fern. Concerning clouds, he adds that the border of a cloud magnified ten million times still shows the same familiar shape. (cp. Mandelbrot 1983).

The culturally generated, consolidated, communicated and innovated socio-cultural identity appears to be self-similar as well. The phenomena of mimetic identity-formation apply to identities on all levels. Mimesis and the progression of identity are organising processes (cultural modes) which convert chaos into cosmos. Identities are networks; they relate different influences (on the intra-individual level), different people (on the inter-individual level), and different societies (on the inter-societal level) within an overall framework (the supra-societal level of identity). The principles of mimesis and socio-cultural identity represent -and respectively are represented by- the individual as well as by groups. This means that both are functioning on all of the mentioned identity-processing levels. Other features of these processes are reciprocity, mutuality and cross-stimulation and arrangement between respective "selves and others", resulting in interdependence and shared co-evolution of the involved parties.

Indeed, *one* piece of evidence for the self-similarity of human socio-cultural systems is the fact that they build themselves entirely on two patterns of self-similarity: time and space. Both, time (seconds, hours, days, etc.) as well as space (centimetres, meters, kilometres, etc.) show the same organisation and proportionality on every micro and macro identity level.

Due to self-similarity, the formula of identity-formation "$A1 + B1 < (A2 + B2)^2$" (cp. "The Mimetic "Peak", chapter 1.3.1.1) does not only apply to the individual dimension, but can also be transferred to the societal dimension.

Inter-individual identity-formation generates societies, so that a society, or societal identity, is a cluster of individual identities. These identities are no autonomous "entities"; instead they are mimetically arranged with each other. Arranged individuals are described by the formula "$(A + B)^2$" (cp. chapter 1.3.1.1). Hence, society is not only a combination of many individuals $A1 + B2 + A3 + B4$ … etc., but is a cluster of inter-individual "$(A + B)^2$" sub-clusters. That means, every society consists is not only a cluster of individuals, but an association of clustered individuals. Or differently, every society is a network, consisting of networks. Just as different individuals form sub-societies which generate societies, different societies, for example a society "C" and a society "D" create the overall human society, or humankind. That depicts the human cultural system as mimetically integrating network, whose stability, or integrity is determined by the grade of integration of the other.

Figure 6 illustrates the configuration of inter-societal identities in the pre-state of supra-societal cohesion. This pre-state, or "pre-mimetic moment" is determined by the co-existence of (in this case two) different societies.

It is not only the involved individuals who define the character of a societal identity (on the inter-individual level), but other societies participate in progressing societal identity on the inter-societal level of identity-formation as well. The figure below shows how individuals configure societies ("pre-mimetic moment"). It does not illustrate two mimetically arranged societies.

Figure 6: The clustering of personal identities to societal identities
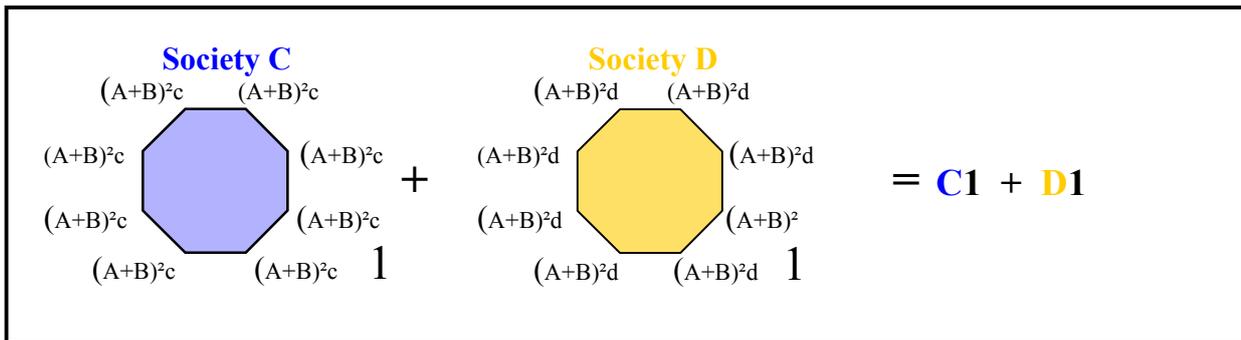
Societies (for example, society C1 and society D1) develop their socio-cultural identities in the same way that individuals develop their specific socio-cultural identities - reciprocally, with and through the other. Throughout the mimetic arrangement they develop their socio-cultural identities. Moreover, they reciprocally "expand the horizons of their possibilities", so that each of them becomes more complex and gains a greater capacity to deal with difference. This emerging potentiation and enhancement of organisation transforms "C1" and "D1" into "C2" and "D2". This signifies that the societies "C" and "D" remain "C" and "D" while their configurations modify: As a result of the mimetic interchange, the configuration of society "C" is co-determined by and transformed through the participation of society "D" and vice versa. Societies "C" and "D" become mutual "shareholders", that means they participate in the formation of and are elements of the respective other. According to the approach described in chapter 1.3.1.3, mimetic arrangement moves societies from a state of coexistence to a state of networking. Through inter-societal identity-formation societies make a shift towards a more complex emergence level. In this case, "emergence" describes the shift from a simple to a more complex composition. In the case of humankind, such increased complex composition facilitates to deal with more complex challenges (cp. 1.1/ figure 2 and "multi-perspectivity" in chapter 1.6/1.6.6). Expressed as a formula this means that: $C1 + D1 < (C2 + D2)^2$.

Indicative of these societal clusters is the potential to create a framework and network that inter-relate the different societies as one heterogenic, self-regulating "moving order" or "organism".

This supra-societal identity intimates the entire cultural system, representing the "culture of humankind", which unites all humans under one species or "world society". It is a huge societal "swarm of participations" (Perkins 1992) and a complex network, which consists of societal networks, which consist of individual networks. For the individual observer, this supra-societal "macro identity" my seem purely imaginary, because it is too vast and diffuse, too heterogenic, dynamic and complex, for a person to get an overview and comprehend it. With the help of imaginative, scientific interpretation, this complexity can be represented in a way that captures it's magnitude as much as possible, while simplifying it to the extent necessary for individuals to perceive it. This magnitude, the "culture of humankind" connects all people and groups to one plural and dynamic society; it is the plot of humanity. This plot describes the present, bestows the past with meaning and guides human development. According to acquainted iceberg diagrams, this base of human being remains invisible and does not appear on the surface of the iceberg. It appears indirectly *through* characters (intra-individual level), *through* persons and groups (inter-individual level), and finally as a ludic and heterogenic socio-cultural diversity (inter-societal level). Furthermore, it doesn't appear in a "pure" and distillate form. Such homogeneity is impossible because this level of identity is intrinsically complex and can't be observed from any identity below this level. Nevertheless, this supra-societal level can be assumed; it is possible to theoretically approach it, for example, through acts of imagination. These imaginations can be expressed, for example, through art or science.

The self-similarity of cultural protagonists indicates the existence of principle modes of mimetic formation of socio-cultural identity on all levels. The aggregation of these levels is the denoted supra-societal identity; it is the sum of human self-perceptions and socio-cultural meanings. In this context, the subsequent chapter explores another perspective on mimetic arrangement: networking.

1.4 Culture as Mode of Mutual Arrangement

The term "network" adverts to an intense interrelatedness which compoundso protagonists participants of a system through a sort of centripetal or gravitational force. This interrelatedness depicts the interdependence of a respective self and the generalised other within a reference-system. Both, self and other, mutually aim for socio-cultural identity and both reciprocally provide assets to configure this identity, so that they are "swarms of (reciprocal) participation", or networks.

In his book "The Web of Life", Capra declares:

"Since living systems at all levels are networks, we must visualize the web of life as living systems (networks) interacting in network fashion with other systems (networks). For example, we can picture an ecosystem schematically as a network with a few nodes. Each node represents an

organism, which means that each node, when magnified appears itself as a network. Each node in the new network may represent an organ, which in turn will appear as a network when magnified, and so on.

In other words, the web of life consists of networks within networks. At each scale, under closer scrutiny, the nodes of the network reveal themselves as smaller networks. We tend to arrange these systems, all nesting within larger systems, in a hierarchical scheme by placing the larger systems above the smaller ones in pyramid fashion. But this is a human projection. In nature there is no "above" or "below", and there are no hierarchies. There are only networks nesting within other networks." (Capra 1996: 35).

He develops the network idea further by asking:

"Is there a common pattern of organization that can be identified in all living systems? We shall see that this is indeed the case. (…) Its most important property is that it is a network pattern. Whenever we encounter living systems – organisms, parts of organisms, or communities of organisms- we can observe that their components are arranged in network fashion. Whenever we look to life, we look at networks." (ibid.: 82).

Gustavo López Ospina concludes:

"Living ontologically involves a knot of relationships. Reality itself is an interweaving of inter-related knowledge and events. The relationship is the genuine substance. Everything is relationship. The network of ties and connections is vital." (Ospina 2004).

Margulis researched the evolution of micro-organisms, and on the basis of biological tests she found out that there "was an evolutionary mechanism more sudden than mutation: a symbiotic alliance that becomes permanent." (Margulis 1986: 17). Her theory, "symbiogenesis",, sees the creation of new forms of life through permanent symbiotic arrangement as the principal avenue of evolution. Capra refers to this when she writes:

"While the social Darwinists of the nineteenth century only saw competition in nature – 'nature, red in tooth and claw', as the poet Tennyson put it – biologists are now beginning to see continual cooperation and mutual dependence among all life forms as central aspects of evolution", (Capra 1996: 232).

Through genetic experiments with bacteria and cells Margulis and Sagan have illustrated this point. They proved that:

"Life did not take over the globe by combat, but by networking", (Margulis/Sagan 1986: 15).

Networking concerns living systems in general and can thereby be applied to the cultural system as well. From this perspective, culture is a mode of networking, or respectively a mode for arrangement between socio-cultural protagonists.

The qualitative shift that denotes such systems-thinking compared to earlier understandings proceeds though "quality instead of quantity, cooperation, instead of competition and partnership instead of domination", (Capra 1996: 232). Indeed, culture is the modus of human networking, and socio-cultural expression is the performance of interrelation and mimetic movements. In this regard, culture is cooperation (this concept is discussed further in chapter 1.8.7, cp. "competitive cooperation").

Regarding the mentioned arrangement or networking with the other; competition and domination are indicative of the rule of force, despotism and the "eye for an eye, tooth for a tooth" philosophy of the Old Testament.

Roger Lewin further strengthens the argument for the evolutionary role of mimetic arrangement inherent in networking. Researching primates, Lewin found that the criterion for evolutionary selection is sensibility and aesthesia, which are requirements for living together in groups, (cp. Lewin 1988).

As shown in the figures 4 and 5, any socio-cultural identity development is circular because in order to progress identity on any micro- or macro-level, it is necessary to interchange with the respective other in a mimetic movement of giving, taking - and sharing. Maturana relates this circularity back to living systems in general:

> "Living systems (…) are organized in a closed causal circular process that allows for evolutionary change in the way the circularity is maintained, but not for the loss of the circularity itself." (Maturana 1970).

Since all changes in the system proceed according to this basic circularity, Marturana argues that the protagonists – which mobilise and participate in the circular organisation, must also be maintained by it. Moreover, he concludes that this network pattern (in this case socio-cultural diversity), in which the function of each protagonist is to co-produce and co-transform other protagonists while maintaining the overall circularity of the network, signifies the basic "organisation of the living", (cp. Capra 1996: 96). This means that socio-cultural protagonists generate, consolidate, communicate and innovate socio-cultural diversity in terms of difference, as long as they relate to each other in terms of arrangement and unity.

Socio-cultural diversity signifies humankind's capacity to proceed circularity (i.e. reciprocity, or feed back) and participate in mimetic networking. It also signifies the ability to create "added cultural value", or socio-cultural synergies and to power human development. This is possible because cultural diversity stimulates the respective other as well the self and the common. Thereby, it activates and preserves the circularity.

It is by these means of mutual networking and cooperation that cultural diversity sustains cultural prosperity and human existence in terms of survival, and *humane* existence in terms of dignity.

Through mimetic arrangement, culture sustains the entire socio-cultural system, because mimesis facilitates dynamic and heterogenic feed back loops, which leads to the subject of the next chapter.

(Annot.: compare chapter 1.4 and 1.6 for further insights into patterns of human networking).

1.4.1 Socio-Cultural Arrangement as Human Autopoiesis

Culture facilitates mimetic feedback loops, which enable socio-cultural protagonists to generate socio-cultural meanings, which, in turn, organise social life. In simple terms, feedback is the process of sending a message in order to stimulate a reaction from the respective other. This reaction connects and possibly arranges self and respective other. The reaction is fed back to the originator of the message (self), and the self may then, either react to, or reflect that message Arrangement emerges between self and other. Throughout the interaction, or communication with the other, the self as well as the other reciprocally explore limits and assess new possibilities. Moreover, they mutually create a common sphere, which means that besides exploring their own limits and assessing their own, new possibilities, they access shared limits and possibilities as well.

Such feedback looping processes are comparable to a sonar-system that assesses opportunities and threats.

❖ <u>Example:</u>

Socio-cultural feed back loops allow for mutual meaning-making and arrangement. This example shows how a father and child relate through feedback. Their communication is intrinsically based on socio-cultural (family) values and on socio-culturally swayed role models, interactions and communication patterns, which father and child apply and which facilitate their mutual relating.

The situation:
A child steps on a sliver and cries. The father, who is in same room, works on his computer.

The messenger: The child
The message: The child cries
The addressee: The father

The interpretation of opportunities (father's perspective):
    The father may understand that the child needs support.
        Option 1: He could provide that support. He may also think that the child is threatened, because he stepped on a sliver.
        Option 2: He should clean the floor more often.

The interpretation of threats (father's perspective):
    Threat 1: The father wants the child to be fine.
    Threat 2: To care for the child threatens the father who needs to work on his computer.

The reaction (father):
    The father takes time to care for the child, but this takes his attention away from his computer work. For both reasons, he cleans the floor more often, so that the child does not step on slivers.

The reaction to the reaction (child):
    After a moment of the father caring for the child, the child stops crying, gains trust in the father, and learns to be careful where he steps and that it is good to sweep the floor.

Mutually generated meanings (father and child):
    Child and father are closely related and celebrate this relation actively. The floor should be clean. One should watch where they step. And both care for each other.

Mutually generated opportunities (father and child):
    Opportunity 1: Physical security is increased.
    Opportunity 2: Social and emotional security is maintained.

Conclusion:
> The feedback loop, or the reciprocal, mimetic reference to another, strengthens the relation/ arrangement between the involved parties that make up a network. They reciprocally stabilise the network and raise their objective and subjective quality of life. Therefore, it is necessary to invest (for example, time and attention) in the relationship with the other.

The messenger and the recipient of a message reciprocally relate to each other. A child and his father usually have a very close relationship, yet "arrangement" does not require such a positive and close relationship. Arrangement allows for competition and competition-related controversy, ambiguity and friction, which can unfold within a framework of cooperation. That cooperation-framework inhibits the assimilation of the self, as well as the dissolution of the other. Moreover, the cooperation-framework, or network, activates and maintains a common sphere, in terms of "the social", of community or of a connectedness between protagonists. "Arrangement" describes a process and/or situation which vary between rather neutral co-existence and relationship.

This arrangement is a precondition for the analysis of a situation, and it is also necessary for the comprehension of strengths and weaknesses, threats and opportunities (by means of a "swot analysis"). This, in turn, facilitates the enhancement or adjustment of the respective situation. Through analysis, meaning (coherence) is generated, communicated, consolidated, or innovated. Such comprehensive capacious meaning then enables protagonists to achieve adequate social organisation.

❖ Example:

How a family (inter-individual level) performs this organisation is shown in the example above. On a societal macro-level, states organise through institutions, laws, education, science, etc. that are not static phenomena but continuously evolving. Thereby, states arrange with their citizens and states arrange with other states, or trans-national states, such as the European Union.

Any socio-cultural identity or protagonist is, in itself, heterogenic. Following this logic, two identities are two times more heterogeneous. Once they inter-relate, they mutually increase their complexity and their potency. Through this relation to the respective other, they can access alternative socio-cultural meanings and meaning-representing lifestyles, values, codes, symbols, self- and world-perceptions, causalities, etc. Moreover, relations create networks, so that the relating protagonists take part in a greater cohesion, or organisation.

Through this shift to (participating in) a higher level of identity progression, the socio-cultural identity becomes more complex and its "pouvoir" increases.

The complexity of an individual identity-cluster, for example, is immense, but the "swarms of participations" (Perkins 1992) emerging on the inter-societal level are enormous. The world society (supra-societal identity level), for example, is made up of six billion people, and 250,000 years of history since the development of the first archaic forms of Homo sapiens (and the extinction of Homo erectus) in Asia and Africa. Furthermore, this world society

depicts controversial as well as complementing perceptions of causalities, logics, beliefs, it bestows of heterogenic traditional and ritual patterns of organisation.

While socio-cultural identities on all levels proceed according to the same cultural mode, or modus, they differ in terms of complexity. In this regard, the supra-societal identity comprehends, or "knows" more forms of communication than an individual may imagine. It is a multitude of attributes which a single person can not access, assess or comprehend.

This multitude of complexities is:

- spatial (i.e. the sphere of influence is smaller for a person than for a group),
- temporary (i.e. cultural diversity transforms relatively slowly and outlasts the life of a person; both, persons and societies have their specific times, or rhythms),
- content related (i.e. the history of a society "knows", for example, more life stories than an individual could assess), and
- quantitative (i.e. the number of parallel communications increases with the complexity of the identity; a society has more "voices" than an individual).

As mentioned earlier, through mimetic feedback loops, persons and social groups generate, consolidate, communicate and innovate a common, viable frame for cultural orientation and socio-cultural meaning. This meaning leads to cohesion, which facilitates organisation. Socio-cultural protagonists regulate their own organisation. Socio-cultural organisation is communicative. Capra assesses this phenomenon:

> "Because networks of communication may generate feed-back loops, they may acquire the ability to regulate themselves. For example a community that maintains an active network of communication will learn from its mistakes, because the consequences of a mistake will spread through the network and return to the source along feed-back loops. Thus the community can correct its mistakes, regulate itself, and organize itself." (Capra 1996: 82).

The aim of communication is to establish a network. Communication can be verbal and/or non-verbal and it explicitly includes ritual networking methods (cp. "rituals and performative learning", chapter 1.8). Networking and mimetic arranging are characteristic for living system, because they maintain that system. They represent the potential of humankind to regulate itself. The overall network of human beings, the societal "sub-networks" and individual protagonists can, therefore, be perceived as socio-cultural identity-clusters on all levels, or as qualitative (i.e. meaningful and regulating) relationships. In this context, culture, meaning, society and the diversity of socio-cultural identities appear as co-evolutionary systems.

Nature, or respectively the bio-system, depicts one possible (the biological) approach to living systems. Nature, thus, can serve as metaphor for the cultural approach to living systems.

Therefore, Capra's understanding of natural systems can also be applied to culture:

> "(…), nature does not show us any isolated building blocks, but rather appears as a complex web of relationships among the various parts of a unified whole", (Capra 1969: 30).

Wulf identifies the same interweaving effect when he states:

> "Interaction with the other plays an essential role. It leads to a better understanding of culture, which no longer appears to be an *isolated island whose inhabitants are simply in contact with the inhabitants of other islands*. The other is rather a part of our own cultural world (…)" (Wulf 2002).

From a physicist's perspective on living systems, we learn from Henry Stapp's assertion, that:

> "An elementary particle is not an independently existing un-analysable entity. It is, in essence, a set of relationships that reach outward to other things." (In: Capra 2000: 139).

The cultural system is a continuously negotiating, configuring, cooperating, networking and arranging assemblage of diverse socio-cultural identities. There are different complexities (qualities) on the different identity levels. And the cultural system is complex in quantity: any identity-level consists of numerous participants. In order to manage this complexity, the system provides tools, (or cultural techniques, cp. for example chapter 1.1 and chapter 4.1.2 for "cultural competencies") which assist its protagonists in their endeavors for the establishment and maintenance of inclusive and, thereby, stable relationships.

Ludwig von Bertalanffy, who developed the "General System Theory", called such systems "open" because they require a continual flux of "matter" and "energy" from their environment. "Matter" and "energy" are terms that he used to describe biological organisms. Transferred to a social and socio-cultural context, the cultural system is an open system because it builds on the continuous mimetic arrangements and the steady establishment of relationships and mutuality between different respective selves and others (cp. figure 4). By means of a dynamic framing and organisation of society, the cultural system lives from the flux and interchange of its components or participants, across the different identity-levels. In this process of mimetic interchange, one socio-cultural identity is fertilising and stimulating the other. That allows the respective identity to continuously adjust itself to the changing and challenging social and natural environment and it reciprocally supports the other to do so as well. Bertalanffy captured this when he coined the term "*Fliessgleichgewicht*", which means "flowing balance" or "dynamic equilibrium", to describe a state of dynamic balance, (cp. Bertalanffy 1968). Hence, the cultural system is the dynamic equilibrium of heterogenic socio-cultural networks, nesting within networks. The system is maintained by obtaining a balance between competition and cooperation, between unity and diversity, between influences of the self and influences of the other, and between opportunities and threats. The cultural ability to deal with complexity is crucial for sustainable human development. In this context, sustainable human development can be understood as the continuous generation, consolidation, communication and innovation of meaningful socio-cultural networks.

This dynamic establishing of relationships is emphasised in Heraclitus' dictum: "panta rhei"; (Latin: everything flows). During the late 1920s the physiologist Walter Cannon took up Claude Bernard's principle of the constancy of an organism's "internal environment" and refined it into the concept of "Homeostasis". This term describes the self-regulating mechanism that allows organisms to maintain themselves in a state of dynamic balance with their variables, fluctuating between tolerance limits, (cp. Cannon 1932). From this perspective, culture empowers human beings to engage in mimetic arrangement, within a dynamically adapted framework of socio-cultural meanings (ethics, traditions, values, self- and world-perceptions, etc.), to secure ongoing mutuality.

Goethe referred to this kind of system as a "moving order" (*bewegliche Ordnung)*. "Each creature", wrote Goethe in his letters to Knebel, "is but a gradated pattern (German: *Schattierung*) of one great harmonious whole". (Goethe 1784).

In his "Critique of Judgement" Kant discussed the nature of living organisms. He argued that organisms, in contrast to machines, are self-reproducing, self-organising wholes. In a machine, according to Kant, the parts only exist for each other, in the sense of supporting one another in a functioning whole. In an organism the parts also exist by means of each other, in the sense of producing one another. This means that each part of the organism is a means in itself and simultaneously it has the function to contribute to a greater whole. Kant writes:

> "We must think of each part as an organ that produces the other parts, (…). For this reason, the organism will be both an organised and self-organising being." (Kant 1790).

With this statement Kant also became the first to use the term "self-organisation" to define the nature of living systems.

In 1972 Humberto Maturana and Francisco Varela invented a new term for self-regulation, "autopoiesis" (Maturana/Varela 1980a/b). "Auto" means "self" and connotes the autonomy of self-organising systems; and "poiesis" – which shares the same Greek root as the word "poetry" – means "making". Therefore, "autopoiesis" means "self-making". Sometimes it is also called "self-creation", emphasising the importance of creativity, i.e. self-organisation as a creative process, able to overcome socio-cultural conventions and to deal with complexity. This text will asses this aspect of creativity later on (cp. chapter 1.5 and "the liminal phase" in chapter 1.8.5). From a culture-anthropologic regard, autopoiesis connotes "meaning-making". In this regard culture mediates between, for example, chaos and organisation, or self and the other, in order to mimetically generate, maintain and regulate societal networks by means of human cultural autopoiesis.

An autopoietic and therefore living system is:

> "a network of production processes [i.e. the production of socio-cultural meanings], in which the function of each component [socio-cultural protagonists] is to participate in the production or transformation of other components in the network. In this way the entire network continually 'makes itself'. It is produced by its components and in turn produces those components", according to Capra, (Capra 1996: 98).

The physicist Geoffrey Chew formulated his so-called "Bootstrap Hypothesis" about the composition and interaction of subatomic particles. This hypothesis touched upon the concept of autopoiesis, about a decade before Maturana first published his ideas. According to Chew, strongly interacting particles, or "hadrons", form a network of interactions in which "each particle helps to generate other particles, which in turn generate it." (In: Tan, Finkelstein, deTar: 248f).

These concepts can be applied to the context of the cultural system and socio-cultural network: This network consists of socio-cultural protagonists on all identity-levels, or respectively the network consists of the mentioned "components" (Capra), "particles" of a network (Chew), "organs" (Kant), "internal environment" of an organism (Cannon), or "graded patterns of a harmonious whole" (Goethe). The achieved regulation, in which all these socio-cultural protagonists participate, is human development or, respectively, sustainable development in terms of humankind's internal integration and external integrity (i.e. integration into the environment).

The German sociologist Niklas Luhmann related the theory of autopoiesis to human social systems. The crux of Luhmann's "Theory of Social Systems" is to identify the social processes of the autopoietic network as processes of communication. Communication consists of a circularity (feed back looping), connoted by the interplay between self and respective other, thus Luhmann argues:

> "Social systems use communication as their particular mode of autopoiesis. These communications are (…) produced and reproduced by a communicative network and cannot exist outside such network." (Luhmann 1990).

❖ <u>Example:</u>

Luhmann gives an example, which highlights the innovative role of communication: A family can be defined as a network, which operates and maintains itself through specific communication patterns. Conversations give rise to further conversations, so that self-amplifying feedback loops are formed. The enclosed nature of the network results in a shared system of beliefs, explanations, and values – a context of meaning – that is continually sustained by further conversations. The communicative acts of the network of conversations include the "self-production" of the roles by which the various family members are defined, as well as, the boundaries of the family system. Since all these processes take place in the symbolic socio-cultural domain, the boundaries cannot be of a purely physical character. It is rather a family-specific socio-cultural set of expectations, confidentiality, loyalties, and so on. Both, the family roles and the boundaries are continually maintained and renegotiated by the autopoietic network of conversing protagonists, (cp. Luhmann 1990).

Mimetic interchange develops both, differences and connections between socio-cultural protagonists. The accompanying figure "The Dynamic Inter-Progression of Individuals and

Societies" (figure 5) illustrates how the communicative interplay between socio-cultural protagonists creates socio-cultural differences and unity. From the perspective of the individual, interplay with the other person is more tangible and less abstract than societal interplay. For the individual, it is especially difficult to comprehend the very complex supra-societal level, the human cultural network. The task at hand for human beings and especially those concerned with education, is to increase our capacity to comprehend the macro-aspects of society and human development in order to adjust our own meanings and lifestyles and to shape social networks accordingly (cp. chapter I). Comprehension can expand abilities to sufficient poiesis of respective socio-cultural protagonists and to sustainable autopoiesis of the overall network of all socio-cultural protagonists (cp. "multi-perspectivity", chapter 1.6/ 1.6.6).

Figure 7:   The Interplay Between Different Socio-cultural Protagonists
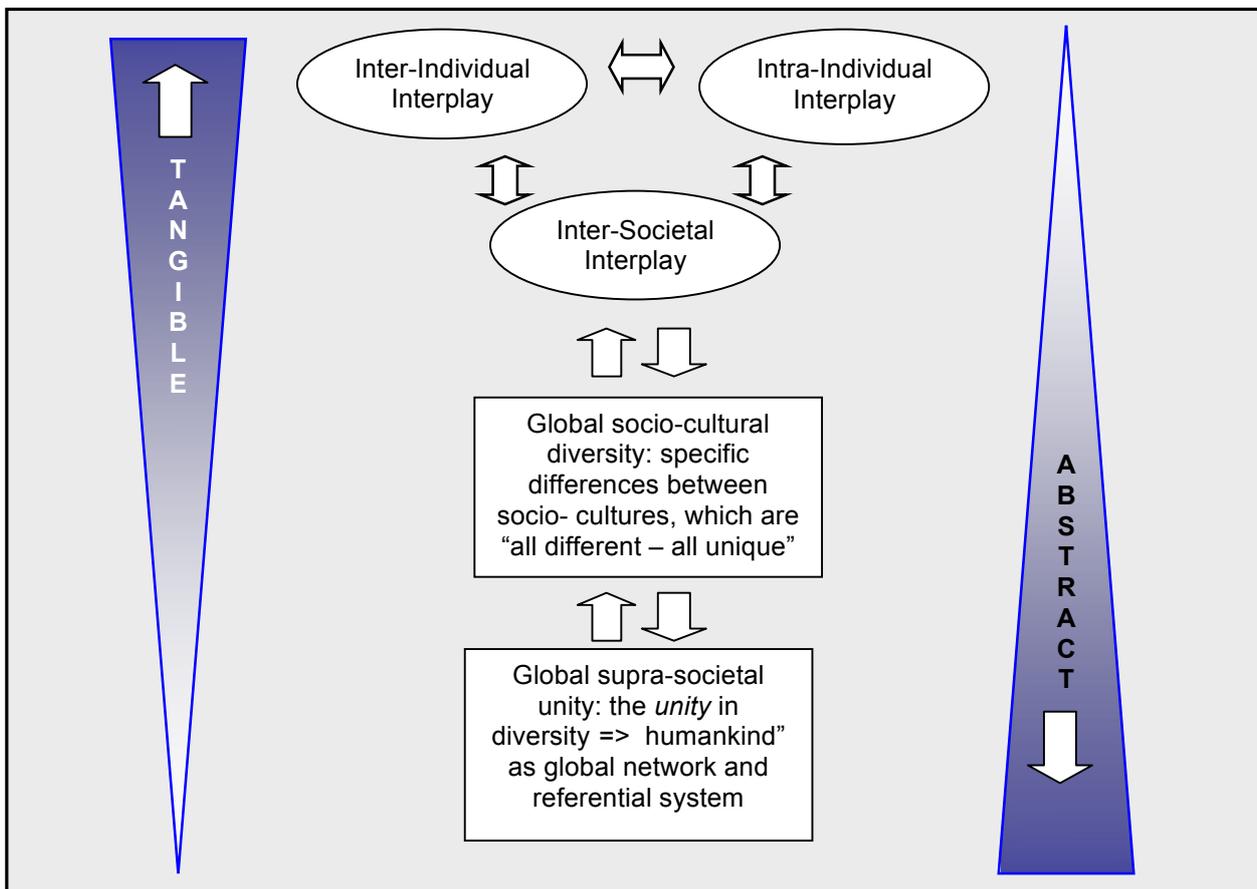
1.5 Unity in Diversity: The Democratic Principle of Culture

That the cultural system is a network of intensively interrelated and interdependent socio-cultural protagonists implies that any of these protagonists is natively bestowed with meaning and prminence. Any socio-cultural identity on any level is heterogenic and, to use a biological term, "cross-fertilised" by the respective other. Tullio Maranhhão describes the subsequent role and meaning of "the other" as follows:

"Several consequences result from the philosophy of the other. The most important is the fact that my freedom and my possibilities in life are not determined by my own being, the entity of my existence. My freedom and my possibilities have their beginning in the other; not because of his agreement or authorisation, but because of the fact that the freedom and possibilities of my core inner would be meaningless if there would be no outside from which they derive. Therefore the time of my life is not equivalent with the totality of my life, which is determined by my death, instead my lifetime is determined by the other person. And the death that concerns me is not my own death which I can experience, it is rather the death of the other which I witness and of which I suffer. According to several existing theories I live in the fear of my imminent death. But the only death that I suffer is the death of the other, which disorganises my self. My identifications persist for the other and once he is dead, the mirror in which I can recognise and identify myself, is broken." (Maranhhão 1999: 82).

In this context Stuart Hall, co-founder of Cultural Studies, warns about the binary scheme "we - the others", (Hall 1994), or of self and other. At the same time this evokes the danger of relativism and neglecting of differences. Only if there is difference, can there be uniqueness. The assimilation of the other is an extreme approach to alleged "harmonisation" of differences in terms of homogenisation. Ethnic cleansing is an example of such an approach and suicides may aim at the destruction of "other" influences within one's own identity. On the other hand, the example of a football game shows that a distinction between "we – the others" can be natural for human behaviour in ludic terms. The precondition for such ludic interplay is a framework, which safeguards that cooperative attempts prevail over competitive attitudes (cp. "competetive cooperation", cp. chapter 1.8.7).

❖ Example:

In the case of football, both parties compete on a level playing field with clear boundaries and the same rules for all. That framework unites the football players and arranges them in a network of individuals who are organised into two parties, which celebrate the shared aim of playing football. In the same way, peace must not connote the absolute equity of all people and societies. Peace rather indicates that conflicts and inequality are possible – as long as they do not violate certain ethical and political frameworks, such as the Human Rights Convention or the Golden Rule (cp. chapter 3.1.5 and 3.2.7). Just as with peace and football, the (world-) economy needn't bar competition among companies, but it must regulate the patterns of this competition. This requires transparent rules to safeguard social and environmental values, and a strong referee to regulate and maintain adherence to the framework. Such a referee must, for example, prevent monopolisation as monopolies represent the degradation of diversity and a decentralisation of competing companies.
Democracy is a political answer to the need for frameworks, which manage liberty and solidarity. As a referential system, it provides structures, which help people live with other people in a desired way.

Diversity can develop within socio-cultural frameworks, which unite socio-cultural protagonists and organise them into networks. Living systems, and therefore also social networks or communities are heterogenic, dynamic and regulate themselves through mimetic interplay. Culture provides techniques that enable community members to deal with difference and interchange with the other. One of these techniques is creative expression, such as art. Art interprets reality, or rather it creates own, alternative realities and uncovers ludically that reality is intentional interpretation, that it is relative, convergent and multi-dimensional. Art takes and provides alternative perspectives on reality and thereby deals

with difference. It incorporates the known and the unknown. This enables the observer to see reality from a different perspective, from the perspective of the other, and to access new emotional and cognitive possibilities. Art deals ludically with different perceptions and meanings, expressed through colours, shapes, and materials, which interpret conventional situations differently. For an observer – as well as for an artist – art accesses the perspective of the unknown other (cp. chapter 1.6/ 1.6.6).

❖ Example:

In the European art world, it was during the fifteenth century that the idea of "perspective" and thereby the vanishing point was discovered. A vanishing point is a point in a perspective drawing to which parallel lines not parallel to the image plane appear to converge.
Until then, time and space practically did not exist in art. One Christian painting, for example, could portray different episodes of the bible; episodes, which occurred at different moments. Ancient cave paintings are usually strictly two-dimensional; size, space and time flows appear disproportional.
Painters often use space in a greatly "unreal" manner: The reality emerging from these paintings allegorises the subjective meaning of the painted object rather than its objective appearance.
The expressionism, fauvism, dadaism, surrealism, cubism, and futurism of the 20th century and (other) contemporary art, removes perspective from their paintings. In the same painting Picasso, for example, interpreted faces from the front and in profile (see figure 6). Referring to Einstein's Theory of Relativity and particularly to the Theory of Space-Time, Ernst Peter Fischer writes: "In Picasso's paintings time becomes space" (Fischer 2005b). And referring to Picasso's ,Les demoiselles d'Avignon' (1907) he states:

> "Those who would try to remove persons or artefacts from the painting would take-away the space. This is exactly what Einstein says about the world", (ibid.).

Picasso's paintings may have many different effects on the observer. One of these effects may be the inspiration to question the relation and meaning of time and space.

Figure 8: Picasso's Paintings – The simultaneous perspective

| Les Demoiselles d'Avignon | Girl with Dark Hair | Portrait de Femme |

"In Picasso's paintings time becomes space" (Fischer 2005b)

Artistic expression combines, re-unites, interrelates, and arranges the self and the other: The multi-, simultaneous- or "a-perspective" artistic modus visualises the making of meaning and cosmos (the canonical/ the self) from randomness and chaos (the uncontrolled, unknown/ the other). It overcomes the perception of the duality of self and other and creates space for

the common and for the "in-between". The creativity represented in art is better able to deal with difference and complexity than mono-causality-oriented cognitive rationality. In this regard, art and creativity appear to indicate the original human rationality, which is comprehensive and sustainable. At least creativity is equally as important as the cognitive, intellectual consideration of rational causality. Both promote human autopoiesis and socio-cultural empowerment. Art is free to unfold beyond conventions, there is no right or wrong in art. This autonomous, non-manipulable, participatory, regenerative artistic power of creativity may also have been what lead Joseph Goebbels to initiate the exposition (and term of) "Degenerated Art" (German: Entartete Kunst, Munich 1937). He aimed to ban by the Nazi's undesired artists from their professions through the burning of artworks and books on July 10 to 21st, 1933 in Germany. In his book "Almansor: A Tragedy", Heinrich Heine anticipated:

> "That was a foreshadowing of things to come. There, where books are burned,
> finally humans will also be burned" (Heine, 1821).

In various ways creativity, for example, in the form of art, is a precondition for the overcoming of inertia and confinement. It enables one to interpret and create meaning, independent from established meanings, organisation patterns, socio-cultural identity models an conventional role models, child and adult, woman and man, the self and the other. Creativity can moreover traverse antagonisms, for example of the real and the imaginative, the rational and the creative, the temporary and the eternal, the known and the unknown. As cultural techniques, creativity, and particularly art, move between antagonisms and relate or arrange them. This arrangement, in turn, suspends or reduces the antagonism because cultural techniques enable protagonists to surpass distinctive boundaries.

Hence, a self does not only emerge in relation to its difference from the other; it is also generated in unison with and through the other. In this context Auernheimer refers to laboratory experiments, which affirm the surpassing function of differences. He explains:

> "Even trivial social categorisations, such as German nationhood (German: "Deutschtum"), lead to identification with one's own group, moreover they lead to a comparison with other groups and finally to the distinction and circumscription of these groups. However, the research concerning Social Identity Theory has also shown that there are alternatives; for example, the possibility of transforming homogeneous categories through the construction of a heterogenic In-group. Humanity and the world-society must establish such In-group." (Auernheimer 2003: 71).

An In-group connotes a tolerant heterogeneous society, which integrates and arranges different protagonists, meanings and perceptions, foreclosing exclusion in form of discrimination, or aggression. In-groups emphasise on the similarities of different group members, rather than using difference from others as parameter for group-identification.

According to Auernheimer, it is neither sufficient nor appropriate to speak only of differences. Differences become significant in correlation with similarities and the commonality of an In-group signifying inclusion of the other. In order to persist and avoid destroying themselves in

competition with the other, different socio-cultural protagonists on all identity levels require certain similarity by means of connection with others.

On the supra-societal level, all humans cultivate a pluralist In-group, a community or "we-group". Individual human beings as well as societies are unique – sui generis – in their differences *and* connected in their unity. As a consequence, human beings are categorically equal in meaning, and are consequently bestowed with equal rights as well as responsibilities. This axiomatic equality denies the distinction of human beings on the basis of race (i.e. exclusive in terms of radical differentiation, cp. Auernheimer 2003: 65 - about Johann Gottfried Herder, 1744-1803). Nevertheless, networks are uniting frameworks, which consist of different members who have different socio-cultural identities. Therefore, living systems or networks require the internal diversity of members. Furthermore, networks require other networks.

Therefore the principle of "unity in diversity" or respectively "diversity in unity" is the basic condition for mimetic socio-cultural arrangement, actual peace and sustainable, human development, (cp. chapter 3.2).

"Unity in diversity" was also used as a slogan for the preliminary European Constitution in 2005. Indeed "unity in diversity" connotes the essence of democracy, because it provides freedom to all citizens – within a political framework of rights and duties. Democracy aspires to relate the self with the other. There is space for frictions and controversy, for example, in the form of free will, freedom of press and the freedom to demonstrate. Thus, the competition between opposing parties is possible and even necessary, but limited to the extent that cooperation prevails. This cooperation aims to prevent discrimination and strictly interdicts the elimination of the other. This is also why the death penalty is incommensurable with democracy.

In so far as democracy is the procedure as well as results from the sharing of forces, distribution of influence and deliberation of participation, (socio-)culture is democratic, because culture facilitates to set up and maintain socio-culturally heterogenic networks.

Culture mediates between differences, for example, between self and other, chaos and cosmos, contingency and continuity. Thereby, it generates common meaning and in turn meaningful community – or respectively arrangement. As virtual application of culture, socio-cultural arrangement itself *is* meaningful for its own sake. Bruner says:

> "The viability of (a) culture results from its capacity to solve conflicts, resolve differentiations and continuously negotiate and re-negotiate meanings", (Bruner 1997: 64).

Meaning can be perceived as concertedly negotiated agreement; and community can be perceived to represent the agreement process. Arrangement signifies social synergy. For the involved socio-cultural protagonists, this synergy connotes the mutual expansion of their respective and shared possibilities. Hence, arrangement equips humankind with power and (r)evolutionary potency, leading humankind to be the dominant species on earth. It potentially empowers human beings as "wise" managers of their own fortune and future. Culture makes the human being what it is; not only the physically upright walking Homo erectus, but the "mentally upright walking", rational, emotional, sensitive, intelligent, flexible, reflective, self-regulative, and, by these means, "wise" Homo sapiens. Culture; "the wisdom" and potential of humankind, determines the humane meaning of human being. To be human means to be arranged with others, to integrate and to be integrated into a steadily renewed and innovated, dynamic and regulative socio-cultural system.

This culture-inherent democratic arrangement with the other is the origin for a humane ethics, on which the text will concentrate in chapter III (particularly chapters 3.1 and 3.2).

Through participation in this arranging process, a cultural identity becomes – ab initio – a meaningful subject and actor in society, obtaining socio-cultural power through and for the society. This applies to a poor farmer, a delinquent, or a president; all are bestowed with the same meaning and value as they are world citizens and human beings. The term "civil society" captures magnificently the fact that this equality is fundamental to a democratic global society and In-group.

1.6 Socio-Cultural Multi-Perspectivity: Diverse Perspectives on Shared Challenges

This text assumes that culture is organised in modes (principles) and patterns (interpretations or practical applications). The modes of culture direct the way that the patterns evolve (cp. chapter I / 1.4). The patterns of culture are unique expressions of these modes, and they express them diversely. While "culture" directs communication and more specifically communicative techniques such as narration and performance, socio-cultural patterns are the expressions of particular stories, ritual performances, meanings, values, symbols, perceptions, etc.

In this way, culture is the mode for social human organisation and regulation. It predetermines that this organisation and regulation proceed through mimetic meaning making, identity building (i.e. the creation of a community/social groups) and through relating with others. Cultural modes of mimetic meaning making, identity building and relating with others are performative, ritual (cp. chapter 1.8), narrative (cp. chapter 4.2.7 et al.) and imaginative (chapter 2.2.2 et al.). They assist socio-cultural protagonists in the generation, consolidation, communication and innovation of meaning and meaningful identity networks

(i.e. communities or social groups). In this regard it is important to recall that socio-cultural identity is not understood as an autonomous unit, but rather as a "swarm of participations" (of many others (Iser 1992, cp. "socio-cultural identity" in chapter 1.3 and "swarm intelligence" in chapter 1.6.4 et al.).

Culture – the model and mode for social life – does not predetermine the patterns of this organisation and regulation. Culture directs the process of meaning-making, but not the results of that process. Hence, it neither determines specific appearances of patterns, nor specific characters of pattern-representing protagonists (i.e. individuals or groups).

Culture is therefore understood as a matrix of socio-culturally diversified and further diversifying human life.

In order to function, culture not only incites the processing of socio-cultural patterns, it also requires the diversity of patterns; it requires cross-stimulating and therefore creative diversity. Cultural diversity activates and thereby "resurrects" the cultural principle of human organisation. The cultural matrix, or mode of socio-cultural organisation (cp. chapter 1.1) defines the potential of human self-regulation. Throughout social application of cultural regulation, culture is expressed and performed throughout diverse socio-cultural patterns.

These different patterns represent different meanings. The meanings, in turn, shape socio-cultural identities and influence for example: values, lifestyles, perceptions, causalities, family- and work-lives, religions, consumption- and production patterns, state organisation, economy, environmental use and education.

The "UNESCO Action Plan on Cultural Policies for Development" provides an idea of the "texture" of social-cultural diversity, referring to the Mexico City Declaration on Cultural Policies from 1982:

> "that in its widest sense, culture [in this text connoted as socio-cultural diversity] may now be said to be the whole complex of distinctive spiritual ritual, material, intellectual and emotional features that characterize a society or social group. It includes not only the arts and letters, but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs" (UNESCO 1998) (cp. "What is culture?" in chapter 1.1)

Moreover, the UNESCO Action Plan relates culture and its diversity directly to sustainable development: The Action Plan recognises for example the following principles:

> 1. Sustainable development and the flourishing of culture are interdependent.
> 2. One of the chief aims of human development is the social and cultural fulfilment of the individual. (…)
> 6. Cultural creativity is the source of human progress; and cultural diversity, being a treasure of humankind, is an essential factor of development.
> (…) . (ibid.)

As mentioned, the differences of socio-cultural patterns signify diversity, which in turn signifies a pool of alternatives for organising and regulating society. Because culture entails the regulation and organisation of humankind, socio-cultural patterns do not only represent

differences in the expression of this matrix, they also represent relations to, and connectedness with, one another (unity in diversity).

The inherent differences found in diversity can also be described as alternatives. In this regard, socio-cultural diversity provides alternative meanings, perceptions and perspectives on locally, globally and "glocally" shared situations. Global warming, poverty and neo-liberalism are situations, which connote challenges. Different socio cultures deal differently with such challenges. Therefore, socio-cultural diversity provides many different approaches to perceiving the problems, assessing the requirements for change, and developing strategies for overcoming or coping with such challenges.

Therefore, socio-cultural diversity can, as mentioned above, be described as a pool of alternative options for regulation and organisation, and as opportunities for all individual and societal protagonists. Alternative organisation and regulation patterns are important in order to sustain the ability to cope with complex challenges deriving from a changing environment (external frictions) and problems of social integration (internal frictions). In moments of contingency and of complex global issues, such as climate change, poverty, war or unsustainable neo-liberalism, but also in times of great, scientific insights and technological innovations, it is highly crucial for humankind to posses such a pool of alternatives. Wulf states:

> "individual or societal identity emerges from difference (…). Societies and people constitute themselves throughout processes of coping with alterity. Already in the learning processes of children and adolescents, experiences concerning other people and [socio-] cultures play an important role." (Wulf 2005).

These identity-generating, -consolidating, -communicating and -innovating processes signify culturally regulated and socio-culturally specific mimesis: Throughout mimetic interchanges between self and the respective other, self and other reciprocally "expand the horizon of their possibilities" (Iser 1978). Moreover, mimetic interplay maintains the unique difference between both parties, while an additional common sphere, an arrangement or even a relationship, is created (unity in diversity).

According to Ehrenfels' theory that "the whole is more [or respectively more complex and in this regard different] than the sum of its pieces" (cp. Ehrenfels 1890, chapter 1.3.1.1 and 1.3.1.2), newly arising self-other constellations and relations increase the complexity of their organisation and regulation potential. Thereby they can prevent and overcome temporally (i.e. long-lasting) and spatially (i.e. globally/glocally) complex challenges. The continuation of effective organisation and regulation can be described as development. More precisely, the successful organisation and regulation of society, environment and economy signifies sustainable development. The unsuccessful organisation and regulation of society (e.g. neo-liberalism, or oppression) is similar to "envelopment" and contradictory to sustainable development.

In this broad and abstract sense, sustainability is perceived as the maintenance of the pool of development alternatives, rather than the predetermining of a specific, globalised development ideology. This is why sustainable development must not be over-defined, even though this makes it even more abstract. Sustainable development aims to empower both:

- human socio-cultural differences by means of diversity and
- the concerted, although heterogenic, controversial and ambivalent (comm-) unity of different socio-cultural protagonists

Sustainable development fosters these both aspects of the human cultural system, unity and diversity, as means in themselves and as functional means to maintain human integration on earth.

"Culture" is the matrix and framework for human organisation and regulation, because it enables concerted meaning making, mimetic identity-building and mutual relating with others. It is best described by the mimetic principle of interchange between self and other and the generation of the common sphere. Mimesis is a conditio humana, socio-cultural diversity the pre-condition for sustainable development. In other words, socio-cultural diversity is the pool, laboratory and incubator for developing sustainability. Wulf explains:

> „Only through the mirroring reactions of other individuals and [socio-] cultures, can people come to comprehend themselves. This implies as well, that self-awareness requires the understanding that the comprehension of alterity is limited." (Wulf 2005).

In other words, the friction inciting diversity enables individuals to comprehend complex issues as long as the involved parties can deal with difference and thereby manage the friction. Accomplishing what Wulf says (see above), not only individuals but, social groups and humankind in general, require various "mirrors" in order to perceive themselves appropriately.

Socio-cultural diversity enables a creative multi-perspective on complex issues. It brings forth differentiated and highly complex solutions to challenges. It is thereby intrinsically able to sustain wealth of humankind, for example also in respect to the ecosystem.

This fascinating potential for dignified human existence in socio-cultural diversity and potential for sustainable development in cultural unity specifies the Homo Sapiens, the wise human.

To summarise, it can be stated that the multi-perspective of socio-cultural protagonists is derived from the diversity of their differences, which represent pools of alternatives. These alternatives are generated throughout mimetic processes and the resulting arrangements with the other.

Mimetic processes create community and cohesion (unity), hence they also provide a framework of relative cooperation (arrangement). Simultaneously, and seemingly

paradoxically, they maintain and foster differences (diversity), which means that mimetic processes are ambivalent and creative. How is it possible for social groups, such as communities or societies to maintain the balance between creative difference, friction and disturbance on the one hand, and consolidating cohesion, unity, arrangement and relatedness on the other? Or, in other words, what keeps a social group together? Why is a social group more than a cluster of randomly attached individuals? Why and how do they connect to another? The answer lies in the commonly generated multi-perspective, which enables protagonists to cope with complex challenges, overcoming them through appropriate organisation and regulation.

This chapter takes a closer look at the features of mimetic (human) regulation and organisation.

The chapter explores and provides examples of how diversity can become a guarantor for lively and therefore autopoietic community. Furthermore, this chapter introduces the concept of how diversity facilitates "multi-perspectivity" to develop the community. In order to highlight these points, this chapter summarises different scientific approaches to multi-perspectivity in an interdisciplinary manner.

1.6.1 Civic Intelligence

Civic intelligence is a rather cognitive "intelligence" that addresses public or civic issues. The term has been applied both, to individuals as well as to collective bodies, such as communities, institutions, or societies (cp. Schuler 2007)

John Dewey used the term "cooperative intelligence" or "democratic faith" to mean something similar to "civic intelligence". He argues that:

> "each individual has something to contribute, and the value of each contribution can be assessed only as it enters into the final pooled intelligence constituted by the contributions of all" (Dewey, John 1937)

This shows that civic intelligence is a more cognitive approach to multi-perspectivity, while socio-cultural diversity is a more holistic approach. Cognitive intelligence is a pattern or aspect of the overall socio-cultural diversity of society. Nevertheless, the citation above describes, in a less abstract manner, how multi-perspectivity can function.

Civic intelligence functions because of collaboration and participation. Its development is interdisciplinary (complex in content) and continuously evolving (dynamic). Cognitive scientists address some of these issues in the study of "distributed cognition". Social scientists study aspects of civic intelligence with their work on group dynamics, democratic theory, social systems in general, and in many other subfields. The concept is important in business literature, which describe it as "organisational learning". Pedagogues approach the

issue through the concept of "learning societies", social learning, community education and community development (cp. 4.1.3.2 and 4.1.3.3). Further related concepts are, for example, collective intelligence, distributed intelligence, participatory democracy (chapter 1.5 "Unity in Diversity: The Democratic Principle of Culture"), new social movements (cp. "from folks to movements", chapter 2.2.1), collaborative problem-solving and division of work (cp. chapter 1.6), or Web 2.0 (cp. chapter 2.2.3).

There exist manifold definitions of civic intelligence. One version is described by Douglas Schuler in his book "Cultivating Society's Civic Intelligence: Patterns for a New 'World Brain'". (Schuler 2001). According to Schuler, civic intelligence applies to social groups, such as communities or societies, because this is the level where public opinion is mainly formed and decisions are made or at least influenced. Through the exchange of information they generate complex knowledge and their own abilities to organise and regulate emerge. This can be described as emergency shift, hence a paradigm change or transformation towards increased complexity, or respectively increased ability to deal with complex challenges. Such an emergency shift, or paradigm change is especially required in moments of contingent human development. In sustainable terms, Laszlo describes this as "macroshift" (cp. chapter 3.1.1 and 3.1.2).

In contrast to the rather informal and implicit approach of socio-cultural diversity, civic intelligence is a formal and explicit approach to working towards civic goals such as environmental protection or non-violence among people.

Referring to the participatory creators of civic intelligence Aristotle declared that:

> "Each of them by himself may not be of good quality; but when they all come together it is possible that they may surpass – collectively and as a body, although not individually – the quality of the few best." (Circa 343-23 BC)

Civic intelligence is based on collaborative and communicative principles. Therefore, it is an opposite approach to the industrial model of the 20th and possibly 21st century: the model of "command and control" (cp. chapter 1.8.7 for "competitive cooperation"). In this regard, industries seem to be based on formats that are basically legacies of military hierarchies. James Surowiecki describes the potential of civic intelligence with (the title of) his book "The Wisdom of Crowds – why the many are smarter than the few and how collective wisdom shapes business, economies, societies and nations" (Surowiecki 2004). Garry Hamel refers to the issue in "The Future of Management" (Hamel 2007).

1.6.2 Collective Intelligence

Collective intelligence is one aspect of socio-cultural diversity's inherent multi-perspectivity. The concept focuses primarily on human beings. It describes the potential to actively upgrade or evoke the ability to develop collectively (commonly) as a community. Howard

Bloom calls this ability to collective, or collaborative self-regulation "the group IQ" (Bloom 1995). Societies tend to promote the consolidation and conservation of their organisation: they aim at keeping things as they are. Protectionism and exclusion of minorities, discrimination and war are the negative aspects of such consolidation. In order to sustain (the stability of) a society, attempts to consolidate societal meanings, identities and structures must be accomplished through creative and innovative attempts to question, proof and eventually adjust unconstructive patterns. When the creative effects of a society prevail, the society theoretically risks being ruptured or breaking apart. The most likely response of social groups is a sort of conservative "groupthink", group behaviour in terms of routine-blindness or economic, social and environmental myopia, as well as cognitive bias on an individual level. Collective intelligence is participative; it involves its participants actively and regulates itself in a more complex and differentiated manner than hierarchical forms of organisation. It can generate, consolidate, communicate and innovate meaning, knowledge and "intelligence", which means that collective intelligence contributes to the prevention or overcoming of complex challenges to the organisation of the respective social group.

In this context, collective intelligence is often confused with shared knowledge. The former is knowledge that is generally available to all members of a community, while the latter is information known by all members of a community (cp. Jenkins 2006).

A good example of learner-generated content is found on the internet – a group of collaborative users pooling knowledge, which results in a shared intelligence (open) space. The internet, or respectively the Web 2.0, functions increasingly as a shared public forum and promotes collective intelligence as it gathers and distributes knowledge. Flew argues that the global accessibility and availability of the internet has allowed more people than ever to contribute their ideas, and to access these collaborative intelligence spaces (Flew 2008). Therefore, it is logical to look for information about collective intelligence on the internet. For one career advisory website Joachim Mai states:

> "Often the masses know better, detect the "truth" quicker, and find more accurate solutions. Admittedly, there are restrictions: It only functions if different opinions are promoted and not the consensus. The masses are only intelligent when all participants contribute individual and independent opinions. This idea can be transferred well to teams and meetings; as soon as the group members are too homogenous, the innovation process stagnates. (…), as soon as only some of the participants dominate the debate, the masses falls into business myopia." (Mai 2007).

Collective intelligence requires both, the "group-compounding" consensus (unity) and the "group-specifying" particularities (diversity), i.e. in terms of different opinions – or perspectives. Consensus refers to the interchange of members who communicate and arrange with others.

The behaviour-biologist Jens Krause of the University of Leeds refers to the appearance of a typical, non-verbal, performative collective intelligence in airports. Dambek reports:

> "After the landing of an airplane, people move out of the plane, but there is nobody to show them the way. Thus, some "members" of the group move on purposively and in a goal-oriented manner, while the others follow and trust that these people know the way. Central are consent-decisions, and how these are incited through a minority." (Krause. In: Dambeck 2007).

It may be evident, but it is important to point out explicitly that these leaders loose their role as soon as the context changes and other decisions are required. Those few people who knew the way out, loose their leadership roles as soon as the group arrives at the customs room where the people build cues. A new place, with new requirements, represented by the demarcation line of the customs service and a new activity – the standing and waiting instead of moving – disengages the former leaders and reintegrates them into the collective. New leaders appear, for example, people who realise that a new customs desk without a cue has opened. These people move to the desk and inspire others to follow.

How does one generate collective intelligence and prevent "group-think"? Or put differently, is there a consensus which fosters group think and another sort of consensus that promotes collective intelligence? Differentiation, hence the multi-perspectivity on the issue of consensus, provides a comprehensive understanding:

- Group-consent: is collective consent is consent which is valuable in a certain moment at a certain place.
- Leadership: The role of leaders who contribute essentially to generate, consolidate, communicate and innovate consent, is crucial. Consent inciting leaders are temporary and contextual leaders. This means that if some members of a group have information, which is convincing to others, they become leaders for a certain moment at a certain place. In contrast to person-centred charismatic leadership, it is not their person or personality, but their information that is relevant and functional to the group. Leaders are teams rather than individual persons.

Collective intelligence generation, consolidation, communication and innovation is neither undemocratic, nor rejecting of leadership. It avoids anti-authority, thus levelling out hierarchy indeed in favour of more participation. The participation, however is not absolute, (spontaneous) leaders have the role to coordinate the participation attempts, foreclosing "laissez-faire" and supporting the group to conduct itself. Through the strong focus on participation, collective intelligence signifies the ability of social groups to organise and regulate development through flexible and differentiated, contextual leadership. Krause states:

> "Everybody who has information can become a leader. (...) A swarm of people is able to use far more information than an individual could collect." (ibid.).

The successful division of work, which enables humankind to develop high living standards, shows that social-systems have a greater emergence-level than individuals (cp. chapter 3.1.1/ 3.1.2). That means, societies are similar organised but more complex than individual socio-cultural identities. Through societies, hence through the arrangement with others individuals can expand the horizons of their possibilities. The division of work is one example. It allows people to build towns, to produce goods, or to develop specified knowledge, because nobody has to do all by himself. Everyone rather accomplishes the other. This human ability is based on a principal which is as central as it is simple: "Everybody regards his/her neighbour" (cp. "the golden rule" and "ethics of neighbourhood") in chapter 3.1.5/ 3.2.7).

How can the above-mentioned, rather abstract principle of mutuality generate, consolidate, communicate and innovate socio-cultures? Which tools and techniques are required to organise leadership and collaboration?

Mutuality, regarding the other and creative "self-other arrangements", requires "cultural competencies" of socio-cultural protagonists (cp. chapter I and 4.1.2 ofr "cultural competencies"). Such competencies are, for example, the ability to engage in mimetic interplay and networking (cp. 1.3.1.1 and 1.4). "cultural competencies" represent the incorporated modes of communication, mimetic arrangement, (auto-)poiesis and organisation. Chapter IV focuses on these competencies; it breaks these insights down into educational concepts and pedagogical practices.

Colonialism, slavery, The Crusades, and National Socialism could not have occurred if it weren't for massive societal consent and support. This means that social-groups are not necessarily and automatically appropriately and sustainably self-organising. Instead, social groups have intrinsic self-organising potential, which they may realise in the case that the above mentioned conditions are met. Crucial for such appropriate organisation is an open space (cp. chapter 4.1.8); a regulating and simultaneously regulation enabling framework. The framework can be formal, policy for example, or it can be informal, as with an ethics or a lifestyle. This framework enables open space for self-other co-operations. Hence, it enables participation and the unfolding of diversity within an incorporating unity for all. This participation allegorises the principles of socio-cultural diversity's inherent "multi-perspectivity" (chapter 1.6 / 1.6.6), mimetic interplay and ludically communicating networks (chapter 1.4 and 1.5). From a systemic perspective, sustainable human being and development is in accordance with autopoiesis (cp. chapter 1.4.1).

It is in this context that George Pór defined the collective intelligence phenomenon as:

> "the capacity of human communities to evolve towards higher order complexity and harmony, through such innovation mechanisms as differentiation and integration, competition and collaboration." (Pór 1995)

From a political perspective on society, such above mentioned frameworks can be democracies or an eco-social market-economy. From an ethical perspective on society, open space can be achieved through tolerance, integration and mimetic interrelation with others (cp. "discourse ethics", chapter 3.1.6 and "ethics of neighbourhood", chapter 3.1.5). Socio-culturally, such frameworks consist of adequate socio-cultural meanings and require sovereign protagonists who are able to arrange with the other, while not assimilating the other.

In this context, one philosopher shall be mentioned who worked intensely on the issue of crowds and structures of despotism: Elias Canetti. After 20 years of work, his book "Masse und Macht", (German, "Crowds and Power") was published (Canetti 1960). In 1981 Canetti received the Nobel prize for his work. Canetti mainly focussed on the psychological processes of crowds. The climax of mass experiences, for example, he describes as "discharge" ("Entladung"), a moment when differences are expelled and all members feel as one. According to Canetti, protesting crowds are learning organisms (cp. "demonstrations in Iran", chapter 2.2.4).

Cultural diversity is an expression of collective intelligence and collective intelligence generates, consolidates, communicates and innovates cultural diversity. Despite this reciprocity, collective intelligence remains a subsidiary aspect of the overall socio-cultural diversity framework.

De facto, this typical socio-cultural diversified and diversifying human being, the sharing, collective arranging and upgrading of knowledge, creates meanings. Through these meanings socio-cultural protagonists collectively shape and celebrate society, science, politics, art, technology, media, economy and religions. Thereby, cultural diversity generates, consolidates, communicates and innovates human development in its entirety, in sustainable terms and by sustainable means.

1.6.3 Crowdsourcing Processes

Another popular term in the context of multi-perspectivity is "crowdsourcing". Crowds can generate, consolidate, communicate and innovate knowledge more quickly and comprehensively than individual persons or organisations. A good example is the new Nasa initiatives "Be a Martian" and "Galaxy Zoo". According to a German news magazine:

> "Counting craters and sorting rocks: with a new website, Nasa aims to animate thousands of hobby-astronomers, who will evaluate pictures of the different Mars probes (…). Nasa aims to support its scientists through the help of laymen. Ludically they shall analyse and organise the great stream of pictures, which are shot by robots on Mars.
> 'We are at a point in history when everybody can become a discoverer.' says Nasa-Manager Doug McCuistion (…). He is the person at Nasa responsible for the Mars-related research. 'With so much publically available data concerning the Mars missions, the discovery of Mars becomes a collective initiative of humankind.' (…) Indeed, the principle of crowdsourcing is well known and space scientists like to use it; for example the project "Galaxy Zoo". [Annot: The collaborative

project of scientists from Nasa, the British universities Portsmouth and Oxford as well as of the Johns Hopkins University in Maryland, USA]. The project enables volunteers to classify and catalogue pictures of galaxies. The idea behind it is simple: the human intellect is better able to analyse the pictures than any computer program. There are about 200,000 astronomy fans participating in the Galaxy Zoo project, and they are able to manage an amount of work that professional astronomers would not be able to handle on their own. Sometimes one of the assistant astronomers even attains fame. In August 2008, the Dutch teacher Hanny fan Arkel discovered a yet unknown category of celestial bodies." (Spiegel 2009).

Typical for the ideas of crowd-sourcing, civic intelligence and conventional perceptions of collective intelligence is their focus on explicit knowledge, intellectual comprehension and cognitive understanding. The "multi-perspectivity" approach, in turn, goes beyond explicit cognition, precise target-orientation and measurable outcomes. "Multi-perspectivity"

Figure 9: Nasa crowdsourcing website

Foto: Nasa
Nasa involves laymen in complex scientific research. Screenshot of the website: http://beamartian.jpl.nasa.gov/

focuses on the organisation of socio-cultural systems, promoting human development. Therefore, it requires – and incites – explicit cognition as well as implicit "knowledge". The idea of implicit "knowledge" involves the capacity to mimetically deal with the other and to expand the horizon of possibilities by relating, arranging and networking with the other. Implicit knowledge includes the comprehension of competencies, and the application of various communication techniques, such as performative and narrative modes of meaning-making.

1.6.4 Swarm Intelligence

Swarms are groups or clusters of individual protagonists that participate in – and collectively create – a greater association, as can be found in the natural world among fish, bees, ants or birds. As different individuals arrange with each other they create a common sphere – the swarm.

The swarm influences the actions of the individual participant and the individual participant's actions shape the group performance. Human beings are social beings, organised and clustered in groups in a similar way to some animals. Looking at animal swarms facilitates the comprehension of human organisation and regulation modes.

 In the natural world, animals that exhibit coordinated behaviour patterns can gather and process data from distinct locations simultaneously. In this regard swarm intelligence enables groups to deal with complexity and to discover, react to, reduce or even prevent challenges.

The decentralisation of swarms has important implications for the acquisition and processing of information within populations.

A common challenge that animals living in groups are faced with is that only one or a few individuals have access to information about the location of a food source, a predator or a suitable nesting site, whereas the majority of the group do not have this insight. Therefore the survival of the individual is often strongly dependent on the presence of other group members and the group requires individual contibutions of information. In this regard, the term "multi-perspectivity" means that different group/swarm-protagonists have different perspectives on shared challenges and that the combination (arrangement) of all these perspectives draws a more accurate picture of the challenge than an individual perspective could. Beyond the assessment of the challenge, multi-perspectivity is similar to a pool of alternative strategies to overcome these challenges in order to (re-) sustain security and life quality.

The following figure shows a child's work of art that allegorises the interdependences between an individual swarm participant and the group. It is not only by chance that the piece of art was produced by a child as it is especially children that require basic social information. Children search for answers to questions, such as: Who am I? Where do I belong? What is meaningful? The work of art is an explicit ludic reflection of such questions.

The gathering (networking, relating, cross-arranging) of individual group members allows them collectively to perform emergency shifts. Thereby, swarms organise themselves auto-poietically, so that they adjust better to their environment and increase their living quality in terms of security (i.e. food security and defence of predators or other challenges). Metaphorically, this self-regulation represents sustainable human development. It also explains the networking-mode of life and the respective assertion that "life did not take over the globe by combat but by networking" (Margulis/Sagan 1986: 15.).

Figure 10: The role of individuals (diversity) and the community (unity) to create multi-perspectives by means, which are as simple as they are effective.

A child's work of art: "swarm intelligence"

The human mode of networking is cultural. Compared to animal life, human-cultural regulation and organisation modes are particular and appear to deal with greater, or at least

different kinds of complexity than animal modes. The fact that humans dominate the planet illustrates this strikingly. This dominance as such is not necessarily "good or bad", but the current pattern of this dominance appears to be unsustainable. The current domination patterns of humankind lead, for example, to the reduction of bio-diversity. Unsustainability describes a lack in the organisation, regulation and networking of humankind, which in turn effects the overall planetary environment. Therefore, it is important to understand the human cultural impact on the world in general, and on human development in particular. Moreover, it can be suggested to mobilise this cultural power and use our "cultural competencies" in order to promote sustainable being and development (cp. chapter I).

Swarm intelligence provides insights into the ways in which group regulation modes function. In The National Geographic, Peter Miller refers to Deborah M. Gordon, a biologist at Stanford University. Miller writes:

> " 'Ants aren't smart,' Gordon says. 'Ant colonies are.' A colony can solve problems unthinkable for individual ants, such as finding the shortest path to the best food source, allocating workers to different tasks, or defending a territory from neighbours. As individuals, ants might be tiny dummies, but as colonies they respond quickly and effectively to their environment. They do it with something called swarm intelligence.
> Where this intelligence comes from raises a fundamental question in nature: How do the simple actions of individuals add up to the complex behaviour of a group? How do hundreds of honeybees make a critical decision about their lives if many of them disagree? What enables a school of herring to coordinate its movements so precisely that it can change direction in a flash, like a single, silvery organism? The collective abilities of such animals – none of which grasps the big picture, but each of which contributes to the group's success – seem miraculous even to the biologists who know them best. Yet during the past few decades, researchers have come up with intriguing insights." (Miller 2007).

Miller then refers to Craig Reynolds, a computer graphics researcher, who researches the rules for such "group success":
> "In 1986 Reynolds created a deceptively simple steering program called boids. In this simulation, generic birdlike objects, or boids, were each given three instructions:
> 1. avoid crowding nearby boids,
> 2. fly in the average direction of nearby boids, and
> 3. stay close to nearby boids." (ibid.).

The result, when set in motion on a computer screen, was a convincing simulation of flocking, including lifelike and unpredictable movements.

The scientists Wilensy and Reynolds detected similar rules, or "modes" of organisation and regulation. They looked at flocks of birds as one example of a swarm. According to them, "the basic flocking model consists of three basic steering behaviours".

Their observations describe how an individual bird acts, based on the positions and velocities of the birds nearby or "flockmates":

- separation: when a bird comes too close to one of its neighbours, it changes direction
- cohesion: when a bird is too far from one of its neighbours, it quickly approaches the nearest
- alignment: when the neighbours of a bird are neither too close nor too far, the bird chooses a direction which is the average of the direction of its neighbours.
  (cp. Wilensky, Reynolds 2003).

The following figure shows 50 "cross-relating" birds (represented by 50 dots on a two-dimensional level) which move collaboratively as a flock, according to the flocking principals.

Figure 11: Flocking bird performance

static: individual birds   dynamic: birds gathering   dynamic: birds moving together

(source: Miller 2007)
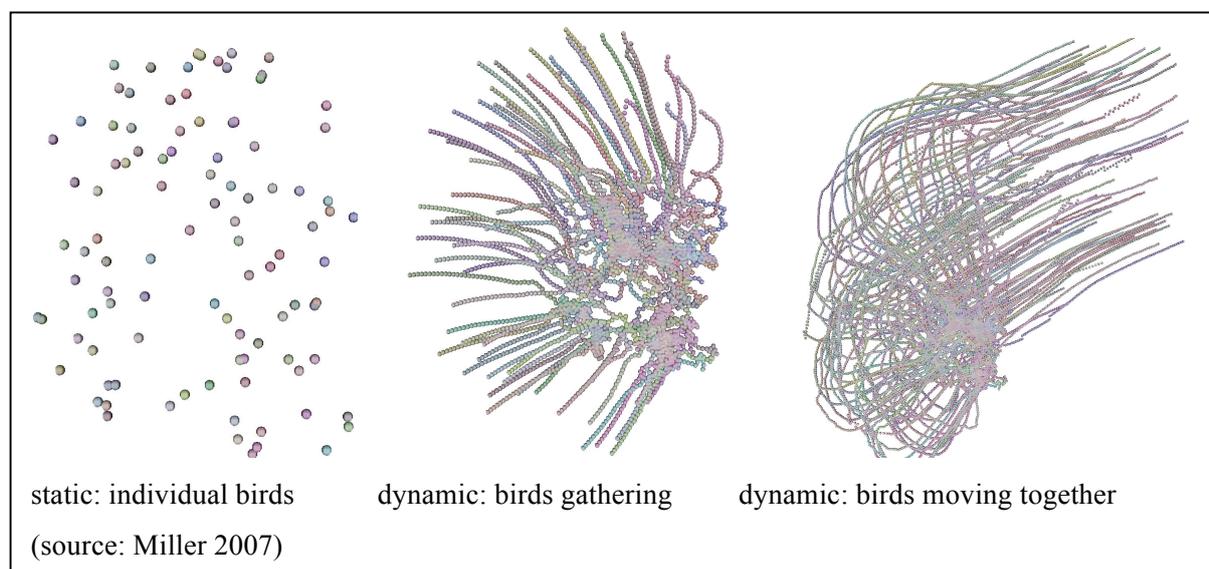
Swarms are living reference systems, characterised by approximation (cohesion) and distance (separation) as well as consolidating alignment.

The two above mentioned approaches describe the internal regulation of the swarm. However, the swarm (i.e. flocking birds) moves through time and space where it is confronted with external obstacles and challenges, such as predators, extreme temperatures, dry and wet seasons, or diseases, which impact the swarm's organisation. For sustainable human development it is also important to not only maintain certain organisational patterns, but to adjust these patterns flexibly to changing external and internal factors.

Therefore, another requirement for coping with complexity – a fourth rule for collective regulation – is suggested to accompany the principles of separation, cohesion and alignment:

- exploration/innovation/adjustment/disturbance/variation: Individuals and sub-groups explore, disturb and potentially innovate the constellation (organisational structure) of the overall swarm as it moves through time and space. These frictions and

disruptions are creative acts; they are functional and as lively expressions they are simultaneously means in themselves. Communities require the maintenance of their organisation as well as its "creative destruction" (Marx, Engels 1848, p. 226, Schumpeter 1989) as prerequisite to the adjustment of out-dated organisational patterns (structures).

These creative acts are generated, detected and neglected, or validated through communication and mimetic interaction with others. In this regard, the orientation towards the neighbour is a relative not an absolute principal. Organisation requires affiliation and opposition, agreement (unity) and difference (diversity), cooperation and competition. In other words, living and therefore dynamic systems, such as swarms or social groups do not only require the unifying harmonisation (orientation towards the other) by means of affiliation, but also the diversifying alteration by means of opposition, or distinction to the other. It is the group-maintaining consolidation as well as the innovating dispersion that stabilises, or rather sustains the system.

❖ Example:

Socio-cultural protagonists mediate and conduct society (social systems) for example through:
- demonstrations
- artistic expressions
- literature
- performances
- scientific discoveries
- elections in democratic states
- science
- innovative entrepreneurship
- music (e.g. the band "The Beatles" which incited new lifestyles, or blues music, which enabled slaves to celebrate community and strengthen themselves in difficult moments of oppression)
- media and press
- education for sustainable development

Indeed, this creative and explorative principle of swarm intelligence becomes evident if one regards research in the context of so called "Particle Swarm Optimization" (PSO). PSO is an abstract and theoretical form of swarm intelligence. If one swarm participant sees a desirable direction to go in (e.g. aiming for food, protection, etc.), the rest of the swarm will be able to follow quickly even if they are on the opposite side of the swarm. Thus, in order to facilitate felicitous exploration of the space (e.g. fish, exploring a coral reef for food), typically it is required that each "particle" (or actor; in this case fish) have a certain level of "craziness" or randomness in their movements. Otherwise, they move on the paths of their precursors and new sources (for food, shelter, etc) can not be identified. The "other-copying" mimicry must go together with mimetic performances, which explore the other beyond imitation. Such performances are moments of stimulating interchange between self and respective other, instead of homogenising assimilation. For sustainable human development it appears

pertinent to strengthen these competencies in order to approach sustainability (for the sustainability convergence theory cp. figure 38 in chapter 3.2.4ff).

Figure 12: Examples of swarm organisation

fish swarm moving through kelp

nesting bees: complex organisation

flocking seabirds searching for food

termites on their track
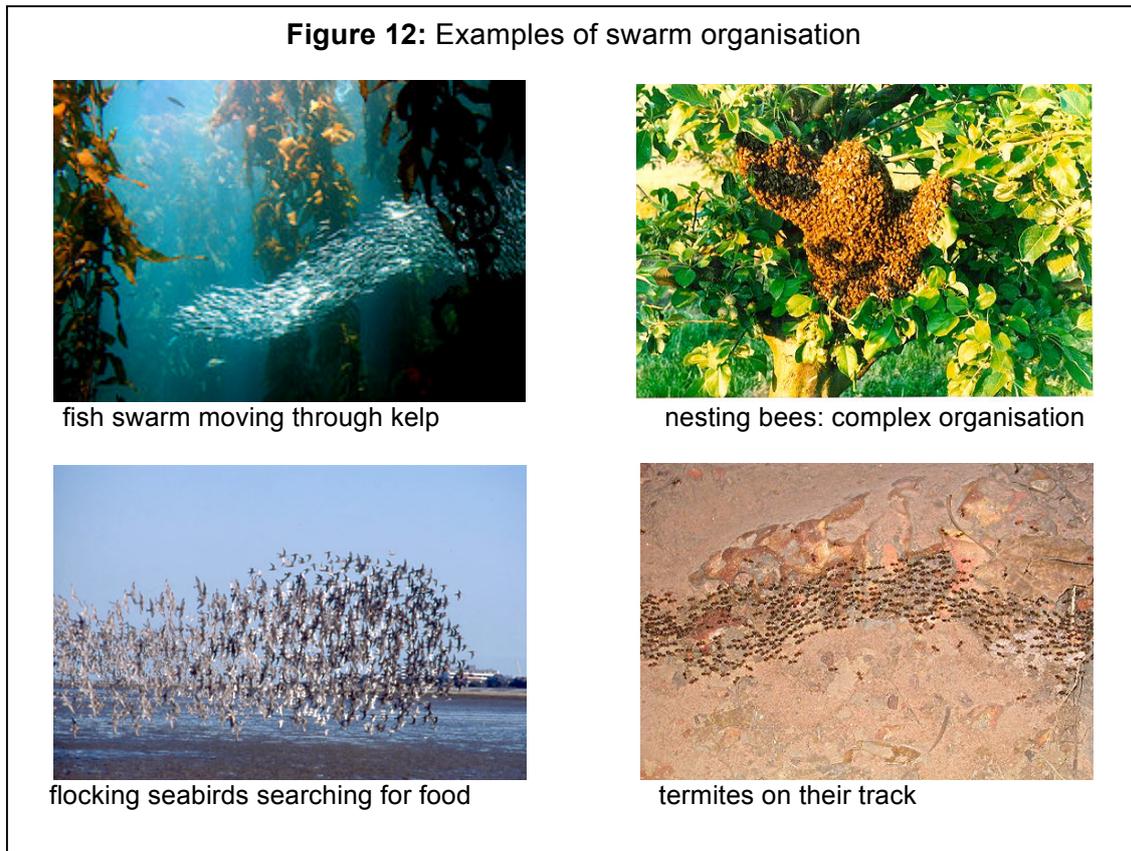
Accompanying the "Particle Swarm Optimisation", another essential scientific approach for the analysis of swarm intelligence, is the Ant Colony Optimization (ACO). It is a metaheuristic (hence computational) optimisation algorithm which can be used to find approximate solutions to difficult combinatorial optimisation problems. In ACO artificial ants develop solutions by moving on the problem graph and by mimicking real ants. They deposit artificial pheromone on the graph, thereby enabling future artificial ants to create better solutions. Through mimicry the ants make "mimetic performances" and explore new options, which subsequently will be mimicked and explored by following ants. ACO has been successfully applied to a great number of optimisation problems, such as telecommunication networking, robotics (self-navigating robots i.e. for military use) and stock market predictions.

Swarms are efficient information and knowledge systems, able to cope with dynamism and complexity. Their organisation modes come close to the educational approaches of discovery learning (cp. chapter I, particularly the "Life-Situational Approach", chapter 4.2.1) and mimetic/social learning in which the exploration of and arrangement with the other plays a crucial role.

Miller says:

> "Crowds tend to be wise only if individual members act responsibly and make their own decisions. A group won't be smart if its members imitate one another, slavishly follow fads, or wait for

someone to tell them what to do. When a group is being intelligent, whether it's made up of ants or attorneys, it relies on its members to do their own part." (Miller 2007).

1.6.5 Human Networks: Complex Clusters, able to deal with Complex Issues

Human beings organise in networks, such as communities, societies or groups of interests. These networks enable participatory multi-perspectivity to occur and facilitate, thereby, the maintenance of their organisation. Seemingly paradoxically, besides this maintenance, they also guarantee the innovation of this organisation. Therefore, a strong cohesion between networking and development can be observed. This becomes more clear when the different

"nodes" (protagonists) of the network are perceived as different informants who provide different fragments of information. If the informants exchange the fragments of information, they can draw a more accurate picture, because they can combine and mutually compliment what each has to offer. Thereby, multi-perspectivity enables community members to participate in social learning.

Figure 13: Networks

Visualised, such human social learning might look like the figure below. Figure 13 shows that learning is not only reduced to the direct increasing of knowledge, which the other transports, but that learning (or increasing of knowledge) signifies the relating with others, who preserve knowledge from which the learner can profit indirectly, without "owning" that knowledge.
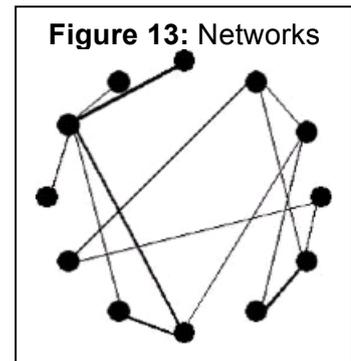
❖ Example:

Someone who is illiterate can still comprehend a letter – if he asks someone to read it loudly. The one who can read eventually has difficulties to find his way home after a walk in the evening, but he can ask someone for the way. Someone who crosses a street might be warned by another person who observes the situation and sees a fast car behind him. The person may be saved from an accident, because of the observers attention. The observer bestowed the person with exclusive information. These are some simple examples for "multi-perspectivity".

Figure 14: Facebook friend Wheel

The figure 14 shows individuals (dots/nodes) who communicate information to some other individuals, so that a social group or network emerges, which creates complex information from which it distils meaning. It is not necessary for each participant to know, relate to, or arrange with each of the other participants. Still, relevant information can be multiplied or distributed. Another expression for such a group is the "learning society".
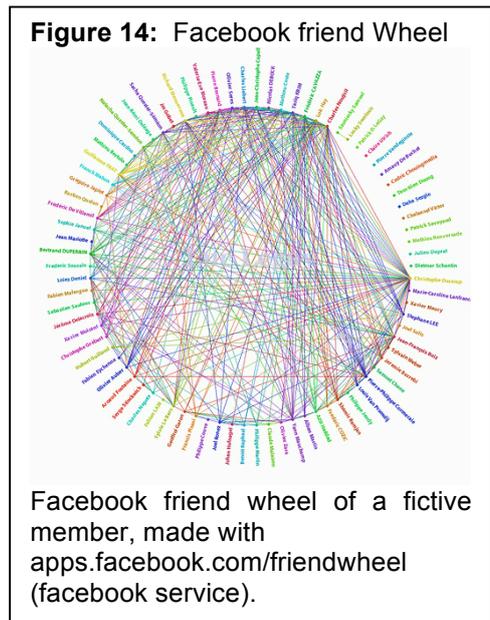
Facebook friend wheel of a fictive member, made with apps.facebook.com/friendwheel (facebook service).

A similar visualisation appears if one regards the "facebook wheel", which shows the result of so called "social networking". Names, which symbolise the friends of a facebook-service user, are written in a circle. It is not only the original user who makes contact with these friends, but there are stunning inter-connections between the other users.

The FAS.research consulting company does "network analysis for science and business". FAS.research focuses on "understanding networks", researching and visualising network patterns. It uses these insights to analyse influencer spreading, pharma or telecom marketing and sales, and campaigning strategies. They do risk assessment and uncover management-gaps in companies, illustrate online strategy development, or map orphaned technology and talent. The following figure of the company shows how artists became inter-connected with each other after participating in an artist festival.

Figure 15: Artist networking

In 2004, FAS organized and curated the program "Language of Networks" together with the Ars Electronica festival. This visualisation depicts collaborations between international artists and scientists from 1979 to 2004. Time Analysis reveals that over the years the global Ars Electronica community has become more integrated and is interacting more intensely.
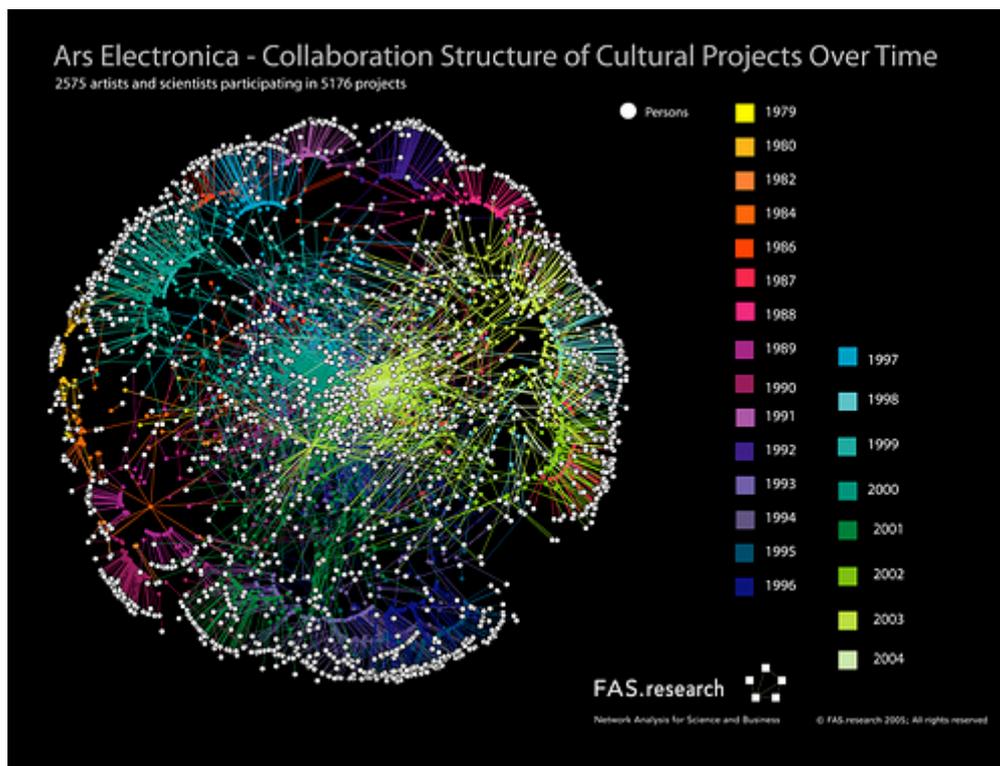
Legend:
Each white node represents one of the 2575 artists collaborating on 5176 projects. Lines between nodes represent collaborations. Each festival year represents a different color line.

Source:
www.fas-research.com and http://www.flickr.com/photos/fasresearch/1363581346/

Another FAS.research approach focuses on food and agriculture. Food has a direct influence on human life, so it is interesting to analyse how humans organise a secure and sustainable production of food through networking.

Figure 16: Food and agriculture networks

This is a map showing the network of terms associated with food and agriculture. To create the map, we collected two months worth of tag data from delicious.com in the Fall of 2008. The network was visualized using techniques from the field of social network analysis.
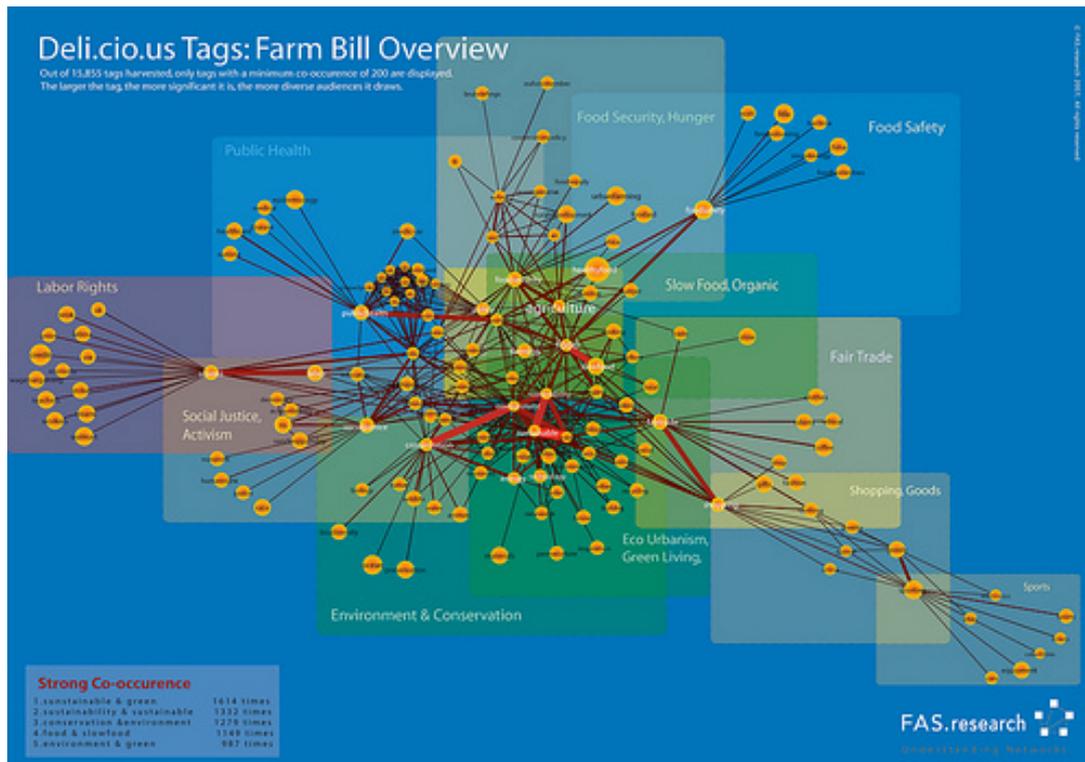
How to read the map:
Each node is a tag. The larger the node, the more the tag showed up in the dataset. Links between tags means they co-occurred as tags for a website. The thicker the line between tags, the more tags co-occurred. The distance between nodes indicates how closely related the terms are in the minds of Delicious.com users (theoretically). Groups of tags were identified using a cluster algorithm. The cluster names were chosen by the research team (for instance, "Food Safety" in the upper right hand corner).
Purpose of the map:
The map was created to help a foundation frame food policy issues for engaging industry and the public. Their program goal is to improve the environmental performance of agriculture. The recommendation based on the map and other analysis was to frame their food policy agenda as "total security net for agriculture" taking into account farmers' need for financial security, consumers' need for a healthy and reliable food supply, and an overarching, long-term need for environmental sustainability of agriculture. In other words, we recommended that the framing lead with what is closest to farmers' and consumers' immediate personal concern.
Source: www.fas-research.com and http://www.flickr.com/photos/fasresearch/3507916578/

Further proof of complex human organisation, and a parable for network-based knowledge trafficking, is the visualisation of flight and subway traffic. The following figure shows how

human beings arrange living together, and how they create dynamic interchange and organisation.

Figure17: Air traffic as networking

In the figure of the worldwide net of flights, the lines symbolise the air traffic between the 500 biggest airports worldwide. The colors of the lines represent the amplitude of connections, hence the number of passengers who move between two airports per day. For example, 25,000 travelers move between Chicago and New York every day.

A similar perspective is provided by subway maps of big cities:
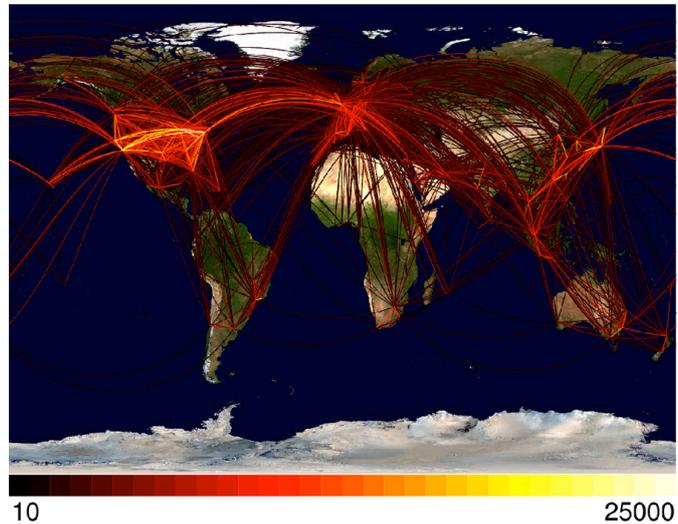
Figure 17

10   25000
Source: Brockmann; Hufnagel; Geisel 2004

Figure 18: Subway traffic as networking

Seoul   Paris   New York

Seoul   www.aroundseoul.com/
Paris   http://www.eurostar4agents.com/images/metro_map_big.gif
New York   http://newyorkcity2005.web.infoseek.co.jp/information/maps/subwaymap.html
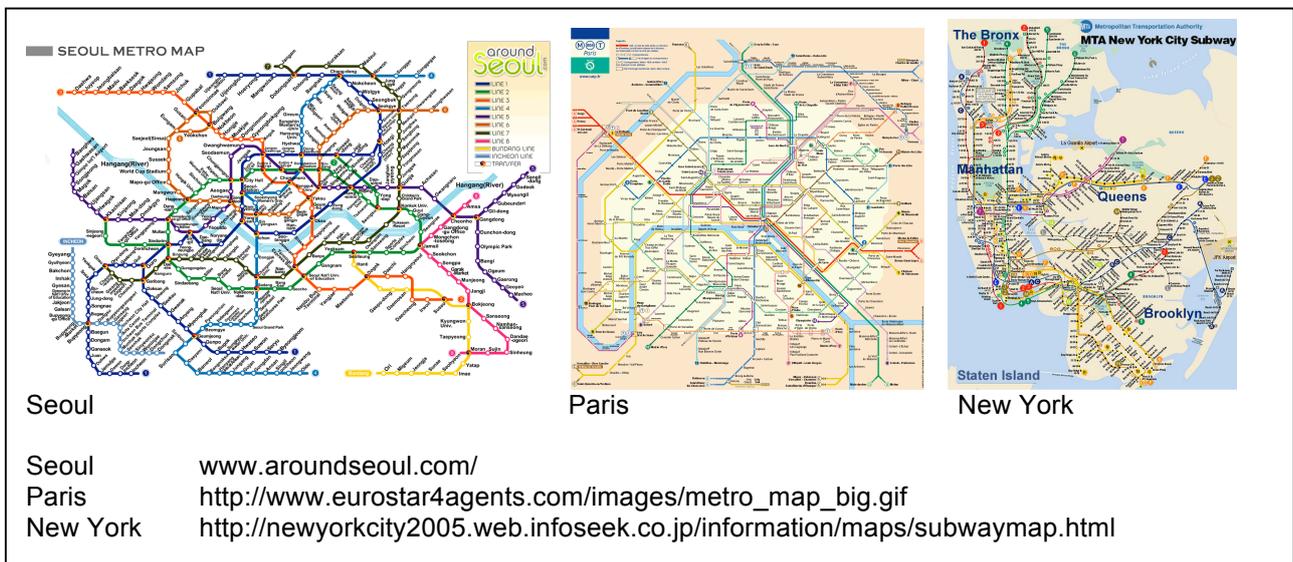
The organisation (i.e. traffic) of the masses is not only an obstacle or disturbance to overcome. Appropriate organisation enables humans to develop complex forms of living together, overcoming complex challenges. Flights and subways, food production and social networking, or artists-interconnections, are only examples of how a society can develop through networking. The participation of all, and their contribution to the common

organisation, can best provide security and lead to the sustainable generation, consolidation, communication and innovation of social life.

1.6.6 Conclusion: Socio-Cultural Multi-Perspectivity to Generate Development Alternatives

What identifies the Homo sapien, as the "wise human" (lat.) is not only his ability to get an overview by physically walking upright (cp. chapter 1.5). Homo sapiens are also identifiable because of their capacity to get overviews of complex situations and react to these situations most appropriately (sustainably) and co-shape them. Multi-perspectivity, accessed through mimetic arrangements that result in networks, enables humans to achieve that overview. Multi-perspectivity provides different perspectives on shared situations and challenges. These perspectives involve alternative meanings, perceptions, and information. They also involve different socio-cultural strategies for dealing with challenges that risk the integrity of the network.

Hence, there is a direct link between socio-cultural diversity, mimesis and sustainable development. In this regard, multi-perspectivity is a cultural phenomenon, that:

- is inherent to socio-cultural diversity
- requires and promotes unity in diversity
- is activated and accessed mimetically
- mediates sustainable development.

Human beings deal successfully with complexity by using cultural devices, such as language, rituals and other cultural methods. These modes (or methods) capacitate the construction of meaning as well as the intentional interpretation of reality (cp. chapter 1.7). These "cultural competencies" promote networked (collective) meaning generation, -consolidation, -communication and -innovation.

Only if this meaning is participatorily, and therefore comprehensively, constructed, can it be denoted as meaning (cp. chapter 3.2.9). Meaning and processes of meaning-making, therefore have the capacity to arrange, relate people, and to organise, regulate and develop the status and future of their community. Complex organisation and "sustainable" development therefore require and foster the mimetic arrangements with others. It follows that learning for sustainable development focuses on such networking features and modes of arranging and canonical meaning making.

In social life, such cultural meaning making modes are expressed through socio-culturally diverse patterns. A vitally developed and developing socio-cultural diversity is simply a pool of meaning- and therefore development alternatives.

In the context of the increasingly tempo-spatial challenges of the globalisation era and the required paradigm changes, this socio-cultural pool of development alternatives is

imperative. Therefore, cultural diversity is the epitome of human dignity (being) and creativity (becoming). Creativity is the imagining of the unimaginable, the creation of the impossible and the consideration of the invisible. Thereby, socio-cultural diversity is a means to sustainable human development. It provides multi-perspectivity, which supports the community in overcoming contingency through continuity, and chaos through cosmos.

"Our Creative Diversity" (Cuéllar 1998), facilitates "Our Common Future" (Brundtland 1987). Besides its function, socio-cultural diversity is an end in itself. It marks the human being as being unique, non-replaceable and valuable as a species, within social groups and as individuals.

The following example shows how socio-cultural multi-perspectivity can overcome hazards to human organisation.

- ❖ Example:

Richard Rorty writes:
> "For most US Americans slavery was a logical consequence. For them, it was difficult to imagine an alternative reality and to let go of their beliefs. However, for the generations of American that came after, it was difficult to imagine that slavery could have existed. The canon of meaning had changed."(Rorty 1999).

Other examples of the innovation of the canonical are: sexual abuse, the rights of women and children, employment rights and environmental consciousness. The list is long. Whatever pattern of socio-cultural organisation, it is created on the basis of cultural modes, which determine that socio-cultural innovation requires the other; it requires differences and diversity. How could slavery be questioned and eventually changed? Not from nothing, but through the other; the other meaning, person, perception, value, or movement. Required were the "other" people who opposed slavery able to approach the other perceptions of human dignity and rights – which apply to all human beings.

The frictions which arise throughout self-other arrangements, and the (creative) destructions, ambivalences and contradictions provide a pool of development alternatives. Therefore the task is not to assimilate the other, or to dissolve the self, but to arrange with the other in order to create unity in diversity.

Another example focuses on the role of multi-perspectivity and science.

- ❖ Example: multi-perspectivity and the networking of scientists

Le Ker writes:
> "Could it be a breakthrough in the search for an effective immunisation against HIV? From the, so-far, biggest serum tests, Thai scientists observed at least a slight protective function. Their strategy: They combined two old, rather ineffective medicaments. (…) Probably it will not be the great coup against HIV (…). If a breakthrough is possible, it will rather arise from the numerous advancements of the aids scientists." (Le Ker 2009).

This example shows how the various contributions of many different scientists with different perspectives on the same challenge (HIV/aids) collaboratively can develop more complex solutions. At conferences and through publications, they exchange their knowledge and refer it to other knowledge. The effect is the accumulation and upgrading of knowledge, or respectively the emergence of a more comprehensive understanding.

As mentioned, multi-perspectivity enables human beings to have different perspectives (diversity) on shared problems (unity), (cp. "unity in diversity", chapter 1.5, and cp. "global issues", chapter 1.1 and figure 2). Within a reference framework for competitive cooperation, socio-culturally diverse protagonists mimetically refer to one another. More than formal (policy and institution, i.e. the constitutional state) or informal (ritual, ethical) aspects, such a (heterogenic) framework requires mimetically competent protagonists, able to deal with the other and cope with difference (cp. "cultural competencies", chapter I and 4.1.2 "mimetic learning", chapter 1.3). Here, learning plays an important role. Mimetically competent socio-cultural protagonists enable the overall socio-culturally diverse reference system, without assimilate the other or dissolving itself, to arrange with the other, utilising or baring friction and tolerating controversy (cp. chapter 1.3.1.1; 1.4 and 1.4.1). In this regard, a successful learner achieves sovereign socio-cultural identity (cp. chapter sovereign socio-cultural identity), becoming able to proceed mimetic interchanges.

Throughout the mimetic refinement process, socio-cultural diversity can generate, consolidate, communicate and innovate "comprehensive views" (Walzer, in: Kuschel et al. 1999: 63) on shared problems in order to facilitate meaning making. This meaning, with its diversified, diversifying, united and uniting effects, functions as orientation; it holds together the "swarm" or humankind as a socio-cultural In-group (cp. chapter 3.1.3). There are functional aspects (mulit-perspectivity) and constitutional aspects (dignified human being and socio-cultural identity) of socio-cultural diversity. This dual impact on human being and becoming enables socio-cultural protagonists to perform meaningful, sustainable development, and hence to overcome complex challenges.

1.7 The Power of Culture

The theory of culturally mediated "multi-perspectivity" reaffirms the enormous importance of culture as a matrix and super system of human being and as a medium, which transforms chaos into a comprehensive, organized cosmos; into reality.

From this perspective, suddenly everything appears to be culturally swayed. Our entire reality is cultural, including knowledge, apperception and consideration. Humankind can not pass over this condition, it can not transcend culture. This is comparable to the lesson of a German parable, which tells the story of a small fish, who asks a big fish: "What is God?" And the big fish replies: "How may I explain to you the sea in which we swim?"

The concept of culture, the word "culture" (and also concepts and words as such) are cultural. Both, word and transported idea are selective; they are reduced and compressed to a cultural and contextual understanding, addressing a cultural interpreter. Culture invented itself in a way similar to the emergence of the universe through the Big Bang. Reich asks, "From where may we take the components of our reality-constructions if not from the cultural repertoire?", (Reich 1996).

In this context Hedley Beare speaks about a cultural "cocoon". He argues:

> "Once born, all of us, both, with and without help, begin to spin around ourselves a web of meaning which allow us to interpret our world and also to protect ourselves from its ravages. In the one process, we can ensure our survival, our fulfilment as a creature in the cosmos, and, paradoxically, our imprisonment – enclosed within a world-view and a social fabric which are of our own making and which prevent us from experiencing reality in its wholeness." (Beare 1991).

This means that any perception, understanding or insight is contextual.

❖ Example:

There is nothing informative in the colour red, except that, when embedded in a cultural setting of conventions, specifically, in the socio-cultural setting of city traffic, it is associated with stopping at an intersection.

The attempt to perceive independent from a socio-cultural context would be what Thomas Nagel strikingly denotes as a "view from nowhere" (Nagel 1986). The German term for perception, "das Wahrnehmen" illuminates the topic; it means "to take for true". In this regard, perception is a targeted, thus active taking and necessarily selective process – a process of choice. This process is neither the random, thus passive receiving, nor the objective cognition, of an exterior fact. Referring to William James, Richard Rorty states, "He aims to say that it is absolutely valueless, if one tells you that the truth is the 'analogy of reality'," (Rorty 1982), because reality is (socio-) culturally contextual and therefore relative. Truth and reality are creative, socio-cultural acts. They arise throughout mimetic negotiations about meaning in which different socio-cultural identities are involved.

Maturana and Varela state that, "The world everyone sees is not *the* world but *a* world, which we bring forth with others." (Maturana/Varela 1987: 245). Capra adds:

> "This human world centrally includes our inner world of abstract thought, concepts, symbols, mental representations, and self-awareness. To be human is to be endowed with reflective consciousness". (Capra 1996: 290).

"As we know how we know, we bring forth ourselves.", explain Maturana and Varela (1987: 244). This knowing how we know implies a knowing how we learn. Chapter IV will transfer what we have learned about this culturally swayed knowing to a culturally swayed education, since such education is capable of empowering people to reflect, regulate and develop appropriately.

"If people define situations as real, they are real in their consequences". This famous sentence is known as the Thomas Theorem, developed in 1928 by William I. Thomas (1863 – 1947), Thomas focused on two main points:

1. There is no reality but there is interpretation. As a consequence, reality is a socio-cultural construction.

2. Interpretation is not only constructed, but "constructive", or constructing and thereby powerful. (cp. Thomas 1928).

❖ Example 1:

If many people in one place believe that their bank has gone bankrupt, and all of them go to the bank to withdraw their money, the bank will become bankrupt in reality, even though the crisis began simply as a rumor.

❖ Example 2:

The 1973 oil crisis resulted in the so-called "toilet-paper panic". The rumor of an expected shortage in toilet paper – resulting from a decline in the importation of oil – led people to stockpile supplies of toilet paper. This caused a shortage, which seemed to validate the rumor.

In other words, the interpretation of a situation has an effect. Interpretation itself is socio-culturally swayed, which means that reality is a product of the masses. If the majority of people on this planet cause problems for themselves and for their environment, they would be well advised to adjust their interpretations and analyses of their situation. The capacity to do so, describes the grade of sustainability of their organisation.

It is the challenge of education to create individuals capable of interpretation and anticipation, criticism and co-creation skills through mimetic learning processes. Because a simple knowledge-transferring "education" instructs to think, analyse and measure everything, based on the already existing canon (of perceptions, rules, values, meanings, ethics, causalities). A mimetic learning process instead, enables one to see things from the perspective of the other. It trains learners to perceive alternative causalities, solutions, rules, etc. (see chapter 1.6 and 1.6.6 as well as 3.2.1).

Culture is (self-) constructed and, furthermore, constructs reality. The world is the world that we "real-ise", which means that it is the world that we make real. Our perception is mimetically negotiated and socio-culturally swayed. This perception then represents and applies socio-cultural meaning, which in turn pre-determines our actions. Our actions, in turn, impact our environment and the environment reciprocally stimulates perception. Bruner writes:

> "To explain an action, it must be situated. This means that the action must be understood in terms of continuity with the cultural world. The realities that men construct are social realities, negotiated with others and shared between all. The social world in which we live is neither in the mind, nor in any positivistic archetype, somewhere 'out there'. Both, our mind and our self are parts of the social world. If we say that the cognitive revolution took place in 1956, then the contextual revolution (at least in psychology) is taking place today." (Bruner 1997: 115).

C.S. Peirce argues that meaning does not only depend on a signal and a referent, but on an interpreter as well. In this regard, meaning is an image or reproduction of the world, which regulates the relations between signal and referent, (cp. Peirce 1960: 228f). This refers to the tradition of scholastic philosophy and its mediaeval axiom "Quiquid recipitur, ad modum recipietntis recipitur" (Latin: "Whatever is received is received according to the modus of the receiver.") Or in an educational context: "Lessons are received according to the nature of the recipient". This coheres with Geertz's statement, that "there is no human nature apart from human culture" (Geertz 1973: 49). In other words, whatever one perceives is likely to be

shaped, more by who the perceiver is than by the characteristics of what he perceives. Culture functions as a medium between socio-cultural protagonists, which in turn maintains the arranging role of culture. Furthermore, it is a medium that relates history (past), the state of being (present) and utopic visions (future). Culture condenses them into a "cultural big bang", unfolding the meaning of human spiritual being and physical existence as a coherent synthesis and performative plot. The status quo of meaning (e.g. the meaning of our existence), of the entire reality and of truth, evolve. The current status quo, then, is always a cultural and temporary moment, distilled from an imaginary number of alternative truths and realities. Mathematicians deal with imaginary, impossible numbers in order to explore the un-imaginably possible. This also happens throughout the mimetic construction of culture: The imaginary other (meaning, person, society, truth, reality, etc.) represents impossible alternatives.

Mimetically, the other is "subjectivated", that means he is no more an abstract black box, or abstract imagination in terms of an object (of consideration), but validated as partner in terms of a subject. Once a relationship is built and the other is "subjectivated", the above mentioned impossible can be accessed, assessed and comprehended; it becomes possible.

Stephen Hawking writes about reality and imagination:

> "In the real-time the universe has a beginning and an end of singularities, which constitute a limit for the space-time and which limits as well the validity of the laws of nature. In contrast, the imaginary time has no singularities or limits. Thus what we call imaginary time is potentially of much more fundamental meaning. And what we call real is merely a term which we invent in order to describe our perception [annot.: imagination] of universe." (Hawking 1995: 177).

❖ Example:

Capra demonstrates the stylising and artistic character of the perception-based processing of reality and truth, with an example. He writes:

> "When we see a network of relationships among leaves, twigs, branches, and a trunk we call it a "tree". When we draw a picture of a tree, most of us will not draw the roots. Yet, the roots of a tree are often as expansive as the parts we see. In a forest, moreover the roots of all trees are interconnected and form a dense underground network in which there are no precise boundaries between individual trees. In short, what we call a tree depends on our perceptions. It depends, as we say in science, on our methods of observation and measurement." (Capra 1996: 40).

In the words of the Nobel Laureate in Physics, 1932, Werner Karl Heisenberg this means that:

> "Since the measuring device has been constructed by the observer (…) we have to remember that what we observe is not nature itself, but nature exposed to our method of questioning", (Heisenberg 1971).

Varela states:

> "We must call into question the idea that the world is pre-given and that cognition is representation. In cognitive science, this means that we must call into question the idea that information exists ready-made in the world and that it is extracted by a cognitive system." (Varela, Thompson, Rosch, 1990: 200).

The contextual, intentional and subjective relativisation of reality by culture may now question the legitimacy and approach of science. If everything is culturally embedded and fluctuating, what, then, are the cornerstones of objective measurement and research?

In his essays on the humanities Dilthey argues that the adduction and inclusion of the phenomenon "culture" does not signify a "subjectivation" and maceration of reality, perception, truth and (scientific) knowledge. Cultural consideration rather represents the "objectification of life" (Dilthey 1891/1893). This means that the cultural reference is a requirement for objective, scientific measurement and research, and the disregard of culture would be subjective.

Taking the cultural context into account enables science to achieve a maximum of objectivity so that, according to the French microbiologist Louis Pasteur (1822-1895), that "Science advances through tentative answers to a series of more and more subtle questions which reach deeper and deeper into the essence of natural phenomena."

According to Fischer, it is not central to understand a scientific theory in all its details, but rather to understand *something* of it. This "*something*" is a creation, it is an artwork. According to Goethe and his theory of colours, "science must be thought of as art", states Fischer, (Fischer 2005b). In this regard, a scientific theory is the approach to comprehend the entire spectrum of reality as good as possible. Possibly this requires comprehensive, sometimes controversial views, plurivalent truths and multi-causality, rather than mono-causality.

In moving culture to the centre stage of reality and science, this text does not aim to relativise or make an abstraction of either, the humanities or human development. The goal is rather a concretisation and objectification of reality and science through contextualisation. Perception helps individuals to comprehend socio-cultural, but as well environmental and economic system cohesions and comprehend the modes of their interactive operation. Thereby, perception facilitates to shape the patterns of the system by means of comprehensive and sustainable self-regulation. This means that, the more insights we have about the operation modes (principals) of the human and natural system, or respectively of life-supporting measures, the better we can organise societies and innovate socio-cultural structures.

Albertus Magnus (1193-1280), also known as Saint Albert the Great or Albert of Cologne, coined the phrase "Experimentum solum certifikat"; (Latin: "Only experience endows certainty"). Experience is the result of a socio-cultural process, which structures a multitude of observations and bestows them with causality and meaning. Observations as well as experiences are therefore socio-culturally relative, remaining temporary presumptions of reality and certainty. Throughout history, certainties have been questioned and transformed.

That happened for example through Aristotle's discovery in 340 B.C., when he stated that the world was round. Another example is when, in 1687, an apple dropped on Newton's head, inspiring the "Law of Universal Gravitation" and the "Law of Motion". His book "Philosophiae Naturalis Principia Mathematica" (1687) finally deduced that planet earth was not the center of the universe. This had dramatic effects on the socio-cultural canon. In 1929 Edwin Hubble discovered the volume expansion of the universe, which brought about the theory of the big bang. The big bang is understood, according to Hawking, "in the sense those earlier times simply are not defined" (Hawking 1995: 23). The theory assumes that, if there is an expansion happening, there must have been compression before this. Until this time, the opinion had been prevalent that the universe had always existed, with the earth as centre.

What is interesting in these examples is not so much the discovery of 'truth', because truth seems to be temporary. What is interesting is rather the historical, revolutionary change of human (self-) perception and self-positioning through the internalisation – and incorporation – of new perspectives. Crucial is the fluctuation, the plot (i.e. the "biography") and transforming of "truth" (cp. performative aspects of truth- and meaning-making, chapter 1.8.1 and 1.8.2). Although truth appears to be relative and culturally contextual, it has the power to incite revolutionary new perceptions of the self, causing human beings to shift and evolve. The examples above illustrate how representatives of a society systematically - scientifically and creatively – took the perspective of the other, the unknown, unusual, or uncertain, and accessed the impossible, stimulating and innovating the canonical. Such explorations of the other cause (global) socio-cultural transformations and a new socio-cultural sequencing (or canonsation: i.e. the process of bestowing something with meaning). Sustainable development and education for sustainable development strengthen the capacity for comprehensive transformation. Sustainable development and education mean the ability to generate, consolidate, communicate and innovate socio-cultural meaning mimetically. Hence, sustainable development and mimesis are coequal culture is their mode. Socio-cultural diversity is the context in which sustainable development and mimesis are applied and it is the pre-condition for mimesis and sustainable development.
Education for sustainable development should focus on cultural techniques, for example, mimetic learning, and strengthen the learner's "cultural competencies". Thereby, humankind could increasingly profit from – and mobilise – the power of culture for sustainable development.

1.7.1 To What Extent does Biology confine Cultural Force?

It has become clear that humankind as a "cultural species" impacts the bio-system of earth. Socio-cultural patterns, such as lifestyles, consumption and production patterns harm

environmental integrity and reduce bio-diversity. Is the reverse true, does biology – the human physical body – confine the power and influence of culture?

The human and natural sciences of the 19th century considered culture as a sort of annex of an otherwise biologically determined human nature. (Still, (the dealing with an consideration of) "culture" often is delegated to "cultural" politics, - events, - journals, - feuilleton, - foundations, etc.). That means, the perception of "culture" often seem reduced to artistic expressions and tradition.

For the early sciences, human behaviour was caused by human's biological foundation, constraining cultural tendencies. This text, however, regards culture and the quest for meaning as the initial causes of human behaviour in terms of human being and development.

Bruner refers to the biological constraint of humankind:

> "The term "constraint" formulates the issue in too negative a manner, because the biological limits of the human life are simultaneously appeals for cultural creativity. The tool-stock of every culture can be understood as an assemblage of artificial organs. They enable human beings to pass over or even reconfigure their 'natural limitations'. (…) There is for example a biological confinement to memory (…). We have developed symbolic facilities to overcome those limits: code-systems such as octal numbers, mnemonic methods, linguistic tricks. (…). As encultured beings we use these code-systems in order to process an input [i.e. bestow it with meaning]. That enables us to deal with "chunks" (bunches of sticks) of information, instead of "bits" (sticks). Thus our knowledge turns into encultured knowledge, which is definable only within a culturally reasonable notation-system. In this process the limits of the so-called biology of memory are surpassed. Indeed, biology shows us limits, but not on a continuous basis." (Bruner 1997: 40).

❖ Example:

Other examples show how culture (in the form of socio-cultural patterns) overcomes, amplifies or erases biological limits: The Jewish Jom Kipur or the Islamic Ramadan, are examples of the cultural lowering of the immediate drive to eat. Here, spiritual desires suspend physical desires.
In ancient times Chinese Geishas mutilated their feet, because small feet were said to be delicate. And suicide attackers even destroy themselves for the belief in an alternative value system.

The Jewish Jom Kipur, or Geishas are indeed examples for human culture. More precisely, they are examples for specific socio-cultural patterns in terms of tradition and artistic expression. As such they represent the cultural "texture", or attribute of humankind. The advantage of such examples is that they are rather tangible and comparatively easy to comprehend. That may be one of the reasons why culture as such is often predetermined by and reduced to an understanding in terms of tradition or artistic expression. But as culture determines human cognition and intelligence as well as implicit meaning making, it is responsible for (all) innovations, which expand the immediate, biologically limited outreach of a person or a group of persons. Meaning-making is a cultural process. Meaning provides measures for human integration and well being, defines desires and assesses gaps in human organisation. Moreover, culture provides techniques, which help in the development of strategies for safeguarding a holistic human existence and dynamic development.

❖ <u>Example:</u>

Thereby, culture enforced for example:
- the construction of computers and internet: in order to enhance communication and knowledge development
- the construction of tsunami warning systems: in order to save lives
- the flight to the moon: in order to expand the horizon of knowledge
- medical inventions such as blood transfers, vaccinations, surgery or radiography and pacemakers: in order to raise living standards
- Sustainable development: in order to conduct human development
- Education: in order to empower socio-cultural protagonists to maintain agile human networking, which promotes internal integration, (such as peace) and external integrity, (for example, through environmental protection)

Culture is mighty; it created the world as it is. For example, culture invented languages, rituals, the book, the phone and mass media. Architecture, public transportation and canalisation systematise the functioning of towns as well organised networks. Knowledge, culturally acquired and accumulated, lead to the invention of the atomic bomb as well as to a rise in the average lifespan of people by more than 100 % in the last 160 years, through industrialisation and the use of oil. Culturally facilitated humankind strongly impacted the bio-system, hence culture effects the physical world.

Elaine Scarry argues in her book "The Body in Pain", that the force of pain, (as through torture), is derived from the fact that it cuts off one's relationship with the perso-cultural world and destroys the context of meaning which orients our hopes and striving, (cp. Scarry 1985). It narrows the human consciousness to the extent that the person literally turns animal. That is why it is inhumane to cause such pain in human beings. For that reason, humankind has set up more or less efficient regulations and institutions on national and international levels to condemn and prevent immoral outgrowths.

❖ <u>Example:</u>

An example for such an outgrowth is the Holocaust and the concentration camps were dedicated, to the same extent, to killing (physical dimension) *as well as* to dehumanisation (socio-cultural dimension). Never before, had people killed each other in such dimensions and in such a bureaucratic manner. And, never before, had there been such a concentrated effort to dehumanise through the causation of suffering, pain and indignity beyond all bearing. For this reason, the Holocaust is the darkest moment in human history, although there have been many other dark moments in history and at present.

In support of the concept of the cultural transcending of biological conditions, is the research made in the field of neurobiology, particularly regarding placebo medicine. It appears "that hope and imagination influence measurably the human organism" (GEO 10/2003). The magazine GEO mentions different experiments that prove the close interweaving of the mental and physical human systems.

In the biggest study about quasi-operations thus far, Bruce Mosley tested more than 180 arthritis patients by operating on half of the test patients' knees. With the other half, he imitated the operation by making two short cuts on the knee. The selection of patients who

were operated and patients who were not was random, without consulting the patients beforehand. The surprising result was that there was no difference between the success of either group of patients. While, before the operation the patients were unable to walk, after the procedure nearly all patients could walk without pain. Even two years later the patients were still satisfied with the "operation".

Other experiments show that placebo tablets with a bitter taste are more effective than those with a sweet taste because they respond to the socio-cultural cliché of bitter medicine. Very small and very big tablets are more effective than those of average size, because we assume that they would either be highly concentrated (small tablets), or have a lot of active substance (big tablets).

> "Even more effective are injections, as we know that doctors only use them in serious cases. Rectally administered medicaments are effective as well, at least in the European continent – in Great Britain oral medicine appears to be more effective", (ibid.).

This example shows that rituals impact strongly on placebo effects and respectively on human physical wellbeing. If in Great Britain the oral medication is more effective it stands to reason that the patient presumes coherence between the British ritual of oral medication and his recovery. This positive effect of oral medication in Britain is independent from the medicine itself. This means that, to a certain degree, the patient associates – and enables – his healing for some extent independent from the physical aspect of the actual medicine, but in respect to ritual medication. Indeed, the medicine has physical effects, but the actual healing appears to concern both, physical body and culturally swayed mind. The ritual power behind this bio-mental aspect of self-regulation (or healing) is another aspect of culture.

Auernheimer understands "culture as an antagonism to nature. As 'second nature' it describes the laws of regulating human life." (Auernheimer 2003: 73). From a perspective of systemic thinking both "laws", cultural and biological mutually, synergetically and mimetically cooperate: While culture expands human biological capacities, for example, by inciting the invention and implementation of technological hearing aids, culture simultaneously requires the body, to express, to speak and also to learn. In this sense, culture accomplishes the human physical abilities, while the human body reciprocally expands the human cultural possibilities. Therefore biology confines cultural liberty relatively, hence to a limited extend and not absolute. To go a step further, the body can be perceived as a tool to expand possibilities of cultural, rather than confinement. Bruner therefore claims:

> "Our attention should be focussed; it should not concentrate on our biological confinements but rather on our culturally creative and inventive talent." (Bruner 1996).

The chapters 1.8 and 4.1.4 (Rituals and Performative Learning) as well as 4.2.2 (Theatre of the Oppressed) show how knowledge is performatively created and incorporated, hence in body-based processes.

1.7.2 Folk Psychology as Educational Phenomenon

Concentrating on the essence (mode) of human autopoiesis by means of "our culturally creative and inventive talent" (Bruner 1996) leads the text to focus on (lifelong) learning. In this regard, Bruner discusses "folk psychology", which emanates from the idea of a complex and implicit lifelong learning; a form of societal education (socialisation) which traverses categories of common formal education. Folk psychology is implicit in the every-day life of everyone; of the "entire folk". Therefore, a German term, which goes in that direction, is "Alltagspsychologie" ("every-day psychology"). Folk psychology involves everyone at any time; it results from a life-long educational process of constituting personal as well as collective socio-cultural identities. Folk psychology consolidates the abstract (socio-)cultural matrix of a society into an applicable, omnipresent "every-day knowledge" (German: "Alltagswissen") or "folk knowledge", transmitted through socialisation. Folk knowledge depicts the ability to maintain lifelong-learning in order to create knowledge, relevant for the "folk", rather than the ability to memorise specific scientific knowledge. That means, folk knowledge equips socio-cultural protagonists in their roles as learners, folk-participants and "shapers" with methodological knowledge. That knowledge provides them with methods to mimetically, hence in collaboration with other folk representatives to generate, consolidate, communicate and innovate socio-cultural meaning, as well as meaningful self-identity and folk-identity. Folk knowledge does not so much, or only casually foster technical, or contental knowledge (cp. chapter 4.1.3.4). It sets us into relation with others.

Michelle Rosaldo writes in her essay "Toward Anthropology of Self and Feeling" that:

> "concepts such as 'self' or 'affect' do not rise from an 'inner' being which is independent from a social world, but from the experience made with a world of meaning, images and social bindings, in which all humans are inevitably involved." (Rosaldo 1984: 139).

Folk psychology is a medium through which the macro-social world (i.e. world-society) is maintained and adjusted. Bruner writes, that folk psychology:

> "reflects a [socio-]culture; it is a component of the valuation and perception methods of the [socio-]culture. This is essential because the normative institutions of a [socio-]culture – the laws, educational establishments, family structures – confirm, endorse and implement folk psychology (…). Folk psychology modifies itself in measure with the cultural reactions to the changing world and to the humans, living in this world." (Bruner 1997: 32, 33).

Bruner continues:

> "Folk psychology is a medium of the canonical. It concentrates on the expectable and/or the ordinary of the human existence. It bestows the ordinary with legitimacy and power. But it possesses purposeful and effective instruments to turn the extraordinary and "abnormal" into a comprehensible form." (Bruner 1997: 64).

At this point in the discussion the questions arises of how folk psychology equips humankind with legitimacy and power.

That can be accessed with the G.W. Allports Theory of Functional Autonomy (cp. Allport 1937). Folk psychology communicates the habitual, the canon of socio-cultural meanings,

which hold together and adjust the meaning-making community (folk). Allport argues that behaviours (which aim for something, hence which are functional), become habits. The more these habits are established, the more they take over the role of motives, which are not only means to something (functional), but also means in themselves. Hence these motives have autonomous character, they have functional autonomy.

❖ Example:

The experienced sailor feels the strong desire to sail again (cp. Allport 1937). And hikers in the mountains usually greet each other, which can be interpreted as a symbol of solidarity. This solidarity is existential in moments of danger, such as accidents, the loss of drinking water, or when they get lost. In towns that immediate solidarity is less important. In case of an accident, there are many people on the street so that it is not necessary to show solidarity to each of them. Moreover the solidarity (securing services) institutionalised: the next hospital is usually near and the police can be called, too.

Functional autonomy helps societies to maintain and secure a canon of habits: whatever was functional to create and maintain the network among the folk-protagonists was habitualised (canonised) and transcended into functional autonomy. William James re-emphasises this perception in the chapter entitled "Habit" of his book, "The Principle of Psychology" (James 1983). And Emile Durkheim argues that the shared beliefs of a community do not only reach "exteriority" by means of a functional integration of the respective society (folk) into a, for example economic environment. According to Durkheim, beyond their functionality, beliefs also become means in themselves, elementary and often incorporated attributes of meaningful socio-cultural identity. Moreover, beliefs also become determents for the community in the sense that they regulate the desires of the people, (Durkheim1961). Folk psychology is performed throughout life, applied and disseminated for example through narrations, or every-day performances, particularly through rituals.

The above mentioned socio-cultural desires, beliefs, habits and motives represent socio-cultural meanings; they are meaningful. These meanings or "common sense" compounds the collective organisation by means of a community-network and committed In-group. This puts mimetic arrangement again on the forefront of human development and organisation. Folk psychology, mimesis and, in this sense culture in its entirety achieve legitimacy, power and meaning. As media they enable the arrangement of different socio-cultural protagonists, which shifts them to a higher emergence level of human integrity and cohesion, (compare: "C1+D1 < C2 x D2", in chapter 1.3.1.4).

Bruner concludes about folk psychology that it deals with and consists of:

"all the culturally swayed narrations [annotation: and rituals] which people use to organise the image of themselves, of others and of the world they live in." (Bruner 1997).

In this text, folk psychology is perceived as implicit, informal, omnipresent, lifelong and especially as educational. Terms, such as socialisation or (informal) everyday education describe the same concept. In this regard, everyday education is as influential as it is implicit. Due to these characteristics education has an enormous impact on processes of socio-cultural devolution. Chapter IV addresses formal and non-formal education as an education which aims to develop our complex cultural "folk knowledge", unfolding the pool of human – humane – potential. In other words, it will be discussed how formal education concepts and approaches can utilise techniques of everyday-education, such as narrations and rituals, in order to increase learning outcomes and make formal education more relevant to sustainable living.

Such formal education, which explicitly involves informal "folk education"-techniques promises to guide learners to develop "cultural competencies". These competencies facilitate mimetic arrangements with the other and hence prepare the creation of unity in socio-cultural diversity in order to attain sustainable human development.

1.8 Rituals and Performative Learning – Modes for Mimetic Generation and Transformation of Meaningful "Being and Becoming"

Mimetic learning proceeds throughout the performative interplay between a protagonist and a respective "other". Confrontations with the other come along as frictions and they are often uncomfortable for the protagonist. This "other" is, for example, represented in other persons, meanings, values, norms, laws, causalities, imaginations, self- and world-perceptions. Contact with the other socio-cultural identity comprises the danger that the respective self will attempt to assimilate, stereotype or try to dominate the other in order to reduce friction and the complexity of life. The other, however, expands the horizon of possibilities for the self. Furthermore, together, self and other can create a common sphere and hence a stability (or respectively sustainability). That common sphere which arises throughout mimetic interchange between self and other, bestows the other with meaning. For example according to Allport's "Theory of Functional Autonomy" (Allport 1937, cp. chapter 1.7.2). throughout mimetic interchange, the other becomes a means in itself, beyond the functionality to expand the self's horizon of possibilities.

A precondition for such arrangement between self and other is mimetic procedures, which require mimetic competencies of the respective protagonists. Mimesis is the process of assessing the other and of accessing mimetic arrangements with and through the other. Rituals canonise the interplay with the other to some extent and assist protagonists throughout mimetic processes. Mimetic processes are performative and ritualised. Rituals are mimetic media.

They are implicit performative sequences of corporal and hence tangible, as well as practicable meaning. Embedded in everyday life and low threshold (familiar) techniques for everyone, they canonise actions and reactions, affiliation and opposing movements between self and respective other.

This does not mean that rituals prevent conflicts, such as war. There are indeed uncountable existing war-rituals. But even in times of war, rituals are used for the generation and consolidation of solidary inward communities and hostile outward communities. Wars themselves, ritualised throughout, refer to the other, although in opposing and not affiliating terms. Rituals uphold the potential to arrange with the other synergetically. They increase the potential to profit from conflicts constructively. In the case of war-rituals that potential is not utilised. This is comparable, for example, to democratic politics, which include the potential to promote social interests. Nevertheless, in the case of neo-liberalism these politics fail to do so. Wars assimilate the ritual "partner". They lead to the stagnation of development and disable creative diversity in terms of mutual win-win situations, multi-perspectivity and network-organisation.

Rituals, in the first place, support communities to do what they aim to do; they represent opportunities. Communities must decide if, in times of global interdependences, war is a possibility or rather a hazard to freedom, dignity and sustainability. Because the necessity for sustainable development increases, it is highly relevant to analyse the ritual potential for developing sustainably.

Rituals generate, consolidate and communicate concerted meaning. Thereby, they generate, consolidate and communicate socio-cultural identities, such as social communities. Besides this concertation and canonisation of meaning, rituals also innovate this meaning. Rituals structure organisation, but they also pre-structure how this organisation can be innovated creatively. For example, rituals define how scientists present new insights, which affect our self-perceptions, and they define how protesters protest. In this regard, rituals are cultural techniques for innovation. Specific rituals provide socio-cultural techniques to dynamise otherwise static socio-cultural identity formations, so that both parties can adjust their meanings and arrange with one another.

Arrangement does not describe absolute harmony in terms of homogenised, enlightened human beings. The concept of "arrangement" which is utilised in this text rather allows for contradictions, antagonisms, conflicts and friction. Arrangement is a framing principle (framework), as is the concept of sustainable development, for the unfolding of socio-culturally dynamic diversity and diversification (see chapter 2.2). Rituals assist mutually

arranging protagonists in dealing with difference and frictions which appear throughout mimetic arranging processes.

Rituals equip human beings and communities with performative, corporal knowledge in order to mimetically deal with "the other" and with the differences as well as complexity which the other represent.
Wulf states that "Ritual knowledge is acquired mimetically as performative, practical knowledge." (Wulf 2001a: 325).

Most processes and episodes of learning are mimetically swayed. Such learning promotes socio-cultural identity development (diversity) and maintains social cohesion (unity). Throughout this sensual, body-based learning, the learner acquires images, schemes, and movements of practical action. This learning is implicit and has a strong influence on all aspects of socio-cultural developments (cp. Gebauer/Wulf 2004).

Throughout mimetic learning processes young children refer especially to other people.

❖ Example:
They answer a smile with a smile, and they discover that they may initiate (re-) actions from others, for example, when their smile is answered with the smile from someone in front of them.

Such experiences of mimetic interchange and often subtle arrangements with others support children in the development of feelings, and these feelings concern their social environment; they connect them to this environment so that the environment, for example, in the form of the family, impacts the self-identification of the child. In this process young children develop the ability to differentiate between themselves and others, as well as between subjects and objects. Moreover, the child develops the "cultural competencies" of being able to refer to and arrange with others. This learning in turn develops the brain of the child. While some elements of personality- and identification configurations are strengthened, others become stunted (Singer 2001; Changeux 2002). Neurons adjust and hence, socio-cultural conditions of this early life stage are engraved into the physical brain. The sensual, performative, mimetic learning literally incorporates knowledge.
Over time, young children develop the ability to experience the world as a world of correspondence. Children, furthermore, develop marginal competencies to express the outside world they experience in images as well as imaginations, and they learn to imbibe this outside world, making it part of their inside world, their identity (Agacinski et al. 1972; Goodman 1978; Taussig 1993).

Mimetic processes develop practical knowledge. This practical knowledge is acquired through body-based, sensual processes and it enables one to act competently in social situations, institutions and organisations.

One important aspect of practical, social knowledge is ritual knowledge. Rituals provide orientation in social contexts and relationships. Through rituals, institutions can engrave themselves into the bodies of human beings. Nevertheless, as shown below, rituals promote more than the generation, consolidation and communication of meaning, social cohesion, organisation and human self-regulation. They also provide techniques or operation modes for the innovation of the respective social, socio-cultural or societal patterns.

In mimetic processes the learner acquires images, schemes, and movements of practical action, which enables the individual to act – and to be. As the self is a swarm of its participations (Perkins 1992), it requires the ability to refer to and arrange with the other and the ability to correspond, or interchange with the other. In other words, this describes the ability of a respective self to become approachable and transitive for "the other", and receptive for "other" information and input. As a result this information and input can generate, consolidate, communicate and innovate meaningful socio-cultural identity. As meaning is a social product, such socio-cultural self-identity is synonymous to social capacity. Or as Habermas says: "identity is an act of integration" (Habermas 1981:214ff) and an open as well as uncompletable "project" (Keupp/Höfer 1997: 11-39). That means, specific socio-cultural meaning is not meaningful as such, but meaningful to a certain social group which uses the meaning to identify itself and hence to compound (integrate members) and maintain the social cohesion. This means that meaning provides knowledge about how to live appropriately in particular social contexts and how to co-shape this context together with other.

Wulf and Zirfas write:

> "Mimetic relations show how rituals generate and perform collectively shared knowledge and collectively shared practices of action. Moreover they show how a self-representation and reproduction of a social order is enabled through an (actualised) practical, performative pattern. (…) Social and cultural acts refer to their origin, they express the social, individually and the individual, socially. The social and cultural act, furthermore, is a corporal implementation, demonstration and proceeding; it enables the continuity of a diversified social reality, hence it is mimetically performative. (…) The performative character of rituals and of other forms of corporal demonstrations are constituted within mimetic processes." (Wulf 2001: 342).

Wulf an Zirfas accomplish:

> "The power of performative processes derives from the incorporation of power structures, from the incorporation of the constitution and apperception of world. Performative processes evoke a habitus, which is represented in specific lifestyles as well as in the acceptance of authorities and hierarchies. Corporal demonstrations enable the embodiment of: patterns of interaction, language, images, rhythms, spatiality and orders of time, schemes and strategies: The body becomes the memory of the social." (Wulf 2001: 343).

In the context of mimesis, some attributes of ritual are:

a) Rituals are performative:

The ritually mimetic act is a body-based performative act, which strives for concerted meaning-making. Wulf and Zirfas state:

"Mimetic processes are primarily sensual-corporal processes. Through mimetic processes the protagonist acquaints ritual practices." And: One essential characteristic of practical and ritual processes of mimetic acknowledgement is that these processes are movements which refer to other movements. (…) Furthermore "mimetic processes refer to already existing ritual worlds, generated by other people." (Wulf 2004a : 369, 370).

b) Rituals are modes of integration:

"The ritual practice [of an individual] prevents his exclusion from the community and promotes the integration into the community. One motivation to integration is to prevent the otherwise deriving risk of strangeness or threat." (Wulf 2004a: 369).

The risk can derive from the other protagonist, from frictions, conflics and possible competition. More generally, the "risk of strangeness or threat" can also derive from the mono-perspective which one socio-cultural protagonist (e.g. an individual) can have of its environment. Excluded from society, the protagonist would have no measures and perception for a meaningful life, unable to develop orientation and to see the situation from another, alternative perspective – or from a multi-perspective (cp. chapter 1.6/ 1.6.6).

c) Rituals are modes of innovation:

Rituals do not only organise and maintain seemingly harmonious integration, through the control of friction. Rituals also promote social development, hence the innovation of consolidated organisation. They provide techniques for the management of social conflict and channelisation of social disruption. Rituals can prevent conflict and disruption, but they can also evoke it and incite "creative destruction" for example of social structures. In this regard, rituals are not only conservative techniques to restore traditional patterns, they are also modes to generate and hence to adjust these patterns. In the sense of evolution rather than revolution they enable performative propositions of social change (of socio-cultural meaning and identity). Rituals enable, conduct and validate social change.

Figure 19: What would the French Revolution be without the waving of the French National Flag?

There are rituals which specify for example how to define and communicate common goals, how to gather, how to protest, how to win or loose. Singing, the building of barricades, and demonstrating on the one side, flag ceremonies, military parades, and excited speeches on the other; these are ritual performances, used to generate and consolidate well-fortified communities. Thereby, rituals (and images) played a crucial role in the transition process of a dramatic revolution with dramatic results, which turned into or contributed to a long lasting process of social evolution.

Social change and development towards sustainability, therefore, have essential ritual elements. The following chapter further illustrates the cohesion between rituals and sustainable development.

Eugene Delacroix – La liberté guidant le peuple 1830, Louvre

Mimetic learning, therefore, goes hand in hand with ritual, performative learning. They are central media for the incitement and management of the cross-arranging development of socio-cultural identities on all levels.

To summarise, ritual performances derive from and further practical knowledge. This knowledge is corporal, sensual, ludic, historically as well as socio-culturally specific. It derives from face-to-face situations and it is semantically not definite [plurivalent]; it has imaginary components, is not only intentional and appears throughout religious, political, and every-day ritual performances, (cp. Gebauer/Wulf 1992, 1998, 2003).

Wulf and Zirfas write:

> "The presentation-character of social situations confirms that these situations address relations. This mean that they are performed in respect to the observers. This is especially important because values, norms, rules and laws of social reality are continuously reconstructed and communicated through ritual idioms." (Wulf 2004a : 373).

1.8.1 The Ritual Generation, Consolidation, Communication and Innovation of Meaning

Since the end of the nineteen-nineties, ritual has been increasingly recognised within the social and human sciences. An introduction to ritual practices by Wulf summarises what makes rituals relevant for these sciences. He writes:

> "Ritual practices require movements of the body, which stage the proximity and distance between – as well as the attaching and detaching – of ritual participants. These body movements express cultural perceptions and social relations. In this regard, hierarchical relationships, which build on power imbalances, require different movements than amicable-, or even intimate relationships.

Ritual practices are determined through body movements, so that the body is subsequently determined through rituals; the body becomes civilised and cultivated." (Wulf 2004a: 366).

In other words, through ritual practices the body acquires socio-cultural meaning. Beyond this acquisition, the mimetic body-performance reciprocally contributes to the making of meaning; of "civilisation" and "cultivation". Rituals communicate; they mediate information and meaning and they configure communion:

"The body movements express and stage the intentions of the ritual protagonists. (…). Ritual practice is the staging and demonstration of social action. It can be perceived as arrangement of body and gestures, hence as linguistic, cultural and aesthetic performance. (…). As embodiment of normative arrangements, rituals contribute to the shaping of society, institutions and organisations. Rituals are dynamic, they transform continuously hence they evoke trans-ritual practices." (ibid.: 367).

Trans-ritually, rituals are able to transform the socio-cultural canon and meanings.

The Theologian Theodore W. Jennings argued that the research on imaginative forms – and theology is such an imaginative form – concentrates too much on narration and fails to include ritual performances. Jennings developed the concept of the "cognitive function of the ritual" (Jennings 1987). In this context, he highlights three aspects of rituals:

- They obtain knowledge: Rituals involve discovery, identification and assignment.
- They communicate knowledge: Not illustrations of theoretical knowledge or dramatisations of myths, but the mediation of ritually generated knowledge.
- As performance, rituals are demonstrations (or presentations), which address an observer. This point is important for Jennings because it allows for the relating of ritual action with theoretical knowledge.

Schilbrack explains:

"As Jennings puts it, participants in a ritual learn not only who they are in the world, or what they are capable of, but also "how it is" with the world (Jennings 1982: 113). One can put this point in existential-phenomenological terms, so that ritual knowledge is knowledge of being-in-the-world, or in pragmatic terms, so that ritual knowledge is an activity in which an organism transforms its environment in order to pursue its purposes." (Schilbrack 2004).

Three main attributes of ritual knowledge can be detected:

1. The body of the protagonist:

Ritual knowledge is corporal, incarnated knowledge; it is obtained with the body and not only "embodiment". Ritual knowledge is not notionally anticipated, or theoretically intended but rather performed with and from the body.

2. The action:

Ritual knowledge is generated through action, it is performative. In the case that it should be obtained before an action, the ritual would be illustration. In the case that ritual knowledge is obtained after the action, it is then reflection. Instead, ritual knowledge occurs simultaneously with ritual action or performance.

3. The competency to act:

The performance of ritual knowledge, or respectively the application of performative ritual-knowledge, requires competency. Ritual knowledge can only be acquired and reciprocally cultivated through actual active, hence performative application. This competency, or ability can be learned.

❖ Example:

One can learn swimming only through swimming. A language can only be commanded through speaking. To be a competent speaker of a language requires more than linguistic or grammatical knowledge about the language.

Mary Douglas explains that culture is essentially mediation: it negotiates and builds up symbolic structures, which enable protagonists to communicate, arrange with each other and share (for example meanings, perceptions, aims or experiences). Thereby, cultural symbols become public issues, symbolisations (the usage of symbols) become public acts. Depending on the social and often political freedom in a society, individuals can revise and oppose such symbolisations. Douglas also states that these symbolic structures of public order are closely intermeshed with the imaginations of pureness and impurity, or respectively of homogeneity and heterogeneity, or unity and diversity. Symbols and symbolic performances structure world-experience within socio-cultural systems, societies, or "meaning-communities".

They provide paradigms for the order of – or the operation modes for organising - the cosmos, which can prevent meaning-diffusion (contingency, disorientation) in terms of chaos. (cp. Douglas 1988/1993 and Durkheim 1912/1981). Meaning-making processes and procedures are essentially ritualised. Thus, rituals facilitate socio-cultural meaning-making, which is how they prevent discontinuity, disintegration and social disruption. Moreover, rituals foster mimetic, socio-cultural organisation, so that they can empower cultural protagonists (on all identity-levels) to live and to develop themselves together with and in respect to others. Rituals promote human autopoiesis by means of reciprocal negotiation, regulation, arrangement, continuity, organisation, cohesion and by means of sustainability. As the current state of the world is nevertheless unsustainable, it can be concluded that a paradigmatic change is required and that such a change derives from performative rituals.

Different lifestyles, production and consumption patterns, adequate social integration and environmental integrity are some rather specific goals to achieve sustainability. In order to achieve these goals competencies are required, i.e. the competency to deal and arrange with the other (the "other self", or the other world-perceptions, values, people, economic concepts, political systems, personal aims) mimetically. Such paradigmatic changes, innovations or transformations concern especially the liminal phase of rituals, which involves the moment of transition from one ritual constellation or pattern to another and from one

meaning to another (for more information about the "liminal phase", see chapter 1.8.5). In this regard, a paradigmatic change or "macroshift" (Laszlo 2003, see chapter 3.1.1; 3.1.2) is the ludic, performative, ritualised and ritualising transition from chaos to (more) cosmos, from contingency to (more) sustainability. For education, this means that it must allow for performative, ludic learning and competences without a predefined "sustainability"-doctrine (see chapter 4.1.8 for "open space" and 4.1.7 for "intravention"). The meaning of sustainability must not be presumed; the learner and protagonist must rather be empowered to partake in mimetic meaning-making. This urges educational practitioners to consider the body, performative learning and rituals for adequate pedagogical concepts.

Ritual performances are functional for socio-cultural organisation and meaning making. Moreover, they are also ends in themselves, because they intrinsically represent human being and dignity.

In addition to the self-sufficiency of rituals, they are intentionally used as functional tools to achieve something. Subsequently, sustainability develops through an education, which promotes socio-cultural self-regulation by encouraging "cultural competencies", i.e. performative play, ritual expression and ludic communication, mimetic cross-references to and with the "other". These competencies allow for the arrangement with others, to create "added value" and to overcome complex challenges, jointly and creatively. Concerted sustainable meanings, lifestyles, and motivations require the arranging of performances and rituals.

Mary Douglas bases her theories on the position of Durkheim (co. Douglas 1988/1993 and Durkheim 1962; 1912/1981). Douglas indeed has a strong functionalistic perspective on symbols and ritual performances. "Utilising" performative insights to adjust education methods can, but must not, reduce education to its functional properties. Performative education can be an end in itself. In this discussion it is crucial to differentiate between the ideas of the negotiating, functionalistic Homo oekonomikus and the Homo ludens, who plays, learns through playing and for whom the play is an end in itself, signifying and dignifying his identity. Transferring this approach to educational philosophy, education can be enriched and validated, it can be more functional and simultaneously increasingly become a means in itself, when it is more performative. With the involving of the body in the otherwise only cognitive learning processes, education can not only promote more capacious knowledge which enable the learner to live meaningful, happy and successful lives in the future. Performative education can also address the learner at present, so that the learning process itself becomes valuable, for example joyful, situationally relevant and intense.

Performances are public expressions, so that the learner experiences him/herself in relation to others The performer learns about him or herself, about the "other" and about the

surrounding social, environmental and economic "world" (including science, religion, media, politics and other aspects of societal life). Education is more than constructive learning; it is a part of being. This insight is already established in the theory of lifelong learning. Or, to put it differently, education can be being and thereby "learning to be" (Delors 1998, Faure 1972). Rituals enable "to be", because throughout the performative process they provide orientation for being in the world and for co-creating, or shaping this world. Refering to Delors' complete concept, rituals promote "learning throughout life" (learning to be, to do, to live together, to know, to change). The role of performative movements is imperative for an education that "educates the human towards human being". The reason is that they are one central aspect of the cultural mode of human regulation and in this sense rituals and performances are intrinsically human (cp. chapter 1.1).

As mentioned, ritual functions as a medium for socio-cultural meaning. Meanings are diversified socio-culturally negotiated and communicated compositions; they are generated, expressed, maintained and transformed through dynamic performances and narrations. Rituals are performances of meaning. They generate (incite or create), consolidate (maintain, or conserve), communicate (express, or represent) and innovate (transform, or develop) meaning. Rituals are modes of meaning making and operate as follows:

1. The generation of meaning:
Rituals help socio-cultural protagonists communicate and interchange with the respective other. This generates arrangement and hence community. Meaning is the gravitational force that clusters community members together. A community is a group of social protagonists with socio-cultural identities who developed and continuously negotiate common sense or meaning. The processing of such meaning is ritualised. Meaning is generated throughout the ritual performance.

2. The consolidation of meaning:
Mimetically and performatively negotiated and thereby generated meanings are represented through rituals. That consolidates the meanings. These meaningful and therefore affirmative, connective rituals in turn maintain the stability of the community. The heterogenic community facilitates to deal sovereign with the "other". In general, rituals are cultural modes – and in case of specific rituals, they are patterns – of performative meaning incorporation.

3. The communication of meaning:
Rituals transport and establish meaning. They are part of the "cultural genome" of socio-cultural identity. Protagonists express, stage and hence communicate their socio-cultural identities and meanings ritually. In general rituals are cultural modes – and in the case of specific rituals, they are patterns – of performative meaning expression and communication.

Children don't drink coffee for breakfast because the parents who drink coffee, say that it is not good for them: the ritual of coffee drinking defines the roles of parents and children.

4. The innovation of meaning:

The communication of meaning, or respectively the performance of rituals, is a precondition for others to be able to react to this meaning, to deal and play with and eventually transform it. For example, through criticism, ludic variation or protest socio-cultural protagonists oppose established meaning, so that a re-creation process is begun. This process must not only innovate the meaning and the meaning-representing rituals, but the process itself is ritually prescribed (cp. the example of the French Revolution, above). Rituals canonise de-canonisation; they mediate creative destruction and hence the generation of new meaning (see meaning generation, above).

Ritual performances are cultural transition modes, progressing from one socio-cultural meaning, ritual, constellation, perception, situation or context to another, yet unknown and un-anticipatable socio-cultural meaning, ritual, constellation, perception, situation or context.

1.8.2 Ritual, Symbol and Meaning

A ritual is codified, symbolically condensed meaning. In a simplified manner, symbols represent unified clusters of diverse meanings. The symbol is a medium of socio-cultural meaning, which is always socially negotiated, complex, ritually condensed, and performatively communicated and incorporated. Rituals are more than numb constructions, or vessels for the communication of symbolic meanings. Rituals support the discovery of organisational gaps. They arrange socio-cultural actors within networks.

❖ Example:

For example in case that this ritual integration leads to friction and evokes conflicts, hence in case those rituals fail, organisational failures become visible. But also seemingly external threats to the integrity of a society, such as climate change, or HIV/Aids increase, the dangers are communicated ritually throughout the network. Such rituals can be demonstrations, prayers, or it can be conference patterns and which provide secure proceeding in insecure times. Regardless if a climate change conference succeeds or fails, in both cases people now more about the climate change danger. They can find out if the issue matters, which role the economy plays, which role governments take to solve or conceal the dangers, etc.
Another example is the act of former German president Willy Brandt who kissed the floor in front of a memorial for Jewish victims of the ghetto in Warsaw. His act not only staged the previous failures of Germany, it also contributed to engrave these failures in the minds of people. Moreover it recalled and emphasised the imperative responsibility of German people and mankind to behave humane.

As soon as frictions in a social network (group, community) increase and endanger the integrity of the ritual applying community, transition rituals promote the innovation of previous affiliation rituals. "Affiliation rituals", or respectively integrating transition rituals are rituals, which enable conflicting protagonists to arrange with one another, to overcome differences and to negotiate common meaning. The transformation of rituals transforms the community

itself and safeguards its continuity. Transition rituals and performances are cultural techniques to innovate the causative (failing) consolidation- or affiliating rituals and to transform incommensurable into more commensurable patterns of socio-cultural organisation.

Victor Turner emphasises the role of meaning in ritual contexts. Turner's thesis is that the symbol is the smallest unit of a ritual.

According to Turner:

> „(…) the symbol has the advantage of being able to cross-relate manifold meanings and condense disparate phenomena analogically. Moreover, it seals sensory, cognitive and aesthetic moments into meaning. It bestows ideological and normative as well as sensual experiences. Thereby, it connects the diverse world into a circle of sense and purpose." (Turner 1989).

Audehm and Zirfas responds that:

> "Communitites are essentially characterised by ritualised patterns of meaning and action. We aim to transform Victor Turner's thesis that the symbol is the smallest unit of a ritual into the thesis that the smallest units of rituals are symbolic performances." (Audehm, Zirfas: 2001: 38).

1.8.3 The Functional Dimension of Rituals – and Rituals as Emblems of Dignified Human Life

Especially dignifying for human beings is that rituals have a ludic character. Their performative composition, their play-like proceeding, is an end in itself. In this regard, the meaning of a ritual or performative act lays not solely in its constructive potential; as ludic expressions, rituals are ends in themselves.

Generally speaking, the ludic aspect of mimetic processes, such as the ritual, facilitates the "liquidation" or innovation of established (consolidated) socio-cultural structures. The ludic aspect allows protagonists to play and experiment with rules and roles. In this regard, rituals create a space where reality can be played with; a space for different (diversity promoting) reality-interpretations, and the testing of reality-alternatives. Throughout ludic performing and performative mimesis, rituals create constitutive spaces (meaning), which hold together and unite (unity-promoting) the ritual performing protagonists as communities. Such spaces are not absolutely static, their variation is rather immanent. The variance of rituals and of performances as such create "spaces-in-between", for example in-between:

- static and dynamic
- unity and diversity
- Chaos and cosmos (meaning/organisation/integration)
- acquainted self and unknown "other"
- contingency and continuity
- an unsustainable reality and sustainable visions.

In these relatively "open spaces" (cp. chapter 4.1.8), considerable reality- or meaning-alternatives can be developed through the performative act. The form, function and content of such meanings are not intentionally predetermined or anticipated. Hence, meaning does not only constrict and construct ritual performances, but meaning emerges through the mimetically performative interplay with the other. Rituals maintain and they alter meanings. Especially in processes of socio-cultural innovation, rituals become media to access, explore and play through (to sample) meaning/reality alternatives. Thereby rituals promote unity and diversity. This makes them central for the activation of socio-cultural multi-perspectivity and at last for sustainable development (cp. chapter 1.6/ 1.6.6).

The criteria for ritual innovation are the ludically performative reduction of complexity, and the mimetically accomplished arrangement with the respective "other".

❖ <u>Example:</u>

Trade unions established (strike-) rituals to facilitate the transition from collective dissatisfaction about work conditions to more satisfying, improved ("innovated") work conditions. These rituals facilitate, for example, union gatherings, where participants develop collective desires and alternative imaginings through ritualised (patterns of) discussions. Hence they promote decision making processes within the group of unionists: What is the dissatisfying situation? What do we want to achieve and how do we achieve it? Through discussions, elections, and "call and response"-speeches, these questions are ritually examined and answers are ritually negotiated and condensed into a collective interest and position, which they can defend collectively. Hence, collective interest is *generated* and *consolidated*: rituals enable for collective positioning of the unionists. Once particular visions become internally concerted claims of the group, the unionists *communicate* them outwards. And they do this again ritually, for example through demonstrations and strikes. The work canon which determines work conditions is interrupted. Rituals, however, safeguard a certain cohesion: The interruption is not a random eruption. Such an eruption could endanger the company, the framework that connects employers and employees. Instead, the de-canonisation process of work conditions is canonised itself – through rituals. Rituals predetermine the different strike patterns, conventions and stages.

The manner of striking can vary strongly and often has ludic elements, including the usage of costumes, music, speaking choirs, theatre, caricatures and original activities to attract attention. Ritually, the unionists evoke communicative, uniting and the community of unionists strengthening (solidarity-) effects. Subsequently, rituals shape the negotiation with employers and state organisations. The different rituals guide the involved parties through the process of transformation, change and *innovation*. They vary from epoch to epoch, from work sector to work sector and from place to place.

In conclusion, rituals enable mimetic interchange between different actors:
- between different unionist groups with different interests
- between unionists, employers, and state organisations, which arrange with one another through ritual negotiation.

Powerful rituals even seem to prevent the usage of physical aggression against people and the usage of weapons. Singing and marching, occupations and a strict and socially controlled strike-ethos can prevent unionists from attacking employers physically. Ritualised negotiations enable union representatives and employers to find compromises. The ritually strengthened solidarity between unionists reduces the risk for individual unionists to be physically attacked, or discharged by employers. Rituals maintain continuity, especially in times of transformation.

Furthermore, rituals enable and facilitate to transit between "antipodes", for example:
- from current work conditions or an established employment context to a yet imaginary, alternative and unknown, "other" future for the striking unionists
- from consolidated structures to imagined and communicated structures to innovated structures. I.e. rituals facilitate the transition from the established situation to imagined desires

and communicated claims to the implementation of these claims towards innovative work conditions.

Overcoming such ostensible antipodes, it can be inferred that rituals, don't guarantee but facilitate the dealing with difference; they reduce complexity (cp. chapter 1.8.6 for "ritual complexity reduction"). In the case of strikes, rituals regulate win-win procedures, or, in other words, they support the overcoming of contingency, promoting the continual integration and arrangement of employees, employers and government-institutions. In this regard, rituals enable the participatory negotiation of concerted, common meaning. For all individuals involved the strike rituals promote a better life-quality. Employees keep their jobs under improved conditions, business goes on for the employers and the government representatives were potent in co-mediating the achievements.

This example shows how rituals and their performative interpretations incite integration and integrity. Especially everyday informal ritual performances are – just as social or socio-cultural settings and situations – often plurivalent and not univocally definable. Because rituals can not be "absolutely" interpreted, it becomes evident that rituals as such are not only functional modes of arrangement. Rituals and their performatively ludic interpretations additionally signify dignified human life. Wulf and Zirfas argue that the plurivalence of performances:

> "represents the limits of a purely functional interpretation of the performative. The performative describes an event which is not analysable in terms of generality or particularity and of identity or difference. Social presentations are ends in themselves; they possess their own aesthetic and staging quality and an expression- and presentation component which can not be reduced to intentions and functions. They are not only expressions or representations of an outer social commonality (Durkheim). Ritual performances represent neither only the meaning, as the symbol does it. Nor do ritual performances reveal something completely different, as in case of the allegory. Referring to its context, its conventionality and its specific effects, ritual performances rather generate meaning throughout the process. Performative action is not only reproductive or productive, it is reflexive and self-differentiating in a practical way. The ritual constructs a framework which stabilises, expresses, differentiates and canalises the form and power of performative interaction and communication.", (Wulf 2001: 339-340).

Performative rituals in turn stabilise, express, differentiate and canalise the organisation of – and arrangements between – socio-cultural actors in terms of "communitication" (cp. next below, chapter 1.8.4/ 1.8.9). The idea of "communitication", or "community-cation", refers to communicative processes, which arrange different socio-cultural actors. "Communitication" hence is the process of generating, consolidating, communicating and innovating community meanings and subsequent community life. Mimetic arrangements incite emergence shifts, hence the shift towards a more complex and accurate socio-cultural patterns: communication seems to describe the exchange between socio-cultural actors in terms of zero-sum-games. That means that the exchange of information would be an economic trade in which the other remains a supplier, a functional object. "Communitication" in turn refers to the arrangement between self and respective other who generate, consolidate, communicate and innovate a common sphere, the community. The already above mentioned emergence shift refers to the added value in terms of the mutual and self-, other- shaping and community-regulating "expansion of the horizon of possibilities" (Iser 1978). Instead of zero-sum-games, "communitication" promotes win-win situations (synergy) for the involved socio-cultural protagonists. In a community both protagonists provide each other with meaning beyond

functionality. These communiticative processes, procedures and proceedings are ritualised (as example see chapter 1.8.4.1 for "family rituals").

Ritual arrangement and organisation, as well as effects of socio-cultural differentiation and meaning-making emerge throughout the ritually performative act. They develop during the process and during the performing, not before or after.

The following text was already stated above. It addresses ritual knowledge, but at this point of the discussion it addresses rituals as such: "Ritual knowledge is generated through action, it is performative. In the case that it would be obtained before an action, the ritual would be illustration. In case that ritual knowledge is obtained after the action, it would be reflection. Instead, ritual knowledge is identical to ritual action or performance."

Humphrey and Laidlaw state that rituals are non-intentional, nonetheless they are not a-intentional: Rituals produce intention, retroactively, but they do not involve intention as "primum mobile" or an inventing- and driving force (Humphrey, Laidlaw 1994).

Hence Humphrey and Laidlaw differentiate between:
    (a) the intention in terms of the modus in which the ritual is performed and
    (b) the intention which dictates the ritual and predefines its proceeding (ibid.)

Indeed, they reject possibility (b) as the force to incite ritual activity because it negates the ritual as "knowledge in action", or "performative knowledge". Instead, they support possibility (a) because it describes the operational character of meaning in the process of performative exploration. Humphrey and Laidlaw conclude that intentionality does not explain the "identity" of a ritual action (Humphrey, Laidlaw 1994, 2006)

1.8.4   "Communiticative" Rituals – The Ritual Arranging, Maintaining and Transforming of Community

Rituals and (ritual) performances are about staging and (re-)presenting; they involve protagonists, participants and observers. They are social media for mimetic interchanges between selves and respective others, who arrange throughout the process.

The mode of culture is a set of different mimetic techniques to facilitate meaning-making. Ritual is a central technique for such meaning generation, consolidation, communication and innovation. Such socio-cultural meaning results from and throughout the mimetic interplay and negotiations between many different socio-cultural protagonists. Moreover, meaning arranges and clusters these protagonists together. Meaning invents networks and community. This entire chapter looks more closely at how rituals and performances in general are involved in community generation, consolidation, communication and innovation.

Göhlich and Wagner-Willi state:

> „In this context, speaking about community does not refer to an assumed or preconditioned quasi-natural unity. It rather refers to common ritual patterns of generating and dealing with differences (Derrida 1976a, Bateson 1985; Luhmann 1984); Moreover, it refers to ritual patterns, which bestow vague transition patterns with an integrative character." Göhlich, Wagner-Willi 2001: 121)

This text uses the term "community" not in the sense of a unified, homogenous group, organisation or society, but rather in terms of a diversified cluster of different community members. Such community is dynamically defined, continuously re-defined and casually innovated through the performances of each community actor.

Rituals enable community members to mimetically maintain their reciprocal arrangement. In this regard, it is important to recognise that it is not so much the consolidated structures and rules of a community that safeguard its stability in terms of integration and integrity. The reason for this is that every community is confronted by complex, internal and external impacts and dynamically changing contexts. A stable community is one, which is able to transform and innovate its own organisational patterns and meanings. Organisational patterns and socio-culturally particular meanings mediate the maintenance of socially integrative, environmentally integer, economically agile and responsible protagonists into a community.

Hence the composition of these patterns, the content of the respective socio-cultural meaning, follows the function of sustainable development. Sustainable development in turn is a vision of the community members who aim to converge towards its implementation. As a matter of fact, how a particular community defines "sustainability" and whether it uses the term or not for envisioning future developments, is secondary. Sustainability concepts can, indeed, be controversial. The diversity of visions of sustainability is equivalent to multi-perspectivity. Different visions allow for different approaches to sustainable development, which expand the possibility to develop sustainably.

In other words, organisational patterns and socio-cultural meanings provide the means for community; they perform "communitication". This enables the (performative) community to extend its socio-cultural diversity. On a functionalist level socio-cultural diversity enables for a lively, creative multi-perspectivity, which bestows a community with the ability to reduce and deal with complexity, to overcome shared problems, to prevent contingency and to transition towards continuity (cp. chapter 1.5 and 1.6/ 1.6.6).

For the world-community, such complexity, shared problems, and contingency are represented by climate change, poverty, the neo-liberal economy and the so called "north-south" conflict (cp. "global issues", chapter 1.1, figure 2). Regardless of how abstract these impacts are, in one way or another, they affect even the smallest "components" (e.g. social

groups or families) of the global network of communities. Due to global socio-cultural interweaving and interdependences, a community (in itself dynamic, heterogenic and controversial) can not escape from such impacts. Moreover, communities generate such impacts. That urges socio-cultural protagonists on all identity levels to continuously (re)act and transform their meanings, self-perceptions, perceptions of the "other" and of socio-cultural organisational patterns. Hence stabilisation, or respectively sustainability can only be realised within a process.

The transcendence of process paradigms is a measure for human dignity and prosperous development. The cultural system is lively; it transforms dynamically and as such it connotes:

- that not the meaning but rather the meaning-making,
- not the symbol, but rather the symbol-processing,
- not the "sustainable" status quo, but sustainable *development*,
- not the structures and rules and not the organisation patterns, but the modes of organisation and the competencies for "organising organisation",

are central measures for vital socio-cultural communities. In this regard, communities are life sustaining and life celebrating networks. Their particular socio-cultural meanings are the frameworks to safeguard that liveliness and hence to safeguard the community's livelihood. Education (for sustainable development) must consequently not promote sustainable meanings (i.e. doctrines), but the motivation and competence for sustainable meaning-making (cp. chapter IV, particularly 4.1.4). Such (performative) education promotes sustainable "communitication"; it capacitates the creation of unity, or respectively "comm-unity", bringing together diverse socio-cultural protagonists.

In turn anti-dynamic and therefore conservative organisation, the reduction of diversity and promotion of homogeneity, and the overall stagnation of human development is unsustainable.

❖ <u>Example:</u>

Industrialisation was a driving force for human development. It raised the living standards of billions of people. Companies and institutions were established that promoted and consolidated industrialisation patterns. The environment and societies were industrially undermined for the sake of industrial- and generally economic development. Today, those who profit from the established production and consumption patterns, from neo-liberal politics and states, aim to conserve these patterns. At a certain point in the development process, it became evident that there are strong linkages between industrialisation patterns and environmental degradation and social exploitation. Conservation of current, socio-environmentally inappropriate production and consumption patterns, state-systems, and economic policies may endanger the stability, or "(su)sta(ina)bility" of the overall socio-cultural, economic and environmental system. This shows that the conservation of established organisational patterns, such as industrialisation, is insufficient to organise a socially, environmentally and economically sustainable system. Rituals as well as education promote conservation, and simultaneously, innovate conservative organisation.

In order to generate, consolidate, communicate and innovate socio-cultural organisation and all sorts of organisational patterns such as institutions, governments, companies, social movements, communities, families, and school classes – performative, corporal organisational modes are essential. Education for sustainable development must, therefore, focus on the organising, or mimetic arrangement-competencies.

Performative learning and ritual interchange are aspects of "communitication". They can facilitate the generation, consolidation, communication and innovation of communities and of their common meanings because they provide techniques for dealing with the differences, which arise between self and respective other.

"Communitication" is not simply the process of creating community and maintaining it through communication. Rather, it connotes the entire community generation, consolidation, communication and innovation. Hence, communication includes the creative destruction of established community meanings and structures. It describes the transformation and emergence shift of one community composition to another, for example, from a typical industrial society to a society with more sustainable production patterns. Rituals foster "communitication" because they canonise the established as well as the innovated aspects of community. Moreover, the ritual mode of "communitication" is mimetic, so that the ritual applying protagonists create unity in diversity, which validates "Our Creative Diversity" (Cuéllar 1989) by means of sustainability-potent multi-perspectivity.

1.8.4.1 Ritual Family-"Communitications" and Trans-Ritual Organisation

As mentioned, socio-cultural meaning is also represented in symbols, which make up a part of ritual performance. Accordingly Audehm and Zirfas state:

> "The ritual is a sign which – because of its conventionalised character – refers to its meaning. According to Turner the symbolic dimension of the ritual anticipates, remembers and demonstrates the potentiality of an unstructured, spontaneous community beyond all particularities, heterogeneities and hierarchies [annot.: unity]. On the contrary, the performative dimension of the ritual refers to the actuality of the community throughout its application of gestures, movements and communicative relationships [diversity]. One could say that the symbol refers to something which does not exist inside the symbol but which is still present. It refers to a cohesion which is not immediately obvious." (Audehm, Zirfas 2001: 54)

Symbols are only relatively homogenous because they cluster different meaning-elements into a meaningful framework, which remains relatively dynamic and complex. Symbols unite the symbol performers within a meaningful community.

Transferred to the symbolic dimension of rituals, rituals evoke the unity of the symbol applying community. Performative, or respectively "corporal interpretations" of this symbolised unity in turn literally mobilises diversification. That means, that symbols pretend a certain mono-causality; they are (their meaning is) clear. However, if symbols are performed through ritual action, they must be interpreted and this includes a certain variation, so that in practice the symbol is diversified and plurivalent.

The symbolic performance has rather spontaneous and fluctuating characteristics. Performances interpret, vary and thereby diversify the symbol, they disperse the symbol's alleged clearness.

Rituals thereby combine community uniting or "(comm)uniting" symbolism of "community life" in general, with performative diversification of socio-cultural meanings, identities and societal patterns.

In this regard, it appears certain that the meaning-making rituals reciprocally generate, consolidate, communicate and innovate socio-cultural communities, such as the family. Different communities have different ritual patterns but the same ritual modes.

According to Audehm and Zirfas, these ritual modes in terms of ritual sequences and scenes are assembled by a number of attributes. Audehm and Zirfas say that rituals are:

> "Interactions which verbally and non-verbally represent normative standards, such as methods and conventions of interaction. Rituals are temporarily and spatially specific, address specific mimetic situations, foster the innovation of community patterns and finally they invent and shape community just as the community invents and shapes rituals.
> Ritual sequences make evident how [for example] a family as an experiential community manages to invent interactions to overcome their central problem: to deal with the unity of differences [or unity in diversity] and the cohesion of continuity and change." (Audehm, Zirfas 2001).

Further referring to ritual family life, Rath asks:

> "What are the specific symbols, which a specific family uses during breakfast? And how are these symbols staged? The breakfast – just as any meal – can be divided in the aspect of the actual meal procedure and the context in which the meals take place. The meal itself can be differentiated in terms of 1. dishes, 2. the cultural technique of the feeding situation, 3. the spatiality, or place, 4. the time of the meal, 5. the regularity, 6. the sociality (Rath 1997: 249).

Audehm, Zirfas describe with their observations of family breakfasts, how meaningful roles and rules guide and maintain the family as community:

> "For their school snacks the children were usually responsible by themselves. That does not exclude help from their mother. This signifies not only the culinary transition from home to school, but simultaneously a generational emancipation process. As the children learn successfully to take over responsibility for an institution [the school] which means something to them, they become a bit more adult. The partially collective preparation of school snacks retains the temporal moment of transition. The mother assists the children. She prompts the activity and actively joins in the preparation." (Audehm, Zirfas 2001: 55)

Furthermore:

> "Bread has symbolic meaning, it is a metaphor for life. In the described breakfast ceremony and from a performative perspective bread has a dual generative function:
> First, it connects mother and children throughout the emancipation process. In that process children transit from family to school [the bread is a life supporting asset which facilitates the transition and maintains the boundage to home and family]. Second, the bread institutionalises the transition process from childhood to adulthood [the act of preparing the bread at home and taking it to school becomes an institution, a daily ritual, beyond the occasional act].
> The bread symbolises not only the common life in relation to work – a life, which requires effort (…) and self-possession. The collective and simultaneously individual preparation of school snacks reveals that fullness of life is based on individualised processes [dimension of diversity in

terms of performative diversification], performed in respect to community and hence creating community [domension of unity]." (Audehm, Zirfas 2001: 56)

Audehm and Zirfas continue to describe their observations of a particular family breakfast. They explain that the parents drink black coffee, while the children who are not allowed by the parents to drink coffee, drink milk. Furthermore the mother gives extra "milk-money" to the children, so that they can buy milk during the school break. This shows how power circulates and consolidates through rituals. It also shows how the parents maintain the differentiation between the children and themselves. The intergenerational relation and the associated set of rules and roles are established through ritual interaction, not guaranteeing, but promoting family stability and family development. Thereby, rituals perform family "communitication" (communicative family stabilisation and family innovation). Audehm and Zirfas write:

> „families become social communities due to specific verbal and non-verbal forms of interaction. These ritualised forms are continually presented on the "family stage". These performances make roles, intimacy, solidarity and integration within the family possible." (Audehm, Zirfas 2001: 37).

Performative learning is learning with the body. It is implicit, hence not (necessarily) consciously and intentionally directed, learning through ritual interaction and communication. Thereby, performative learning produces tacit knowledge.

Audehm and Zirfas continue:

> At least since Durkheim's 'The Elementary Forms of Religious Life' in 1912 it has been a common understanding, established in ethnological, sociological, political, and educational discourses that societies are generated, maintained and innovated through rituals. Through focusing on the symbolic meaning of rituals, societies nevertheless disregard their own performative character." (ibid.: 38).

For these reasons, Audehm's and Zirfas' analysis of rituals focuses on their performativity. According to Cliffort Geertz and Victor Turner, "cultural performance", is society-relevant and community inciting, (cp. Göhlich, Wagner-Willi 2001: 120). Wulf and Zirfas therefore speak about "Performative community creation" (Wulf, Zirfas 2001: 345 and Wulf 2004a: 381).

Wulf and Zirfas reflect on the inter-connectedness of rituals, or respectively of "trans-rituals". They write:

> „Transrituality describes how rituals create a relation to the (temporal, spatial, cultural, habitual, etc.) "other". Rituals represent and address this "other" (cp. Althans u.a. 2004). In this regard rituals play a crucial role in dealing with the "other". "The other" incites fascinations, irritations and challenges and rituals contribute to the staging of this and thereby to the comprehension and shaping of these fascinations, irritations and challenges. It is important to recognise the canalisation of violence and desire which the process promotes. Ritual performances deal ludically with violence and desires. In this regard, rituals can be defined as mechanisms for empirical complexity reduction. Complexity refers to the challenges and requirements that a specific society has to face in order to manage itself and further its development. More precisely, management and conducting connote the relation with– and the reference of a self to – the respective "other". This requires the drawing of dividing lines, the bridging of distances as well as the belief that the ritual inherent forces not only shape one's own perspectives but that they shape the 'outside world, the reality' as well (cp. Durkheim 1981; Schäfer, Wimmer 1998). Through rituals one works on the differences one has to the „other". This makes trans-culturality relevant for understanding the ritual structure of society: It allows for the differentiation of different

forms of community through rituals, for example, community as collectivity, group or team. Trans-culturality refers here to a performative community, which highlights the inter-digitation, togetherness and conflicts of ritual presentations, corporal and narrative practices, spatial and temporal framings as well as mimetic forms of circulation.

From a trans-cultural perspective, society appears less as a homogeneous entity, strictly integrative and authentic, social proximity, but as a precarious corporation which experiences tensions, demarcations and negotiations. In this regard, we understand a performative society as a ritualised realm of action and experience, which is defined by representative, mimetic, ludic elements. (Wulf, Zirfas 2004: 381-382).

Ritual-performative dealing with the other and with difference as well as complexity which are represented from the other are elements of the so-called liminal phase. This phase describes the ritual transition from one stage or composition of established socio-cultural meaning (and socio-cultural identity) to another.

1.8.5 The Liminal Phase: Dealing with Difference and Experimenting with Innovation

Rituals, supporting the comprehension of and reference to the "other", promote arrangement. Ritualised being and becoming (development) enables the protagonist to perform what Jackson calls „learning to live in a crowd" (Jackson 1968: 10). For example, in schools, during the schools breaks, rituals organise and canonise the "crowd" of playing children. This chapter provides three examples (A, B and C) from the everyday lives of students in schools. The examples illustrate the performative generation, consolidation, communication and especially innovation of communities. In an inter-dependent, dynamic and complex world in which self and other approach one another, and in a world of "contingency-continuity-dramatisations", the steady innovation of consolidated meanings is highly crucial. Such a world requires innovative meaning in order to accomplish the maintenance of integration and integrity, the promotion of socio-cultural diversity as well as an overall ethos of reciprocity and unity. Transition-rituals (or German: "Übergangsriten", French: "Les Rites de Passage", Turner 1964, van Gennep 1986) mediate this innovation ludically, mimetically, and performatively. The examples are micro-analytical observations of liminal activities and interactions. Audehm and Zirfas explain:

"The concentration on the "how" of social actions, described within the context of group-dynamics, has the advantage of avoiding the production of rash definitions. Rather it focuses on the generation and representation of social actions. The concentration on micro-processes of social action makes it possible to see apparently familiar circumstances with different eyes." (Audehm, Zirfas 2001).

❖ Example A: Transition-Rituals during the Gogo Game

For her field study, Anja Tervooren observed students of a German school who regularly play the gogo game during the breaks between school lessons. Tervooren writes:

"The group of players enables interested students to join. Therefore, "applying" students at first join into a shared rhythm and thereby they induce the transition from the non-game to the game. This transition-ritual, which allows non-players to become players, requires that the students stand together closely in a circle. The circle is a symbol of an egalitarian society, per se. All participants maintain the same distance from the centre of the circle, so that hierarchies are

marginalised. In this case the circle constellation is also functional. All participants can keep an eye on the gestures of the others, so that they have an overview of which gesture wins and which loses. If someone walks through the circle and blocks the view of the players, he/she will be admonished by calls such as "hey!" or "wait" and subsequently sent out of the circle as he/she disturbs the ritual." (Tervooren 2001: 232).

This shows that corporal and aesthetic dimensions play a strong role in society in terms of:

- Community generation:

Every school break "invites" ritualised gogo gatherings and canonised habits. In every school break a community of players is generated.

- Communitiy consolidation:

Rituals do not only bring the group together, they also dictate how the group of players will carry out their gogo "ceremony". Frictions and disturbances are reduced through strong rituals within a closed circle and disturbers are sent away.

- Community communication:

In ritualised manners, the community of players communicates who they are, what they want and what they do not want. They occupy playing space and they demonstrate power: "we are the gogo playing group and we are one party on the school yard", so that teachers and students know what they do and who they are.

- Community innovation:

Students can leave and join the community; there is continuous change. Leaving and joining would "normally" disturb and potentially destabilise the consolidated canon. But instead of preventing and eliminating the joining or leaving of players, the joining and leaving players are themselves "norm-alised", standardised, or ritualised. Through ritual modes of consolidation the community is able to maintain itself. Through ritual modes of transition the community is able to self-regulate and innovate its composition and structures.

Commenting on the role of rituals to maintain and innovate community, Göhlich and Wagner-Willi state:

> „Rituals are understood as repetitive, interactive patterns of action. Through corporal, sensual expressions, stylised gestures and arrangements they constitute and confirm the boundaries, orders, values and norms of a community. (...) Ritualisations are swayed by collective, practical participation in repetitions and mimetic processes (Gebauer/Wulf 1992, 1998). They contain elements of changeablity." (Göhlich, Wagner-Willi 2001: 120)

In other words, these processes of innovative change or transition are processes of mimetically commensurate and ritually canalised inter-change and social negotiation.

Subsequenty, Göhlich and Wagner-Willi refer to the anthropologist Victor Turner (1989a), who focused on liminality as the transition of one group constellation into another group constellation. In the transition phase, Turner finds that the ludic elements of rituals are a substantial presence: one finds the playing with symbolic expressions, meaning, dramaturgy, with potentialities, or with horizons of possibilities (cp. ibid).

Further examples of liminal phases are the change from one government to another after elections, or the death of a family member and the subsequent recovery, or "reconfiguration" of the family. Other examples of transitions are after-work parties, coffee breaks during conferences, travel from one country to another, the shift from neoliberalism to an eco-social market economy, and from un-sustainable to sustainable lifestyles. Regarding sustainability and recognising that sustainable development describes the shift to a more sustainable course, transition is not an uncommon or infrequent occurrence. It is rather a frequent and continuous phenomenon of human development on all socio-cultural identity levels. Hence, transition rituals structure intra-individual mimesis, promoting the sovereign socio-cultural identity, which is required for vital inter-individual arrangements. Moreover, they assist in inter-societal "communitication" and thereby shape and re-shape the supra societal identity of humankind.

Transition rituals provide individuals with the tools necessary to access and consider complex issues, such as those, which challenge humankind as a whole. For example transition rituals support "global thinking and local action", hence the transition between global thinking and local action. In a way, the principle of sustainability is nothing other than the creation of complex and abstract imaginings and their transition into precise and tangible performance (action). Moreover, thinking globally often requires the innovation of one's own self-perceptions with effects on local lifestyles, production patterns, consumption patterns and actions. Rituals guide socio-cultural protagonists throughout this transformation of socio-cultural meaning and identity.

Established rituals are not "immune" to friction, stimulation and outside influences. This allows for their performative variation, which in turn allows for their transformation and facilitates their adjustment to socio-cultural requirements. Considering the variability of rituals, even a precisely regulated ritual, such as the Latin Mass of the II. Vatican is celebrated differently in different regions. Even in the same socio-cultural context, the same rite is celebrated differently; it is similar but never exactly the same. Ritual action, therefore, is never simple repetition or copying. Rituals are not fixed, inflexible or static procedures. Without the variation and alteration of their performative application, rituals would simply serve as tools for communication or illustration and would not be autonomous. Autonomy is meant in the sense that beyond functionality rituals are means in themselves for a specific community, (cp. "functional autonomy" Allport 1937 and chapter 1.7.2).

Jennings contributes to this theory with two observations (Jennings 1982). In brief, Jennings refers to a study of Ronald Grimes who observed an experimental theatre group. These

observations show that ritual action is not the product, but rather the medium for the search for an ideal sequence of actions. The other observation concentrates on liminality, as it was introduced by Victor Turner. Jennings argues that liminality shows the creative aspect of rituals; the transition from non-knowledge to knowledge. According to Jennings, this transition does not arise from external influences. Rituals are rather structured in order to enable such transition. Transitions (co-)constitute rituals. The parallels between ritual action and cognitive processes is, according to Jennings, depicted in the openness for the new and hence the openness for "the other" (i.e. the other perspective, meaning, expression, performance, knowledge, person). This openness characterises the liminal situation and the search for appropriate performances and action, which bestow the other with meaning. The transitional element of rituals, and especially of the liminal phase, works to include the other in one's own socio-cultural network and to bestow the other with meaning. Therefore it may be necessary to adjust one's own socio-cultural meaning.

 "Liminal" is derived from the Latin "limes" (limit). "Transition" can be described as a passage, or intersection. It describes moments in-between different constellations; for example, constellations (features) of a situation, context, status, perception, or behaviour.

The liminal phase deals with limits, or borders. For a better understanding, one can differentiate between "border-lining" (moving on the ridge of boarders) and "border-transition" or "border-passage". For a society, for example, there are limits (boarders) to environmental use (and degradation), in terms of production and consumption patterns. These patterns may reach the environmental limits and would have to be adjusted. In case that these patterns are not adjusted, but further conserved by human protagonists one can speak about "border-lining". The societies own socio-cultural patterns can limit their opportunities to maintain environmental standards of societal security. Protagonists can also overcome environmentally detached socio-cultural patterns through transitioning from old to new environmental paradigms and patterns by means of "border-transition" or "border passage".

Transition rituals facilitate such transition, or in other words, they facilitate the continuity of a community, which in turn is defined by arrangement or networking. Hence, transition rituals facilitate the self-regulation of human, socio-cultural networks in terms of social integration and contextual environmental integrity. Such integration and integrity are not self-dynamising automatisms, conducted from an "invisible hand". At any point, integrity and integration are decided upon or against. Whether a society will promote environmental protection and sensitivity is a decision that must be made. Rituals, and especially transition rituals, are tools for implementing such decisions. Rituals and tacit knowledge in general involve a human potential, a "treasure within" (Delors), which helps with concerted decision making and

implementation. Transition rituals facilitate continuity – or more specifically – they facilitate sustainability in a holistic sense.

Nevertheless, their potential is apparently not well utilised because the current developments carry moments of contingency. The financial crisis, poverty, desertification, over-fishing, and climate change are some of many aspects, which exemplify a moment of contingency and borderlining, instead of continuity in terms of border-passage and -transition. Such borderlining attitudes and patterns convey the revelation, dramatisation and performance of contradictions, for example: people who are conscious about environmental protection, but who waste a lot of water in their households, or states that are aware of decreasing influence of national politics (cp. chapter 3.2.9), but which promote global neoliberal so called "free market economy", (see chapter 2.1.4).

Associating the current indications of contingency or "human development on the borderline" with medical borderline symptoms (borderline personality disorder, BPD), different societal phenomena can be detected, such as societal-

- self-harming behavior:
  e.g. environmental degradation despite scientific insights
- paranoid perceptions:
  e.g. fear about so called "islamisation",
- identity diffusion or –disorder:
  e.g. the maintenance of disintegrated, inappropriate, unsustainable socio-cultural self-identities, unable to deal with the complexity of world challenges. The failure of socio-cultural meanings which are overburdened with the increasing omnipresence of the other due to globalisation,
- dichotomic patterns of thought or "black and white thinking":
  e.g. "us versus them", war *and* competition instead of peace and cooperation, or economic growth and sustainable development, and
- phantasies of omnipotence:
  e.g. ethnocentrism and imperialistic efforts and attitudes.

As mentioned, the term "liminality" was developed by Arnold van Gennep and Victor W. Turner. It denotes the condition of an initiator during the middle phase of the three-step transition ritual (separation – liminal phase – aggregation). The title of one of Turner's essays describes the liminal moment or condition as "betwixt and between" (Turner 1964). This means, neither the one nor the other, and includes, for example, being in between social stages; the "betwixt and between" of belonging to an old community (i.e. of children) and the new community (i.e. of men, when the child grows up). It can also refer to the transition

phase "betwixt and between" a hitherto socio-cultural meaning or self-identity one the one side and a new socio-cultural meaning or self-identity in which the other plays a new role, on the other side. Turner utilises the term "liminality" to describe not only liminal phenomena, but also phenomena which disconnect or detach people from their usual living conditions, before they return to them. Such non-ritual phenomena are, for example, carnivals, sports-events, theatre, illnesses and travels. (cp. Gennep 1986; Turner 2000).

❖ Example B: A School Class Community and the Threshold Between Classroom and School Building

Göhlich and Wagner-Willi (2001) observed the performative and ritualised actions of a school class in their classroom over a period of time. They particularly focussed on transition rituals, for example, the movement from the school hall into the classroom, or the effects of a teacher who enters and transits, or crosses the classroom.

Göhlich and Wagner-Willi write:

> "Besides rituals which are initiated by the teacher, such as the greeting and a morning circle, there exist a diversity of ritualisations, ritual sequences and mimetic interactions which are initiated by the children themselves. These rituals (…) have structuring effects. They contribute to the constitution and confirmation of school-internal communities (peergroups, class communities, learning and lesson-communities). Wherever they support school-related communities they effectuate simultaneously school-institutional organisation." (Göhlich, Wagner-Willi 2001: 196).

Hence, these rituals prepare individuals for the transition into organised and concerted community life.

> "They allow students to participate in organising, applying and shaping their school life with others and in respect to others.
> Furthermore such organisation is performed in reference to non-personal parameters, such as the class room, the seat and the seat-position, or with working materials. …. It was also observed that different school-internal communities (i.e. classes, peer-groups) have different rituals. Communities unfold their diversity ritually. The specific differences can also be interpreted as "grades or forms of school-proximity or – distance, of school-affirmation or –opposition" (ibid.: 197).

Göhlich and Wagner-Willi continue:

> "Ritualised demarcations [annotation: differences, or particularities] which children of a school class practice and which co-create the specific class community connote:
> • ethnic background
> • belonging to a certain state of development (child-like or adolescent)
> • gender belonging
> Beyond demarcation-efforts, especially the gender-related rituals play with the subject of demarcation." (ibid.).

For all of these three ritual performance "themes":

> „the transition phase from school break to school lesson is predestined. This moment offers moments of 'communitas' (Turner 1998a), of opportunities for the experimental incitation of new relationships, it is pervaded by ludic and staging elements and it has a dramatic character.
> In particular ritualisations, particular territories and requisites become holy, for example holy rooms and things. Hence, the door of a particular school class room and the door-related border-securing ritualisations of school-class-children become a taboo and a demarcation-line for

external pupils. The ritually performed prohibition of unauthorised entry contributes to generate the class-room community.
When the teacher enters and slowly walks through the classroom, (…) the teacher bestows the front area and the black board with holiness; a holy area and taboo-zone. Escaping from this area is one of the school-affirmative actions of school children, which strengthens the generation of a learning- and lesson community.", say Göhlich and Wagner-Willi (ibid.).

They continue:

"Taking seats on class-room chairs and thereby resuming in a quiet and stationary position essentially traces the transition between break and lesson. It stages lesson-disposition, co-establishes the organisational system 'lesson' and depicts the end of the structurally weak liminal phase." (ibid.).

Such order, or organisation, must steadily be re-invented. „Through repetitive ritual practices the seating arrangements are negotiated and confirmed on a daily basis." (Göhlich, Wagner-Willi 2001: 198). With the help of rituals, protagonists (in this case pupils) mutually arrange with one another. Furthermore, with the help of rituals, a common sphere is created, so that rituals arrange community, (see "communitication", above).

The class-community organisation is relatively complex and dynamic; it is in a constant process of transition. Therefore, transitory moments, transit areas and transition rituals; the "when, where and how" are required – and the school class performatively generates them in a self-regulative and concerted manner.

Göhlich and Wagner-Willi write:

„Transition phases occur as well during the lessons. They are incited by the change of discussion subjects, the change of social interaction between pupils and teachers as well as among pupils (i.e. in succession to the change from frontal teaching to working groups), or by the transition of demarcations of a class room by external persons (i.e. other pupils, which provide information for the class)." (Göhlich, Wagner-Willi 2001: 122).

❖ Example C: A Mambo Presentation – the Generation of a Performative Community and the Transition from Childhood to Adolescence

During a school event which took place on a school yard, Wulf observed the staging of a mambo-dance by a group of adolescent girls. He describes settings, movements and incidents around the scene. Beside the stage a monitor was installed, which showed a mambo-dance video while the group danced. This made it possible to compare the dances on the monitor to those on the stage. The comparison showed that the girls interpreted and explored the possibilities of the mambo ludically by means of a "mimetic difference" (Wulf 2001: 330). They did not mimic the mambo, or simply apply its rules. Instead, they presented their own particular version of a mambo and a particular mambo community. The community was not so much determined by the mambo scheme; by mambo "do's and dont's". The community rather emerged through the actual performance. Wulf writes:

"All movements are synchronised and they are rhythmic. Sometimes there appear minor irregularities, nevertheless a synchronised group-movement arises and with it, a performative community." (Wulf 2001: 327).

Wulf further states:

"Referring to previously acquired schemes and body-techniques, body-performances generate their own rules." (Wulf 2001).

Audehm and Zirfas write:

"The performative dimension of rituals does not primarily refer to signals and codes but to the modes of dealing with this code, or respectively to the practices of codifying." (Zirfas, Audehm 2001: 54).

During and after the mambo-presentation observers clap their hands. The participation of the audience makes the presentation public:

"The girls can show to other pupils, teachers and parents that they are no longer children but that they are on the way to becoming young women. In their mambo-presentation they communicate that they not only aim to acquire lesson contents, but that they desire other social and corporal experiences as well." (Wulf 2001: 330).

In this process the observers mimetically become participants. Wulf continues:

"The mimetic participation of the observers converts the desires and interests of the girls into a concern of the overall school-community and of the parents who witness that the girls are in a transitional phase between childhood and adolescence.
In this regard, the presentation of the mambo belongs to the rituals, which institutions and communities, such as the school utilise in order to organise transitions. (…) Characteristic of this situation is its explorative character, which enables the protagonist to find orientation externally from his/her own situation. Through such rituals, one works on his/her self-modulation.
Often, ritual expressions are generated and presented, whose incorporation contributes to the development of a new identity. This identity is primarily related to the peer-group, the community of adolescents, to the ritual actions and their performative character. Scenically, the ritually acting protagonists present their intentions. Central is the arrangement of bodies. (…).
Ritual arrangements show and dramatise differences and involve the observers in their presentation. They repeat scenic arrangements so that they become recognisable and provide opportunities for identification as well as mimetic embodiment. Ritual performances demonstrate something exceptional and provide the opportunity to scenically perform contradictions.Outside of these 'scenic arrangements' such contradictions can neither be expressed nor processed. Ritual performances are collective events, which generate community.
Ritual performance provides a cohesive system of meanings, which functions as a framework, making it possible to comprehend all scenes, symbols, body-movements, and gestures." (Wulf 2001: 330).

Wulf argues that although ritual presentations depend on the interpretation of the actor they are as self-explanatory as they are to be socio-culturally explained. Wulf concludes:

"Ritual presentations are repetitions and transformations at the same time. They have structuring power which influences body and mind." (Wulf 2001: 331).

In terms of "communitication", ritual performances create and shape (transform, adjust, innovate) society constantly; they enable social networking and regulation.

„As with all movements, these dance-movements mediate between the plasticity of the body and the formability of the world. They are the medium for cross-relating body and world. Reciprocally they generate and incite relations and innovations. This process requires the participation of the girls. (…) While the girls present mambo-suggesting movements, they become part of the world which is represented by these movements. It is the world of a media generated, global youth-culture and it has elements of Cuban music and eroticism, which the girls access through specific body-movements. Through the application of these movements the girls embody this world; contrariwise the girls embody their [particular] mode of apperceiving this world. Through the presentation of these body-movements they acquire [in this case mambo-] specific behavioural patterns which are related to other experiences and which finally are condensed into perceptions and attitudes. These attitudes are expressed through demarcations, appreciations and lifestyles. Differing from one's elders, listening to music, wearing particular cloths, having one's own life, and being similar to and solidary with another's, are important values of this pop- and youth-

culture. Through the presentation of the mambo, the girls join into the mimetic processes of this world; they incorporate them and expect to be accepted by the school public." (Wulf 2001: 332).

The performance incites conjunctions between general attributes in terms of unity and particular attributes which lead to diversity.

Figure 20: Expressions for the general and the particular

General (unity)	Particular (diversity)
the representation of the uniform mambo-logic	the interpretation of their particular mambo-version
the application of role models (i.e. to be a woman, to be an adolescent)	their particular interpretation of, participation in and co-shaping of these models
the uniqueness uniting/inter-relating community	the unique individual(s)

The above mentioned attributes incite unity in diversity, because the performative particularities guarantee difference, the "general" attributes of the ritual (in this case of the mambo) integrate these differences into an overall system (of the mambo-dance). In this sense of unity, differences are not homogenised, or "uniformed", but inter-connected. This promotes a diverse, complex and dynamic community. The girls thereby enter in their own dance-group based community. That community is a socio-cultural system nesting within the overall school community-system. The school community in turn is a sub-community of another socio-cultural framework: the society network. That society is both represented and innovated at the same time. Mimetically, ritually, and performatively the girls participate in this process of community generation, consolidation, communication and innovation in terms of a "communitication" process. The mambo is a form of media that the girls use to empower themselves through "communitication" and it is a means for socio-cultural identity- and meaning exploration. Wulf writes:

„Through the body-based representation of the mambo the girls participate in the myths, desires and lifestyle associated with the dance. Mimetically and ludically the girls explore how this attitude towards life feels to them.", says Wulf (2001:336).

The performative, ludic trial ("how it feels to them" to enter the mambo-lifestyle, role models, etc) enables the girls to access the other. Examples of this "other" are: alternative world-perceptions, other socio-cultural meanings, other selves, other lifestyles or role models, other dance-group members, the unknown aspects of one's own body, etc. The approach of "accessing the other" is systematically utilised in integration pedagogies and mixed-age groups.

Throughout the mimetic performance, which is a body-based, tangible interchange, the protagonists can discover and explore themselves from the perspective of the respective

other (cp. Wulf 2002:84). The benefits can include increased arrangement with and relation to the other, as well as adjusted and integrated self-compositions in terms of sovereign identity (see chapter 1.2 et al.). Throughout the performance, the other and self transform. Moreover, a common and particular liaison-network appears. (see "mimetic peak", chapter 1.3.1.1). For this reason, rituals and performative learning are crucial for peace education in particular and for sustainable development in general.

Rituals, and for example the ritualised mambo "dance-code" occurs to be rather static construction and precise schemes. Nevertheless, during the performantive vivification for example of the mambo-rituals, it comes to the spontaneous and random variation of the mambo code. This shows how performances equip rituals with flexibility, transience and convertibility. For mimetic movements, it seems important to have a ritual framework or matrix, which codifies meaning. In case of the mambo, the framework defines what a dance must be like in order to be a mambo. Simultaneously, it seems to be essential for mimetic movements that protagonists play with, and vary these codes. That means, a mambo is not only what a mambo is supposed to be, but what the dancer does with it and how he interprets – and plays with – the mambo-code. Concerning the example of the mambo-dancing girls, Wulf explains:

> "The mambo includes specific movements, schemes and techniques which all exist independently of the girls, although they can only be embodied by them. Insofar as the girls respect the text, music and movement, as well as the accompanying imaginary worlds and symbolic meanings, the girls performatively enter these worlds and their inherent symbolic structures. Hence, the girls acquire the independently existing forms, or codes of the mambo just as any other adolescents would. Subsequently, these processes incite elements of a youth-culture which contribute to the assigning of social positions to these adolescents." (Wulf 2001: 333).

Referring to Ricoeur (1983) Wulf states:

> „Central (...) are the mimetic processes which the girls perform in order to present a mambo. Through these processes the girls refer mimetically to idols and models; these processes do not only have a copying, but a constructive dimension as well. This dimension has creative elements which differentiates it from simple reproduction." (Wulf 2001: 335-336).

While the girls relate their mambo-interpretation to the "original" mambo dance code, they innovatively generate, constitute/consolidate, and communicate an inter-related "we-group" with its own, specific codes.

There are differences between the members and there are differences between dancers and observers. These differences, however, are facets and particular applications of an overall network, which inter-relates all people who are involved. The mambo example shows that rituals mediate mimetic arrangement.

From an anthropological meta-perspective, all rituals have in common that they are modes to mimetically arrange and re-arrange arrangement patterns. That means, rituals represent not only, they also shape socio-cultural patterns for example of individual or societal identity. Considering identity as such as an "act of integration" (Habermas 1981:214ff), or mode/modus of mimetic arrangement, the patterns of particular identities arrange different identity participants.

Rituals bestow us with the ability to negotiate a shared perception of a comprehensible, diversified, diversifying and dynamically complex world. Hence, they *continuously* generate, consolidate, communicate and innovate "meaningful" world-perceptions. This continuous, participatory, ritually performative meaning-making, in turn, is a precondition for humans to find their role or place in this world and to co-shape (the constituents of) this role. As this meaning-making and world-shaping determine development, rituals and performances are crucial for sustainable development.

Wulf concludes:

> „Mimetic processes are constructive. They generate a reconstructed world and enable, thereby, comprehension and cognition. For reconstructive social sciences the mimetic processes of world-generation with constructive, fictional and organising elements is central."

As mentioned, the self is a shoal of participations and requires the other. In the same context Wulf continues:

> "Worlds are made from other worlds. 'The conversant world-creating always emanates from other worlds. Creation is trans-creation.' In this way something new occurs." (Wulf 2001: 338).

1.8.6 The Ritual Reduction of Complexity and Promotion of Diversity

Diversity and dynamism are synonymous to the complexity of a multifaceted, steadily changing world. Rituals are tools to manage this complexity. They canonise and canalise our apperceptions and allow for (concerted self-) organisation.

❖ Example:

Conference rituals prevent derangement, enable arrangement, and organise chaos:
Conferences are gatherings of people who come together to discuss an issue of interest. Many of those who attend conferences are experts. Every individual may have an opinion and a different perspective on the issue of interest but without an organisational framework only the person with the loudest voice may be heard (competition). The ritualisation of conferences is such an organising framework, which works to overcome or canonise competition through cooperative means. Conference rituals organise (canonise and sequence) the performative procedure of the conference. Conference rituals provide performable and tangible (e.g structural and action) standards of "meaningful conferences". On an organisational level, conferences are networks of rituals (such as plenary sessions, discussion panels and coffee-break traditions), symbols (such as the dress code and the buffet as informal meeting area) and symbolic actions (such as shaking hands or clapping). Rituals sequence, canonise and thereby regulate the proceeding of conferences. In this framework:
  1. different experts can communicate their opinions and perspectives to others (focus on the self)
  2. they can listen to the opinions and perspectives of others (focus on the other),

3. moreover, all involved can discuss, explore and enhance insights and perceptions concerning the uniting issue of interest (focus on the common sphere).

This triad is a typical mimetic phenomenon, because the participants share, cross-relate and generate added value. In other words, they process complex knowledge through performative, ritual interchange. The ritual, in terms of unifying, overall meaning (unity), enables the different conference participants to attain multi-perspectivity (diversity) on a shared issue of interest (cp. chapter 1.6 and 1.6.6). Moreover, this multi-perspectivity allows for complex perspectives with the potential to overcome shared, complex challenges, such as communicative interchange and knowledge processing.

There is no knowledge without the communication and sharing of this knowledge and without relating it to other knowledge perceptions. Just as with meaning, knowledge is what different people believe and thus decide that it is. Knowledge is intentional, contextual and a product of participation. Knowledge, then, is not valuable because it is almighty, untouchable in its content and meaningful in itself, but because it arranges people within a particular "we-group", network, or community of interest and cognition at a certain historical/temporal moment.

Obviously knowledge has perceptual- and imaginatory aspects. Moreover, any knowledge, even abstract-theoretical knowledge has a performative aspect. In this regard, performance plays an important role in knowledge-processing participation.

Body-performance and imagination are modes to generate, consolidate, communicate and innovate knowledge – for example, in the context of conferences. Accordingly, conferences are patterns of ritual organisation.

Ritual performances do not only bring together, constitute and keep together communities, but they also provide assistance to overcome the friction, violations and clashes that these communities may face:

A conference agenda is (meant to be) performed in a certain place, at a certain time and by certain means. If a conference speaker breaks out of this framework, there are sets of ritual interventions to restore the framework. Chair wo/man and observers can, for example, react with humour or with direct interference. In the worst case, they may throw tomatoes, leave the room and get back to the order of the day later on, or change this agenda performatively. Such adjustments can be discussed in the conference group; for this discussion, again, rituals provide the procedural orientation for how to discuss. Another possibility is that the "disturber" receives support from other conference members and that the disturbance incites innovation of the framework itself and/or of the knowledge, (Martin Luther King was, for example, someone who creatively destructed obsolete structures of repression). For whatever happens and whatever could happen, there are ritual frameworks to organise and re-organise the conference. Nevertheless, rituals do not guarantee the prevention of destruction in terms of contingency, they only enable protagonists to deal with complexity and promote continuity. That continuity can include limited friction, conflict and destruction.

Rituals generate and shape our orientations and values (e.g. how to survive and how to live a meaningful life). Once the orientations are set, they are communicated and maintained by specific rituals. Thinking of rituals one may first think for example of religious rituals. These seem to endure something traditional, something ancient. Indeed, rituals conserve (consolidate, maintain) patterns also of religious identity. However, beyond this conservation, rituals can innovate ritually generated, communicated and consolidated social patterns, such as meanings, mind-sets, values or organisational structures.

Rituals support socio-cultural protagonists to deal with difference and reduce complexity. But complexity derives from diversity. How is it possible that rituals do not reduce and even foster diversity, but still reduce complexity?

Ritual complexity reduction enables protagonists to cope with difference and facilitates the comprehension of diversity. This does not signify the "compacting" and, hence, reduction of diversity. Ritual complexity reduction rather signifies the canonisation and organisation of a

perception of diversity. Rituals equalise others, but they do not homogenise them. Instead, rituals are tools to connect different protagonists, to associate and arrange them with one another. Thereby, rituals transform chaotic diversity into heterogeneous networks. In other words, rituals expand the possibilities of social actors on all identity levels to cope with social friction and utilise that friction for social and what's more, sustainable development. Rituals are capable of converting contingency in terms of stagnation into continuity in terms of development.

❖ Example:

Politeness Rituals to Overcome Contingency and Facilitate Continuity:
The knowledge and application of rituals of performative politeness, such as greetings and the use of smiling and gentleness can help a German tourist who has a motorcycle accident in a lonesome village in Thailand. The situation of the tourist can be described as a small contingency crisis because he does not know what to do, how to do it, and perhaps not even where he is. Rituals – as networking tools and patterns – help him to establish a minimum of exchange and respect with villagers on the other side of the road. He greets someone who comes by. With his finger, he points to the broken motorcycle. He smiles, so that he ends up on a truck, which brings him to the next repair shop. Driver and tourist have a drink together, before they go their different ways. The liaison may have stimulated the mood of the people involved. It may even have changed their perception of "the other" in a sensitive, almost trivial manner.

The triviality of rituals, make rituals applicable, omnipresent and powerful. They are not only functionalistic networking-tools, but they are also ends in themselves because they define humankind. Rituals are implicit, corporal, tangible and finally low-threshold (common) modes for networking in terms of mimetic arrangement-generation, -consolidation, -communication and -innovation.

Because humans can reduce complexity and deal with difference ritually, they can – so far – afford the unfolding of socio-cultural diversification and the prevalence of human development. In this regard, rituals are in part responsible for the diversified and diversifying development of humankind.

❖ Example

One example of the prevalence of human development is that humankind covers the planet in a way that at night can be detected from space (cp. Takafumi 2004; chapter 2.3). Another example is that humankind so far has supported a population growth of up to 6 billion people on earth. Moreover, on a quality level of human development, humankind has developed complex knowledge concerning health, medicine, and living standards (i.e. housing, transport, insurances, traditions of care, division and specialisation of work, etc.). The effect is that the average age of human beings is the multiple of the average age, some hundred or thousand years ago, and the trend continues.

The ritually empowered strategies of dealing with difference and complexity enables people to maintain their organisation in a dynamically changing, complex world.

Rituals provide modes of meaning revision and meaning making, so that human beings do not depend on static (i.e. dogmatic, ideological, mechanical, mono-causal) socio-cultural

meaning and organisation. Instead of conserving static organisation and meaning, they can constantly generate, consolidate, communicate and innovate new and hence dynamic meaning in order to overcome contingency and master development challenges. In this light, development challenges, such as global issues (see chapter 1.1 and figure 2), contingency crises, "eco-social schizophrenia" and the democracy crisis, become meaning challenges. These meaning challenges do not require a new form of human being; they require human beings that are able to develop and strengthen their self-regulating meaning-making techniques, such as ritualisation and mimetic, performative learning. Protagonists with such competency have a sovereign identity; an identity, which is capable of mimetic interchange, able to resist the dissolution of self or other, to share with the other and to perform arrangement.

Rituals create socio-cultural networks. In order to sustain such networks it is increasingly important to consider the natural environment. Ritually, socio-cultural protagonists are not only able to adapt their meanings and self-perceptions to deal with complex environmental challenges, but they may also participate in the socio-cultural management of the environment. Impacting and shaping natural as well as social environments, rituals are crucial attributes of the so called shaping competence (or respectively co-creation competence), (cp. de Haan 2002, chapter 4.1.2.1).

Wulf and Zirfas write, "A ritual is the symbolic presentation of dealing with difference." (Wulf 2001: 339). They continue, "In their medial role, rituals communicate experiences of the unknown and of the other." (Wulf 2004a: 380).

Recent publications in educational science describe rituals and performative ritualisations as the liaison of:

(a) corporal, mimetic processes,

(b) functional aspects of complexity reducing and the subsequent empowerment to deal with difference, as well as,

(c) the cross-relating and arrangement of ritual performing protagonists and the subsequent creation of communities.

Wulf, for example, defines rituals as "sensually experienceable presentations" in terms of corporally-expressive, normative, repetitive and public, socio-cultural performances, which facilitate "dealing with differences" (cp Wulf 2001:7).

"Dealing with differences" means, in this context, that differences are stated, constituted, constructed or neutralised (cp. Audehm/Zirfas 2001:47). This makes "the other" accessible, demystifying it. Funeral rituals, for example, support family and friends to comprehend and accept "the other" – the other side of life, or the other, deceased person. This prevents the

dissolution of self or self-contingency in the form of depression, trauma, or suicidal thoughts, thus stabilising the community and its members.

In chapter 2.1, how the tempo-spatial continuum is transformed throughout history will be examined. Today, people can travel easily and information can be disseminated in "direct time" through information and communication technology, crossing great physical distances. The "other" approaches – e.g. in form of alternative lifestyles, other socio-cultural meanings, knowledge, perceptions and traditions. The respective "other" has an increasing impact on the respective "selves", and the (composition of) "selves" are diversified and dynamised. The results are trans-cultural stimulations and developments, inter-changes, challenges, frictions and transformations of "the common". Subsequently, new synergies, collectives and communities with innovated meanings emerge, for example through reciprocal references (neutral re-/actions), eventual repulsions (opposing re-/actions) and new, inter-relating liaisons (affiliating re-/actions) between self and other.

"The other" – and thereby the challenging requirement to revise and adjust what is common and canonical, meaningful and concerted – is omnipresent. Omnipresent is:

a) the risk of potential disturbance and instability, which "the other" can incite,

b) the opportunity to expand one's own horizon in terms of multi-perspectivity and socio-cultural diversity and to be stimulated through "the other".

Rituals, as socio-cultural media for identity-, and meaning generation, consolidation, communication and innovation support protagonists to reduce the risk of (a). They also support different protagonists to converge towards mutual arrangement, and mimetic inclusion, (b).

Instigated by the omnipresence of "the other", complex and dynamic, liminal processes emerge. These liminal processes promote the innovation of meaning and the re-arrangement of the conflicting protagonists. These procedures of relational interchange include peaceful and aggressive approaches. Rituals support both, peace (cooperation) and aggression (competition). The aim of any cultural mode, however, is the stability and maintenance of the cultural reference framework. Stability is in this sense a situation when self and other are related and rituals have a maximum normative function, so that they "make sense". Strong competitive attempts would risk the cultural system.

1.8.7 Competition versus Cooperation? The Ritual Synthesis of two Antipodes

Culture as mode of human being and human development is applied in diverse socio-cultural ways. This interweaving socio-cultural diversity is an emblem of human dignity. In other words, socio-cultural diversity is the pattern of a (theoretically abstract) cultural matrix and of cultural modes. The matrix, or modes support humankind to generate, consolidate, communicate and innovate human organisation, regulation and development. The

autopoietic potential inherent in socio-cultural diversity derives from multi-perspectivity: Different socio-cultural identities have different perspectives on shared challenges. Diversity alone is insufficient to activate multi-perspectivity, because different identities with different meaning-systems can evoke conflict and friction in terms of competition. For the unfolding of multi-perspectivity to occur, a certain unity in diversity is required. As long as different identities arrange with one another, the conflicts and frictions inherent to difference can be used to stimulate and develop the socio-cultural network. Through the socio-cultural techniques of "communitication", the cultural system maintains itself.

At this point in the discussion, a question arises: How does the cultural networking, which is a unifying approach, go together with cultural diversity, which is a differentiating approach?

Cultural networking is the cultural principle of mimesis, which allows for socio-cultural unity in diversity (cp. chapter 1.5). Mimesis shows that (and how) different socio-cultural protagonists can cooperate without diminishing their differences. This cooperation is not absolute; it is not an antipode to competition. The cooperative cultural system maintains difference within a unifying, cross-arranging network. If there were no difference, no cooperation would be possible. Cooperation, hence, is far from being a smoothly functioning phenomenon; it rather requires differences and assumes certain friction in order to maintain the cooperative system. This allocates cooperative acts "in-between" conflict and consistence, division and unity, order and disorder, self and the other.

Pieterse states:

> "The perception that conflicts only separate humankind disregards something essential and therefore is incorrect. Conflict can also bring people together, although in strained manners, they create an ambivalent unity. It is basic logic that unity develops out of, and through, mutually antagonising positions and conflicts." (Pieterse 2004: 153).

❖ Example:

France and Germany – one unifying partnership, two different partners:
The continuing wars and historic conflicts between France and Germany over several centuries resulted in an arranged partnership (unity) and two different partners (diversity). Today, both remain profoundly different and still they represent a profound and mighty federation, based on competency within a cooperative framework.

From this perspective cooperation has elements of competition. Therefore, the conventional perception of "cooperation" is not precise enough for the expanded concept of cooperation that shall be developed subsequently.

A common perception is that the two possible reasons for a self and respective others to refer to one another are competition *or* cooperation. Wars, such as World War II are based on polarisations of self and other and on a perception, which emphasises competition with the other. The aim was to achieve homogeneity through the assimilation of the other. Mimetic

arrangement, in turn, promotes competition within cooperative means. Mimetic arrangement rather promotes unity in diversity.

The following is an example of the historic competition-based assimilation of the other. The subsequent example is an example of mimetic arrangement.

❖ Example

One example for the competitive reduction of complex diversity in the Nazi-Regime: The Nazi Regime tried to kill all Jews and other minorities. They destroyed works of art and books that differed from the Nazi-perception of a meaningful life. Hence, they tried to reduce diversity and, thereby, complexity. The aim was to reduce "disruptive factors" and "sources of irritation". They aimed to dominate life and became a serious threat to life. This and other experiences prove again that attempts to reduce complexity through homogenisation, such as ethnic cleansing, racism and violence, are at variance with meaningful living.

❖ Example

One example for the cooperative reduction of complex diversity through the golden rule:
The Golden Rule states, "Do unto others as you would have others do unto you". This principal is found in all of the world religions (see 3.1.5 nd 3.2.7). The Golden Rule shows that the different religions *can* live well together, while maintaining their differences. This rule reduces complexity; it organises the religious "cosmos" and arranges different people and meanings with one another that seem incompatible in the beginning. Instead, any kind of war (absolute competition) leads to new wars, promoting complex chaos.

Nevertheless, it is insufficient to perceive competition and cooperation in terms of categorical antipodes; they must be further differentiated:

1. competition:

1.1) Competitive competition

(*rejecting the other, or absorption of the other into the self: hegemony of the self*)

Competitive competition refers to the elimination of the other in order to (seemingly) protect the self. It connotes egoism, or ego-centrism (i.e. ethno-centrism and hegemony) -short term benefits for the self at the cost of the other. The other is perceived as a disturbance factor; the other is an object, not a subject.

Self – other relation: win – loose

❖ *Examples:*

• Neoliberalism; and the principle of " starving the beast" (a strategy, originally of some US conservative politicians to reduce via tax cuts the size of governments – the "beast" and the programs it funds, particularly social programs such as welfare, social security, medicare, and public schools.)
• (Social) Darwinism and the principle of "survival of the fittest",
• "Faustrecht" (German: the rule of force),
• the Old Testament with its principle of "eye for an eye, tooth for a tooth"
• colonialism and its principle of racism, including slavery
• the crusades and their missionary principles.

1.2) Cooperational competition:

(*utilisation of the other as a strategic means to gain power*)

Cooperational competition promotes cooperation for competitive ends. It denotes cooperation as a tool used in competition. The other, the fellow competitor, remains an object because he is purely functional. The other is not perceived as subject. Moreover, cooperational competition describes protagonists who arrange with each other in order to compete collectively against another protagonist.

Self – other relation: win – win or loose

❖ Examples:

- Protective tariffs, i.e. European import-tax on textiles. The EU does not aim to diminish the other. Instead, European states integrate themselves in a global economic (cooperational) network, trying to maximise their own profits (competitively). Supposedly, this creates short-term benefits for the EU. The poverty that it creates and consolidates in Asia or Africa, for example, effects European integrity through illegal or legal (mass) migration, terrorism, poverty-related HIV/Aids dispersion, poverty-related effects on climate, etc.
- The NATO: National states cooperate in order to protect themselves from potential aggressions from other national states. Military in general is a tool for extreme aggression, domination and escalating, because possibly life-threatening competition.
- Pricing agreements enable companies to consolidate concurring monopolies and "regulate" the market autonomously. Their cooperation allows them to compete more efficiently with others.

2. cooperation:

2.1) Cooperative cooperation (or conforming cooperation):

(*homogenising affiliation: dissolution of self and other into a common*)

Cooperative cooperation describes the dissolution of differences; the mutual acculturation of both, self and other and their transformation into a merged, diversity assimilating, rather homogeneous third constellation. During the process of cooperative cooperation, difference is perceived as a disturbance factor to be assimilated. It prevents the stimulating and inspiring, difference-based effects which result from competition-based friction. Furthermore, because of the loss of alternative meaning and orientation inherent to homogeneity, it produces situations of stagnation and contingency. Cooperative cooperation aims for homogenisation.

Self – other relation: win – loose

❖ Example:

- Misunderstood solidarity, in terms of "altruism", or "philanthropy": It reproduces power-relationships between the mighty giver and the poor, the strong and the weak, the potent and the helpless, the independent and the dependent. It reproduces the already existing power relations and produces a clearing function for the conscience of the giver. Through altruism and philanthropy unequal opportunities are often conserved. The poor and dependent other can become a means for the individual to feel good about himself, or create a good image for himself.

2.2) Competitive cooperation:

(*mimetically diversifying unity*)

This perception denotes competition as a means to cooperation. Here, competition proceeds within the conditioning framework of cooperation, which protects the integrity and promotes the benefit of all involved. Competitive cooperation accepts and utilises difference not in order to promote "uniform unity" or homogeneity, as it is the case with 1.1, 1.2 and 2.1 (above), but in order to promote "unity in diversity". Hence, competitive cooperation signifies affiliation and friction (i.e. opposition) between self and other within a common framework that allows particularisation and participation: unity in diversity. Competitive cooperation produces integrative networks, able to self-regulate due to their multi-perspectivity (cp. chapter 1.6 and 1.6.6).

Competitive cooperation signifies the mutual "expanding of the horizon of possibilities" (Iser 1978) for the self and for the respective "other". Self "A" and other "B" remain different from one another. Throughout the competitive cooperation process they remain self and respective "other". More precisely, throughout the mimetic process of competitive cooperation, self and respective "other":

- Develop or transform the composition of their socio-cultural identity; simultaneously they

- remain related to their original composition; hence they are not homogenised, conformed or "uni-formed"; this accords to the principle of diversity; and they validate, integrate and secure this diversity when they

- create a common sphere in terms of unity.

(Compare chapter 1.3.1.1: a1 + b2 < (A2 + B2)² and chapter 1.5 for "unity in diversity").

Self- other relation: win – win

❖ Examples:

- Sex is based on the differences between the partners. Whether they are heterosexual or homosexual, partners are never "one body", although they approach the fusion of both bodies. Sexual intercourse ludically performs the "in-between" of difference and unity, attachment and detachment, forward and backward, affiliation and opposition, giving and taking. Moreover, the result may literally be the creation of a new life, or of life-dignifying happiness. This accounts also for dances, theatre and other explicit or every-day life rituals and performances.
- The democratic principles of politics: Democracy is a set of principles, represented by laws, rules and values that generate, consolidate, communicate and innovate inclusion and societal functionality. It allows for the division of power and participation in development.

The different options of competition and cooperation prove that arrangement – and in this context sustainable development as well – is not an automatism. Arrangement must be intentionally incited.

The options, 1.1, 1.2, 2.1, 2.2 also show that there are many possible ways to act but only one way (competitive cooperation, 2.2) to achieve "sustainability", also by means of a comprehensive stability.

This sustainability connotes the ability to achieve stability, a life of dignity and human development, which can overcome complex global issues. Only the option of "competitive cooperation" allows for the overcoming of complex problems through more complex answers (i.e. appropriate lifestyles and an applied ethics of sustainability). Competitive cooperation" is an approach for creating and maintaining socio-cultural diversity, its inherent "multi-perspectivity", "swarm intelligence", and socio-cultural autopoiesis. These are the requirements for maintaining the "unity in diversity" of arranged selves and others who reciprocally expand the common horizon of their particular possibilities and who mutually create a common sphere.

The result of competitive cooperation is that both self and respective "other" transform. Throughout this transformation process they remain different or unique, while creating a common framework of concerted development, arrangement and re-arrangement in terms of a common sphere or network. Compared to the other options (1.1,1.2, and 2.1) through competitive cooperation, self and respective "other" maintain and even increase their diversity.

1.8.8 Performative Continuation of Tempo-Spatial Orientation and Meaning to Prevent Contingency

Through the contemporary paradigmatic shift, the world's two related determinants "time" and "space" lose their orienting function, or at least their traditional function. Rituals provide assistance to individuals and societies in maintaining or renewing orientation, because they promote socio-cultural meaning-making. Thereby, rituals compensate gaps of meaning. This means that if the determinants "time" and "space" lose their traditional functions, rituals assist by bestowing them with adjusted meaning.

❖ Example:

In the 19th century it was particularly meaningful for civilians to identify themselves with their own towns and nations. Today, this is still important for many people, but because of increasing global interrelations it appears to be increasingly beneficial to identify oneself as a world-citizen. This means that it is insufficient to perceive the "world" and human development from a purely local, or national perspective. This example shows that town, nation and world remain determinants, but that their meanings evolve. Interacting with "world-representatives" or having inter-cultural experiences with people from all over the world - in the work place, on the subway, in the neighbourhood, through a book or TV, within one's own family, or on holidays - can foster such re-adjustment of self-identification and individual, as well as societal, meaning. In the case that this interaction is performative, (it involves the shaking of hands, smiling, work experiences, etc.), the meaning revision can be accelerated because of the tangibility and intensity of performative experiences.

Such transformations, in this case of meaning, are typical for living systems and describe their self-regulation through so called feed-back-loops. Feed back loops connote an upgrading of meaning through the communicative participation of many participants.

Chapter 1.3.1 describes feed back loops and (their potential to perform) autopoiesis (cp. chapter 1.4.1). Autopoiesis (self-regulation), nevertheless, doesn't describe an automatic, but rather an optional "treasure within" (Delors 1998), which the "wise human" (homo sapiens) *can* mobilise or not. Referring back to the above-mentioned example, it is not automatic that people identify themselves as cosmopolitan world-citizens. A profound interaction with the other, however, can promote intercultural learning and the discovery and consolidation of commonalities between self and respective other.

In this regard, a ritually active, performative humankind can promote a (more) comprehensive perception of the other, which is a pre-condition for sustainable development. A ritually passive humankind will have difficulties perceiving the necessity for a sustainability shift of socio-cultural meaning and organisation. In other words, it will have difficulties generating, consolidating, communicating and innovating such meanings and organisation. "Ritual strength" refers to ludic-mimetical meaning making and self-regulating, cross-arranging ability. This affects institutions, politics, education, sciences, media, religion, economy, civil society and their processes of decision making, meaning-making and -concertation, prioritisation, validation, operation, intervention, prevention, development, and organisation, etc.

Especially the terms and phenomena "meaning-making", "self-regulation" and "arrangement" connote the performative nature of generating, consolidating, communicating and innovating meaning, organisation and development.

To break it down, sustainable development requires sovereign identities on all identity-levels. These are identities that are able to interchange, without diminishing the self, and without discriminating or eliminating the other. Rather, the self is transformed and the perception of the other is adjusted. They are identities, able and motivated to create common sense and added organisational value in terms of arrangement with the unknown other. In this regard, sovereign identities are resistant *and* flexible; they are competitive *and* collaborative, decisive *and* integrating. They oscillate between seeming contradictions. Such dichotomous identities, capable of dealing with contradiction, difference and complexity, are far not infallible. They do make mistakes, but they are able to deal with and eventually learn from failure, and this learning includes the adjustment of previous perceptions of the other, self-identifications and meanings.

Sovereign identities require simple orientation: the orientation within time and space is one basis for meaning making. In a quickly changing tempo-spatial continuum, "orientation within time and space" requires dynamic, flexible and continuous *re*-orientation. Therefore, it is not the orientation or the reference points that are central. Central is the ability to open ended

interplay, and rituals play a crucial role in this interplay and ludic meaning-making. Furthermore, socio-cultural identities do not only adapt to external contexts, such as socio-cultural macro-meanings, for example to he current economic system, or to perceptions of environment. Instead, socio-cultural identities are sovereign if they also question and shape their social, economic and natural environments.

Such transformations, and the continuous process of (self-)"becoming" in a rapidly changing world, are determined through the procedural, performative and ritualised "making" of meaning and orientation, of self, of mimetic arrangement and of socio-cultural contexts. Rituals are not only means to development, the different already existing ritual patterns also determine meaningful being and a meaningful life at present.

Tempo-spatial orientation and identification of socio-cultural protagonists on individual or societal levels of identity can be generated, consolidated, communicated and innovated through rituals.

It is fascinating that rituals are as powerful as they are practical and practicable. Moreover, they perform what they invent.

Chapter 1.7 describes how "objective reality" has a profoundly subjective texture, how it is intentionally invented and constructed. This refers especially to time and space, the two constituents of the "real world". The making, continuation and transformation of meaningful, diversified and diversifying tempo-spatial continuums are ludically-aesthetically "designed" and ritually performed, maintained and revised.

Concerning "time" Wulf and Zirfas explain:

> Besides space, "time is the other constituent condition for ritual action. It prescribes essentially the procedure, style, and dynamic of rituals. Referring to the ritual handling of time two mutually complementing perspectives emerge: First, rituals play a crucial role in introducing the societal categorisations of time to children and adolescents. (...) Second, the ritual handling of time generates practical knowledge, which is indispensable for the application and presentation of rituals. (…) Moreover, the distinction between different types of time is regulated ritually. This accounts, for example, for the difference between school lessons and free time, or every day life and event-moments. Patterns of dealing with time result from processes of culturally swayed learning. Rituals play an important role in these processes. Their repetitive character inscribes the order of time into bodies, so that bodies are impacted by and structured through the order of time. (…)." (Wulf 1999; Bilstein/Miller-Kipp/Wulf 1999).

This means that rituals are able to consolidate meanings; they mark identity. Moreover, they are able to innovate, transform and develop such meanings and identities.

Wulf and Zirfas continue:

> Rituals synthesise social memory and community visions of the future. (…) The temporal dimension of rituals brings about moments of progression as well as moments of regression. This evokes and innovates of collective traditions. (…) The temporality of such moments is characterised by the intensity of the experience rather than by the length of the measured time.

Life-phases are dispersed – and they become experience-able – through transition rituals. This generates continuity and meaning. (ibid. Wulf 1999; Bilstein/Miller-Kipp/Wulf 1999).

Concerning "space", Wulf and Zirfas state:

> Rituals and spaces are not characterised by a subject-object relationship or by a cause-and-effect chain. They instead share a reciprocal relationship. On the one hand, a rearranged sports hall hosts a school party and a church hosts a confirmation event. On the other hand, the school party transforms the sports hall into an open space and the confirmation event transforms the church into a living and sacred space. (…) The relationships between real, virtual, symbolic, and imaginary spaces as well as their practical, performative dimensions seem to be highly important for ritual sciences. (Wulf 2004a: 365).

Indeed, talking about "the world" and tempo-spatial determinants of its global dimension is something different than talking about a church and a sports hall. Nevertheless, all spaces have a performative aspect, because we explore their specifications corporally, moreover they are imaginary performed. These spaces are what we believe them to be. Thus everybody creates own unique spaces, such as the "world", so that "world" is a diversified and further diversifying concept or intentional, mimetically processed and therefore meaningful perception. Wulf and Zirfas write:

> "Rituals always interchange with imaginary structures. The imaginary organises and structures the ritual dynamics, order, transformations and regularities. It is operator and model for the construction of the historical, cultural and social swayed ritual worlds. (…) Rituals make imaginary instructions for action effective." (Wulf 2004a: 373, 374)

"The world", intangible and highly complex, is a virtual space. The transfer of "world" as a space into virtual, hence theoretically abstract imagination supports the reduction of world-space related complexity. Rituals in turn make this virtual space experience-able.

❖ Example:
The airplane - a space for symbolic and ritual world-experiences:
The experience of the "world" begins with the security information performance before every airplane flight. The signs, symbols and signals which the steward or stewardess perform are not only necessary and constructive acts. They also inaugurate and present the airplane as a space, which performs a passage from one airport to another. The inside of an airplane is a well known space, which hasn't changed much since the early years of flying. Compared to the image of flying the inside of an airplane with its seats, floors, particular services, attitudes and habits, (such as drinking tomato juice), is a rather conservative room of astonishingly unoriginal interior design. The airplane is not a communicative space, as opposed to train facilities. The seats, for example, all face in the same direction and while the passengers travel they tend to turn their attention inward. Even the windows are only small, well-framed opportunities for receiving outside impressions. The airplane room is a space, which transfers passengers from hemisphere to hemisphere. The design of that room is extremely comprehensible, providing seats, storage, toilets, etc. It functions as a carrier, not only to transport the bodies of people, but also to transport socio-cultural identities from a known context to an unknown one.
In this regard, flying is a process of transition between "different worlds", or rather, between different aspects of the same world. The transition related performance is the sitting and waiting, in which time spaces and sequences of life-experiences are sorted into: before the flight and after the flight. Sitting and waiting reduces human activity to a minimum, so that the sitting and waiting becomes a significant performance. Flights connote reduced activity, reduced space, reduced interior design, reduced communication and reduced choices of food. During the passage (i.e. the flight) these reductions are furthermore completed through very clear role models. There is no doubt of who is who and of who does what: a passenger is a passenger, a stewardess is a stewardess and a pilot is a pilot. This is

further competed through precise instructions, e.g. the seat belt fasten sign, or the flight security performance. Moreover, passengers establish their own rituals, such as reading, watching TV or drinking tomato juice. This reduction and order lessens the complexity of the flight experience, for example, the challenge of comprehending that one is flying 10,000m above the earth. Moreover, this reduction provides a moment of contemplation, which promotes successful transition from one place to the other.

Certainly people do not necessarily require these reductions in order to be able to fly, but they have chosen this socio-cultural flying pattern. This demonstrates how ritualised flying is, and how the rituals are connected to space.

Liebau, Miller-Kipp and Wulf give examples of virtual space-perceptions. There are "public and secret, collective and private, global and local, symbolic and imaginary spaces." (Liebau; Miller-Kipp; Wulf 1999). Moreover, these spaces do not only exist, they (and our perceptions of them) are generated, consolidated, communicated and innovated through rituals. Liebau, Miller-Kipp and Wulf continue:

> „These spaces often overlap, and it is this overlapping or interweaving which configures the specific characters of specific ritual actions. Often, rituals provide rigorous demarcations, according to strict inside-outside-structures, more or less strict segmentations, but also a (often paradox) frame. Within this frame different space concepts are evoked, and isotopias, utopias, heterotopias can be sampled."(ibid. 1999).

1.8.9 Conclusion: The Ritual Sustaining of Dignified Being and Comprehensive Development

Organisation is not only a condition or status, but in the same extent also a continuous process. Organisation – for example of a family, state or individual identity – is always socio-culturally swayed; it expresses socio-cultural meanings. Specific organisations – for example of a specific family, a specific state or of the identity of a specific person – are socio-cultural patterns. Such socio-cultural patterns of organisation are snapshots of temporary, dynamic and developing socio-cultural constellations and constitutions. However, the phenomenon of human organisation as such is a mode of human being. Rituals belong to this mode. They mediate human organisation. Moreover, because organisation is operational and evolving, rituals do not only communicatively promote the generation and consolidation but also the innovation of socio-culturally diversified and diversifying socio-cultural patterns.

Rituals consist of sequences of symbols and symbolic gestures, all of which elements or representations of socio-cultural meaning. However, they do not only represent such meaning, they are also drivers of meaning-making. Such meaning has bonding and arranging effects for communities and for societies. Societies (or other communities) in turn create meaning. In this regard, meaning is the result of common, ritually navigated negotiation and "community-cation". This "communitication" is not only communication in terms of uniting, organisation generating, conserving or consolidating processes. "Communitication" also involves the innovation and continual development of community, for example through ritually and performatively driven "creative destruction".

In other words, processes of meaning-making (meaning generation, consolidation, communication and innovation) are not only ritually navigated and conducted, but new, innovative meaning is also communicated through rituals.

Rituals are powerful; they generate, consolidate, communicate and innovate (transform) meaning and thereby society (or community). Society in turn performs rituals and this includes ritual creation, application, variation and innovation.

Furthermore, rituals are omnipresent. They shape human being and development. Rituals are performative operation modes (general methods) and they develop socio-culturally particular ritual patterns (specific techniques) to process meaning and to deal with complexity. They develop meaningful identity and meaningful organisation. Through performative, mimetic arrangements of people, rituals transform otherwise random primary impressions into valuable and meaningful, because commonly canonised and arranged, information. They enable people to deal with difference, so that a respective self (a socio-cultural protagonist or actor on any identity level) can refer to a respective "other". Dealing with complexity and difference, rituals transform intangible and incomprehensible phenomena – such as global issues or socio-cultural frictions – into comprehensible, corporal, applicable and hence tangible knowledge.

Rituals, through their performative, corporal attributes are pre-eminent in their ability to make tangible the complex environments of people and societies. Rituals make gaps in organisation visible. Thereby, they can support the prevention or overcoming of contingency and can "sustain" the continuity of socio-cultural organisation. An improved complexity reduction of "the world" enables in turn, the shaping and co-creation of "the world". Science, governments, social movements, religions, media, business communities, education, traditions, lifestyles, and individual personalities are all patterns and hence results of "world-making", which organise, constitute, institute and characterise communities. Their function is to reduce complexity and provide comprehensible orientation and meaning – ritually and therefore, performatively. Wulf and Zirfas discuss the importance of rituals for arrangements between self and respective other, for world-perceptions, for contingency and continuity:

> „Rituals are generated in and through social arrangements. Through such arrangements, people perform their relationship to themselves, to others and to the world, sometimes in a transcendental manner. Through scenes and performances we present with our bodies who we are, how we perceive our relations to others and which implicit knowledge characterises us. In these scenic processes, contingencies and continuities of presentations play an important role." (Wulf 2001: 340).

Rituals shape and create our world performatively. Performances are body-based, holistic actions of learning and creation. For these reasons, rituals and performative movements

must be involved in – and imbue – educational theories and methods. The consequent approach is not to intervene into human development through the manipulation and inciting of "sustainability" or through artificial rituals, as this would be intentional, hence un-practicable and a-ritual, ideological and possibly ethnocentric.

Crucial for education is rather the comprehension and consideration of the tangible aspect of rituals and corporal knowledge procedures: the performance. Performances can help people to learn about the world and performative learning can contribute to the shaping of this world (cp. chapter 1.8 and 4.1.4). Instead of intervening in ritual meaning-making and meaning-acquisition, open-performative-education aims to shape human development and to empower learners to shape social, environmental and economic factors (cp. chapter 4.1.2.1 and 4.1.7).

Beyond direct functionalism, performative learning opens up opportunities for ludic, mimetic interplay – a means for dignified human being.

Performative learning provides modes (on a practical level "modes" mean "competencies"), which help one to arrange with the "other". On the one hand, this means that performative learning provides help for the processual creating of patterns, which arrange "selves and others" with one another. On the other hand it communicates already created, static patterns of arrangement, such as specific roles, values, or causalities. Performative learning aims to empower the "Hidden Dimensions of Education" (Wulf 2006) and the "treasure within" (Delors 1998) socio-cultural identities. That in turn enables the protagonists to analyse their situation, test the functionality of their meanings, and revise their lifestyles. This process is comparable to a gap analysis. One who is aware of the organisational gaps in (un)sustainable local and global terms can mobilise their own competencies to co-shape more sustainable development.

Concerning the power of rituals and their importance for education, they indeed allow for the generation, consolidation and transformation of society, or other diverse and dynamic social communities. In addition, they provide (implicit and performatively applied) criteria to identify and measure moments of crisis, gaps in organisation, or challenges and threats to social integration and integrity – for example in a family or a national state. When rituals don't work as they were expected to, for example:

- when children attack teachers,
- when children commit suicide,
- when important conferences, such as the UN Copenhagen Climate Conference of 2009 fail,
- when hooligans fight each other,

then rituals prove themselves to be outdated. When rituals are outdated, non-functional or dysfunctional, they identify gaps in the organisation and integrity of a community or society.

In this regard, rituals support protagonists to explore and select of regulation "strategies", methods, techniques or –performances, represented through lifestyles, consumption patterns, or policies, literature, media attention, science and other public debates. Moreover, (transition-) rituals incite new, innovative re-orientation and organisation rituals. This ensures that the innovation, transformation and adjustment of social organisational structures is not random or coincidental, but rather a purposive, implicit and participatory mode of complex, diversified, social negotiation. Additional to central governance – typical for example in representative politics – societies adjust themselves performatively to decentralised, distributed self-regulation.

In this regard, rituals support the transformation of situations, meanings and lifestyles in a participatory way. This means that anyone can democratically join in the development of a community or society. This diversified ritual participation socio-culturally customises and dynamises human development. It generates, consolidates, communicates and innovates human unity in socio-cultural diversity, so that sustainable development can become a joint venture of humankind. Such sustainable development can be perceived as a common project with diverse interpretations, titles and approaches. The aim of the project is to converge towards a maximum concertation to produce meaning and the arrangement of participants.

Rituals sway and shape the socio-cultural identities of human beings on all levels. Additionally, they enable the participation of all in the generation, consolidation, communication and innovation of community and common meaning. The performative techniques they use are implicit and tacit. In this regard the practical dimensions of ritual performances, their potential for socio-cultural positioning and identity-bulding, for affiliating with or opposing the other, for conserving and innovating meanings and patterns, represent implicit, tacit knowledge.

With the title of one of his books, Wulf refers to implicit, tacit knowledge; he points out that there are "Hidden Dimensions of Education" (Wulf 2006), referring specifically to the performative dimension of education.

The body, body-knowledge and the corporal procedures of knowledge-generating practices are incredibly significant and yet neglected in many education theories, concepts and practices. Rituals and performative learning possess great potential for contributing to many aspects of an education for sustainable development. They empower the learner and

operator to deal with contingency, complexity and difference, with frictions and contradictions. Rituals and performative learning:

- conserve existing socio-cultural patterns, e.g. affiliating, stability maintaining and relatively static elements
- have creative-ludic aspects, e.g. opposing, transiting, exploring and innovating elements), which dynamise the socio-cultural patterns
- deal with imagination and its implementation,
- mediate between individuals and community,
- condense the abstract, intangible and diverse community-inherent pool of comprehensive meaning-alternatives into tangible, comprehensible and applicable body-based meaning,
- shape human development and dignify human being.

Rituals and performative learning provide assistance for traversing borders, for example, between self and respective other, or between individuals and societies. Wulf and Zirfas write:

> „Because it is an important task of rituals to deal with difference, rituals play an essential role in promoting trans-cultural learning. Through the staging and presentation of ritual arrangements, heterogeneous experiences and perspectives converge. In the case of collective application, these ritual arrangements, heterogeneous experiences and perspectives can performatively generate communities. Ideally, these possible forms of ritual action can be used to influence international collaboration, intercultural learning and cooperation as well as trans-cultural cooperation." (Wulf 2004a: 375).

Furthermore, rituals and performative learning shape the relations and the ludic inter-play of socio-cultural identities. Therefore, rituals are capable of shaping and potentially safeguarding processes of competitive cooperation between socio-cultural identities on all identity levels.

In the same way that rituals address and finally shape reality, they address and shape learning. And in the same way they must shape education, which can become more relevant through addressing rituals. That could lead to an education, which empowers protagonists to shape the above mentioned phenomena. Learners can not passively learn *about* life, but must learn actively *through* life: They learn through the exploring of life – a life which is not only explored on the basis of cognitive analysis and comprehension but as well through relationships, through the ludic, performative interplay between people and the arrangement with the other (cp. Delors 1998 and School for Life, chapter 4.2.6). This kind of learning through life involves the complete human being, with all its intellectual capacities as well as all senses of the human body.

Omnipresent rituals naturally shape learning traditions and concepts already, but mostly rituals and other performative ways of learning remain side effects, and not explicit means for learning. The role of rituals and performances in learning is often not taken into account, so that educational concepts and interventions have random effects and are relatively inefficient, compared to what they could accomplish. Such educational concepts and interventions are often reduced to intellectual comprehension and analysis. Neglecting the body, they do not actively involve all of the learner's capacities.

Often they fail to empower learners to participate in comprehensive, sovereign and hence sustainable global thinking and local action. The effect is that education can waste life-time and decrease life-quality, because such education is not an end in itself. Education must not necessarily be reduced to functional intervention in human development; it can be an end in itself. Education can reflect life for example through addressing real-life situations. Moreover, such education can "teach" the holistic enjoyment of life and of life-long learning, which in turn might be the most powerful guarantee of sustainable continuity. For example, rituals do not only establish and transform community, they are also expressions of community life, of life itself and of a life-dignity.

Performative learning signifies the intentional provision of physical and imaginary open space. It supports the learner to engage in unpredictable self-regulated learning about the individual. Furthermore, it involves the learner to explore and co-shape commonly concerted, possibly sustainable, generation, consolidation, communication and innovation of meaningful identities and meaningful lives. While this chapter mainly addresses the relevance of rituals and performances for meaning-making and thus for sustainable development, chapter 4.1.1 "Implictit Performative Learning and Explicit Performative Education" further adresses aspects of performative education in particular (cp. also chapter 4.2.2 for "Theatre of the Oppressed").

The current human development heads for ecological, social and economic break-downs (see chapter 1.1, figure 2 for "global issues"). The world crises and "human envelopment" have:

- ecological aspects, in terms of climate change, which leads to desertification, water deficiency, natural catastrophes, the loss of bio-diversity, and the shaking of the sensitive planetary bio-system;
- social aspects, in terms of poverty, inequality of living standards and opportunities and population growth;
- economic aspects, in terms of the neo-liberal hegemony of economy over political regulation and in terms of the current financial crisis.

In order to overcome this "envelopment" of human existence, socio-cultural patterns and self-perceptions and in order to promote sustainable development a macro-shift, a change in consciousness and the generation of diverse approaches to socio-cultural transition are required to generate, consolidate, communicate and innovate sustainable meaning, identities, values and identifications. Rituals are predestined to mediate such processes. Holistic educational approaches must, therefore, mobilise the "treasure within" (Delors 1998), or the "hidden dimensions of education" (Wulf 2006). Measures for such education address modes of human poiesis. That means, such education empowers learners to narrative, imaginary, virtual, cognitive and of course ritual participation in shaping integrated, integrative self-identities and meaningful development. Concerning the ritual dimension of development, especially transition rituals are important. They are one aspect of performative transition competency. Rituals and performances play a crucial role in the repertoire of identity-, community- and meaning-making techniques. They impact lifestyles and implicit motivations. Moreover, current lifestyles, motivations, identifications and contemporary life-situations are not only meant to be changed, they are also the starting points for contextualised, situative and therefore "real" and "really relevant" pedagogy.

The required sustainable socio-cultural macro-transitions are marked by the challenges of continuous re-orientation, of steady "communitication" and hence of arrangements with others. The foci of such transitions are mimetic organisation, reciprocal regulation, socio-cultural meaning-making, the incitement of sovereign identities and integrative and dynamic pluralist communities.

This chapter argued that common global issues are symptoms of unsustainable ritual, narrative, and imaginary and virtual world-perception. Everybody, to different degrees, participates in the creating of this ecological, social and economic imbalance. Realising this, bottom-up approaches such as education become increasingly essential to human and sustainable development. Moreover, this insight suggests that we should adjust education to use the inherent "cultural techniques" of socio-cultural meaning-making, participation and regulation. Last but not least, there are two main reasons why education has not been able to promote a conscious change for sustainability:

1) Quantity: Worldwide, still too many people are without access to appropriate education.
2) Quality: most formal and informal educational approaches and systems are content with informing students descriptively and passively about global issues. They do not actively involve learners in the "world-challenge" to shape local situations within global contexts.

Quality "Education for All" should be accomplished through rituals and performative learning to empower more of the learners' capacities to discover, identify with, and shape sustainable development.

1.9 Closing Words of the Chapter

The aim of chapter I was to discuss the role of culture and its ritual, performative, imaginative, virtual and narrative techniques and methods (modes) for human development, and for the arrangement of human beings as an overall In-group. Moreover, the chapter aimed to develop understanding of how the integration of humankind in the environment of "living systems" can be potentiated. It showed that besides biology, cultural autopoiesis is not only functional, but is an emblem of Homo sapiens, the "wise human".

Referring to this fascinating, but latently perceived role of culture, the opening words of the Spanish Prime Minister Rodríguez Zapatero, spoken at the World Forum of Cultures, Barcelona 2004 shall close this chapter. His words are simultaneously associated with the subject matter of the consequent chapters.

Concepts which the World Forum of Cultures constitutes as building blocks are peace, cultural diversity and sustainable development. Zapatero states:

> "To understand culture as constitution and expression of human dignity implies the adoption of those social conditions, which include the value of knowledge and creativity to promote the integrative capacity of democracy. This is because culture tests, constructs, corrects, and invents, showing thereby how to direct the diversity of voices into a broad dialogue.
> Culture can not be reduced to a hasty entertainment product whose destiny is to be decided by a prosaic market, just as if it's worth as little as a banal consumption article.
> Culture should be – because this is the source of its power – a demeanor and mindset, which crosscuts all concrete initiatives that depict a world whose protagonists are effectively its inhabitants, and in which its boarders are replaced by an enormous horizon." *(Zapatero 2004).*

CHAPTER II   THE CHALLENGE OF GLOBALISATION

2.1   Globalisation as Tempo-Spatial Transformation and Intensification

Any development theory must be situated in its historical context to be appropriate. The previous chapter concentrated on cultural and socio-cultural aspects of development. This chapter discusses the substance of the historical context; globalisation as the principle challenge to human, sustainable development.

Just as with culture, globalisation is a term, which is complex to such an extent that any analysis or definition of it must always be a compromising reduction, trying only to converge to what the phenomenon "globalisation" could be.

2.1.1   Globalisation as Sequence of Communication and Technology

The first humans were organised in small groups, interacting and communicating. The groups spread out over the land and expanded and intensified their regional network(s). The upright walking human body was just completed and development continued with human social evolution and refinement. The first forms of human communication were rituals, as they are codified expressions of culture, identity and meaning. Such ritual expression unfolded for example with the hunt, dance, music, paintings, tattoos, prayer and meditation as well as other standardised and daily interactions. Rituals express cultural identity, support the identification with community, and enable coordinated action and organisation. Simultaneously, signals and symbols were developed and all was supported by 'technological' innovations such as the invention of paint, drums and flutes, knives, water tanks, the use of fire, etc. Every new ritual, tool, sign or symbol could differentiate one group from another, strengthen the communities and enable them to create a sense of identity and a social, efficient division of labour, which in turn lead to new rituals. Lifestyles, fashion or hunting weapons, rules and roles, agricultural methods and "housing", for example, distinguished one group from the other. This was also the beginning of:

- cultural diversity: diverse social actors, individuals or groups, who use cultural meanings and expressions which are different from other actors,
- social stimulation: one social group or collective saw the ideas of the others which inspired them, and
- human development: the religious, political or economic cooperation of diverse socio-cultures working towards a fertile, overall network through hierarchy, war, pacts, cooperatives and agreements.

In this (ongoing) process of developing human communication, language was developed. It enabled people to express, exchange, and in this way develop more quickly, detailed information. Language allowed for the communication of more precise information, so that information became diversified and intentional. The goal of this information since then has been the raising of the standard of living:

- socially : wealth in terms of organisation, cooperation and security,
- environmentally : securing the synergetic interchange between humankind and the eco-system,
- economically : economically generated capacities to ensure and increase health, comfort and other quality standards in order to potentiate high social and environmental standards.

The speed of information generation and exchange increased rapidly. The "simple" production of shoes and water tanks or the use of horses, camels, etc. enabled people to travel. Boats were developed. The wheel lead to coaches, bicycles and cars. Trains and airplanes followed. In this way, all sorts of information were carried out within new dimensions of content and spatial reach. The post system, printing technology, newspapers, radio, telephone, TV and finally the Internet were established.

The industrial revolution of the 17th to 19th centuries occurred due to the vast growth potential of the energy in fossil fuels and the technical innovations created to help us use these energies. Coal was used to power ever more efficient engines and later to generate electricity. Modern sanitation systems and advances in medicine protected large populations from disease (cp. Hilgenkamp 2005).

Such conditions led to an explosion of the human population and unprecedented industrial, technological and scientific growth that has continued to this day, marking the commencement of a period of global human influence known as the Anthropocene. From 1650 to 1850 the global population doubled from around 500 million to 1 billion people (cp. Goudie 2005).

Spoken and written language, as well as rituals, enabled complex arrangements between people and communities to develop. These cultural techniques lead to – and were subsequently accomplished by – transportation-, agriculture-, information- and communication technology. All these technical innovations were invented through cultural communication and they continuously incited the invention of new innovations for example in science, media and (self-) perceptions; values and expectations of people and societies.

Two perceptions were especially far-reaching. The first of these perceptual shifts connotes the human being as a powerful and ruling species in the universe, undermining nature and other creatures. Moreover, within the human species, especially minorities such as

indigenous societies were increasingly and systematically oppressed. There were no forces to protect such minorities, but there were benefits for the aggressors who gained even more power over others, often built on poverty and dependence. The crusades, colonialism, slavery, and the First and the Second World Wars are examples.

Religions established systems of rules, rights and meanings. Today, states and increasingly, trans- or supranational institutions as well as the civil society are taking the first steps to regulate and balance imperialistic approaches coming, for example, from other states, organisations or global companies. The media can play a great role in the future and – although in the western world often underestimated – religion may have a comeback concerning its power to oppose or support political or economic systems. Economically crucial, but an unimplemented and abstract vision, is the ideal of an eco-social market economy. It defines environmental integrity and social integration as means of human being and development, so that environment and society function as the frameworks for a vital economy. The political foundation is the increasingly established system of democracy, itself in a process of refinement. Cultural diversity highlights the democratic principle. Democracy is a form of organised diversity, or at least a framework for organising diversity. Democracy ensures rights, dignity and opportunities, it defines duties and divides powers, just as socio-cultural unity in diversity ensures participation of all in a global socio-cultural network. Education is the medium through which humans can mimetically and hence concertedly establish appropriate self-perceptions, meanings and visions in order to maintain and adjust development and through which they increase the human autopoietic potential.

The second perceptual shift concerns time and space. Time in connection with space enabled people to allocate themselves in a world, which is developing ever faster. The identity of people and their cultures is determined within a spacio-temporal context. But during this communication development, space and time were relativised. The allocation system began to malfunction.

The perceptional dimensions of time and space have traversed. This phenomenon was and still is interrelated with the first perceptual shift of the powerful "human king". In the early years of humankind (dimension of time) bow and arrow where limited to bridging a distance of about forty meters (dimension of space) to kill a man (dimension of power). Today, a missile with an atomic warhead can be sent to the other side of the earth by pushing a button, killing thousands or billions of people. Picht describes this phenomenon as the "boundlessness of possibilities for the exertion of power", (Picht 1969: 16).

Especially in Europe during the 16th and 17th centuries, people and their societies broke with the traditions of the Antique and Middle Ages, which tabooed the questioning of, or intervention in, a predetermined higher, divine order ("the kingdom of God"). Humankind was not satisfied with looking at the divine order, but instead aimed to become, what Descartes called "the master and possessor of nature". Humankind does not want to passively recognise, but to actively rule and co-create the development of the world. In the 18th century this led to the visible expansion of technology and to the industrialisation of the 19th century with strong effects on societal organisation and the environment. Since the beginning humankind has been entitled by its potential to social regulation and organisation. With industrialisation particularly economy has appeared as a strong parameter of human development. Economically driven environmental degradation (e.g. production and consumption patterns) transformed the considerations of environment and pushed into the role as the new – and simultaneously oldest – pillar of sustainable development; new, because the limits of environment as well as the potential of agile bio-diversity must now be seriously considered and old, because the environment signifies the genesis of life on earth.

While in Europe during the 13th century information was still spread by minnesingers, today, newspapers, telephones, fax, radio, TV and the internet can send unlimited information all over the world with the speed of light, in "direct time". Satellites, early warning systems for natural disasters, GPS and other innovations contribute to the quick transfer of increasingly differentiated information. These technologically "intelligent" innovations are results of, as well as indicators for, human development.

Humankind found itself confronted with a new situation, which was determined by new spacio-temporal dimensions. A striking description of this phenomenon by Liebau/Miller-Kipp/Wulf is the statement: "Space is shrinking." (1999).

Wulf writes:

> "The expenditure of time and costs are marginal. Images, discourses and mass tourism bring the unacquainted into proximity. The traditional order of space and time, near and far, the unknown and the familiar dissolve." (Wulf 2002: 77).

Referring to Beck and Münch, Wulf states:

> "The current societal change, known as globalisation, is a multidimensional process, which has economic, political, social and cultural effects and changes the relations of the local, regional, national and global.", (ibid.: 76; cp. Beck 1997/ Münch 1998).

In this regard, globalisation appears to be an intensification of human experience, responsibility and opportunity. From an anthropological perspective, this intensification can also be described as the approximation of the unknown; the other person or society, the other perception, time, space, or meaning.

Culture processes the accumulation of random primary impressions (chaos) into information, and transforms information into meaning (cosmos). In this regard, culture leads to the generation, consolidation, communication and innovation of meanings and meaningful identities on the individual as well as on the societal level. Culture, hence, is the mode of human being and development. Thus, culture is a mode for creating diverse network patterns. It is a reference system, which arranges different protagonists. The aim of the network and the meaning of sustainability is to be able to maintain the network through autopoiesis.

In this regard, globalisation, in terms of globalised interconnectivity, appears to be the result of culture as well as a huge challenge for culture. The term 'globalisation' would need an essay to make tangible and thereby comprehend the phenomenon's enormous complexity. The comprehension of globalisation signifies the expansion of new horizons of human perception and opportunity, which in turn may lead to the sustainable regulation of globalisation. Considering globalisation is a first step to conduct human development actively and sustainably. At the same time, the attention that humankind pays to globalisation shows that it brings with it great risks for sustainability.

2.1.2   The Global Acceleration of Processing Knowledge

It is not only that information is transferred more quickly, but the process of creating information and accumulating knowledge is also accelerated. Information stimulates information. A scientist, for example, can develop his ideas through exchange with other scientists from all over the world, using Information and Communication Technology (ICT) or by taking an airplane in order to visit a conference, etc.

❖ Example:

An author, writing a text, has eventually used literature from foreign countries, translated into English, French and German and has collected information in libraries and from the Internet. He may have participated in media discussions. TV, radio and newspapers may have influenced his research and also the manner how he presents conclusions and himself. He types on a computer, constructed from materials, designed and produced by companies and scientists from different regions of the world.

Inspiration and stimulation through dialogue and (for example, scientific) exchange lead to higher levels of efficiency and information with more profound content. This has led our society to become an "information society" ("information available in books"). The "knowledge society" ("information available in minds" and the competence to create new or retrieve existing information) activates the information. Information is existent, present and actively applied, instead of only having the passive status of "availability". Human beings actively, although not always consciously, create and shape information. The generation of knowledge accelerates rapidly; in increasingly shorter periods of time knowledge increases in

complexity. Moreover, through ICT (Information and Communication Technology) the generated information is available to an increasing number of people. Simultaneously, it has a strong impact on our lives and the way we perceive the world. Information enables protagonists to compose new identities, which internalise (or "impress") the new "horizons of the possible", so that protagonists express and actively apply these possibilities. The essence of development is the upgrading of the status quo of existence. That existence is measured by survival (security) and the quality of life (wealth). "Developed" knowledge is a knowledge which endures security and wealth. It strengthens the human cultural potential to advance the networking of humankind towards an inclusive, entire society. For this reason, the exchange of information and the 'upgrading' of knowledge are parameters for humankind by means of human being (existence) at present and by means of human development. Nevertheless, advanced knowledge can be a threat or risk for development as well if it is not channelled or if it does not refer to an overall framework of meaning. Human development means, above all, *humane* development.

❖ Example:

The discovery of atomic energy was a great shift in human development at a certain time; it provided energy. But this potential was turned against human beings as well, in the form of the atomic bomb and with the great environmental risks it brought with it. Human beings were unable to eliminate the risks for the sake of the benefits, so that atomic energy turned out to be a potential threat to human being and development.

The following figure 21 tentatively tries to visulise the acceleration of development within a period of about 6000 years. Around 40,000 years ago, there was not much development that occurred within a period of 6000 years, compared to the speed of today's developments. It seems evident that between 4000 BC and today, humankind developed considerably. Nevertheless, one must admit that ancient techniques of transport, for example, were sustainable compared to current technological achievements. One would hope that it does not take another 6000 years to combine the benefits of both techniques. Moreover, the painting of an Egyptian boat on a Norwegian rock, shown below, proves that there were ancient steps taken towards globalisation.

Figure 21: tentative example for visualising the accelerated speed of development

34,000 -38,000 years old

"Venus vom Hohle Fels", found in 2009, Germany, mammal ivory, ice age, 6cm high, the oldest representation of the human body, early human self-perception

6,000 Years

28,000 years old

"Venus von Willendorf", found in 1908, Germany, limestone, ice age, 10cm high

4000 Before Christ

<u>Left:</u> Early Egyptian high sea ship, rock painting found at Trondelag, Norway
<u>Right:</u> Reconstruction of a big reed boat as seen in rock-carvings

6,000 years

2000 Anno Domini

Left: A speed boat with 2,700 horsepower

Right: A special transport ship, on the way from China to Germany

2.1.3 Globalisation – Increasing Tensions

In addition to communication-technologies, the dispersion of industrial technologies caused profound transformations worldwide of our self-perceptions, our roles, meanings and futures. For example was the globalised economy and the finance system at least furthered through

technological innovations, while the local, social structures mostly did not benefit from economic globalisation. In the course of industrialisation, capital increasingly moved from the hands of many people, with small shops and businesses, into the hands of a few people. Thus, a minority of people reached a higher quality of life with the increase of material living standards. Finances were more and more detached from the influence, participation and control of civil society. As money was increasingly accumulated by elites, this globalisation turned out to be a hazard to global economic and social equality as well as environmental preservation. In this sense the globalisation of human networking turned out to be the dissociation of humankind, promoting destructive economic practices. Economic power was centralised in huge monopolies. These companies created millions of jobs, and they destroyed billions. In contrast to the accumulation of this financial power, the rapidly growing masses of society experienced an increase in poverty and a hopeless exclusion from the new possibilities of attaining wealth. An unequal and unbalanced globalisation penalises a majority of socio-cultures and societies while it privileges minorities.

Human beings established an ethically un-reflected egocentric (e.g. ethnocentric) greed for "private" wealth and power, which was politically often ignored, furthered and not regulated. Moreover, they were able to use all kinds of knowledge-based innovations, such as technical innovations, industrialisation and neo-liberal market-strategies to increasingly take and centralise that power. These actions went against traditional values and priorities. Today, protectionist barriers of trade solidified the non-democratic and almost caste-like status quo of the world society. Laszlo states that this:

> "lead to an exploitation and partial exhaustion of (…) basic materials, moreover it broke social structures and degraded the living standard in urban as well as in rural areas." (Laszlo 2003: 58, 59).

Likewise, not globalisation as such but *this* globalisation exhausted cultural viability and diversity because independent from the number of their representatives, a few societies obtained such pre-dominance over so many others that those undermined societies – naturally equal in value – suddenly had a reduced and disproportional impact on the commonly shared situation.

❖ Example:

Bangladesh is one of the most fertile, yet simultaneously one of the poorest countries in the world. It is poor because of various historical and political reasons. Huge companies profit from this poverty. Salaries are low, labor rights are weak, and the employees have no alternatives – hence, with very low costs, companies produce textiles. The generated income is not reinvested in the country, or returned to the workers and their working conditions. Instead, financial capital is accumulated by companies, and the civil society of Bangladesh remains poor. This in turn maintains the ideal conditions for companies to engage in low cost production; the vicious cycle of poverty.

This imposed passivity, the increased voicelessness and the exclusion from the co-evolution of their own situation diffused the affected societal identities. This gave rise to the danger

that the confused, disoriented members of such penalised societies would orient themselves towards socio-cultural value systems with an alleged higher potency, refusing their own culture. Another possible reaction is frustration that ferments into fundamentalism.

Such cultural diffusion was a potent breeding ground for theories of "McDonaldisation" (Ritzer 1995) and "Coca-colonialisation" (Hannertz 1992); the globalisation of products with western images. These theories symbolically indicate an alleged infiltration of one other socio-culture into the other and allude to an absorption or undermining of the other socio-culture. However, the impact of socio-cultural undermining, the increasing (although never absolute) heteronomy inherent in this issue, often weakens the identity of the "supplemented" cultures. From a more objective perspective "Coca-Cola" and "McDonalds" are insignificant. Significance can be better derived if they are regarded as phenomena of communication: They are signs or symbols of a socio-culture, entering into another socio-culture. The problem of heteronomy, absorption and undermining arises if the affected cultures are increasingly less in the position to be able to communicate on their part, identifying signs to other cultures. Moreover, with the diffusion of identity, the affected cultures may lose their ancestral signs, symbols, rituals and other tools to generate, consolidate, communicate and innovate particular socio-cultural meaning.

❖ Example:

Great cities, such as New York, Paris, Bangkok as well as small towns and even villages seem to move towards standardisation and stereotypes. In the main streets it seems easier to find a McDonalds than to spot a typically traditional and unique café.

Nevertheless, another perspective on globalisation is possible. Indeed there are forces of homogenisation, but where homogenisation takes place and erases traditions, new socio-cultural particularisations seem to appear. New meanings and new socio-cultural expressions emerge where traditions retreat. The standardised design and architecture of some areas of big towns with same shopping centres which host same shops, with their similar bank buildings and similar street sceneries do not provide serious measures for diversification and the heterogeneity of socio-cultural life. Similarity and even standardisation of some aspects of town architecture does not say much about other aspects of town life, so that it does not connote homogeneity. Chapter 2.2 will look closer at homogenisation, and heterogenisation. It seems that socio-cultural diversity is not reduced through globalisation, even though traditions are increasingly dissolved. It is difficult to validate globalisation in terms of homogenisation or heterogenisation. Instead, the impression emerges that globalisation is a process of intensification and increasing transformation of the social, economic and natural environment. This rapid transformation overstrains human (current) capacities to achieve sustainable development. In this situation, power imbalances harm the

overall human system; the global network of human beings. The dissolution of traditions is only one aspect of that transformation.

The UNESCO programme entitled "Memory of the World" collects endangered cultural signs, or information, such as languages, dance, theatre, oral traditions, handicrafts, music and games. The programme also provides a few statistics to illustrate the state of our socio-cultural diversity:

- "The approximately 6000 languages that exist in the world do not all have the same number of speakers: only 4 % of the languages are used by 96 % of the world population.
- 50 % of the world languages are in danger of extinction.
- 90 % of the world's languages are not represented on the Internet.
- Some 5 countries monopolize the world cultural industries trade. In the field of cinema, for instance, 88 countries out of 185 in the world have never had their own film production", (2006).

Dominion and greed for hegemony have always had a place within human development and history. The difference today is in the quality of the issue. The polarisation of rich and poor, powerful and dependent, north and south, is intensified to such an extent that the politically uncontrolled economic laissez-faire leads to destructive rebound effects. The global financial crisis and the worldwide increase in population and poverty are only examples of these destructive effects. Compared to these impacts on human development, terrorism is a negligible variety. Terrorism neither endangers political structures nor does it endanger as many lives as, for example, hunger and poverty-related malnutrition do. Terrorism is a popular term as it makes headlines in newspapers and is central in political discussions.

Further examples of profound man-made dilemmas (which marginalise terrorism) are: mass-migration, the spread of AIDS (because of social, religious and political ignorance), poverty-caused social and environmental degradation (e.g. criminality, burning of rain forests, corruption and war), backlashes on economic as well as on politic security, and consequences of global carbon emission mismanagement (i.e. climate change, rising sea level, tropical storms, sour rain, desertification).

❖ Example:

Everyday one can read about a high number of terrorist killings, which is indeed tragic. According to the FBI "2008 Report on Terrorism (FBI 2009) there were about 15,765 people killed in 2008 (FBI 2008). It is not clear which number of deaths represented by this number are a consequence of the "war on terror". In any case, it is very unlikely to be killed by a terrorist – compared to other causes of death. Far more people are killed due to other unnatural (man-made) causes:
- smoking 4,5 Mio/year (WHO 2009a)
- car accidents about 40,000 per year only in the US (CNNmoney 2005)
- Hunger, about 16,000 children per day (Bread for the World 2011)
Humankind strongly affects the ecosystem and fosters or does not prevent natural disasters, so that many of the "naturally" caused deaths are in fact man made for some extent:
- In 2008, 321 natural disasters killed 235,816 people (WHO 2009b)

- Malaria, 250 mio malaria cases and 1,1 Mio deaths per year (WHO 2009c and WHO 2009d).

These are global problems without adequate global or local attention, whereas terrorism has this attention, for example in the media and also in the budgets which states provide to overcome the respective problems. In many states the military expenditure is much higher than expenditures to prevent from actual problems, such as preventing malaria, although mosquitoes kill many more people through malaria than drones and warplanes from "hostile states" kill people through fighting. Can humankind afford such imbalances? Inappropriate strategies and financial backing to face pressing global issues uncover unsustainable priorities and hence gaps of human organisation.

The world society does not only deepen its interdependences and thereby its operational (networking-) intensity. As world society it increases global impacts and thereby intensifies challenges, which sometimes result in global issues.

From this perspective one could say that humankind will "drift" towards its end. However, the "End of History" declared by Francis Fukuyama in 1992 still has not occurred. (Fukuyama 1992).

The term "to drift" could assume a passive role of humankind as a victim of external processes. In fact, globalisation is not an autonomic process, or natural law, but a process that can – and it has shown that for reasons of social, environmental and even economic security it must – be regulated. The problem did not just "happen", but rather, it has been induced and set forth by humankind. Globalisation is man-made; it is irreversible, but conductible.

The challenges of the mentioned global issues are immense, however, there are possible responses. Disaster preparedness, environmentally appropriate production patterns (such as integrated farming, carbon neutral architecture, renewable energies) and policies, education about HIV/Aids and the risks of smoking, vitamin A vaccines against polio, protections and hygiene against Malaria, etc. The approaches and strategies are already in existence, but their implementation is insufficient.

Our knowledge about the complex social, environmental and economic effects that may endanger human life is extremely limited, still there is some knowledge and it can, theoretically, be increased. For this reason, the end of history appears to be as possible as its continuity. Thus, the questioning of a possible end is irrelevant and unconstructive.

Alternatives are not accessed by the consideration of the end of alternatives but by the consideration and (de-)liberation of alternatives. The only opportunity for physical human survival *and* ethical humane living dignity is an appropriate human(e) development. Thus it seems to be a inconsequent to discuss the possible end of development, rather than the question of how to do better and how to develop.

In other words, it is essential to understand that it is not merely the survival of humankind that is of central concern when discussing human regulation, arrangement and organisation, but it is rather the quality of human existence and development.

There is a growing concern about the state of the world: Regarding the spread of poverty at least two thirds of the human population is aware not only to live the "third world", but to be forced to live the "third world" – often enough by their own elites. No natural causes but often economic interests, including corruption, penalise (the rights and of) a majority of human population, while privileging elites.

Wulf concludes:

> "Given the globalisation of basic areas of life and worldwide political, economic and cultural integration, an enforced acceptance of differences and the promotion of commonalities are required. Thus tensions between the local, the regional and the global are inevitable." (Wulf 2002: 76).

Globalisation is often regarded in terms of its economic impact and character. Numerous critical statistics, reports and analyses depict the correlations between the economy and the imbalance of worldwide living standards. Laszlo explains:

> "The 214 billion dollar accrued debts of the most involved developing countries accord to the military disbursements of the West during four months. About 19 trillion dollars were invested on the global stock-market. That number is equivalent to the gross national product of the G8 states and makes up about 80% of the gross world product. Where the money flows has enormous implications for the direction of the economy. Moreover, it transmits an unexampled power into the hands of international investors who influence the state of the world. More than two thirds of international investments are accessed by the richest 20% of the world population, only 1% reaches the poor." (Laszlo 2003: 82, 83).

The UNESCO states that the:

> "Globalization is not just about increasing the worldwide circulation of information and ideas. Economically speaking, it entails an increase in capital flow, trans-national investment and international trade, thereby integrating all countries into a single giant world market. In terms of politics, the social, economic or environmental orientation of states is being increasingly determined by regional and international structures." (UNESCO 2006).

This dilemma of nation-states leads to the next chapter.

2.1.4 The Dilemma of Politics: The Political Nation versus Economy

Nation-states are constructed political zones, frames of a more or less historically allocated territory. Already, the term "globalisation" connotes a current change to that history and a transformation of territorial order. Globalisation surpasses national borderlines. It relativises and increasingly annihilates the perception of a globe, which is organised in nations and geographical regions. Characteristic of globalisation is the arising of economic, social and ecological phenomena, which are independent of territorial constraints; phenomena which traverse national boarders with ease.

❖ Example:

Multinational companies are no longer, or only marginally linked to national boundaries, for example, in terms of uncoupled taxes (tax evasion), production and acquisition. Moreover, environmental as well as social problems (e.g. climate change, north-south-conflict, drinking water supply, population growth and desertification) are also detached from national boarders and regulations.

Bilstein, Miller-Kipp and Wulf state:

> "Through the acceleration of time globalisation reduces distances. Moreover, globalisation leads to the acquaintance of new and far distanced cultural and social spheres. Those newly arising spaces do not commensurate anymore with confined territories, nations, national boarders and boarder control." (Bilstein/Miller-Kipp/Wulf 1999).

Atomic energy, genetic manipulation, the role of mass media and neo-liberalism affect human development and other phenomena as they confront all states on earth. These phenomena require a common positioning and hence the interchange of many socio-cultural protagonists on different levels to foster cohesive, representative and possibly sustainable decision-making. The mentioned phenomena crosscut not only national boarders (space) but concern future generations as well (time). Kofi Annan calls this "problems without passports", characterising problems which are not resolvable by only a nation. Scholte thus characterised globalisation as "deterritorialisation", (Scholte 2000: 46-61), suggesting that we can define globalisation as follows:

> "Globalisation is the progressive eroding of the relevance of territorial bases for social, economic, and political activities, processes, and relations." (ibid.: 46).

He goes on to argue:

> "The proliferation and spread of supra-territorial (...) connections brings an end to what could be called 'territorialism' characterising a situation where social geography is entirely territorial. Although (...) territory still matters very much in our globalizing world, it no longer constitutes the entirety of our geography." (ibid.).

When examined, a nation is not only a territory, it is a unit of political regulations coupled with a territory. If the territory "shrinks" and relevant questions of political regulation traverse national boundaries to a global dimension, then globalisation leads to a problematic phase of (nation-state) political contingency. In this case, contingency describes a situation of political dilemma, confusion, randomness and ineffectiveness. Politics are still confined within local and regional structures. The "problems without passports" make political regulation, including the prevention of global problems, difficult. Accordingly, political participation and regulation is in crisis. This crisis pertains particularly to the political concept of democracy. Globalisation requires global cooperation. In the economic world this is already a highly developed evidence and practice. Political structures and, therefore, democracies persist in their territorial identifications and constitutions so that they are overstrained by the need to regulate globally.

Compared to economic practice, regional associations and trans-national organisations develop hesitantly. Despite this slow progress, the actual political influence on economic globalisation in terms of social and environmental regulation remains marginal. Multinational concerns play a crucial role in this dilemma because their common interests and financial potential are united against different political actors, corrupting political efficiency through lobbyism and infiltration.

A major issue in this dilemma is the north-south conflict, which signifies global imbalance and the inequality between the (rich and mighty) northern and the (poor and dominated) southern hemisphere of the planet. The involuntary exclusion of the "third world" from the positive effects of the market-economy appears not to come about from nothing; it has its historical causes. Obviously one must use the polarising terminations, such as north-south conflict and third world with great precaution. Apel explains:

> "A historical perspective shows that the current process of globalisation only makes up the youngest stage of a development which results from the scientific, technological, economic as well as political pre-dominance of Europe; more precisely it results from the 'era of discovery' or the 'era of colonisation'." (Apel 1999: 48).

Historically, colonisation involved slavery but it also refers to the present neo-liberal, hegemonic, unilateral structures, which are far away from creating an effective free-market economy or democratic equality. Instead, neo-liberal structures represent a global imbalance of opportunities, especially between the northern and the southern hemisphere.

In the meantime, those structures are decreasingly dependent on Europe. Furthermore, they are decreasingly attributable to political nation-states or even to regional alliances. A reason for the deprivation of political control is the laissez-faire economic policies that signify political self-corrosion. Antithetic to concepts of an eco-social market-economy, multinational enterprises take over principle parts of the political world, comparable to the church during the European Middle Ages.

A study of Amnesty International recorded in 1985 that:

> "Conjointly with world-market oriented parts of the economic elite and/or states, multinational concerns build a cohesive block of political interest, which excludes the majority of the population from political participation or complicate such participation." (Kasch et al. 1985: 68 f).

This does not relieve political entities from their responsibility to conduct sustainable development through the provision of binding sustainable framework regulations. It would be insufficient and possibly deficient to accuse the private sector to disregard social and environmentally responsibilities and demand for the voluntary self-control of capitalist business sector. It is not even the often criticised economic capitalism that seems to cause the political, social and environmental degradation; it rather appears to be the "political capitalism" that legitimates certain economy and leads to critical un-sustainability. Indeed, the economy has ethical responsibilities, however, it is the state that has the role of assessing, promoting, controlling and ensuring that those responsibilities are headed in order to potentiate the private sector's positive impact on sustainable development.

On the other hand, this ascertainment connotes the potential for human autopoiesis, which politics, theoretically, still have. That evokes new discussions for concerted action and the combined political and economic overcoming of the challenge of globalisation for the benefit of humankind and the eco-system. The necessity for responsibility and political regulation calls for a political renaissance by means of new political structures, alignments, visions,

practicable strategies and consequences. Regional and trans-national alliances and organisations must be strengthened in order to move towards a global standard of democratically structured rights, opportunities and duties. In particular the UN could re-form into a supranational coordinator of a federal political mosaic of local, regional and global organisations and institutions, as well as of nation-states and regional alliances.

On this point Karl Josef Kuschel states:

> „Only a few people already realised what the technological and economic innovations mean to their lives. The actions of national states seem no longer to regulate the innovations and their effects. The economic globalisation appears to be a swelling river, which undermines and erodes the previous boarder controls. The controls of spatial and temporal dimensions are removed. While in ancient times economic success came along with the containment of territory, today it rather depends on the early presence of the market – in whatever country, thus detached from territory.
> A growing number of politicians and economists, therefore, begin to understand that especially those who recognise the irreversibility of globalisation must push for a global market-framework. Globalisation is not destiny; it is a regulable process. Trust in regulation presumes a political conception, based on ethical, preliminary decisions and a moral spirit for the well-being of human being. (…) What can ethical rules achieve in one country, if their adherence can be avoided in other countries with different rules?", (Kuschel 1999: 124f).

Ernst Ulrich von Weizäcker (member of the World Commission for the Social Dimension of Globalisation) writes:

> "Globalisation is determined by two competing principles: the principle of the market and the principle of democracy. The first is for the strong, the second for the weak. The new character of globalisation is that the principle of the market is global while the principle of democracy is national. It is obvious who will win. Only if the two principles are balanced, will humankind be in good condition.", (Weizsäcker 2004).

To recapitulate, economy itself is not something necessarily opposed to appropriate development. Moreover, it can be supportive and essential to sustainable development. The difference, which has to be made in this context, is that the current economy is without boundaries or regulation. It is a neo-liberal economy of laissez-faire. Indeed, the theory and practice of economic competition is vital and can be sustainable, but it requires an eco-social framework. That framework does not yet exist.

For this reason, the current randomness of economic development is counter-productive to sustainable development. Regulation is only possible within democratic, ethical boundaries.

Only such boundaries can assure a stable and vital market economy of competition; a market economy of concurrence, participation, and transparency, dictated by a decentralised power instead of by a monopoly. In order to promote competitive cooperation, a market is free only within defined restrictions. This means that politics do not only restrict the economy, but the economy depends on political regulation.

Furthermore, only ethical boundaries and control mechanisms can assure a responsible economy, respecting and supporting standards of sustainability.

Overcoming the current economic determination of policy through political regulation of economy, signifies the renaissance of policy. This can facilitate the regeneration and sustainable transformation of the roles of nation-states for the sake of their citizens.

Nuscheler wrote:

> "We are situated in a late-stage of the world of states, in an early-stage of the world of society, but admittedly in an advanced stage of the world of economy." (Nuscheler 1996: 39).

It is not only economy that requires regulation and a framework of reference, this principle of regulation applies to society as well. For example, neither companies, nor individuals should have unlimited power. The Weimar Republic did not have such democratic boundaries, controls and regulations to divide power, which enabled Hitler and the Nazis to come into power. The seemingly rational and altruistic society is not an appropriate alternative as this will lead to a totalitarian system, such as Stalinism. The Lehman Brothers Inc. abused 2008 the lack of regulations and finally failed. Furthermore, the breakdown of the Bank caused a huge financial crisis, taking down banks, which took similar risks and incited the bankruptcy of many other companies and organisations.

Every protagonist (individual, group, company, political party, and so on) should have as much freedom as possible and as many restrictions as necessary. This will hold society together and prevent, as much as possible, moments of critical diffusion, or destruction, which occurred within many ancient civilisations.

❖ Example:

Examples of ancient civilisations are: The Sumerer (Mesopotamia, 4000-3000 BC), Egyptians (3150 – 600 BC), Elam (located on the Iranian Plateau, Middle Bronze Age 3500 – 600 BC), Indus Valley Civilisation (2800 – 1800 BC), Xia Dynasty (China, 2200 – 1800 BC), Oxus Civilisation (Karakum, Central Asia, 2200 – 1700 BC), the town of Caral (Peru, 2627 BC), the Olemec folk (Mexico, 1500-400BC), and following Assyria, Babylonia, the Persian Empire, the Roman Empire, the Byzantine Empire, the Islamic Golden Age, the Etruscan civilisation, Inka, Maya, Aztec, Toltec, Mycenaean Greece and others. They all had organisational gaps (discrepancies), which caused the breakdown of their organisation. The challenge of the modern age is to develop sustainably.

A distinguished, comprehensive and highly developed civilisation does not promote its own destruction. Generally speaking, civilisations, which collapsed were either unable to anticipate the issues that threatened them, or they were not able to develop adequate, sustainable strategies to fight these threats. With the collapse of each of these civilisations, the elites as well as their respective civil societies lost collectively their socio-cultural roots, their existence and their freedom. The challenge for our civilisation is to build up an integrative, sustainable system. This system would protect the defined freedom of socio-cultural protagonists to unfold in diversity, while ensuring a certain unity in this diversity, so that the different protagonists can mutually maintain the sustainable system.

About 6000 years ago, the first proto-states developed in Mesopotamia, and in the Sahara/ Nile and in the Indus Valleys. Having developed in terms of agricultural techniques and trade, military forces were formed for protection, and government bureaucracies and administrations were installed over time. States increasingly competed and sometimes cooperated for resources, such as farm-land, in some cases waging wars. State identifications, perceptions and structures were established over long periods, adjusting to changes in the social, natural and economic environment.

These socio-cultural perceptions, identities, meanings, identifications and structures are now confronting a more complex and dynamic changing environment. Therefore they must now continuously be reviewed in order to organise people informally through civil societies and normatively through states, politics, administration, bureaucracy and international organisation(s).

Due to the increasing connections among people in the global village and due to interdependencies between institutions, a strong state will be one, which communicates with, and opens up to other states in order to maintain (or "protect") its own stability. Classical protectionism and ancient war philosophies lead to international disrespect and exclusion. North Korea is such an example. Some characteristics of a contemporary sustainable, democratic state are: a free market within a sustainable framework of socio-cultural values and formal rules and policies and the free flow of information (such as freedom of press, freedom of speech, of art and artistic expression, scientific freedom) within ethical boundaries.

The principle of freedom (opportunities) within a reference frame (rules and duties), also applies to educational approaches for sustainable development. A democratic system of states and an eco-social market economy would provide sustainable regulation and thereby systems, which are as stable as possible (cp. Wagner 2007).

2.2 The Globalisation of Particularisation and "Communi(ty)cation" – Moving Towards Mondial Socio-Cultural Diversity

The social and cultural anthropology of the 1990[s] explored how socio-cultural structures in "southern" countries were modified through "northern" and particularly "western" impact. At that time, mostly "western" socio-cultural structures and lifestyles were increasingly being globally disseminated. The questions of whether "western" structures and lifestyles were simply being copied by "southern" countries, reducing cultural diversity and whether globalisation was leading to global homogenisation began to be explored.

Soon theories concerning a "global homogenisation paradigm" or "global westernisation" were postulated. It was argued that the trade of "western" goods transported or globalised socio-cultural meanings. Such meanings (values, beliefs, desires, perceptions, world-views, intentions) were supposedly embedded in consumer products and expressed through consumption patterns and lifestyles. The theory of socio-cultural homogenisation argues that cultural differences are increasingly reduced if local products are replaced by global products, which come predominantly from western countries. Supposedly, this leads to a process of colonisation or re-colonisation of the non-western world by monopolies, which promote global marketing and trade. The establishment of such companies, moreover, was enabled by the competitive, rather than the cooperational system of neo-liberalism, in terms of socio-cultural, economic and political hegemony. Is globalisation, therefore, a kind of socio-cultural imperialism, comparable to religious wars?

The "globalisation of consumer trends and lifestyles", seems to have lead to a homogenisation or standardisation of gender perceptions, tastes, value-orientations, meanings and behaviours. (cp. Wichterich 1998:198).

Figure 22: globalised consumer products

Maggi-Werbebanner in Quito, Ecuador
Foto: Maria Dabringer 2003

Speaking of socio-cultural domination, of penalised (particularly indigenous) societies, diffused socio-cultural identity indeed raises the question if globalisation leads to socio-cultural homogenisation. Homogenisation is often perceived as being the same as "westernisation". This refers especially to "western" logocentrism ("western" perceptions of rationality and causality), ethnocentrism (Euro-centrism or US-Americanisation) and egocentrism (individualisation). It appears that this has been promoted through neo-liberal market philosophy, rather than through democracy. Auernheimer states:

> "There are clear indications of a global homogenisation of consumption patterns, lifestyles, media contents and fashion-trends. What colonialism commenced during five centuries is now accelerated. Nowadays the West increasingly complains about facts that he evoked by himself." (Auernheimer 2003: 180).

"In the west as on earth" (German: "Im Westen, wie auf Erden") is the striking title of a book by Wolfgang Sachs, which refers to the desire for western standards in various respects in the "developed" but particularly in the "developing" world – a desire, which is often in conflict with (local) traditions.

❖ Example:

As Auernheimer already mentioned, an example of such homogenisation is fashion; the replacement of indigenous dress through the cappy-trend with the usage of sport-shoes, printed t-shirts and jeans. Another example is the replacement of locally available methods of healing by externally purchased medicines. Further examples of homogenisation include urbanisation replacing farming, Hollywood movies instead of local productions, and mass tourism instead of socio-culturally sensitive interchange, etc.

To summarise, such cultural imperialism mostly refers to:

- Consumption:
  - o Dominance of US-American mass media
  - o Oligopoly of big media companies (and mass media):
    - e.g. Disney, Warner, Sony, CNN, BBC
- Other products, such as food, cars, music, fashion, Software (e.g. Microsoft) and internet facilities (e.g. google).
- Imbalance of cultural flows from 'core' to 'periphery', allegedly not vice versa
- Neo-liberal economic growth as an end in itself; reducing the value of the diversity of socio-cultural expressions to economic usability and reducing socio-cultural diversity as such to marketing obstacles and to a disturbance factor.
- The monopolisation of companies and the accumulation of wealth and political power reducing equal opportunities and disadvantaging the majority while privileging an "elite" minority
- The globalisation of western meaning, values and products to the disadvantage of local socio-cultures

Descriptions of global homogenisation often reduce people and societies to their roles as consumers rather than defining human beings as cultural beings. In this light, the human being becomes "Homo economicus". As mentioned earlier (see chapter 2.1.3) Hannerz (Hannerz *1992:217)* denotes this process as the "coca-colonisation of the world".

❖ Example:

The Coca-colonisation theory: The term coca-colonisation refers to the worldwide dispersion of the "soft-drink" Coca Cola. Since the beginning of the 20th century, the development of this drink, its marketing and dispersion can be perceived "as a central symbol of 'cultural imperialism'" (Hannerz 1992 : 217). The theory postulates: The drink became a medium or symbol to communicate the "American way of life" as well as the image of a cosmopolitan, universal and trans-cultural product. Moreover, the consumption of the drink communicates the "US-American dream" as well as the ideology of a "free world" and free or unlimited, self-determined choice ("consumer democracy"). This mode of socio-cultural transfer is captured by the almost political slogan "Coke offers a taste of Freedom" (cp. Howes 1996:3, Bauer 2001:207, Beck 1997:80).

Hegemony signifies the decline of diversity. In this regard, socio-cultural and thereby political and economic hegemony in the form of US-Americanisation or Euro-centrism awakens fears of a Pax Romana, the Roman empire, ethnic cleansing, the crusades and other dark

episodes of human history. Globalised socio-cultural hegemony necessarily neglects local desires for socio-cultural autonomy and the preservation of one's own (particular) socio-cultural identity. Reduced choices or opportunities in terms of lifestyles, employment, etc. is another effect of homogenisation. This makes it easier to access markets and anticipate their development. Homogenisation also seems to make it easier for politics to shape social structures, because a homogenous society provides politics with clear mandates. However, examples such as the war on terror in Afghanistan and Iraq show that, despite "western" interventions, homogenisation did not occur overall. Instead, the socio-cultural systems of these countries maintain their differences. The situations in both Iraq and Afghanistan are rather examples of profound socio-cultural conflicts and they resemble civil wars.

Another expression of homogenisation is "uniformation" or, as already mentioned, "standardisation".

❖ Example:

Normative/formal international standard are found for example in:
- Economy (DIN-Norms, seals of approval, etc.)
- Sizes and weights
- The gold price
- World order: nations, national flags, constitutions, public international law, human rights, United Nations

These normative/formal standards are not contradictory to diversity. They may even support local standards and promote diversity.

❖ Example:

Examples for diversity enabling standardisation:
- The system of states and principle that states have constitutions is global, whereas individual states have unique characteristics.
- As stated by Beck:
  "The example of human rights shows, first, that they are universal rights in that they exist in almost all countries. Second, their interpretation and representation differ, depending on the different contexts." (Beck 1997: 92).
- The Global Ecovillage Network (GEN) promotes rather a philosophy (as a standard) than binding criteria to define what an ecovillage is and to accept or neglect applications of organisations who want to join the network.

The nation-state system and human rights are universally as well as particularly swayed, interpreted and implemented. In this regard, formal categories, such as rules, laws and symbols function as a framework (unity) for reducing friction and guaranteeing the productive exchange of diversified information, such as:

- diverse meaning (e.g. international law: ensuring arrangement) or

- diverse modes of organisation (e.g. state constitutions)

- diverse goods (e.g. the gold price allows economic stability. Export of local products such as rice, textiles and music).

Beck explains:

> "The arising of ambivalences and local conflicts in a world society does not necessarily signify the failure of 'multicultural experiments with society". They rather symbolise the beginning of a new era for society, which constitutes itself through the normalisation of trans-national, trans-cultural lifestyles.
> A population which represses these realities and which perceives itself as well as others in terms of monolithic (folk-) cultures, will have difficulties dealing with a normal cosmopolitan jumble in a playful way." (Beck 1997:154).

There are various terms, which are affiliated with both of the seemingly contradictory phenomena:

Figure 23: Terms affiliated with homogenisation and heterogenisation

Homogenisation*,	**Heterogenisation,**
standardisation	diversification
unification	particularisation
singularisation	alterity
uniformation,	decentralization
centralisation	pluralisation
sameness	hybridisation
generalisation	creolisation
unity	distinctiveness/uniqueness
relativation	diversity
universalisation/the universal	specification
canonisation	pecularisation

*The term "homogenisation" takes on an almost cynical and absolutist character and expresses the elimination of diversity. Associated terms, such as standardisation and unification are related to the concept of homogenisation. Nevertheless they are not absolutist.

This chapter analyses the state of cultural diversity in the era of globalisation. It reviews the "paradigm of globalised homogenisation" and it aims to adjust and compliment that theory. The thesis is that globalisation does not solely lead to homogenisation or diversification; it rather promotes both forces and evokes new socio-cultural patterns.

2.2.1 From Folks to Movements

What makes it relevant to reconsider the concept of globalisation? Insights and knowledge about patterns of un-sustainability and global issues (cp. chapter 1.1. and figure 2), can be

used in a gap analysis. Knowing more about the current situation and the current state of human development makes it possible to deduce what is needed. In terms of education, such knowledge helps to deduce required competencies for the empowerment of individuals. Hence, insights will show which competencies human beings need in order to anticipate, interpret and overcome critical moments and to sustain a life in dignity, peace and happiness.

Albrow states:

> „Globalisation requires the understanding and organisation of society and puts it at the top of the agenda in public debate." (Albrow 1998).

Beck explains:

> "This is a crisis. It results from the new incertitude and chaos of the world society. According to Albrow, the central issue is "the identity". Who am I? Where am I? Where and to whom do I belong?" (Beck 1992:182).

Traditionally, geographic localisation helped to form and consolidate socio-cultural identity. For a couple of decades our self-perceptions have been increasingly globally stretched.

Yet socio-cultural identities and hence cultural diversity are not only threatened, they appear to be modified into new forms of cultural expression. The geographically localised socio-cultural identities were often closely related to the idea of folks. This means that territories and folks were closely coupled.

Folk-like localisation, however, is a sort of particularisation. The global diversity of landscapes and territories represented a mosaic of different folks.

One scenario could be that due to globalisation and the dissolution of boarders, the folk identification no longer suffices. This would not have to mean that the general (mode or phenomenon of) particularisation is being destroyed.

The destruction of socio-cultural patterns as such only uncovers a shift within the socio-cultural system; it uncovers processes of transformation. In this regard, the destruction of traditional socio-cultural patterns could also be thought of as symptoms of change.

Localisation refers increasingly to shared interest rather than geography. Shared interest, connect people and unite them into movements (or networks, or communities). Such groups of interest can focus on equal rights for, or simply exchange between homosexuals, or they focus generally on human rights, environmental protection and religion. But also neo-liberal accumulation of money, terrorism, sects, child prostitution and human trafficking are reasons for people to create powerful movements.

Such movements, communities or networks have their own particular meanings, modes of communication (e.g. blogging, or particular codes, symbols and languages), celebration rituals (e.g. protesting, gathering, trading), solidarities and biographies/histories. Hence they are new, diversified and continuously diversifying socio-cultural protagonists. In contrast to the case of folks, for these movements, space and localisation play no, or only a marginal

role; territory is a negligible resource for their identification. According to Robertson (Robertson 1992) this addresses "the consciousness of a world-society, to live in one shared place." (Beck 1992:151). That shared place is often denoted as "global village". From this perspective, the term "globalisation" increasingly describes the socio-cultural proceeding "from folks to movements". In place of movements one can also speak about groups of interest, (virtual) communities or networks (see chapter 1.6.5), or socio-cultural "streams" (Appadurai 2005), or "flows" (Hannerz 1997).

The term "movement" is similar to the term "network", yet "movement" is used because it pronounces the evolving or proceeding dynamism of networks. A movement is a network "on the move". In other words, "movement" draws attention to the operation mode of social networks, "the networking" and the operation modes of communities in terms of "communitication" (cp. chapter 1.8.4). In this sense it goes beyond the classical understanding of a movement which is connoted with socio-political actions.

Globalisation leads to the parallelism and synchronism of contradictory socio-cultural processes: There are processes of homogenisation and, paradoxically, these processes provoke, or at least go together with processes of heterogenisation. The point of discussion is not then "homogenisation *or* heterogenisation", but homogenisation of some aspects of socio-cultural life/expression *and* diversification of other aspects.

As Robertson notes, *globalisation* has seen cultural tendencies for both homogenisation and *heterogenisation* in "mutually implicative" tension (Robertson 1992 und in Beck 1992:51).

The German Foundation "Entwicklung und Frieden" differentiated that picture in its biannual magazine "Global Trends":

> „Admittedly, the process of globalisation is not equivalent with a homogenisation of societal relationships and the political integration of the international system. Often, contrarily, globalisation takes place in a highly asymmetric and contradictory manner. In some areas globalisation even enforces the structures of single nation-states. In different areas, globalisation leads to the intensification of differences between those who lose in this process and those who win." (Stiftung Entwicklung und Frieden 1991a: 17).

For society as well as for individuals it seems essential to be critical about the disadvantageous patterns of current globalisation and to be aware of globalisation's homogenising effects. However, critical reflection should not be limited to the stigmatisation of "globalisation = homogenisation = westernisation". Regarding such "westernisation" Wulf states that:

> "Neither the USA nor Europe are the centres of the world. The world has many cultural, economic, political, trans-national centres, where different scenarios for global technology, finance, media, images, and discourse are applied.", (Wulf 2002: 78).

The world becomes globally linked and remains locally unique. Moreover, new socio-cultural particularities emerge in the form of movements.

Beck states:

> "Cultural experiences, in the past and present have never had a tendency towards homogenisation or standardisation. This does not mean that the concept of cultural homogenisation is meaningless – to the contrary. But this perception is not sufficient. It ignores the counter movements…)." (Beck 1992: 154).

Globalisation generates new patterns and configurations of socio-cultural meaning. They arise as images, values, symbols or artistic expressions, which stimulate, innovate and simultaneously represent socio-cultural identities. Our perceptions of the world, of self and of the other have transforming tendencies and result, for example, in the foundation of new transnational organisations with global mandate (i.e. United Nations) and local branches (regional and national UN offices) as well as subject-related branches (UNICEF, UNESCO, UNDP, UNEP, etc).

Appadurai develops the concept of globalisation. Globalisation refers to human action and communication on the surface of the globe. Appadurai states that globalisation concerns more than the "globe" in terms of land, territory or geography. Hence, globalisation is a process of shaping the global "landscape" of socio-cultural patterns.

Appadurai argues that there are perceived or "imagined worlds", including:

- "Ethnoscapes": The transforming ethnic (or socio-cultural) landscape of people
- "Technoscapes": Connoting that technology moves at high speeds across once uncrossable boundaries.
- "Finanscapes": Connoting the global flow of capital through currency markets, national stock exchanges, and commodity speculations.
- "Mediascapes": Connoting the electronic capabilities to produce and disseminate information and visual images of the world.
- "Ideoscapes": Connoting ideologies of states and the counter-ideologies of movements which oppose those states.

(cp. Appadurai 1998)

The term "imagined worlds" refers to Benedict Anderson's theory of "imagined communities" (see below). Anderson states that a nation is a socially constructed community; it is imagined by the people who perceive themselves as part of that entity. A central driving force in the generation of imagined worlds or communities is communication. Anderson uses the "nation" to exemplify his concept.

❖ Example:

The nation - an imagined community: As Anderson puts it, a nation: "is imagined because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion". He goes on to argue that a nation is an imagined community because "regardless of the actual inequality and exploitation that may prevail in each, the nation is always conceived as a deep, horizontal comradeship. Ultimately, it is this fraternity that has made it possible, over the past two centuries, for so many millions of people, not so much to kill, as willingly to die for such limited imaginings." (Anderson 1983: 6,7).

Concerning Appadurai's "global landscapes" theory, and related to Andersons approach,which highlights the relevance of imagination, Beck states that:

> Global landscapes "are building blocks of imaginary worlds. They are globally conveyed with different meanings and they are differently exchanged and implemented." (Beck 1992:98).

2.2.2 Global "Communitication": Communicating Particular Communities

Nowadays information is increasingly diverse, complex, omnipresent and accessible. Information becomes powerful in a way that is not predictable. Moreover, neither is its creation explicitly conductible nor is the control of its diffusion possible. Information is generated and disseminated in a decentralised and rapid manner.

❖ Example:

The role of the internet during the post-election protest in Iran, June, 2009: Journalists often no longer write for one, but for various newspapers, and they often have their own websites and blogs. These facts dictate the creation and dissemination of journalistic information. After the Iranian elections in June 2009, the government interdicted journalists to document protests. Journalists, however, received their information from private persons, through (mobile-) phone calls, e-mails, blogs, twitter, facebook and other electronic communication tools. The government may control the specific websites, but as one solution is blocked by the government, another solution is opened up by protesters within civil society. Control of the internet was and still is additionally complicated because many servers for websites which function as forums for protest are not on Iranian territory. It is possible that the Iranian secret service sent out contradictory information in order to make other information implausible. Indeed, there was far from a free flow of information inside the country, from Iran to foreign countries or from foreign countries to Iran. There was, however, some flow of information during that time. It was not only the press that was organised in an increasingly decentralised way through the use of internet and mobile-phones, the protesters also gained power and influence – they ameliorated their organisation and constant re-organisation through efficient (focused, immediate, capacious, multi-channelled) communication. According to the theories of swarm intelligence (chapter 1.6.4), multi-perspectivity (chapter 1.6 and 1.6.6) and mimetic learning (chapter I and particularly 1.3), the protesters empowered themselves as an opposition movement in terms of dynamic self-organisation through networking. Swarms require short-pulse coordination contacts to organise and these coordination requirements were achieved to some degree by the protesters in Iran.

This shows that information is increasingly decentralised and that anyone can be an informant (in terms of co-creating, accumulating and disseminating information), or a recipient (receiving information). In contrast to such decentralised civil society creation and dissemination of information, even powerful news agencies are limited in respect to carrying out their own research and disseminating results. Information is increasingly independent from institutions, such as state, religious institutions or media organisations. Furthermore, information is becoming more difficult to control.

Information is a multilayered product. Knowing more about a war, dictatorship or catastrophe and about the suffering of effected people is – in itself – valueless, or neutral. This is because information requires measures of meaning, such as morality and values, which bestow the so far neutral information with value.

Meaning is imaginary and intentional and, therefore, a creative act of communication. Imaginations endow people with alternative options and with opportunities to evaluate and shape their lives.

❖ Example:

The above mentioned Iranian protesters gain power because they have imaginings of an alternative government, or alternative governments. In this context, the Iranian situation urges members of civil society to react. They may impend and warn, protest against, or agree with the Iranian government. The common process of all involved parties, such as protesters and government, is to reconsider, consolidate and eventually develop their particular ideals and imaginations communicatively. Communication creates and represents communities; it creates "common unity", deriving from diverse involvements. These communities are tightened by imaginations, ideals, meanings, and are often expressed through rituals, such as protests, protest abolition, internet communication, or the convocation of Iranian ambassadors by concerned countries.

In this regard, information communicates meaning and contributes to the stimulation, review and adjustment of already existing meaning (cp. Chapter… figure 4: "Phases of identity-formation – a cultural process"). Summarising, information is an imaginary and communicative, socio-cultural product, which constitutes socio-cultural trends, identities and communities.

Appadurai writes: "The arising [socio-] cultures are detached from place and time" (Appadurai 1998). Often, socio-cultural protagonists do not link their identities to territory, moreover, these identities appear and change rapidly. Through globalisation the other approaches and he introduces alternative, imaginary options for meaningful lives, which shape socio-cultural identities. Appadurai connotes: "Imagination gains an extraordinary power in the every day life of people" (ibid.)

More than ever, people all over the world seem to beginning to dream about and consider a greater range of possible lives. Indeed, the images of possible lives are disseminated by global mass media and the internet. A homogenisation of images, however, appears not in a way that particularisations are diminished. There is, for example, an inflation of images in process, facilitated by digital photography and through social networking on the internet. These images transport and initiate socio-cultural expressions.

On the one hand, globalisation signifies the communication of globally-uniting and generalising aspects of socio-cultural life. On the other hand it leads local and diverse

aspects of socio-cultural life over into global contexts, or it globalises local particularities. This global communication process generates a globally interrelated, socio-culturally diverse and dynamic community.

"Communication" and "community" are "mutually implicative" phenomena, in the same way that (cp. Robertson 1992; Beck 1992:51) homogenisation and heterogenisation are, according to Robertson (Robertson 1992). Globalisation connotes globalised communication. And since communication is a medium to deals with meaning, globalisation furthers global processes of socio-cultural meaning-making, of socio-cultural organisation, as well as of identity-formation and thereby of a strongly heterogenic world community. In this regard, globalisation can be understood as global "communi(ty)cation" (cp. chapter 1.8.4). The arising community, however, is not a singular or uniform "pure race of men". It is a highly diverse new model of a polycentric, interdependent society and a cluster of communities, of individual and collective socio-cultural identities. "Communitication" is generated by many different participants. Together, they generate a highly diversified group (community) of socio-cultural actors and dynamic socio-cultural identities, movements, sub-networks or streams, (see Anderson 1983: about "imagined communities", above).

Such movements can be global and particular at the same time: A web-community of euthanasia supporters, for example, can have members all over the world, nevertheless, currently they are a particular movement, not mainstream. Such movement related processes can be denoted as "global particularisation" (this will be further explained below). In this regard, there can be global "imagined communities", movements, which are both global and particular. This shows how the perception of localised society (which constitutes the building blocks for common nation-states) gets disturbed.

Indeed, it appears to be logical to drop the traditional perception of "society" and to replace it with other constructions from classical sociology, such as "movements", or:

- Max Weber: *sociality (social relations)* (Weber 1924).
- Georg Simmel: *social networks* (Simmel 1972).
- Norbert Elias: *social chains* (Elias 1987).
- Arjun Appadurai: *streams (of meaning)* (Appadurai 1999, 2005).

John Urry calls this reconsideration of society "Sociology Beyond Societies" (Urry 1999). In such sociological perspectives society is considered to be dynamic and highly diverse (spectroscopic/complex). This can be expressed in terms of:

- Global flows. These are:
  - unpredictable
  - uncontrollable

- o complex
- Social processes:
  - o disseminating rapidly (dimension of time) and
  - o across the world (dimension of space)
- Unconstrained cross-border mobility of people, things, information and meanings

"Communiticated" sociality, socio-cultural identities or flows appear to be spectroscopic "global networks". Spectroscopic, in this context, means:

- ludically creative
- dynamic and
- diverse (heterogenic, sometimes controversial).

According to anthropologist Ulf Hannerz socio-cultural effects of globalisation can be differentiated as follows (Hannerz 1992),:

1) No culture is ever 'pure'; it is always a mixture of influences. Globalisation leads to complex mixtures of cultures which can be called 'creole cultures' or 'hybrids' (see "cross-composition of particularities", chapter 2.2.4)

2) Previously (relatively) separate, or co-existing socio-cultures come into contact with each other. They "communiticatively" are cross-involved in the meaning-making and identity-building of the respective other so that they arrange each other as "pact-partners".

❖ Example:
According to Matei:
   "The globalisation of (tele)communicative ties between nations: The globalisation of (tele)communicative ties between nations is studied from a perspective of heterogenisation. A theoretical model inspired by Appadurai's "disjuncture hypothesis", which stipulates that global flows of communication are multidimensional and reinforce regional/local identities, is tested empirically on an international voice traffic dataset. Spatial-statistical measures (global and local versions of Moran's I) indicate that nations that share the same linguistic (English, Spanish, or French) or religious (Catholic, Protestant, and Buddhist–Hindu) background are more likely to be each other's "telecommunicative neighbors" and that this tendency has increased over time (1989–1999)."
   (Matei 2005).

Appadurai's study shows that communities are generated and strengthened by global communication (Appadurai 1999, 2005). Mobile phones, Blackberrys, computers, webcams and comparable technical devices enable users to communicate at anytime with anyone, anywhere and anything (by voice, video, photos, sms, e-mail, live stream). Such mobile, hence omnipresent, opportunities to communicate enable glocal "communitication". The example shows that:

- Global homogenisation generates and motivates the reflection and reaffirmation of identities and particular socio-cultural movements.

- Global travel and communication facilitates the creation of relational community rather than spatial community.

Münch explains:

> "Globalisation modifies the livelihoods of local, regional and national cultures. They can only abide if they symbiotically connect with the global. The global in turn, can only develop if it symbiotically connects with local, regional and national [socio-]cultures. The global and the local interdigitate and co-produce themselves mutually. Together they produce the glocalisation of the world. (Robertson 1992: 173-174).
> The global becomes indigenised, which means that it fits itself into local livelihoods. The local becomes generalised and globally accessible." Münch (1998)

❖ <u>Example:</u>

Indigenisation and generalisation of the local:
- The indigenisation of the global: Someone says: "I feel like a German-European world citizen."
- The generalisation of the local: The website of a Swedish canoe rental is accessible in Cambodia. The Taj Mahal is no longer solely present in the minds of Indian people, but in the minds of billions of people far beyond Indian borders.

Münch continues:

> „Meanwhile, this means that local livelihoods can no longer reproduce themselves out of themselves, due to their interaction with the global economic exchange, the global division of power, global communitising processes (ann. by author: "communitication" processes) and global streams of communications." (Münch 1998: 15).

Concerning the generalisation of the local, it must be mentioned that "the local" is one possible expression of "the particular". The global, in turn, can be particular as well but must not necessarily be generalised.

❖ <u>Example:</u>

Religion as such and the world-religions in particular are globalised. There are Muslims, Jews, Christians, Hindus, Buddhists and the practitioners of many other religions all over the world. These religions have temples, mosques, churches, synagogues, and other places of celebration and communities who practice and celebrate their faith more or less explicitly. Obviously, there are a diversity of religions. In this way, religions are globalised, but particular. Furthermore, despite their globalised nature every religion has different meanings to each of its adherents. Moreover, looking more closely at religious practices and symbols, it appears that all standards, regardless of their level of homogenisation, are interpreted differently. Even within the individual religions complex diversity can be found.

Concerning the indigenisation of the global, it seems important to point out that socio-cultural expressions can be global from the beginning. However, no socio-culture is generalised from the beginning. Every generalised socio-cultural expression is created by particular socio-cultural actors. "Particular" implies that these actors can, but must not have local

identifications; these actors are rather defined through relational networks, such as communities or movements.

❖ Example:

Examples of the globalisation of local patterns that promote and innovate, rather than destroy them, are:
- globalisation of religion: there various options for a person to choose a religion from, not only the "local" religion
- New Age religions: religious syncretism through the mixing and matching of religious rituals, beliefs, chants, symbols, metaphors, etc. Compositions of bits of Christianity, Hinduism, Buddhism, Taoism, Celtic paganism & witchcraft, etc.
- globalisation of food:
  o "fusion cuisine" e.g. French-Japanese, Anglo-Indian. In the tradition of potatos and spices – originally local, but eventually global products
- globalisation of music:
  o "World music"
  o Buddhist-techno, Spanish rap, Hungarian rock. In the tradition of blues and reggae.
- Human trafficking (i.e. of kidnapped or bought women to be prostituted or otherwise enslaved),
- illegal child adoption (sale of children in foreign countries),
- drug smuggling,
- Mafia (global operations local clans).

Organ trafficking is an illegal way to deliver organs over national borders. Since India and the Philippines criminalised the export of organs, a new illegal market has arisen in Egypt where people (such as street children) get kidnapped and/or killed by organ-trafficking mafia. Their body-parts continue living in other bodies, so that not only minds, imaginations and socio-cultural meanings become interconnected networks. This means that, patchwork-bodies are created: the (in the case of organ trafficking mafia illegal) "particularisation of human bodies".

Those examples with a solely economic purpose, which disregard social and environmental ethics, such as human trafficking, drug smuggling or mafia activities, often appear to be morally apprehensible as they disregard human rights and dignity.

One conclusion from these examples is however, that human actions, even when they are globalised, to some extent always have local determinations and allocations. This means that local and global identification go together.

❖ Example:

Economic globalisation simultaneously means re-localisation: Economic globalisation simultaneously means re-localisation, because no company can produce globally. Factories are local, services are invented in places and they are provided in places. Marketing as well functions locally or regionally, even for Coca Cola.

Nevertheless, a considerable criticism of that perspective is that it is secondary whether a marketing strategy is developed in Namibia or the USA. Although the countries are different, as long as the same people, employed by the same company plan with the same objectives, the results are similar and therefore de-territorialised. On the other hand, the local dimension is not simply dispensable. For factory workers it makes a significant difference, if a factory

stands 1000 meters or miles away from their homes. For a company like Coca Cola it makes a significant difference if the respective country has a reliable government and a good water-management system to ensure the availability of water as the basic component of the drinks. For an appropriate analysis of particularisation, both aspects must be regarded, the local and the global particularisation. What are the linkages between localisation and globalising particularisation? Socio-cultural particularisation is, more precisely, the socio-culturally particularised expression of culture, or respectively the expression of particularised socio-cultural meanings. Meaning ties communities together. Every community is a collective of diverse community-members who mimetically and mutually interchange, negotiate, express, stimulate, innovate and communicate meaningful socio-cultural identities.

In this regard, the communication-based and community-processing "communitication", creates and is simultaneously derived from the "(...) trans-cultural production of spheres of meaning and cultural symbols (...)." (Beck 1992: 88).

Meaning can be understood as a cluster of sub-meanings or sub-information as the following example about football will show. It is possible that football comes from China, but was globalised and has since become indigenised and diverse. It is also an example, which shows the local socio-cultural roots of global expressions. The history of the football game exemplifies the local re-rooting of a global movement (local – global – glocal).

❖ Example:

Football: A peace of leather has no meaning in itself, but if it is round and filled with air, it can evoke memories from childhood and the playing of football. It can lead to friendships, headlines, and mass-events, which no longer have much in common with the peace of leather.

<div align="center">"leather + round + air"</div>

This is a cluster or formula of information that makes up particular (football) meaning. Moreover, the overall meaning of a football extends beyond its primary function. It has created a particular, diversified and global football (fan) movement. During the globalisation process, different information, rules and roles from all parts of the world were and still are clustered into a globalised meaning or definition of the football game.

Football playing has similar rules globally, however, footballs are made with a variety of techniques and materials, played on a variety of fields (inside, outside, schools, backyards, stadiums, fields, etc) and by a variety of players (adults, children, women, men).

The playing of football is one example of global movement. Further examples for global movements or meanings are: religions, conference logics and other rituals, dance, and the meaning of smiling, of happiness, war, violence, discrimination of minorities and of women.

This shows that it is not just people that are linked socio-culturally. Primary information particles (such as leather + round + air) are accumulated into meaning, which in turn helps to define socio-culturally diverse groups of people (e.g. a global community of football fans and their formal branch, the FIFA, the Féderation Internationale de Football Association).

Moreover, there are numerous football varieties (cross-compositions), such as:
- *the Thai takrow game,*
- *beach soccer,*
- *the Brazilian futsal (only played by youth),*
- *the Chinlon (a sport from Burma (Myanmar) is a combination of teamwork, dance and meditation),*
- *bossaball (mixes volleyball, football, gymnastics and capoeira on inflatables and trampolines),*

- *jorkyball (is a modified form of 2 on 2 soccer, influenced by squash. It is played in a 10m x 5m cage),*
- *fireball (Played in some parts of Asia such as Indonesia or Thailand, the ball is made of coconut fibre, soaked in diesel and set alight),*
- *ice soccer (similar to ice hockey),*
- *bike ball (football with bicycles),*
- *underwater football,*
- *Shaolin soccer (a combination of football and Shaolin Kung Fu).*

These examples all express local variations of a global game. Playing is intrinsically human (cp. Homo ludens, Huizinga 1939), because it is creative and communicative. Football-related activities, communication and celebration, such as football playing, -watching, -discussing, etc. therefore, depict particularly ludic forms of "communitication": (Football) "communitication" brings together and mimetically arranges people from all over the world, from all kinds of contexts and with all kinds of backgrounds.

2.2.3   Global Particularisation: Dissolving the Local-Global Paradigm

Roland Robertson argues that the local and the global do not exclude one another. Contrariwise, he states that the local must be perceived as an aspect of the global (Robertson 1995: 8).

As a result, Robertson suggests that we speak about a "glocalisation" of the world. The term refers to the Japanese word for global localisation, "dochaduka". Robertson explains:

> „Glocalise is a term which was developed with reference, in particular, to marketing issues, as Japan became more concerned with and successful in the global economy, and against the background (…) of much experience with the general problem of the relationship between the universal and the particular." (Robertson 1992: 173 f.).

Kleinsteuber writes:

> „The concept states that localisation is incompatible with globalisation, on the one side. One the other side, they are connected through constant and immense interdependences." (Kleinsteuber 2004: 66).

Why is the discussion about the localising aspects of globalisation relevant? Localisation represents particularisation; it is *one* aspect of it. Globalisation allegedly represents homogenisation. The inherent issue of discussion is not so much "globalisation versus localisation", it is rather "homogenisation versus particularisation".

Local socio-cultural expressions continue to be relevant. Nevertheless, localisation is only one aspect of socio-cultural particularisation or diversity. Other aspects are: movements, groups of interest, networks, streams and "imagined communities" in terms of global "communitication".

Globalisation is not the unilateral disentanglement of western socio-culture and domination of the rest of the world. Globalisation is not the process of western meanings and patterns, globally covering human life like a layer. As such, globalisation is rather the disentanglement of socio-cultural expressions from their local bindings. Folks are local socio-cultural identities;

"communiticated" movements, in turn, are socio-cultural identity systems. They can, but must not be, detached from localities.

In summary, globalisation does not only lead to homogenisation, but to particularisation as well. There is no imperative cohesion between globalisation and homogenisation.

Globalisation connotes:

- Homogenisation through globalisation
  - ❖ Example:

  Pop-music as globalised genre

- Localisation through globalisation
  - ❖ Example:

  Iranian Pop music as local social movement of young people who use pop-music as a medium to express their desires for more modernity and a less conservative regime.

- Particularisation through globalisation
  - ❖ Example:

  Ethno-pop, pop-rock, and Hip Hop, are examples of a new global creation of socio-cultural diversity (sub-genres) with and without local aspects. This means that there is, for example, "hip hop", but it is diversely interpreted, refined and advanced through local participation and non-territorial trends, epochs, and movements. Another example is the global environmental movement with locally particular and global patterns of expression.

Internet based communication is an example of the phenomenon of global communication. Travel is another example of this phenomenon and trade brings products and thereby meanings and lifestyles (consumption patterns) from one socio-cultural context to another. This does not necessarily mean that globally communicated information and meanings further homogenisation. Actual communications are involve not only different communicating parties, but also a variety of communication techniques, verbal and non-verbal. Moreover, they "transport" fragmented, specified and particularised information. Meaning and information which is brought from socio-cultural context C to context D may, but must not influence and stimulate parts of the D context. A new constellation of context D arises, but it can not be homogenised. Moreover, communicating with context D, influences context C in return. Obviously, the more socio-cultures are interconnected, inter-dependent and mutually impact one another, the less possible it is to distinguish one from the other.

- ❖ Example:

Export nation Germany – a "reciprocal self-imagination": Germany, for example, generated a new image of itself as being the "biggest export nation in the world". In order to export goods (indirect communication of socio-cultural identity) it must communicate directly with other nations. Its self-image

is comparative; it compares between the self and the other. This means that Germany requires "the other" state(s) in order to define itself as the "biggest export nation in the world".

Chapter 1.3.1.4 describes how two communicating socio-cultural identities, C and D, which are situated within a particular socio-cultural context, become mutual "stakeholders". Referring to the approach in chapter 1.3.1.4, the shift of the inter-societal emergence niveau (gain of more complexity and increased ability to deal with complex challenges) appears as: $C1 + D1 < (C2 + D2)^2$. The chapter states that throughout mimetic interchange, both, the other (A) and the self (B) remain different from one another: A remains A, B remains B. Simultaneously, both innovate their composition: from composition 1 they transform to composition 2. Reciprocally both potentiate their relation: from "+" to "x^2"; they develop interdependences or commonalities. The deriving connections, or communalities are forms of socio-cultural meaning and constitute communities. Socio-culturally common meaning enables communities and their individual actors to deal with complexity so that the community is maintained. Some complex challenges arise from globalisation because globalisation dissolves tempo-spatial perceptions, and thereby brings tempo-spatial challenges (cp. "global issues" in chapter 1.1 and figure 2). With this dissolving, "the others" (i.e. different socio-cultural meanings, different persons, knowledge, desires, perceptions and perspectives) come closer to the self and its sphere or context of acquaintance.

In summary, communication creates meaning; it is mutually created by different cultural actors to generate, consolidate and confirm their arrangement. This arrangement in turn enables them to deal with complexity, and finally to live good, meaningful lives. They can stabilise themselves in comparison to, in relation to, in arrangement with and through the other. Eliminating the other through homogenisation would mean eliminating the self. The mentioned arrangement does not connote absolute peace and harmony; it essentially also includes frictions and conflicts.

Arrangement can even involve hegemonic attempts, for example when – arranged – voters in France and Belium prohibit to wear a burke, in order to protect Christian perceptions of freedom, or if in Malaysia Yoga is forbidden in order to protect the (rather political interpretation of) Islam. These are indeed conflicts and the prohibitions appear discriminative. Still this can stimulate necessary discussions and important counter-movements in the respective countries and beyond.

So far, hegemonies have not been able to sustain themselves. All explicit hegemony (e.g. National Socialism) and other forms of homogenisation (e.g. crusades and Christianisation) modified socio-cultural contexts, even significantly, but has not succeeded in eliminating the other as such, or even in reducing diversity. The intrinsic meaning of arrangement however is defined in terms of competitive cooperation, so that any competitive attempt has limits in

order to maintain cooperation. A conflict is a form of competition between parties, while the (verbal, objective, possibly constructive and respectful) conflict itself still maintains cooperative criteria. Aggressing the other physically, or discriminating the other verbally steps out of cooperative behaviour leading over to domination attempts, which are oppositional to arrangement.

Meaning is the medium with which one accumulates primary impressions and transforms them into information. In this regard, information is a cluster of primary impressions, selected and held together through socio-cultural meaning. The "gravitation", which holds otherwise random impressions (potential information) together, was for a long time locally determined. There were pragmatic reasons for the fact that meaning was a local phenomenon. People could only communicate locally, hence their communities ("In-groups", or "we-groups") and their socio-cultural organisational compositions and patterns (language, rituals and traditions, etc.) were locally swayed. As today, communication can be global (immediate and omnipresent) and meanings "can travel". "The local" as identifying and the socio-cultural protagonist-arranging medium loses its exclusive status. It is complemented and increasingly replaced by movements or networks, which can, but must not, have local identity. Movements (with trans-local, or de-territorial identity composition) and locally defined socio-cultural identities are both aspects of socio-cultural particularisation; and they are expressions of "communitication". Communities were once solely local, but now they can also be global; they can even be both at the same time. The particularisation patterns were formerly often locally defined, now they are increasingly defines through movements with de-territorial or trans-local characters. The territorial/geographic determination of the quality of information, meaning, or socio-cultural identity inherent in the term "local" or "localisation", loses its functional effect. This general development does not allow or lead to global homogenisation.

Because internet-based communication is one of the driving forces in global "communitication", the following example shall be presented. A prominent example of such global interconnectedness facilitating innovation, is the blog. A blog is a web-based logbook or notebook. It functions as social media; a communication tool for civil society, which is, additionally, an antipode to centralised mass media. Blog technology functions as a globalised medium for the exchange of all sorts of particular information. This civil-society internet-platform is used as well by Wikipedia, the famous encyclopaedia created by civilians for civilians.

Information is globally interwoven; it merges, interrelates and activates new information. In the following, the text will examine three different examples: Wikipedia, the blog and

McDonaldisation, in order to trace such ludic interweavings. The discussion of Wikipedia will contribute to the explanation of the blog and a blog example will introduce the McDonaldisation theory, which will lead to further analysis about homogenisation and heterogenisation.

❖ *Example:*

The blog: A blog (a contraction of the term weblog) is a type of website, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse-chronological order. "Blog" can also be used as a verb, meaning to maintain or add content to a blog. There are personal blogs, corporate blogs, blogs by media, such as video, sketches, photos or weblinks, blogs by genre such as music, news, travel, fashion, politics, education, religion, environment, and family. Furthermore there are blogs that are defined by their devices, such as portable computers, mobile phones, wearable computers, webcams, etc. The particular blogs describe web-communities. Similar to the medieval minnesong, the blog enables the sharing of information.

> "Blogs often become more than a way to just communicate; they become a way to reflect on life or works of art. Many blogs provide commentary or news about a particular subject while others function as more personal online diaries. A typical blog combines text, images, and links to other blogs, Web pages, and other media related to its topic. The ability of readers to leave comments in an interactive format is an important part of many blogs.
> As of December 2007, blog search engine Technorati was tracking more than 112,000,000 blogs.
> History: The term "weblog" was coined by Jorn Barger on 17 December 1997. The short form, "blog," was coined by Peter Merholz, who jokingly broke the word weblog into the phrase "we blog" in the sidebar of his blog Peterme.com in April or May of 1999." (http://en.wikipedia.org/wiki/Blog; Oct 12 2010).

Shortly thereafter, Evan Williams at Pyra Labs used "blog" as both a noun and verb ("to blog," meaning "to edit one's weblog or to post to one's weblog") and devised the term "blogger" in connection with Pyra Labs' Blogger product, leading to the popularisation of the terms. (cp. Baker 2008).
The collective community of all blogs is known as the blogosphere. Since all blogs are on the Internet, they may be seen as interconnected and socially networked. Discussions "in the blogosphere" have been used by the media as a gauge of public opinion on various issues. A collection of local blogs is sometimes referred to as a bloghood.

> "Some institutions see blogging as a means of "getting around the filter" and delivering messages directly to the public. Bloggers and other contributors to user-generated content are what inspired Time Magazine to name "you" their 2006 person of the year.
> Blogs have also had an impact on minority languages, bringing together scattered speakers and learners; this is particularly so with blogs in Gaelic languages. Minority language publishing (which may lack economic feasibility) can reach its audience through inexpensive blogging." (ibid.).

❖ *Example:*

A blog conversation about McDonaldisation:
Blog user guia_fronci (USA)* wrote:
> "(…) I agree with Held and McGrew's definition of globalisation: that it is a collusion of multiple forces. It pulls and pushes society, it creates conflict and fosters cooperation, includes and excludes, etc.
> With the advent of globalisation, I believe that the world we live in is becoming BOTH similar and different:
> --Similar because varying cultures collide, creating a brand new culture altogether. When Starbucks first hit the Philippines' shores, people united in their love for coffee - it is what bound them together. Drinking Starbucks coffee became that one similar experience that they shared.
> --Different because through the trends mediated by globalisation, the unique characteristics of cultures are emphasised. Every nation in the world may have a McDonald's franchise, but each

franchise offers variations to the menu that reflect the culture of the specific country. In McDonald's Japan, they offer a Teriyaki McBurger and Chicken Katsu burger. In Israel, they have McShawarma. In India, they have McMaharaja which is made of lamb or chicken meat. McDonald's is a really interesting case study that exemplifies how our globalised world is both homogenised and heterogenised. For more information on different McDonald's menus around the world, refer to the following links:
http://www.trifter.com/Practical-Travel/Budget-Travel/McDonalds-Strange-Menu-Around-the-World.35517" (Mediaaneglobalization 2008).

Blog user stargirl_portia (Manila, Philippines) answered*:

"I like Anderson's idea of imagined communities and how the media intensifies the need to identify with the "bigger" world because it pulls different nations to become concerned (or be aware at the very least) with events outside of their community/ country.

First, through local news programs "Imbestigador" or "The Journalist's Notebook", people here in Manila now know that Batanes is an aging society or that 10-year-olds in Sulu are being trained to become Abu Sayaffs or something. These media programs sort of make us sympathise with people we don't really know but we feel like we do largely because they're also Filipinos.

Second, through CNN or Oprah or The Tyra Banks Show, we get to see that our issues in life are somewhat similar to the issues that American teenagers have. We do not know them but we can identify with them. As Meyrowitz says, "Because of media, we increasingly come to have no sense of place".

So as long as we have the same traditions, problems, or whatnot in life, it doesn't matter if I come from the East and you come from the other side of the world. " (ibid.).
*names are changed

From this blog-conversation and input it is continuative to further examine the theory of McDonaldisation (Ritzer 1995, cp. chapter 2.1.3). Just as "Coca-colonisation" (Hannerz 1992), the terms "McDonaldisation" and "McWorld", relate to the dissemination of a set of western products with inherent western meanings attached to a particular taste, consistence, concepts of alimentation and consumption. Indeed, McDonalds appears to be a so called "lifestyle brand", comparable to "apple" or "Nike".

Worldwide the company has about 32000 restaurants in 118 countries, 1.6 million employees and about 50 million customers per day.

McDonalds conducts local or regional marketing, which responds to the alleged expectations of local customers. Therefore, the company slightly modifies the globalised, core "hamburger" product. The following is an example of the failure of such an approach:

❖ *Example:*

A Blogspot reports: "McAfrica – a marketing failure: The McAfrica was a pita bread sandwich with beef and veggies. Unfortunately, the product was released in 2002, at a time when some African countries were experiencing a famine and a lot of people felt it was adding insult to injury. Perhaps it would have fared better if it had been named differently" (Purpleslink Blogspot 2008).

The question arises whether localised market strategies result in a direct sales increase because they attract more customers (direct effects) or if the localisation is a simple image campaign designed to prevent reproaches concerning McDonaldisation and give the chain a

better appearance in the public's eyes (indirect effects). Even in the first case, McDonalds remains a homogenising symbol of lifestyle. That shall not be further be explored in the context of this text. However, there seem to be particularising as well as homogenising effects of the marketing and trading of the McDonalds lifestyle. It is also relevant to consider the reactions of other socio-cultural protagonists to McDonaldisation. Traces of diversification and homogenisation must not only be detected within "McWorld" itself. Globalisation includes both, homogenising and also particularising effects, these are eventually reciprocally stimulating. Considering the "McWorld" in terms of homogenisation, the question could be: what reactions did it stimulate which further diversify the world of socio-cultural alimentation patterns?

One may argue that fast food remains fast food and a burger remains a burger, regardless of the particular socio-cultural context to which it might be adjusted. Whether McDonalds promotes homogenisation or not, the answer of critical world citizens was not only to passively boycott fast food chains, but to invent a new contra-movement: the slow food campaign.

❖ *Example:*

The Slow Food Organisation and movement:
"Slow Food is a movement and the name of an organisation. Slow Food began in Italy with the foundation of its forerunner organisation, Arcigola, in 1986 to resist the opening of a McDonald's near the Spanish steps in Rome.

> Buono, pulito e giusto – good, clean and fair; this is the criteria, which defines slow food.

Slow food aims to promote products with "authentic characteristics"(regional, seasonal), produced with traditional methods and consumed in traditional styles. Food products which are produced, sold and consumed using slow food criteria are supposed to strengthen regional markets and to re-root people to their regions through methods which target their senses.

Figure 24: Slow Food

A restaurant placard, Santorini, Greece

http://www.d.umn.edu/cla/faculty/troufs/anthfood/afslowfood.html

The Slow Food organisation spawned by the movement has expanded to include over 100,000 members with chapters in over 153 countries. All totalled, 1300 local chapters, called convivial, exist. The 360 convivia in Italy — to which the name condotta (singular) / condotte (plural) applies — are composed of 35,000 members and there are 450 other regional chapters around the world. The organisational structure is decentralised: each convivium has a leader who is responsible for promoting local artisans, farmers, and flavours through regional events such as Taste Workshops, wine tastings, and farmers' markets.
In 2004 the Slow Food organisation opened a University of Gastronomic Sciences at Pollenzo and Colorno, Italy. Carlo Petrini and Massimo Montanari are the founders of the University, whose goal is to promote awareness of good food and nutrition." (Cp. http://en.wikipedia.org/wiki/Slow_Food)

These examples demonstrate the connectedness of the homogenising and particularising effects of globalisation. The conclusion one may draw from this is that homogenisation is not

an immediate danger to a world diverse in socio-cultural identities. The examples above also show that the local is a decreasingly relevant criteria to explain the quality of socio-cultural particular movements.

2.2.4   Mondialisation and the Attributes of Particularisation

Robertson, Apadurai, Featherstone, Lash, Beck, Urry and other cultural theorists disagree with the otherwise rather popular theory of a McDonaldisation, or respectively of homogenisation through globalisation. Beck explains:

> "Socio-cultural globalisation does not mean that the world becomes homogenised. Globalisation rather appears to be a highly contradictory process. The contradiction refers to socio-cultural patterns as well as to a diversity of consequences concerning, for example, opportunities to act, to co-create and to react." (Beck 1992:54).
> According to cultural theory, "due to the self-evident nature of national states there is an appearance of linearity, the 'either…or'. In the new process the 'either…or' is replaced by another concept, the 'as well as'. This means that globalisation and regionalisation, combination and fragmentation, centralisation and decentralisation are dynamics, which belong to each other like two sides of the same coin." (ibid)

Breidenbach states:

> „The local and the global seem to be antipodes, but they are not; both are mutually determining. Neither of them is more natural than the other, because any identity must be created." (Breidenbach 2004: 58).

"Global", as well as "local" are geographic terms. The term "mondialisation" (from the French word "le monde" – the world) allows deliberating about "globalisation" phenomena without reducing it to a discussion about geography.

Breidenbach states:

> "(…) In order to be understood by people outside of their own community, they communicate their particularities in standardised manners. Every culture refers to globally valid categories (languages, lifestyles, world views and rituals), which enable them to express differences. Only a common vocabulary and interculturally comprehensible categories enable transnational alliances. This enables Brazilian indigenous peoples to correspond with the Penan of the Borneo and it enables Germans to participate in a petition against uranium mining in the territory of Australian Aborigines." (Breidenbach 2004: 58).

Breidenbach's examples as well as the above mentioned example of web-based communication in the 2009 Iranian post-election protests (example below) illustrate a newly arising government-opposing civil power. Another example of this is the NGO movement (see below as well). The global society creates new forms of organisation within civil society independent from governments. Informally the civil society safeguards the division of power and controls governments. This power has traditionally been governmental (centralised) and with the transformation of this civil power (the making and constellation of) governments might be transformed as well. Government may be in a process of democratisation from the bottom-up.

Wirth writes in the German Magazine "Der Spiegel":

> „Anyone in the world can talk with cyberspeed with anybody, without consulting diplomats and independent from diplomatic channels." (Wirth 1995).

Technological devices and the growing awareness (about global issues), which go assumedly together with rising living standards in formerly poor parts of the world such as India and China, promote the quick and complex exchange and creation of new socio-cultural meanings. Additionally to the transfer of political power from nations to regions, (chapter 2.1.4 for "dilemma of the national state"), the influences of state and civil society are increasingly decentralised. However, the new configuration of the socio-political system is not necessarily chaotic, but it is polycentric. After the globalisation of religion, politics, media, science and economics, civil society is globalised as well. According to Arenhövel, global communities are "patchwork-like regime-components". (Arenhövel 2000: 149).

Globalisation hence consists of the dialectic of "homogenisation and heterogenisation". Breidenbach states:

> "The dialectic development of homogenous structures and cultural particularities is characteristic of the contemporary process of globalisation. While we seem to become increasingly similar, we rather accentuate our differences." (Breidenbach 2004: 57).

The heterogenisation and particularisation processes are co-generative and reciprocal; they interrelate and inter-merge. This process can be described as mondialisation; the contradictory world-reference of socio-cultural particularities. This mondialisation consists of several main aspects, which can be described with the following attributes:

- **Localisation:**

  Socio-cultural meaning and expressions with local origin (history) and significance

  ❖ Example:

  Iranian Pop music as local and social movement. The Thai Sonkcran Festival, the Lovenian "Kasa" (porridge), the Fall of the Berlin Wall are local events or and will keep their local connotation. Many languages and dialects are more or less strongly connected to local areas.

- **Globalised localities:**

  Socio-cultural meaning and expressions with local origin (history) as well as a global dissemination and significance.

  ❖ Example:

  Neda was an Iranian girl who liked to listen to pop music, although pop music was criticised by different Iranian ayatollahs. During the 2009 post-election protests she was shot down. A video, made with a mobile phone, was circulated worldwide. Neda became an icon for the protesters,

recognised worldwide, and pop music was endorsed and globally communicated in a politicised manner. In one day Neda's story became a global symbol for resistance in Iran.
(cp. Putz 2009).
Other examples are the messages from, stories about and pictures of people such as Mohammad Ghandi, Martin Luther king, The Beatles, Mona Lisa who are global change agents with local background. Another example is the money, which migrants send back to their home-countries when they work abroad. It is one opportunity for migrants to remain connected to their local origins, so that these migrants agents who travel the world with a local mission.

- **Global particularisation**:

  Socio-cultural meaning and expressions, which are generated globally by a specific/particular group of interest, network, movement or community.

  ❖ Example:

  A web-community of euthanasia supporters, for example, can be made up of members from all over the world. Nevertheless, currently, they are a particular movement, not mainstream, (see above).
  The Hospitality Club, is as well a semi-web-based global movements which enables travelling people to overnight at other people's private homes without knowing them before. Wikipedia as wel is based on the contributions from all kind of people from all over the world. And the World Social Forum is a movement which organises huge gatherings of people who critically question the social status of current development, criticising for example the G8 and other decision makers. Other examples are international days, weeks and decades, but also the Non Governmental Organisation movement to complement Governmental actions.

- **Indigenised globalisation**:

  Globally relevant and globally disseminated socio-cultural meanings and expressions, which are adapted in a particular (local or subject-specific) way. They are globally significant and differently adjusted to local or subject-specific contexts.

  ❖ Example*:*

  German human rights activists who participate in a petition against uranium mining in the territory of Australian Aborigines. Human rights are often addressed from a global perspective and have global significance. Germans (particularity 1), involved in Australian issues (particularity 2) promote particular interpretations of human rights, which may differ, for example, from those of other Germans, and/or Australians.
  The T-Shirt is a globalised symbol, however, there are some T-Shirts with wording written in local or national languages, promoting particular socio-cultural identities. The globalised item functions as a medium for specific socio-cultural expression.
  "I feel like a German-European world citizen." Is an example how local particularity goes well together global universality (see above) The term "world citizen" connotes global meaning, "German-European" addresses local context and meaning, so that the described feeling embeds German-European identity in a global context.

- **Cross-composition of particularities** (Hybridisation*):

  Mixtures or patchworks of global and/or local socio-cultural meanings and expressions, which generate *new* global and/or local significances. Once such meanings or expressions are consolidated, they refer to one or more of the above mentioned categories.

❖ Example:

„Regional traditions are specific and the result of different historical influences. For example the Spanish kitchen: olives and garlic were introduced by the Romans, and saffron, black pepper, nutmeg, lemons, sugar cane, rice and bitter oranges came with the Arabic occupation of the Iberian Peninsula. Sweet oranges came over Portugal from China, and chickpeas came from Carthage (Ann.: near modern Tunis). Due to the discovery of the New World, the Spanish people made potatoes, tomatoes, sweet pepper, and chocolate a part of their diets. One wonders what they ate before."   (Breidenbach 2004: 60,61)

New cooking ingredients lead to new cooking traditions and consumption patterns. These traditions and ingredients entered into – and transformed the Spanish socio-cultural identity.

Furthermore: Ethno-pop, pop-rock, Hip Hop, Blues, or "Denglish" (mixture of German, "Deutsch" and English) and other "youth-slang" are examples of a new and global creation of socio-cultural diversity (sub-genres) with and without local aspects (cp. Pieterse 2004 and Kraidy 2005 with the book titled, "Hybridity: or the cultural logic of globalisation".).

*Annotation:

The term "Hybridisation" is a common expression in sociology, however it is written in brackets and replaced by the expression "cross-composition of particularities" because:

- The term "hybridisation" has biological origins and describes all attributes of cross-composition. The metaphor, however, is inaccurate since biological hybrids are unfertile. The term polymorphism would fit better, since human cross composition of particularities is highly "fertile", evoking new compositions. Human development depends on these innovations.

- In biology (zoology and botany), hybrids are the result of two influences and not more. This is not the case for socio-cultural identities, meanings and expressions as they can have "poly-", "multi-", or "cross-" influences.

The term "globalisation" encapsulates different phenomena. One prevalent aspect of globalisation is the era of neoliberal economic policy and political impairment, the adoration of profit and the hegemony or oligopoly of monopoloid companies over society. A new aspect is the emancipated civil-society. Its constitution and focus will depend on its "globility"; its ability to generate and profit globally from:

- differences (i.e. division of labor: "we can do this, you can do that")

- commonalities ("this is important for all of us"; for example the common interest to maintain differences)

- innovations (new technologies and new techniques, such as rituals to deal with old and new, known and unknown identities and meanings)

Such "globility" and its application will create transnational and cross-cultural relations and spaces. It valorises the particular (local or subject-related socio-cultural identities and meanings) and creates new socio-cultural identities (cross-composition): "a bit of this, a bit of

that – is how innovations are born into the world" as Salmon Rushdie says (cp. Beck 1992:30).

Early globalisation appeared as a threat to environmental integrity and to many aspects of social development. This early globalisation is a phase of political disability, thus of the disability to (democratically) regulate economy by environmental and social means. "Globility" refers to a phase in which globalisation is perceived and utilised as an opportunity to promote sustainable development for all. The "for all"-perspective, or the genesis of "the common" has just evolved over the last decades (e.g. The Universal Declaration of Human Rights in 1948 and "One World" in 1980). It has not been sufficiently implemented yet, as the persistence of global issues, such as poverty, unequal economic opportunity and wars demonstrate.

Theoretically, it becomes increasingly relevant to reflect and develop existing perceptions of "the common" in order to deal with challenges such as identity-diffusion (cp. chapter 1.8.5), the contingency crisis (cp. chapter 1.8.8 and 3.1) and tempo-spatially complex global issues (cp. chapter 1.1 and figure 2, for "global issues") in a concerted manner.

The phrase "unity in diversity" (cp. chapter 1.5) refers to a united, or concerted way to maintain "Our Creative Diversity" (Cuéllar 1998) for "Our Common Future" (Brundtland 1987). "Concerted" connotes common meanings and strategies, not in a homogenised sense, but rather meanings created from diverse actors with unique socio-cultural identities. Metaphorically speaking, a concerted approach of safeguarding socio-cultural diversity is comparable to the different musicians of an orchestra that play a concert. Different protagonists make different (particular) contributions to a common product. Chapter III focuses on such common perspectives. The development of such common perspective can be called called "sustainable development" (cp. chapter 3.2). Chapter IV refers to educational criteria and pedagogic practices for creating a common basis and frame for sustainable socio-cultural diversity.

2.2.5 Conclusion: The New Mondialisation of Socio-Cultural Diversity

Globalisation is a challenge and an opportunity for cultural diversity and, in this regard, for sustainable development, which connotes a life in dignity, today and for future generations. A common misconception is that globalisation refers purely to the global dissemination and standardisation of western hegemony. There is no hegemonic "take-over", or domination of western socio-culture, covering the planet like a layer. Globalisation rather appears to be the geographic detachment, de-territorialisation, or trans-localisation of a diversity of (particular) socio-cultures. This does not mean that these socio-cultures no longer have roots; rather it suggests that their roots are found in movements, which can, but must not, exhibit local

identities. Due to the de-territorialisation of socio-cultural meanings and their expressions, geographic attributes are insufficient to describe the current phase of human development. Globalisation is a spatial, a geographic expression. It connotes that something spreads over the entire globe. In fact the meaning of the term "globalisation" goes far beyond that geographic connotation and thus it is an insufficient expression to explain "mondialisation" phenomena. As mentioned earlier, the term "mondialisation" comes from the French "le monde" – the world. Mondialisation connotes the interdigitation and reciprocal influence of heterogenic "worlds" of socio-cultural meaning, perception, identity, as well as of world on terms of spaces and times.

Humankind is increasingly characterised by comprehensive interrelation and interdependence. Humankind is experiencing the dissolution of the tempo-spatial continuum; according to Wulf, "the space is shrinking" (Liebau/Miller-Kipp/Wulf 1999, cp. also chapter 2.1 for "transformations of the tempo-spatial continuum"). This derangement of the human orientation system, in reference to time and space, causes contingency and brings upon the danger of the detachment of socio-cultural meanings from the context in which they function. This means that through the dissolution of traditional concepts of time and space, humankind approaches economic, social and environmental disintegration, furthering unsustainable lifestyles (i.e. unsustainable production and consumption patterns). The traditional tempo-spatial continuum transforms rapidly and as a result it is no longer a continuum, but a contingency.

In this regard, it is not the term "globalisation" that describes the current age of humankind, or phase of development, and it is not (only) the global spread of products or socio-culturalities. It is rather the "complexisation" of socio-cultural worlds and in this sense of the complexisation of social, environmental and economic challenges.

The Agenda21 doctrine "think global, act local" refers to space, as does the completion "think global, act global", which addresses global movements, such as the environmental movement or the interest grouping of neo-liberal market economy. In a moment of tempo-spatial dissolution, this must be accompanied by a temporal equivalent: "think long-term, act now".

This text will continue to use the term "globalisation" in order to facilitate reading and understanding, but it utilises the term explicitly in the described sense of "mondialisation" and "complexisation". The terms "mondialisation" and "complexisation" go beyond the idea that something spreads globally, but that the world and the role of humankind in shaping this world become increasingly complex.

Geographic detachment has often been perceived as homogenisation. Yet, the term "homogenisation" is inappropriate since it refers to an absolute erasure of diversity. More suitable is the dialectics of universalism and particularism. The term "universalism" appears to be less absolutistic because it does not foreclose the effective and more or less cohesive diffusion of manifold, different particular socio-cultural meanings and expressions. The example of the global diffusion of fast food reveals that there are local product modifications and that fast food has incited a slow food movement. Hence, a homogenous approach evoked particularisation. Although the number of people who belong to the slow food movement is less than the number of McDonald's consumers, the daily life of people is obviously not determined by food, or fast food, so that a McWorld could not represent the state of socio-cultural living. Therefore it is important to dispute common perceptions and moral fears about homogenisation with a differentiated perspective.

Regarding the transforming tempo-spatial continuum it is supposable that the role of socio-cultural meanings and expressions with local origins will be reduced. In other word, if space transforms, socio-cultural patterns, linked to local space may transform as well. As a matter of fact, new socio-cultural cross-compositions are developed which consist of (now modified) traditional, local socio-cultural expressions and meanings. These new compositions or socio-cultural cross-fusions possibly agitate increasingly trans-locally, or globally. Compared with traditional meaning-compositions, these innovative meanings can be more successful at providing appropriate guidelines and orientation for people dealing with the tempo-spatial complexity and contingency of globalisation.

Globalisation promotes processes of universalisation as well as of particularisation. For this reason it has already been stated that globalisation is not the same thing as homogenisation. Just as the internet, travel opportunities and international trade are de-territorialised (geographically detached), socio-cultural information or meaning is de-territorialised as well. From this perspective on globalisation, socio-cultural networks of particular meanings and expressions become fluid and flexible movements or "streams", according to Appadurai (1999, 2005). These "movements" and "streams" have their own evolving socio-cultural patterns, which relate to traditional patterns, but which also exhibit new aspects. Such innovative meanings are necessary in order to adapt to:

- the dynamically changing socio-cultural context
- increasingly complex challenges; challenges with increasingly temporal and spatial outreach, such as poverty, climate change and other global issues

Innovative meanings, empower human beings to act in an integrative manner (internal social cohesion, or social unity in socio-cultural diversity) and to be environmentally integer

(external integration with the environment). Innovative can for example be environmental meanings which invent valuable technologies to protects the environment (e.g. the exploration of renewable energies), and innovative are meanings which foster equal rights for men and women. Innovative meanings shape human development and are able to direct us towards sustainable development.

Such "communiticated" movements have some of the attributes of a swarm. Swarms are complex, self-regulating forms of organisation, able to adapt and react rapidly to changes in the social, environmental or economic context (cp. chapter 1.6 and 1.6.6 for "multi-perspectivity").

Since the dynamics of the consolidation, of the fusion and the subsequent innovation of meaning increases, it can be assumed that explicit socio-culturally creative expressions, arts, for example, will gain influence and importance. Artists contribute significantly to the reflection, expression, stimulation and innovation of socio-cultural meanings. Artists create works, which are often rather independent from explicit, or common social functionality. Artistic expression is an open space where one may explore imaginings and perceptions, meanings, sense and non-sense, as well as knowledge and non-knowledge (what we know that we don't know). Thereby, art takes us beyond conservative (common) socio-cultural patterns. This ability to move beyond the norm essentially contributes to multi-perspectivity within society and thus art is essential for sustainable development. Or differently, sustainable development can be perceives as the art of human living and ludical unfolding of social unity in socio-cultural diversity. In this sense, art is an end in itself and is generally beneficial to human meaning-making, identity-progression, societal organisation and human development. There is a danger of art and artistic expression being excluded from the everyday civil – and institutional (e.g. political) – life, being outsourced to artists who are thought of as "experts". Instead art should be part of political action, for example as a force to prevent "business myopia" of politicians and other decision makers.

Another concept is that life and living is an art; the art to arrange and deal with the omnipresent other: the other or alternative information, meaning, person, or the "other self", etc. Globalisation leads the socio-cultural actor or "artist" to reconsider their own identity again and again, in a way that not the (inconstant) form, but the process of forming, the formation of identity becomes an evidence and end in itself. That means, the age of globalisation does not require actors who learn result-oriented in the sense that learning aims to form a conclusive, stable socio-cultural identity and a perception of world in which everything has its place. The age of globalisation rather requires process-oriented learning; a learning which empowers the lifelong learner to deal with – and shape – the continuous transformation of world. In this context, a meaningful life consists of people creating their lives mimetically with and through the other. Such creation does not necessarily constitute a

threat, obstacle or disturbance factor. Instead, it may be perceived as an intrinsically motivated, ludic interplay – or as "art". Education influences the progression of identities and effects individuals' abilties to generate, consolidate, communicate and innovate meaning as well as meaningful identity, ludically, mimetically and hence poietical (regulative). In this regard, it is important to recognise that involving art in formal education needn't be limited to arts-education, such as painting, dancing, etc. Education itself can be art; it can be ludic and performative (cp. chapter 1.8 and particularly 4.1.4). One aspect of this education is artistic expression as a crosscutting and interdisciplinary approach, another aspect is the creative exploration of challenges to sustainability and solutions (cp. chapter 4.2.1 for "life-situational approach" and 4.2.6 for "School for Life").

Meanings are meaningful if they represent and thereby compound those protagonists who invented these meanings. Socio-cultural meaning, hence, is not something with objective "truth", but many different meanings are imaginable. Socio-cultural meanings rather become truth. Essentially, meaning creates and holds together the socio-cultural community which originated the respective meanings. Therefore, the accuracy of meanings must be measured on their integrative power, hence their ability to integrate different heterogenic parties in one cohesive social network. This means that meanings are functional if they arrange human beings with other human beings (social integration). Since different members of the same group can have different perspective on the group (and its socio-cultural meanings, or patterns), meanings enable for social unity (cohesion) in socio-cultural diversity. According of the capacity of meanings to be strongly integrative and to facilitate the coherence of vigorous heterogeneity, they strengthen the multi-perspectivity of society. Multi-perspectivity is the human ability to deal with difference and complexity. Furthermore, meanings are functional if they maintain the integration of human beings into a viable environment (environmental integrity). Thus, socio-cultural meanings promote the continuity of human development and prevent its stagnation in terms of contingency and "human envelopment" (contingency crisis, see chapter 3.1). Meanings are adjusted to the rapidly changing social, economic and environmental contexts of human being and development. Moreover, through the socio-culturally mimetic regulation of human organisation, meanings shape the respective context. The context of human development and socio-cultural organisation can be described thus:

1. Globalisation brings the other closer, which can result in a socio-cultural multi-perspectivity. Mimetic processes with the other expand the horizon of possibilities. In other words, *globalisation evokes a diversity of development alternatives:* possible lifestyles, biographies, meanings and finally a diversity of possible decisions and actions. Globalisation causes individuals and communities to decide: how they want to live, who they are, who they want to be.

2. Due to the global proximity and interconnectivity of socio-cultural protagonists, the *confrontation with the other* is not always voluntarily chosen. The other can be perceived as an opportunity, but also as a challenge or threat. This raises the risk of conflict, and consequently, calls for mimetic arrangements. That arrangement relates self and other, it creates a common sphere, a sphere of mutuality. It is imperative that socio-cultural protagonists on all identity-levels are prepared and willing to deal with the other, with complexity, ambiguity and friction. Education plays a crucial role in the preparation and empowerment of socio-cultural protagonists.

The challenges to human organisation and development include an overwhelming diversity of opportunities, the pressure to decide, and the confrontation with the omnipresent other. Concerning the other, it is to resist the dissolving into the other (opportunism) and it is necessary to relate to the other without absorbing (assimilating) it into the own. "Communiticative" interplay and mutual arrangement connote learning with, from and through the other. These are the preconditions necessary for assuring a great choice of opportunities and alternative strategies for developing economic vitality, social equity and environmental protection.

What happens if societies and individuals (intra-individual, inter-individual, inter-societal and supra-societal identities, (cp. chapter 1.3.1.2 for "dimensions of socio-cultural identity") are incompetent at dealing with the diversity of meanings and possibilities, the omnipresence of and interrelatedness with the other, the pressure to make decisions and the diversity of development alternatives? The result can be the diffusion of socio-cultural identities and the inappropriate reduction (neutralisation), or inappropriate persistence (overemphasises) of socio-cultural meanings and orientations, disintegration of the self, discrimination of the other, etc. In such a situation, the complexity of global issues can overpower human socio-cultural organisation. The other fails to participate in and influence socio-cultural meanings, accordingly the self fails to uncover gaps in organisation and to mediate possible solutions. In such situations, socio-cultural meanings risk detachment from contextual requirements, so that the overall socio-cultural system may be seriously threatened, or collapse.

Modern lives, biographies and lifestyles, transform rapidly and profoundly. Meanings and socio-cultural identities are stimulated, sometimes over-stimulated. They are questioned and innovated; perceptions of right and wrong, self and the other, here and there, change. Traditions are innovated; some disappear, others arise. Space and time lose their normative functions. Sense and non-sense approach to another and become difficult to distinguish.

❖ Example:

For some people atomic energy is a future energy-supplier, for others it is emblem of human disintegration on earth. Each side has many supporters, so that empirically, truth (sense) and non-thruth (non-sense) are very close to another. The problem is that mistakes in decision making do not only involve the struggling parties, may influence future generations on the entire planet (space) for hundreds of thousands of years (time). Decision making upon atomic policies may be democratic, but unfortunately future generations can not participate in it. That intensifies the importance of the discussion and makes it much more complex.

The current inability of humankind to deal with globalisation sustainably manifests itself in the disintegration of economy, environment and society. The reason for this failure is the inability to arrange mimetically with the other in terms of "communitication". In other words, comprehensive visions and ethics of sustainability are missing. The economic system is successful at organising efficiently, whereas social and environmental interests are inconsistent, incoherent and underrepresented.

In summary, socio-cultural expressions are increasingly detached from local territories. In other words, local socio-cultural expressions are replaced by new socio-cultural expressions and movements (e.g. the global homosexual community, environmentalist and human rights movements, etc.). These movements do not, or only marginally, have local identifying attributes, but they are assembled through common interests.

Throughout the process of globalisation, the amplitude of socio-cultural diversity or the quantity of different socio-cultural identities may be maintained, though, the texture of socio-cultural diversity or the quality of socio-culturally different identities, meanings and their expressions is in a process of profound transformation. That texture can not and need not be conserved because socio-cultures are dynamic phenomena, and the speed and effect of socio-cultural stimulation and friction is increasing rapidly, pushing this transformation.
This difference in the speed of transformation is the biggest discrepancy between socio-cultural diversity and bio-diversity. Bio-diversity has a "globalised biography", because after the genesis of first life on earth 3.5 million, life covered the entire globe, unfolding cohesively in diversity and birthing the autopoietic ecosystem. Biodiversity undergoes enormous changes through a process of mutations, but it changes slowly.

Nevertheless, there is a risk that the diversity of socio-cultural expressions is reduced. The reduction of spoken languages - medium for and expression of socio-cultural meaning - would corroborate this theory.

Proving that there is and will be processes of particularisation, it remains insufficient and would be either idealistic or ignorant to forget that particularisation of socio-cultural meanings and expressions must be explicitly fostered, protected and conducted. The self-regulation of

particularisation is not an anonymous force, but manmade. It must be explicitly and offensively promoted and vitalised, for example, through adequate ethics, political concepts, media considerations, scientific research, and of course through education.

Just as the economic system requires a determining framework of social and environmental standards, socio-cultural particularisation requires sovereign identities, able to mimetically and continuously maintain socio-cultural patterns as well as possible and to innovate them as much as necessary.

Modern globalisation in terms of mondialisation, signifies the contemporary intensification of interrelatedness and mimetic identity-formation processes. It matures human beings because every protagonist (on the individual or societal identity level) must take his/her fate into their own hands and must take responsibility for the vitalisation of socio-cultural diversity. To the same degree that human beings accelerate their development (i.e. genetic modification, diffusion of the English language, atomic energy production), they also must be able to deal with new spatial (locally and globally outreaching), temporal (relevant now as well as for the future) and, therefore, complex challenges.

The integrity of humankind must be measured by its ability to adapt former self-perceptions and socio-cultural meanings to new social, environmental and economic contexts.

In a not only interrelated but interdependent and simultaneously heterogenic, complex and dynamically changing world, the interplay with the other becomes the central challenge and opportunity for sustainable development. The task for socio-cultural protagonists on whatever identity-level is not to survive the omnipresence of the other and the related frictions, ambiguities, conflicts and insecurities. Instead, the task is to deal with these and other aspects that the other provides, so that self and other reciprocally expand the horizons of their possibilities in terms of meaning innovation, identity-progression and development alternatives. Mondialisation requires the continuous, mimetic arranging of self and other and the creation of common spheres, in order to promote unity in diversity through dynamic competitive cooperation.

Beyond intellectual or cognitive consideration and comprehension of sustainable development as a theory, sustainable mondialisation requires the incorporation of cultural techniques (competencies) concerning meaning-negotiation, consolidation and innovation, as well as techniques of sovereign identity-formation, both with and through the other.

Particular techniques for arranging with the other and dealing with alterity, such as narrations, rituals and performances, then become identity-attributes and elements of socio-cultural meaning.

This equips, more than ever before in human history, education with a sociological and moreover anthropological "globalised" mandate. Globally, educational practices and concepts must be adjusted to the continuous and challenging "complexisation" of the social, economic and natural environment.

In fact, the challenge for socio-cultural protagonists to arrange inter-culturally is not central to the explicit shaping of sustainable mondialisation. Instead, what is central is the challenge of intra- and inter-individual relating and the confident dealing with alterity within one's own society, one's own family, and within oneself. Once this is achieved and the the competence to deal with alterity "internally", the inter-cultural arrangement is facilitated.

Competencies to learn with and through the other, to participate in socio-cultural meaning-making and intervene in human development (according to Habermas for example through joining public discourses) describe some aspects of a "shaping competence" (de Haan 2002, cp. chapter 4.1.2.1) and mimetic competencies (cp. Wulf, Gebauer 1992) of individuals and societies. These competencies, which are learnable and should be applied "throughout life" (Delors 1998), become crucial for sustaining further development. The chapter IV will look more closely at education as a form of media capable of developing such competencies.

2.3 The Impact of Globalisation on the Environment

Social, economic and political aspects of globalisation inter-depend closely with the condition of the environment. The environment is their "playing field" and therefore the status of environmental conditions determines everything that affects environment.

Indeed, human development concerns much more than humankind. Humans, themselves part of the biodiversity on this planet, also impact the environment with their perceptions and the resulting actions. A "wise" development, which adequately represents the wise human, (Homo *sapiens*), is synonymous with sustainable development. Considering the ecosystem, sustainable development implies an overall "planetary development" by means of the mutual and cohesive co-evolution of humankind and natural environment. After the previous discussion of the social and economic aspects of globalisation, and before chapter III, which concentrates on sustainable development in general, what follows is a brief addressing of the environmental dimension of globalisation.

The Japanese comparative planetologist Takafumi Matsui gives an introduction to the human impact or "ecological foot-print" on the planet. He observes:

"One characteristic of our modern age is that human existence is visible from space. We can see this for ourselves from looking at satellite photographs of our planet: on the side of the earth that is lit by the sun, and thus in daylight, human existence cannot be clearly seen; however, on the part of the earth that is in darkness, there are seas of shining lights. We can see that humankind is one of the elements making up what is called the "earth system", and that we have created our own "human sphere" which impacts upon this system. So, in the context of the earth's history, I would say that our modern era is one in which a new human sphere has appeared, greatly changing the makeup of the earth system." (Matsui 2004).

Humankind and the environment inter-depend to an extent that their distinction often remains rather theoretical. Human beings are part of the environmental world. This is a relatively new concept in the history of moral-philosophy. In the western hemisphere, almost for the entire duration of intellectual history, the ethical discussion did not refer to any responsibility concerning the environment. Animals, as well as plants, obtained an indirect, instrumental value depending on their usefulness for humankind. Natural life, plants and animals were perceived as objects and their value was economically measured.

According to Kant, the human life is an end in itself; it is never a means to another purpose (slavery for example). Correspondingly, the moral commitment was circumscribed to family, friends and fellow citizens, which made up the moral community of humans. "National Socialism" (the Nazi-Regime), Stalinism and other totalitarian systems, unilateral hegemony (e.g.: Sparta, Theben, the Imperium Romanum), as well as the crusades and colonialism aimed (as other political or economic systems still aim) to justify and legitimise violence against others through moral devaluation in terms of discrimination. While the committers assure themselves of their own morality and civility, they accuse their enemies of being wild, barbarian, pagan and uncivilised, valueless victims, which must be "evangelised in their own interest" and "liberated from their own delinquency".

Increasingly, moral commitments were transferred to all human communities. Due to new debates about our responsibility to future generations, there is a moral commitment to care for the future, which would include ecological protection. Nevertheless, until recently, the ecosystem was excluded from our sphere of morality and responsibility. The ecosystem in all its diversity was – in human perceptions - not equipped with essential attributes, such as intelligence, morality, language, self-perception and conscience. In the seventies this perception was questioned. The Australian philosopher Peter Singer compared the women's movement with the liberation of animals, not in terms of the content of the discussions, but in terms of procedures. Women had reduced rights and their meaning was reduced to the service of men. This discriminating and unsustainable practice became increasingly unpopular due to educational activities and because of policy and media awareness. Singer's argumentation is that after - or rather parallel to - the gains in women's rights, the liberation of animals would be the next step in the moral sensitisation of humankind (Singer 1989). In 1972, Arne Naess invented the term "deep ecology" (cp. Naess 1989). Deep ecology is a

philosophy or "ecosophy" which shifts away from the anthropocentric bias of established environmental and green movements. This philosophy is marked by a new interpretation of "self" which deemphasises the rationalistic duality between the human organism, human socio-cultural organisations, such as communities, and their environment. Thus, "deep ecology" allows emphasis to be placed on the intrinsic value of other species, systems and processes in nature. According to "deep ecology", the concept of a morally relevant community is no longer limited to a community of living creatures that have moral consciences. It is rather a community of creatures to "whom" the moral human beings have a moral responsibility. Not only is the human being an end in itself, it is also a component within the network of living systems. In terms of the human cultural perception, the environment transformed from an object into a subject. Relevant connotations of the "subjectivated", or validated environment are the terms "bio-diversity" and the "eco-system". The motivation which produced this subjectivation was not altruistic. Humankind inter-depends with a viable bio-diverse environment. This fact is highlightened through issues concerning drinking water, alimentation, the Sahel zone, climate changes, poverty, medical potential of plants, etc.

2.4 "Global Village" and "One World": From Global Interdependences to Shared Challenges

Already a relatively short time after the appearance of the human species on, and spread over the earth, the flow of socio-cultural information (e.g. language, perceptions which define morality and meaning, traditions, as well as traditional rituals) took global dimensions. This results in an intensification of social and economic interdependences. Simultaneously, this approach of respective others causes tensions. Differences between socio-cultural identities and meanings become visible and cause feelings of ambiguity and incertitude. The amplification of socio-cultural diversity calls for the restoring of certitude. In such situations polarisations and discriminations gain influence because they facilitate the classification of the unknown other. This is a dilemma because interdependences require the validation of differences and the discovery of commonalities in order to promote effective mutual arrangements. Sovereign socio-cultural identities are required, able to comprehend and reduce factual polarisations of the social world and overcome realities of: rich or poor, north or south, national citizen or migrant, economic growth or environmental protection.

Simultaneously polarisations, such as "we –the others" and "winner – loser", may soon be put into new perspectives and slowly be dissolved. The reasons are not to be found in moral enlightenment or altruism, but rather in economic calculus.

Poverty is one example of factual global polarisation. The more people are affected by poverty and the more "wealth" is simultaneously accumulated by exclusive elites, the more these elites will be affected by rebound effects of said poverty. Hence, in a way, the dissolving of this difference may accelerate, the greater the differences are. The question of course is, how far humankind wants to continue like this before an emergence, or paradigm shift towards sustainability.

Interdependences between the economy, the social and the environment are strong. Poverty, for example, furthers climate change (i.e. because inadequately educated and poor people burn rainforest for agriculture). Climate change, in turn, has rebound-effects on the economy.

❖ <u>Example:</u>

Climate change will have a significant economic impact on the United States, according to a study published by researchers from the University of Maryland in 2007.
The report, The U.S. Economic Impacts of Climate Change and the Costs of Inaction, aggregates and analyses previous economic research in order to develop a better estimate of the costs of climate change.

Concerning, for example, the west coast of the US:
- "Water shortages will force farmers in the area to fallow their lands. The estimated annual loss to the agricultural sector around the Central Valley will be $278.5 to $829 million, depending on the dryness of year. The estimated economy-wide loss for the Central Valley region is expected to reach up to $6 billion during the driest years.
- Decreased supplies of water are expected to diminish the value of farmland by around 36%, translating into a loss of $1,700 per farm.
- The value of wine production in California is $3.2 billion, which may be compromised, as grape quality will likely diminish with higher temperatures.
- The decline in dairy cow productivity is correlated with higher temperatures, as well. An annual loss of $287-902 million is expected to this $4.1 billion industry in California."

Or the Southeast of the US:
- "In 2005, the nation was made painfully aware of the damages possible from extreme storm events when Hurricanes Katrina and Rita struck. A total of 90,000 square miles was declared a federal disaster area following Hurricane Katrina, covering four states and 23 coastal counties and parishes. Eighty percent of the City of New Orleans was flooded, and more than 1,700 lives were lost. More than 350,000 homes were destroyed and another 146,000 seriously damaged. A total of 850,791 housing units were damaged. At an estimated $100,000 repair cost per unit, the total cost to rebuild could exceed $85 billion. In addition to the urban infrastructure damaged by the storms, it was estimated that 2,100 oil platforms and over 15,000 miles of pipeline were damaged. Lost revenue due to the damages amounted to almost $11 billion — 153 million barrels of oil (of an annual total of 547 million) at approximately $70 per barrel at the time of the hurricanes. The questions of what to rebuild, when, and at what cost have spurred debates locally, regionally and nationally, and have stirred deep-seated environmental justice concerns."
(Center for Integrative Environmental Research 2007).

Globally one effect of environmental degradation will be environmental refugees. Their countries will destabilise politically and in high numbers these refugees can cause political instability in host countries. The current conservative turn (in 2010) in European political arenas and the populist discussion about migration, show that even small numbers of migrants can cause conflicts. The Care International report "In Search of Shelter - Mapping

the Effects of Climate Change on Human Migration and Displacement" estimates around 200 million environmental refugees by the year 2050 (Care International 2009).

Ghettos lacking hygiene and access to education are results of this kind of migration and are a breeding ground for malaria and HIV/Aids, which in turn have economic effects. In South Africa, companies are beginning to realise their own economic interests in Aids education, "simply" because of the high death rate of qualified employees. Businessmen, moreover, are becoming increasingly interested in state building and the stabilisation of one of the poorest countries in the world: Somalia. The Security Technology News reports:

> „No fewer than 53 ships and over 1800 sailors were captured last year, according to figures released by the International Chamber of Commerce International Maritime Bureau.
> This was 10 per cent more than the number in the previous year, making 2010 the worst year for piracy since records began in 1991.
> "These figures for the number of hostages and vessels taken are the highest we have ever seen," said Captain Pottengal Mukundan, director of the Bureau's Piracy Reporting Centre. "The continued increase in these numbers is alarming." (...) No fewer than 92 per cent of all pirate attacks in 2010 took place in Somalia." (Security Technology News 2011).

This has effects on employees, transportation costs, insurances, salaries, delivery periods, etc. Neo-liberal political structures and economic activities are often responsible for social, economic and environmental problems. Regardless of the causes for such problems, polarisations grow and require counter-strategies.

The following figure shows the ratio of rich and poor people in the world compared to the population by country.

❖ Example:

Global Wealth Polarisation Visualised by Cartograms

Figure 25: Human poverty 2002

Territory size shows the proportion of the world population living in poverty living there (calculated by multiplying population by one of two poverty indices).
Poverty is not just a financial state. Being poor affects life in many ways. The human poverty index uses indicators that capture non-financial elements of poverty, such as life

expectancy, adult literacy, water quality, and children that are underweight. The 30 territories of the Organisation for Economic Cooperation and Development use a different index which includes income and long-term unemployment; and not water quality or underweight children. This implies that the poor
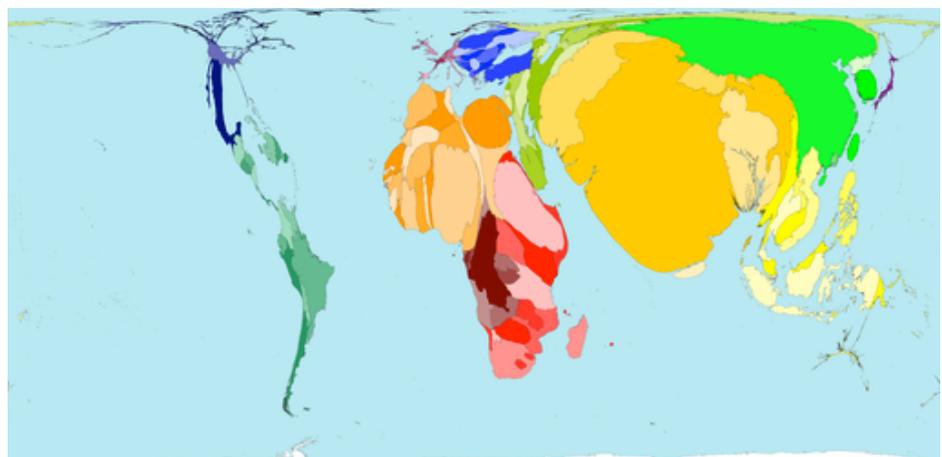
in richer territories are materially better off. The highest human poverty index scores are in Central Africa, the lowest are in Japan.

Figure 26: Total population 2002

The size of each territory shows the relative proportion of the world's population living there.
In Spring 2000 world population estimates reached 6 billion. The distribution of the earth's population is shown in this map.
India, China and Japan appear large on the map because they have large populations. Panama, Namibia and Guinea-Bissau have small populations so are barely visible on the map.
Population is very weakly related to land area. However, Sudan, which is geographically the largest country in Africa, has a smaller population than Nigeria, Egypt, Ethiopia, Democratic Republic of Congo, South Africa and Tanzania.
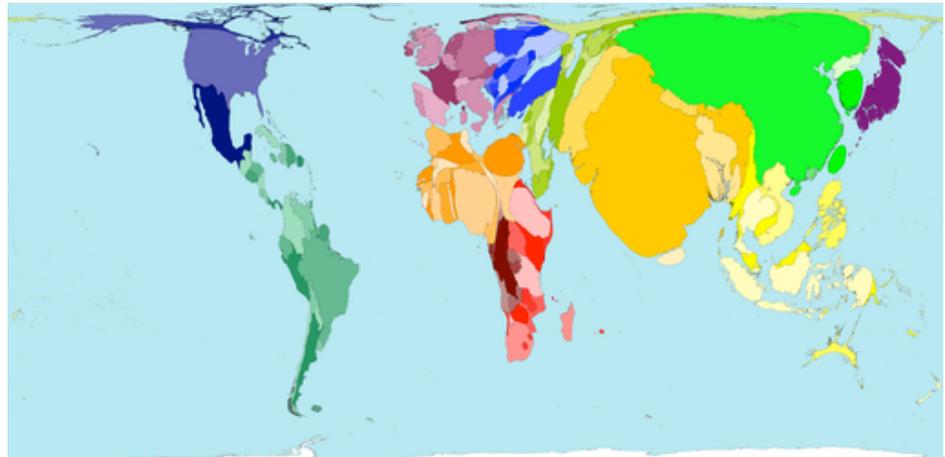
Source: www.worldmapper.org (2010/2002)

If the rich-poor polarisation continues to amplify, the effects on economic, environmental and social (i.e. state) structures will be even more stressed and may collapse: globally. Due to poverty and other threats the dignity of more and more people already collapses in billions of cases. Big parts of the world are already, and it seems they will be even more, seriously underdeveloped. Measured on this situation, human action is maladjusted to overcome social, economic and environmental problems; or, in other words, the world is unsustainable. Sustainable development does not claim to achieve "heaven on earth", it simply consists of processes of becoming more sustainable. This has to be processed in a concerted manner in order to ensure today's and tomorrow's generations a freedom of choice and dignity in life. Sustainable development, in this regard, is no "add on" to, or aspect of, human being and human development. Neither in education, nor in politics, science, media or the economy, can sustainable development or "culture" be reduced to a "component-role". Sustainable development has intrinsic and determining importance to all aspects of human being presence and human development. Sustainability moreover identifies all aspects of human being at presence and of human development in the positive sense (identifying sustainability) or in the negative sense (identifying un-sustainability). Globalisation encompasses a globalisation of chances, risks and threats. This interconnects unites all socio-cultural protagonists – and moves sustainability in the centre of the world society and human

development. Therefore, sustainability is the interface and connecting "essence" of socio-cultural meanings, identities and competitively cooperating socio-cultural protagonists. Successful mimetic interchange and arrangement between different socio-cultural protagonists evokes the creation of capacious, cohesive, possibly poietic and heterogenic network. This network is sustainable to the degree as it is capable to cohere heterogeneous participations; that means to afford heterogeneity without homogenising them. In this sense sustainability is synonymous with human "culturality".

❖ Example*:*

The fact of global interconnectedness can be seen clearly in the current financial crisis. The banks and finance system are globally interconnected in such a powerful way that they can disrupt companies, people, and states in a significant way. This is due to political under-regulation. The framework has been missing that would allow for a redefining of "the market", and make it work for social (and environmental) requirements. Companies, consequently, used this situation for individual profits and the overall system collapsed. Common paradigms, such as "my company – the competitor", "cooperation – competition" are not sustainable. Competition and cooperation, and a framework to ensure fair play are needed. Everything else is reminiscent of a football game without a referee and without a level playing field. The state, and international state organisations now attempt regulation through rules, political control, laws and more transparency.

Globalisation leads to an interconnected and therefore interdependent world. To explain it with the criteria of a SWOT analyses: strengths, weaknesses, opportunities and threats are maybe not equally, but commonly shared by all people.

SWOT stands for: strengths, weaknesses, opportunities and threats.

❖ Example*:*

Strengths and weaknesses define internal attributes of an organisation, such as a company, state, or society.
- Examples of internal strengths of humankind are: vital economic system, comprehensive scientific knowledge.
- Examples of internal weaknesses are: inequality within the economic system, insufficient ability to use scientific knowledge to meet sustainable development requirements.

Opportunities and threats define attributes which exist externally from the organisation and which can, but must not be caused by that respective organisation.
- Examples of external opportunities for humankind are: great biodiversity potential to secure nutrition and other basic life conditions, vast renewable energy resources.
- Examples of external threats to humankind are: climate change and an inappropriate focus on oil-based and atomic energy production; destructive effects on the ecosystem with unpredictable rebound-effects on human well-being.

Socio-cultural patterns, competencies and rituals of communication and collaboration are required to overcome or even prevent challenges, to develop strengths and opportunities and to reduce weaknesses and risks as much as possible. Many differences derive from globalisation and they contrast intensively. Examples for such differences can be found between rich and poor, north and south, we and the others, national citizens and migrants, economy and ecology. Paradoxically, the more, these differences contrast, the less they

differ and the more they uncover actual interdependences. That means the more for example poverty increases the more it affects rich countries.

- ❖ Example*:*

If someone pollutes the environment and someone else protects it, still both will be effected by the pollution. "A chain is only as strong as its weakest link", therefore the two alternatives to global interdependence are win-win or lose-lose. Win–lose as well as lose-win turn into lose-lose, because the differences between self and other are replaced by interdependences.

What may sound like a paradox is in fact a simple, rational consequence, which a German country proverb captures strikingly:

"If the neighbour is distressed, the mice come in your own cellar." (German: „Wenn es dem Nachbarn schlecht geht, kommen die Mäuse in den eigenen Keller.") That means, if in winter for example, when the neighbours food (e.g. potatoes) decreses, which is stored in his cellar, the mise, which live from this food will move over to one's own cellar. This increases the mise in the own cellar and threats the own food security, even though oneself had enough to come over the winter. The proverb shows how interdependences exist which must not necessarily be visible at first sight.

Gustav Heinemann, President of Germany from 1969 – 1974 and supporter of Willy Brandt's new East Policy, expressed it with the words:

> "If today someone looks out only for himself, ignoring the future of the other, he gambles away his own future." (in: Nuscheler 1996: 41).

Jaques Delors stated:

> "The world is our village: if one house catches fire, the roofs over all our heads are immediately at risk. If any one of us tries to start rebuilding, his efforts will be purely symbolic. Solidarity has to be the order of the day: each of us must bear his own share of the general responsibility." - (from a speech made at the UN Conference on Environment and Development, Rio de Janeiro, Brazil, June 1992. In: Cuéllar 1998).

Radermacher writes:

> „Through processes of globalisation today, the north interferes massively in the living situations of people all over the globe; regionally as well as locally, as well as in families. Often that leads to effects of debasement and [socio-] cultural violation. As the principle of 'communicating tubes' shows, this process does not function like a one-way-street.
> Absolutely inevitable are backlashes that emerge from poverty in many places on the earth, affecting the rich countries, on regional and local levels. (…) for this reason the problems which we induced ourselves return to us after some time.", (Radermacher 2002: 189).

There is a gap in living conditions between, for example, the north and south hemisphere. Nuscheler expands on this perspective. He calls attention to an alternative approach to socio-structural conflicts and distributive justice caused by globalisation. As addition to the north-south problematic he points to another frontier between urban and rural areas:

There are various patterns of political and economic hegemony. They prevent equality, democracy and the unfolding of cultural diversity. However, the increasing interdependence of all socio-cultural protagonists – individuals, societies and humankind as such – incites a new pattern of "rational solidarity". It is the rationality of solidarity that makes it different from altruism. Negatively depicted, this solidarity results from and leads to interdependence. From this perspective, the respective solidarity is less rooted in an ethical, or moral decision, but it is rather a practical constraint.

Positively depicted, "rational solidarity" results from and leads to mutual empowerment and the synergetic arrangement of people. This would be a good basis for the unfolding of the creative and self-regulative potential inherent in cultural diversity.

The more current tensions, differences and polarisations intensify, the more they inter-affect and inter-depend, and the quicker people (will) re-find themselves sharing a situation on increasingly equal terms.

Globalisation began with the early spread of humankind over the earth. Driven by the human "cultural potential" (cp. chapter I) through the presence of human existence all over the planet and the need to communicate in order to self-regulate, communication took global dimension. The human revolutionary impact on life on earth evoked not only the successful settlement of mankind on earth, it also caused increasingly complex challenges, global issues. Thus, the adequate development of the human species as cohesive and reactive if not proactive In-group became humankind's global, overall challenge.

In other words, this challenge can be described as the community development of the whole of humankind. The man-made globalisation of communication turned out to be global "communitication". The task is to conduct this "communitication" in sustainable terms, so that strengths and opportunities prevail over weaknesses and threats (cp. SWOT analysis, above).

Humankind must mobilise its potential to join in the autopoietic self-reliance of the living systems on earth. This addresses the sustainable interweaving of humankind and the environment. In this context, globalisation is a catalyst; it has the potential to promote such development but it can also work against it.

The new dimension of development is global; moreover, it is increasingly complex and dynamic (rapidly changing and fluctual). Apel refers to this new dimension when he writes:

proves that *in the modern time all human individuals, nations and [socio-] cultures* – whether they recognise it or not – *are for the first time situated in one boat.*" (Apel 1999: 49).

Laszlo states:

„Society grows out of traditional limits and towards international and intercultural dimensions. A more complex society with more people who consume more basic materials, does not only connect more people but also increases their interdependences. As collaborative trade develops, more social interaction emerges. The result is an extensive exchange between the different folks and [socio-]cultures." (Laszlo 2003: 40).

And Albrow states that,

"'Globalisation' causes all those processes by which the peoples of the world are incorporated into a single world society". (Albrow 1990).

Such a world society is not necessarily the same thing as a homogenised society. This world society is socio-culturally highly diverse. Globalisation provokes the appearance of a new In-group; the entire, morally acting, formally organised, cultural species of humankind. The self-perception of humankind has expanded. This new perception recognises humankind as a network which inter-relates all humans (internal integration/organisation) and that arranges humankind with the environment (external integrity/organisation). Moreover, it includes next generations and their freedom of choice. According to sustainability principles, freedom of choice shall not be eliminated or reduced by the present elites, or respectively by the parents of the following generation(s). New discussions and eventually conflicts must address the interests of all societies, not only individual groups, such as the economic elite. Nevertheless, according to the value of diversity, sustainability shall not be a unifying ideology, which dissolves differences, but a uniting ethics.

It unites a diversity of socio-cultures and interests and provides means of cooperation and collaboration, democratic rights, possibilities and duties. The value of diversity is dual. First, diversity ensures dignity because it highlights the opportunity for the socio-cultural unfolding of individuals or groups. Second, sustainability must be developed by and re-rooted to diverse local societies and their people. Sustainable diversity does not connote the equalisation of power for all socio-cultural protagonists. It rather provides (for example, ethical) frameworks to prevent the abuse of power and promote competitive cooperation.

For example, so called "elites", whether individual people, states, or organisations, have more power than other protagonists of public life. Sustainable diversity means that "elites" must work on sustainability and help to prepare a breeding ground for sustainable development, for example through financing adequate education, or setting up economic systems based on environmental and social values. But "elites" can not achieve sustainability without the socio-culturally diverse civil society. They must not be defined as "elites", because they are more powerful than others, but because they represent a great number of others and they represent what these others believe to be sustainable; this is how elites should gain power. Democratically elected politicians could play this role in many socio-

cultural settings, but also religious leaders, authors, movie-makers and other artists, or eco-socially responsible entrepreneurs are examples.

In a simplified manner, the following figure 27 illustrates a conventional hierarchical system (A), a hierarchical sustainable diversity system (B1), a basic sustainable diversity system (B2) and an absolute diversity system (C).

(A) is not intrinsically sustainable because it polarises society into independent decision makers ("elite"), and civil society. Elites gain their status at the expense of civil society, rather than through civil society. C is also not sustainable because the absolute and egalitarian system requires independence and slows down decision making processes through absolute participation. Controversies and frictions within this system would have to be eliminated in order to maintain equal power. History has shown that as long as there are different socio-cultural meanings and patterns, the respective protagonists will try to make sure that the influence and the impact of their own socio-cultural meanings and patterns prevail. To a certain extent, he different protagonists naturally compete with other actors. A certain kind of competition, namely competitive cooperation (cp. chapter 1.8.7) is even productive because it leads to friction, which can power continuous, creative development and prevent the kind of blindness that can develop from routine (cp. chapter 1.6 and 1.6.6 for "multi-perspectivity").

Sustainable diversity systems (B1 and B2), in turn, are sustainable because they incite inter-dependences and promote competitive cooperation between societal protagonists with more or less, but never absolute power. "Elites" gain their power through representative functions, maintaining the diversity of socio-cultural patterns and the relative freedom of other protagonists. Power in these systems is circular or fluctuating because the "elites" are not independent from civil society as they represent civil society and answer to it. B1 and B2 are typical democratic systems. But "elites" can also be different individual or collective protagonists, for example, companies, which produce products with a certain quality and engage in production practices that meet the (environmental and social) expectations of civil society.

Figure 27: Diversity, Power and Participation

A   B1   B2   C
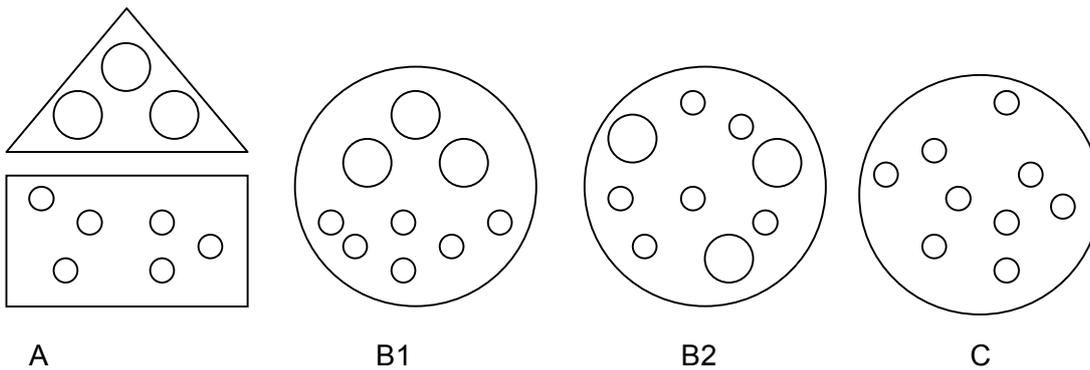
Frame
Triangle   = hierarchic organisation
Circle/block = civil society framework

Frame content:
big circle   = influential, powerful protagonist
small circle = average citizen

Explanation
A   - Conventional hierarchy system:
Elite (triangle), detached from civil society (block). Decides upon (sustainable) development strategies that are exclusive and top down. This system is autocratic.

B1   - Hierarchical sustainable diversity system:
Differences in power exist, a certain amount of hierarchy exists as well, and competitive cooperation is promoted throughout society. The elite is representative and therefore attached to – and defined by – civil society. The overall system decides upon (sustainable) development strategies.

B2   - Basic sustainable diversity system:
Differences in power exist, hierarchy is flat, and competitive cooperation is promoted throughout society. The elite is representative and occasional, or temporary. It is therefore attached to – and defined by – civil society. The overall system decides upon (sustainable) development strategies.

C   - Absolute diversity system:
Power is equalised or homogenous. Different protagonists have different socio-cultural patterns, e.g. different languages, rituals, values, perceptions and meanings. Despite these differences they have equal opportunities to participate in societal decision making and

human development. Decisions are difficult or slow to be made and carried out because there are no representatives, so that all protagonists participate in all decision-making. This absolute basic democratic system is utopian. The different protagonists mutually annihilate one another.

Figure 28 refers to figure 27 and visualises how power is distributed between the different protagonists who participate in decision-making processes.

Figure 28: Distribution of power in decision-making processes
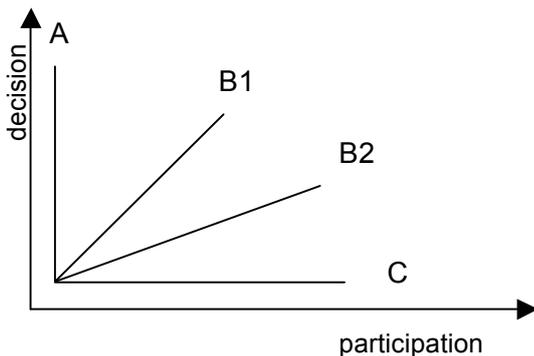
Global interdependence increases proportionally to the complexity of the global issue. For politics and economy this also means that neither individual self-reliance (the autonomous and independent existence of a state or of a company) nor collective self-reliance (i.e. political regionalism or economic clustering into protected, isolated, autonomous systems/monopoles) continue to be possible. Self-reliant systems are built and sustained from their own resources, independent from others. Globalisation inter-relates all systems, so that a successful system is one that is "connective", arranging with other systems. Alliances and confederacies become existentially important for organisations. States, civil society movements, religions, scientific disciplines or institutions, media organisations and companies must not only compete with others, but should also cooperate with and connect to others, so that they can mutually expand their outreach to others and increase the information input which others contribute to the respective network.

  ❖ Example:

Regionalism is an example of arranged local political areas, or countries. Existing integration projects, such as the European Union, were developed and geographically expanded, other projects were newly founded. Meanwhile exists at least one regional organisation on each continent: besides the EU, prominent examples are the North American Free Trade Agreement (NAFTA), the Mercado Común del Sur (Mercosur), the Association of South East Asian Nations (ASEAN) and the Asian Pacific Economic Cooperation (APEC). These organisations are very different in terms of institutionalisation and the diversity of policy fields, which lead to collaboration. The NAFTA, for example, is almost exclusively based on a free trade treaty, while the integration of the EU is so developed that it can be perceived as domestic marked. This makes it difficult to compare the different regional organisations with another and to generally characterise their relations to global organisations.

Another example of the (although successive) reactions on globalisation is the transformation of the G8 into the G20. The G77, founded in 1964, represents the interests of developing, or underdeveloped countries within the United Nations Organisation and has expanded to 130 member states. Further examples of regionalism as a strategy for overcoming local confinements in the age of globalisation are the Organisation for Economic Co-operation and Development (OECD), the Organisation of African Unity (OAU), and the Organisation of the Petroleum Exporting Countries. To a certain degree, these organisations aspire the creation of domestic markets and monopolies, but it is already interesting to see that these associations establish more and more international profiles. NGO's also network increasingly with other NGO's and especially international NGO's can become global players, such as Transparency International, Doctors/Reporters without Borders, Amnesty International, Greenpeace, Oxfam, or the Red Cross, etc.
Summarising, central for the founding of most inter-state, regional organisations were questions of trade policy and free trade agreements.

Nowadays, new requirements and desires emerge. The financial crisis of 2008 and the following years, for example, also lead civil society to become sceptic, concerning an "economical" society. Such society is the home of Homo oeconomicus rather than the complete man, the Homo sapiens, who strives for a society in which economic values harmonise with social and environmental values. For many people, the current economic system no longer seems sufficient in a world with social and environmental issues, such as population growth or climate change. Desires increase for more socio-cultural exchange and sustainable development; a development that is supported by economic activities and not dominated by these. Touraine writes:

> „Gradually a theory emerges of a new system of acts; in other words, a theory of [socio-] cultural projects of social actors, of conflict arenas, of negotiation mechanisms, of political conducting and new [socio-] cultural patterns of organisation, which characterise post-industrial society." (Tourraine 1986: 35).

The strength of the above-mentioned organisations of post-industrial society lies in the synergetic integration of different actors with the same interests: unity in diversity. Through this union they can adjust their internal organisation patterns as well as communicate and realise their interests in the inter-play with external organisations. Self-reliance, in contrast, applies only to the internal regulation of a community rejecting external arrangement. Self-reliant organisations often do not foster arrangements with, but rather differences to, other actors. They apply "unity in diversity" only "half-way", because they promote polarisation which divides actors into categories such as "us –the others" (cp. chapter 3.1.3). For these self-reliant organisations (e.g. monopolies, or dictatorships) the polarisation reduces the perceived diversity radically and circumvents unity (arrangement) with others. These others are perceived as competitors, rather than partners. The result is that they do not integrate in their environment, which in moments of globalised interdependences leads to rebound-effects on their internal stability.

❖ Example:

The more North Korea isolates itself, the more it tends to collapse and the more it depends on external aid, for example, when it tries to fight hunger. The state and its political elite can exist, but possibly not

in the long term. North Korea's people already suffer and live neither long nor good lives. The value of dignity in this country appears to be replaced by survival, at least for many poor people.

Nuscheler states:

> "Globalism and regionalism do not contradict, but rather complement one another. Regional organisations form something like federal building blocks of a world-order. This emphasises not only the principle of subsidiarity, but also connotes a growing rational, common-sense stance to deciding as much as possible on decentralised levels." (Nuscheler 1996: 482). (cp. chapter 2.2 for "particularisation").

Diversification is a response to globalisation. Nevertheless, an efficient diversification must, in turn, be accomplished, potentiated and enriched by Global Governance. Diversification and globalisation go together; they regulate one another. The United Nations Organisation plays an important role in the moderation and coordination of political decisions. It functions as a medium and catalyst to global cohesion and is supposed to regulate the interplay of global, regional and local actors. In order to promote diversity through global democracy it would be beneficial for the United Nations to organise democratically and act as a democratic (and thereby inclusive and participative) world parliament. This concept is the foundation of an emerging UN reform to be implemented.

After the Cold War, the UN was facing a new context and a new task. Part of this new context was the era of globalisation. Regional and global alliances do not dissolve the role of national states. Regional and supranational organisations, such as the UN or the EU, rather empower national states to communicate trans-nationally and contribute to their integration in globally inter-connected realities. Nevertheless, the general political problem-solving capacity of the "global village" has priority over the destiny of the national state. Politics are supposed to direct sustainable human development, to safeguard and develop standards of social life (welfare) and economic activities (business). Globally this still doesn't happen. Without the mandate of the United Nations, the US was able to go to war with Iraq, and the UN security-council, with only five permanent members, represents the interests of the military and economic elite rather than the "united nations" as such. Also, the mentioned financial crisis has shown massive political failure and incapacity.

The mentioned global interdependence signifies the approximation of time and space; a "shrinking space" (Liebau/Miller-Kipp/Wulf 1999, cp. chapter 2.1): Thirty years ago the sociologists Daniel Bell and Alain Touraine coined the term, the "Global Village", which made it possible to comprehend the to scale down the world to a village community with different interconnected households. Every human being appears to be affected by global processes and becomes – in addition to his/her local citizenship – citizen of a "One-World" society.

In this context it appears essential to re-emphasise the heterogeneity of such a society. The "One World" society, or simply "world-society" does not describe a system of globally uniform socio-cultural patterns. And it does not connote the homogenisation of differences; it rather means that there is a liaison, a relation between different socio-cultural actors.

Socio-cultural diversity connotes a human multi-perspective on complex issues, empowering socio-cultural protagonists on all identity levels, to overcome endangering challenges and establishing stability and sustainability. (See also chapter 1.6 Picasso's simultaneous-perspective, figure 8 and chapter 1.6/ 1.6.6 for "multi-perspectivity"). A reduced socio-cultural diversity would reduce necessary inter-stimulating perspectives. This, in turn, would reduce the access to development alternatives to a potentially dangerous extent. This would be comparable to a socio-cultural impotence, a stagnation of development, or an "end of culture and history". As cultural diversity signifies viability and life, it is an end in itself. This means that the role of every socio-cultural identity is to become a citizen, member, representative, performer, applicant of and contributor to socio-cultural diversity. Sharing power in a world society means ensuring a fruitful and multidimensional co-evolution by democratic means. That precludes the assimilation or reduction of diversity in order to form a stronger unity. The mentioned unity is strong only through its diverse, heterogenic composition.

❖ Example:

The problem of climate change does not yet have many direct and tangible effects on the lives of German citizens. However, climate change does affect other people, particularly in poor countries, such as Tuvalu since the rising sea-level may flood the island state. Climate change's effects are also seen in China where already 1/4 of the land area has turned into desert. When people from Tuvalu and China, together with many others, begin to communicate their real life problems, it can raise awareness in the minds of German citizens who may begin to research and understand the impact of industrialisation on the environment. German citizens may begin to anticipate how they will be affected through sour rain and environmental refugees. For ethical and economic reasons they may adopt their own production and consumption patterns. Many people in Germany are aware of climate change and it is not so crucial what climate they experience subjectively when they step out of their house door, they rather focus on global climate change effects.
There are three different mentioned effects of climate change: the rising of the sea level, desertification, and sour rain. There are also other issues connected to the problem, such as the tragedy of environmental refugees, who move from one country to another.
People in Tuvalu and China, as well as in Germany, are beginning to communicate their observations through the media, their travels, and conferences and they create new perceptions of the environment. Moreover they create new self-other perceptions. This is a basis for collaborative work on ecological gap analysis, environmental strategies, the revision of environmental aspects of socio-economic meanings and organisation patterns. The UNO as supranational institution, along with regional and national organisations and states, can work on policy- making and capacity building. However, the policies will be regionally and locally different. Environmental education in Tuvalu may focus less on industrial aspects and more on sensitive cultural practices and eco-tourism. China may begin to teach about the importance of sustainable water-management. Some schools in Germany may decide to focus on intercultural education and migration issues. All of them share one problem but each of them may specialise in chosen aspects of strategic planning. They specialise themselves and thereby accomplish another. The result is a diversity of (for example) educational approaches, which compete and stimulate each other mutually and develop over the years. This will result in a diversity of perspectives on global warming and environmental degradation. Diversity leads to more diversity. Diversity provokes communication and communication prevents diffusion and ensures a common focus. This is how an environmental movement can develop that is able to compete with ecologically detached policies and economy.

Such processes, whether driven by environmental, economic, political, religious, or social concerns are mainly communication and community-building processes, and therefore

"communiticative". They lead to new perceptions of the other, which in turn lead to new perceptions of the self.

❖ Example 1:

China was not often mentioned in the German media until 1989, but then economic, environmental, political and rights issues began to enter into the daily news reports. The image of China was modified on a daily basis. Documentaries (literature, video) were produced, and tourism increased over the next 15 years. China was and still is accused of polluting the world, but in turn, western countries had to admit their own liability. A discussion about environmental protection versus economic development has begun and may influence the integration of other upcoming countries into more or less sustainable development. Hence, diversity inspires and leads to communication, which in turn influences the perception of the respective other.

❖ Example 2:

Discussing strategies for responding to global issues, both, developed and developing countries have to work together and both can accomplish common goals through communication and the consequent implementation of agreed upon strategies. The complexisation of global developments and the increasing dynamics of change foreclose the undermining of and competition with the other. Instead, they require competitive cooperation, mimetic arrangements and adequate discourses between socio-cultural protagonists to maintain dignified human existence and development. Radical differences in power, for example, between developed and developing countries are inappropriate. Both live in one world and both are equally responsible for it.

Agents of such communication provoke, agree, bargain, argue, and struggle, mutually developing each other. Through the development and adjustment of self-perceptions and perceptions of the other, they innovate through their own identity-transformations the (perceptions of) world. Their changed perception of the world changes the world.

Unity is a theoretical, ethical and imaginative dimension. Its actual application is heterogeneous, so that the alleged "unity" of different protagonists rather denotes their connectedness. In this regard, unity is the imagination of a common plot, which connotes the culture-inherent aim to arrange, network and forge partnerships.

The idea of a new unity in diversity in terms of a global In-group, the "one world" theory, and the idea "that for the first time in history, humankind shares one boat" (see above, cp. Apel 1999: 49) are concepts that anticipate a new, consequent dimension of globalisation. The next chapter concentrates on that aspect. Apel calls it a "globalisation of the second order". He explains:

> „The characterised process of [primarily economic, random] globalisation is irreversible, as I'd like to accentuate. It is a typical historic process, which preceded our reflection and moral control. Admittedly this implies that the former globalisation process was qualified as a process of the first order. This process of the first order incites philosophical reflection. That reflection connotes the challenge of mobilising the moral responsibility needed to establish a new order of human interaction [or respectively of mimetic arrangement], which can be denoted as globalisation of the second order. Only such effort will be an adequate answer to the problematic aspects of the globalisation of the first order." (Apel 1999: 48,49).

Globalisation is a process of social transformation, inciting new orders of social relations and organisation. Sergio Paulo Rouanet highlights this aspect of globalisation when he points to the role of culture in the regulation of such social transformation. He states:

> "With the apparition of modernity, which consecrates the hegemony of the bourgeoisie and puts it into circulation, mercantile values linked to profit and utilitarianism, the phantasm of the end of culture defines itself in a new way: that of the opposition between [socio-] culture and civilisation. Whereas [socio-] culture defined the symbolic sphere- religion, art, literature – civilisation referred to the material world – that of the economy and procedure. (…)
> In the German Romantic tradition, from Herder to Schiller and Hegel, civilisation expressed the fragmented condition of modern man who, enslaved by the machine and commercial values, had lost the vision of the whole, the original unity with nature. Culture – high culture, classical culture – was a means of correcting the ills of civilisation and winning back the lost whole." (Rouanet 2001: 44).

Saying that we live in "one world" means that we make up an interdependent and inter-connected or rather cross-connected global network, which can be an opportunity. It is for example an opportunity when it comes to the combining of forces to overcome shared problems. The challenge lies in the issue of the mutual overcoming of problems. Therefore the challenge of globalisation is what Apel called the "globalisation of the second order". First there was globalisation, but no order, no regulation. The economy developed randomly and was detached from social and environmental requirements. Social globalisation was under-regulated and the environment was disregarded but heavily affected. A globalisation of the second order, of a sustainable order, must be achieved. This would mean the restoration of a morally legitimated civilisation, maintaining integral socio-cultural diversity and dignified living for current and future generations. Such cultivated, or culturalised and culturalising (actively cultural modes of self-other-arranging) civilisation maintains and develops itself mimetically. It connotes the arrangement of socio-cultural protagonists, fostering socio-culturally determined, autopoietic multi-perspectivity. Such society promotes competitive cooperation and forecloses a "civilisation" in which the stronger competitor dominates the weaker. That is a society, which is ruled by the competitive "survival of the strongest" by means of a "nature - red in tooth and claw" (Tennyson: cp. Capra 1996: 232, see chapter 1.8). A society which unfolds the mimetic potential of cultural arrangement is not immune against power, but it circulates power and regulates it through co-operational frameworks, such as the golden rule. It does not aim for negating power imbalances, the related frictions and conflicts as this would probably be utopic and hostile for diversity. A cultivated society rather uses these effects proactively to uncover gaps of organisation and stimulate socio-cultural innovation.

CHAPTER III   GLOBAL ETHICS AND SUSTAINABLE DEVELOPMENT

3.1 The "Contingency Problem" - Assessing the Necessity for a Global Ethics

Globalisation is not a destiny, caused and conducted by a higher power (for example an act of God), but man-made. Although it is irreversible, it appears to be modifiable. There is sense in globalisation; it holds potential for human evolution.

Globalisation is driven by men and emblem of men's power and influence. Moreover, it constitutes the human challenge to increase this power in order to overcome globalisation's dangerous effects, which arise from men's powerful and impact on (and trembling of) environment, society and economy. At its root the phenomenon "globalisation" has a great potential for humane and sustainable development. However, it also puts pressure on humankind, the inventor of globalisation: they must mobilise all their autopoietic capacities, their "treasure within" (Delors 1998) in order to act and react wisely. But what does that mean? This chapter focuses on sustainable development and thereby prepares readers for chapter IV, which examines how (and which) education leads to sustainable development.

This chapter mainly examines the current mode of globalisation as a crisis of human organisation and management. It discusses the current state of economic, environmental and social disintegration on the one hand and the human potential for sustainable integrity on the other.

Regarding globalisation Richard Rorty speaks of a contingency problem (Rorty 1989), which humankind faces in the current period of modernity. Contingency denotes a great freedom of choice, which implies the responsibility to make deliberated, appropriate choices.

Sustainable development requires choices, because they represent alternatives, for example, of development models and socio-cultural meanings. But the difficulty is for socio-cultural protagonists to make the right, hence meaningful choices. In this regard, sustainability requires socio-cultural diversity because it represents a pool of development alternatives and it requires socio-cultural protagonists, able to assess and deal with these alternatives. The following figure illustrates attributes of contingency, continuity and sustainability.

Figure 29: Attributes of Contingency, Continuity and Sustainability

Contingency	Continuity	Sustainability

Legend:
= meaningful choice   ○ = protagonist

Contingency:
Different possibilities to choose from, poly-causality, requires measures for choosing and competency to deal with difference and ambiguity. Involves risks. Provides development alternatives.

Continuity:
No choice necessary. Reduced opportunities, but mono-causal, risk-free. Provides no development alternatives.

Sustainability:
Combines the provision of "contingent" development alternatives (poly-causality and diversity of choices) with the competency of socio-cultural protagonists to maintain and re-create certain continuity. Involves reduced risks, expands the "horizon of possibilities" (Iser 1978; cp. figure 38, chapter 3.2.4; chapter 3.2.5 for "integrative sustainability as convergence system"; and figure 27 "diversity, power and participation" chapter 2.4).

The contingency problem generally depicts the tension between the opportunity of choice and the responsibility to development sustainably. This means that socio-cultural protagonists on all identity-levels can choose between many, overwhelming possibilities. There is, for example, the choice between neo-liberal, socialist, capitalist, democratic, authoritarian, and many other forms of societal organisation. There are manifold opportunities for overcoming global issues, such as poverty, or climate change. There are many questions and even more answers, so that every theory seems to be eligible. But how to deal with this diversity of choices (answers)? Which are sustainable choices? The omnipresence of the other (e.g. the other opportunity, truth, meaning, sustainability, etc.) makes it difficult to proceed with meaning-making. Moreover meanings, once they seem established, have a short actuality; they fluctuate and must continuously be innovated.

In simple terms, the variety of choice represents manifold development alternatives. Urged to develop sustainably, not every opportunity seems right, so what is sustainable development? And who decides upon it? A situation in which one has many choices, but is not sure which is best, can cause confusion, identity-diffusion and parallelisation of socio-cultural protagonists. This can become a hazard to the integrity and sovereignty of the respective protagonist. If globalisation confuses mankind it can become a hazard to human development. This situation is denoted as the "contingency crisis".

An individual, for example, has manifold opportunities when it comes to shaping their own life: privately, professionally, religiously, politically, concerning health, joy, forms of partnership, fashion, home country/home countries, etc. There are many, sometimes controversial, models. However, the individual may not know which choice would be the most wise, promising and meaningful. This tension causes confusion and disruption as these choice-alternatives arise from and through modernity. The term "contingency" sheds light on a crisis that disarranges and revokes social, environmental, political and economic coherence. Since culture is the overall concept that regulates all aspects of human existence and development, this is a socio-cultural crisis. The crisis connotes a moment of human history when the intrinsic canon of socio-cultural values, sense and meanings is confounded and when socio-cultural self-perceptions do not match with requirements for solving socio-cultural challenges, such as global issues.

There are different - naturally overlapping - causes for this crisis:

1. Due to the scientific revolution and the immense accumulation of knowledge, almost everything is possible for humankind. This mightiness led Nietzsche to suppose that "God is dead". Picht states:

   "Today humankind possesses a nearly absolute power to control their future history." (Picht 1969: 15).

   The responsibility is significant, because the high level of activity (agility) in terms of social, economic and environmental impacting of humankind could also lead to the collapse of human evolution. Edgar Faure who was the principle prosecutor in the Nürnberger Processes (1945-1949) of war criminals of the Third Reich stated:

   "The man now emerging is one whose knowledge and means of action have grown to such an extent that the frontiers of what he thinks is possible are infinite. And it is a fact that man today is beginning to be able to control the processes of nature and take responsibility for them, thanks to his knowledge and mastery of scientific laws: 'His (i.e. man's) role, whether he wants it or not is to be the leader of the evolutionary process on Earth, and his job is to guide and direct it in the general direction of improvement' (Sir Julian Huxley). (…) man is the potential master of his fate. But only potentially because, for this to become reality, the conditions which make men the victims of violence and tyranny must be eliminated." (Faure 1972: 153-154).

The mastery of one's own evolution (global and collective self-regulation) is not just an opportunity; currently it is a pressing and confusing challenge to handle it adequately. But, from a scientific point of view, there is no higher instance to provide humankind with guidelines, meaning and sense to tell us what "adequacy" actually means. It is our own task and responsibility to determine and generate meaningful existence and development. The above mentioned high level of human activity (connoting the subversive, agile human being) can be an opportunity for development or turn into a threat. This existential pressure nourishes the crisis of contingency – a moment of social, environmental and economic necessities, but lacking answers and orientation.

2. The growing consciousness about globalisation as the intensification of a complexisation, dynamising and indeed revolutionary process, nourishes the "contingency problem". *We know* that the human subversion and agility that caused complex and dynamic global challenges can fall back on its creators, if it is not channelled appropriately. Francis Fukuyama's book "The End of History", (1992) highlights this aspect. It describes the self-*envelopment* of human ability and the possible end of self-*development*. There are plenty examples, from atomic energy, to genetic modification, AIDS, poverty, problems of desertification, water-supply and the climate change, etc., which approach dramatically the limits of the "web of life" and threaten to overreach the capacity of planet earth and the global village. There is growing awareness that global challenges lack globally organised responsiveness. Unsustainability is recognised and critisised, but it is difficult to develop and implement concerted strategies. To meet sustainability requirements, the UNO interventions are insufficient, national states fail as well (cp. chapter 2.1.4 for "dilemma of the national state"), and NGOs cannot close that organisational gap. Human's capacity to imagine and anticipate dangers is helpful, but in case that human beings have difficulties to deal with incertitude and difference, this puts additional pressure on this human crisis.

3. The process of Globalisation is irreversible. There is no escape, no way back. New problems and new capabilities, such as accumulated knowledge and acceleration of change make up new challenges and demand for a new, yet unknown positioning which furthermore is difficult to conduct. Who are the actors capable of inaugurating (measures, strategies and implementations for) sustainable human development? Indeed, it is a typical human strength, and characteristic of intelligence to be able to consider and anticipate such challenges at quite an early stage. With the consideration and anticipation of challenges, a general, basic potential to overcome the challenges is accessed, yet, the problem remains.

4. The abstract global revolution of the tangible local context leads to the disruption of socio-cultural meanings, which "frame" human lives and biographies. From the perspective of an individual this can mean:

❖ Example:

> Due to the dilemma of the national state and the global merging of socio-cultures questions of social affiliation arise. People ask themselves "Where do I belong?". A German may not know if she should feel like a German, a European or as a world citizen. She may travel often to different countries for her profession, live in Geneva, be married to a Muslim French man, herself a Christian, favouring the Buddhist lifestyle; she may be bilingual and have family-roots in Poland and like Yoga.

Socio-cultural meaning is essential because any socio-cultural identity can persist only within a frame of meaning, orientation and sense. The disruption of such a frame leads to the questioning of the role of the self: "Who are we, where do we want to go, how do we achieve this goal? What is my role, my responsibility, duty and possibility in the context of this new and overwhelming globalisation? How can we live meaningful lives privately and professionally?" These are some of the pressing questions. There are many possible answers to these questions, but the difficulty of finding the right answers makes up the crisis of this era. Wherever the self is incapable of questioning itself, it questions the (role of the) other. For a nation, for example, their neighbour is not only the bordering state. Rather, the whole world becomes our immediate neighbour. Self and other approach to each other. The tempo-spatial continuum transforms (cp. chapter 2.1). The respective self, positioned within the tempo-spatial system becomes unknown, it becomes the other. This self-estrangement may end in a virtual "de-positioning", a suspension of the self. Simultaneously problems are increasingly commonly (globally) generated and need to be commonly (globally) faced. This requires sovereign selves on all identity-levels as a prerequisite to cooperative, reciprocal fortification.

What Rorty calls a "contingency problem", is a global identity-crisis (the term "identity" refers to all levels of socio-cultural identity, cp. chapter 1.3.1.2). The challenge of global "communitication" is the challenge of communicating meanings and arranging with others in complex terms, on many different levels, in order to create unity in the diversity of the global village. Promoting unity simultaneous leads to the challenge, to resist absolute unifying tendencies, such as the domination of the other, or self-assimilation in terms of fostering homogeneity. Unity is no means in itself but a means to establish and safeguard agile diversity. Examples for communities, which promote unification of participants can be sects and communities with defence demeanor, such as terrorist groups or militant states. Such evasive activities seemingly promise resistance against difficulties (controversies, ambiguities, incertitude), which arise from mimetic inter-change, and replace them with alleged security, causality, homogenous (polarised) meaning, or diversion and escape.

Philosophical questions explore, what is, or could be meaningful and what would be a meaningful identity? Nuscheler states:

> "The globalisation of communication and the universalisation of values and consumption patterns is accompanied by the search for [socio-] cultural identities, for the human right of uniqueness and of cultural difference. As reaction to uniforming tendencies inside the Global Village, a fragmentation and reversion to the local micro-cosmos occurs." (Nuscheler 1996: 107).

Addressing the global identity-crisis, Beck discusses the "risky freedoms" (Beck 1994) of the current "risk society" (Beck 1986): The tension arising from the freedom of choice and the responsibility to make appropriate choices, represents a risk and thus a threat to the chooser. In this context Stehr identifies the "fragility of modern (knowledge-) societies" (Stehr 1999/2001). Due to globalisation and increasing interdependence, suddenly all respective others are confronted with one another. Over-stimulation, disorientation and disintegration result in what Wagner (1999) described as cultural shock, and which he highlights especially as the third phase, the phase of escalation (see figure 3). Ervin Laszlo contributes in this context the term "bifurcation" (Laszlo 2003) which signifies a moment of rapid and fundamental change, a possible division of development into two complementary directions. Radermacher refers to these directions with the title of his book "Balance oder Zerstörung" (German: "Balance or Destruction" Radermacher 2002).

In this regard "the end of history" is not an inevitable consequence, but only one possible result of man's self-management. It is as possible as the "resurrection of history". Although dangers are important to consider, more central than such considerations is the question of how to enhance the "plot" or proceeding of human evolution. The task is to transform the current methods of human organisation to work towards re-integration, "dynamic equilibrium" (Bertalanffy about the stability of open systems), peace, productive mutual respect (understanding, acceptance, appreciation) and competitive cooperation (arrangement and the mimetic learning with, from, as well as for *another*).

As already mentioned in chapter 2.1.3, "Globalisation – Increasing Tensions", more important than the consideration of apocalyptic scenarios and the possibility of non-development (collapse and "en-velopment"), is the concentration on the qualities of the possible development. Elaborating the understanding of appropriate and thereby sustainable development is certainly more pragmatic and effective than the question if "development could end up in an end of development". The global, common development of a shared imagination and of a (re-)action on globalisation emerges. This reaction must be concerted and competitive cooperatively developed; it must be participative and foreclose dominative attempts of some participants, undermining others. Required are socio-cultural meanings, societal patterns and sovereign identities, able to deal with the complexisation of the world

(complex for example in terms of global issues) as well as with the acceleration of socio-cultural transformations.

The problem of contingency is synonymous to the current parallelisation of humankind. It deranges the canon of values and cultural orientation, sense and meaning, which disorganises and disroots socio-cultural identities on any level. According to Geerz:

> "Without a cultural frame [annotation: a repertoire of what is meaningful and appropriate, normal, ordinary, usual, useful and progressive] the behavior of man would be uncontrollable, a complete chaos of random, confused, aimless, unfocussed actions and erupting feelings, and his experience would be without form or meaning." (Geerz et al. 1992, cp. chapter 1.1).

Globalisation constitutes a tremendous challenge for the continued existence and appropriate development of humanity as such. It therefore demands a new positioning, the "communitication" of humanity as a whole. Such positioning allocates the self and the other in a productive rapport by means of mimetic arrangement, ludic inter-change and autopoietic networking. That positioning simply signifies sovereign socio-cultural identity and successful meaning making.

Since the way to arrangement is mimetic interchange with the other, globalisation necessitates a global mimetic process. Human development therefore requires socio-cultural protagonists (on all identity levels, cp. chapter 1.3.1.2) capable of acting mimetically (see chapter IV), hence protagonists with strong mimetic competencies. Mimetic competencies generally enable cooperation and discourse; they are sustainable "leadership-qualities", connoting a leadership, which is *contrary* to domination. In this regard mimetic competencies enable protagonists to appropriately utilise the knowledge of humankind for arrangement and culture as an organising and sequencing, autopoietic force. Mimetic competence connotes socio-cultural knowledge and abilities. In this context, knowledge is understood as the "capability of social acting" and the ability to co-create the commonly shared social, economic and ecological environment. Stehr writes:

> "Knowledge can be defined as the ability to take action (action-capacity), viz. the qualification to get something going." (Stehr 1999).

Chapter IV will refer to and partially build on this delineation.

The current contingency problem connotes the diffusion of socio-cultural identities. That diffusion impedes their self-regulation and concerted interaction, fostering resignation and egoism.

❖ Example:

The global issues, such as population growth, hunger, poverty and desertification, are related. Nevertheless civil society persist furthering (r)evolutions of lifestyles, or consumption patterns and nation-states remain concentrated on national internal interests. Consumption and production patterns represent egoistic short-sightedness. The degradation of bio-diversity signifies the increasingly

dangerous behaviour, despite the awareness of risks for humankind and the entire ecosystem. How can that schizophrenic behaviour be otherwise interpreted than in terms of helplessness and the certain resignation of humankind? (cp. chapter 3.2.9).

In general parlance the supra-societal system is over-stimulated. The impressions arising (e.g. from globalisation, problems without borders, new social, environmental, economic, political phenomena) are obviously too complex and dynamic for the current system of societies, institutions and individuals to be adequately accumulated into meaning. The result is that individuals as well as societies lose orientation and the overview within this macro process of socio-cultural transformation with its numerous effects on the economic market, environment and other conditions concerning life and living standards. The socio-identities, self-conceptions and perceptions of the other diffuse. The results of this were mentioned in chapter 2.1.3 and 2.2, when the text concentrated on cultural heteronomy.

To counteract this diffusion a globalisation of the second order is required which Apel described as the "mobilisation of moral responsibility for the establishment of a new order of human interaction" (Apel 1999: 48, 49, see as well chapter 2.4). Such order would function as a "skeleton for the social body", or as a "road-map for the global village".

Interestingly, the answer to globalisation and the represented acceleration (of knowledge generation, global dissemination processes) is not necessarily the sometimes argued for "deceleration" (German: "Entschleunigung"). The challenge is *not* to decelerate development and reduce the unfolding of complexity. Moreover it is difficult to say what such deceleration means exactly and how it could be implemented. Instead the task is rather to conduct this unfolding through the adjustment of (contentual, technical and methodological) knowledge (cp. chapter 4.1.3). This means that it would be important to enhance the socio-cultural frames for development: What are the framework attributes in which development shall unfold? Or put differently: What are the socio-cultural meanings, for example, of a good life, happiness and sustainability, which humankind wants to move towards through adequate development? What defines development, what defines sustainability?
Since the development of today is a global development, a global socio-cultural frame is required. If development accelerates, the socio-cultural framing process should "accelerate" as well.

Today's challenges have developed in a manner that would suggest that precise, deliberate and "wise" regulation is indispensable. The philosopher's stone, however, seems difficult to find. This means that the true, singular, universal wisdom seems difficult to define and hence to achieve. But wisdom is something intrinsically meaningful and meaning is intentionally created. It is not an external truth, but results from internal negotiation, or rather through the

mimetic interchange of socio-cultural protagonists. These protagonists competitively cooperate, maintain socio-cultural diversity, generate multi-perspectivity, deal with difference and complexity and create (heterogenous, controverse, complex and dynamic) truths, rather than one (singular, homogenous and static) truth. The phenomenon and human criterion "culture" equips human beings with the potential to conduct autopoietic interchange and mimetic arrangement. From the respective competencies (of sovereign socio-cultural protagonists) the above mentioned heterogenous and dynamic "truths" can strengthen sustainable development, globalisation of the second order, validation of knowledge, human poietic development, the overcoming of global issues, a macroshift (Laszlo 2003), a "one world" society, unity in diversity, etc. Education must concentrate on the development of the culture-inherent competencies of human autopoiesis through mimetic interchange. Admittedly it can not be anticipated and hence also not taught, what attributes the respective socio-cultural meanings will, or shall have. Instead of teaching alleged "thruth", or "sustainability" education must rather provide open space for self-regulated learning, so that learners can explore, questions, conform or innovate and shape patterns of own socio-cultural meanings. "Open" means that education must proceed in a ludic way, so that it becomes an end in itself, because learning is a characteristic of human dignified life. "Open" also means that education must empower protagonists to create a meaningful future. "Open" education also includes the concept that different socio-cultures may find, interpret and implement such education differently. This requires an openness to consider and respect not only the other learner, but also the other educational approach.

Immediate and appropriate reactions to the world's "problems without passports" are indispensable. In this context, it is highly irresponsible to believe in a passive "everything leads somewhere" or in the current "laissez-faire" philosophy of global interaction and the domination of economic interest in particular.

In this regard, the motto of many contemporary scientific discussions appears to be, "Global problems – global solutions". Similarly, the UNESCO Commitment to HIV/Aids has as its subtitle "Global Crisis – Global Action". This approach could be transferred to all the other pressing problems the world faces. However, a more positive approach would be the economically intensively implemented variation of "global opportunity – global action".

Mankind is united as one community, the one-world society, particularly because of the global problems, which concern us all. Being united also involves the potential to resilience against unsustainable development. Being united in diversity facilitates concertation, hence concerted decision-making in the name of human sustainable development.

In 1995 the UN-Commission on Global Governance, under the leadership of the former Chancellor of Germany, Willy Brandt, as well as the Commission for Culture and Development advocated for a "global civic ethics" (Sullivan, Kymlicka 2007) as the foundation for cooperation among different societies and socio-cultures facing common global problems. In the preface of the Report, Brandt gives an example of the above mentioned opportunities:

> "Never before has mankind possessed such manifold technical and financial resources with which to overcome hunger and poverty. The tremendous task is possible to manage if the necessary common will is mobilised.", (Brandt 1981: 23).

Considering the vast possibilities and the agility and poietic potential of humankind, the challenge of responding to globalisation becomes apparent as a question of will, not of ability. The challenge of globalisation is a management problem, the management of multifaceted, contingent possibilities, which are represented by global cultural diversity.

Laszlo supports this idea when he states:

> "The crucial point is not how many people use the resources of the planet, but how they use them. Our world, says Gandhi, has got enough to satisfy the needs of the humans, but not enough to satisfy their greed." (Laszlo 2003: 92).

The Club of Rome described this opportunity to attain economic, social and environmental surplus, or synergy with its report "Factor Four. Doubling Wealth, Halving Resources", (Weizsäcker et al. 1997). Indeed, besides the theoretical discussion there are many practical examples to verify this thesis.

❖ Example:

The Zero Emission Research and Initiatives Foundation (ZERI) is one of those examples. They coordinate and implement various projects based on the concept of "Upcycling", a concept that promotes, with great success, the intelligent circulation and maximum utilisation of raw materials in industrial projects with beneficial social and environmental effects, (cp. Pauli 1998, see also www.zeri.org).

To recapitulate, the cultural challenge of globalisation is what Hans Küng stated about politics: it is "the art of the possible" (Küng 2001: 27). That art involves a globalised, cultural management. Artwork is a dynamic, ever performing intrinsically humane phenomenon, which promotes unity in diversity and safeguards competitive cooperation, because artwork relates (affiliates or opposes) to other artworks without destroying it.

In his book with the simple yet striking title, "Shared Challenge, a Shared Response", Philipp Hughes refers to the above mentioned management challenge, which turned out to be a problem:

> "The future is not something that happens, but something which is constructed – constructed through our choices, or our failure to choose. (…) The major problems (global issues) we are facing show us is clearly the nature of those choices. They are not technical but moral choices. They are a statement about what we believe a good society should be." (Hughes 2000).

3.1.1 Global Ethics

The role of providing common orientations has traditionally been in the hands of the religions. They have escorted and embodied all advanced civilisations ("high cultures") through their evolution and devolution. Today this is still the case, directly or often indirectly religious perceptions are embedded in moral standards, attitudes, world-views, constitutions, policies and basic laws. An example of this is the commandment "thou shall not kill", represented in all of the world religions. With the Age of Enlightenment (German: "Aufklärung"), the French Revolution and the recent scientific revolution, this role has been partly transferred to science and politics. Religious, scientific attributes and political structures (the state divided in judiciary, legislature, executive as well as the political civil society) of societies distinguished, and a new division of power was established. The secular system was expected to stabilise and sustain our socio-cultural systems more effectively. Nowadays, another dimension of power appears; the increasing emancipation of economic policy from political sway. This means that the globalised economy seems to dominate national politics, even though politics are supposed to coordinate human action (such as economic activities) and make sure that it serves human well being.

Yet a new political framework for this current movement of economic globalisation is still missing. What are meaningful standards for human societal organisation and of living together in one world, implemented and defended politically? During this historic division of power, the need for a strong orientation towards a "world-society" and an articulated direction for societal development increased. This turned into a new scientific and philosophical challenge: to come up with visions of a possible socio-culturally meaningful framework or ethics.

After World War II, the United Nations Organisation was founded in order to establish universal rights and duties. Particularly since the 1970's a broader acceptance for the substantiation of a universal ethic has been achieved. This changed especially with John Rawls' publication of his "Theory of Justice" in 1971, which evoked a boom in the field of political ethics, human rights and the universal acceptability of democracy, (cp. Rawls 1971). As will be discussed below, the content of the ethical discussion about "common values" has maintained an astonishingly religious affinity (cp. chapter 3.1.5/ 3.2.7). This chapter reflects on a global ethic from different perspectives.

Referring to the "end of history", Picht writes about an alternative vision:

> "One can perceive the state of human development totally different. History has shown that the explosive revolution of new discoveries always lead into a phase of harmonising regulation. The gained knowledge was converted, broadened, stabilised and transformed, so that it became the property of the entire civilisation." (Picht 1969: 76).

This regulation; the embedment and integration of discoveries, such as new technologies, in the societal canon, can be understood as the transformation of the socio-cultural frame (or canon) of meaning. Such a global frame of meaning is a regulative re-action to global challenges and aims to re-organise society as such. It organises the mutual integration of its diverse social groups, the vitalisation of economic activities and the integrity of the surrounding environment.

The preamble of the Earth Charter introduces the spirit of such a socio-cultural, global (frame of) meaning:

> "We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that in the midst of a magnificent diversity of [socio-] cultures and life forms we are one human family and one Earth community with a common destiny. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life, and to future generations." (Earth Charter Commission 2000, cp. chapter 4.2.4).

Laszlo further develops the idea of having a responsibility to one another:

> "From the desideratum to live and act in a manner that is appropriate for six billion people, situated in highly different economic, social and ecological conditions, a new behavioural codex is derived. 'Let us try to live in a manner which allows all others to live as well' would be a perception to overcome the conservative and liberal perception of privileged people to 'live and let live (as long as it does not affect me)'. Moreover it could overcome the perception and desire of many underprivileged people to 'let me live as the rich'. This requires a new vision of the self, the other and the environment." (Laszlo 2003: 90).

Laszlo calls the moment of transformation a "macroshift"; economically speaking, that would be the "break-even" of the modern society, a moment when society affords its own patterns, hence when it is organised in a way that it can continue to exist and to develop prosperously ("growth"), preventing stagnation ("bankruptcy"). Fien calls this a "paradigm shift", (Fien 2001: 125).

The democratic idea of arrangement and equality between the self, the other and the environment recurs in a statement of the "Commission on Education for the 21st Century", in Jaques Delors' "Learning: The Treasure Within":

> "The coming century, dominated by globalization, will bring with it enduring tensions to overcome, tensions between the global and the local, the universal and the individual, tradition and modernity, long-term and short term considerations, competition and equality of opportunity, the unlimited expansion of knowledge and the limited capacity of human beings to assimilate it, and the spiritual and the material.
> Whatever the diversity of [socio-] cultures, and systems of social organization, there is a universal challenge of reinventing the democratic ideal to create, or maintain, social cohesion." (Delors 1996).

Regarding Globalisation and the acceleration of knowledge creation, an *objective alteration* (change, transformation or shift) occurred, historically marked by developments in fields such

as communication, transport, technology, industry, economic globalisation, science and mass media. Terms, such as "intellectual revolution", (Faure 1972: 126), knowledge, economic, technological and scientific revolution, capture the issue of objective alteration, complex and dynamic transformation. The results of such revolutions were often significant changes in life-style and working-manners. As so far, they often lead to the exposure of people (e.g. decreasing health, increasing poverty) and of the environment (e.g. exploiting fossil energies and other raw materials, polluting the planet) – mostly for the prior benefit of single individuals and monopoly companies.

Now a *subjective alteration* (intentional change, transformation or shift) emerges that makes mimetic competencies, sovereign socio-cultural identities and integative societal patterns the capacity to live together for the benefit of all world citizens. "Subjective alteration" refers to the adjustment of worldviews, perceptions or images of the global situation and one's own role(s) in this evolving process. The subjective and that means intentionally promoted initiation of an appropriate social order, of appropriate socio-cultural meanings and respective patterns of reasonable management emerges.

A global ethics fosters meaningful unity in socio-cultural diversity. In this regard it is a diversified, heterogenic ethics with ambivalent and paradoxical elements. It is defined by a certain mutuality and reciprocity, so that the different participants are unified in their reference to one another, not in their conformity. Participants do not homogenise, they do not develop a singular ethics, they rather unite through the agreement that an ethics is required and that they must approach to this aim through competitive cooperation. Thus, the different protagonists create a diversity of ethic-alternatives. It is this unity, collectivity, mutual arrangement and integration, which promote a global In-group or world society. Such community fosters togetherness, rather than homogeneity.

3.1.2   Mental Paradigm Change

The term "global ethics" implies an internal shift, a change of mind-sets, perceptions, socio-cultural meanings and identities, hence a paradigm shift of consciousness. The preamble of the UNESCO constitution highlights this conscious dimension of social transformation. It states: "Since wars begin in the minds of men it is in the minds of men that the defences of peace must be constructed" (UNESCO 1945).

Milbrath writes:

> "It is absolutely essential to change the way we think. All other attempts at change will fail if we do not transform our thinking. (…) A proper understanding of the way the world works requires people to think systematically, holistically, integratively, and in a futures mode ." (Milbrath 1996: 188, 194).

In the Declaration Toward a Global Ethic, the Parliament of the World's Religions stresses the necessity of a transformation of consciousness:

> "Historical experience demonstrates the following: Earth cannot be changed for the better unless we achieve a transformation in the consciousness of individuals and in public life. The possibilities for transformation have already been glimpsed in areas such as war and peace, economy, and ecology, where in recent decades fundamental changes have taken place. This transformation must also be achieved in the area of ethics and values! Every individual has intrinsic dignity and inalienable rights, and each also has an inescapable responsibility for what she or he does and does not do. All our decisions and deeds, even our omissions and failures, have consequences", (Parliament of the World's Religions 1993).

The transformation of consciousness, of self-other and world-perceptions – appears to be essential. Nevertheless, our lifestyles and attitudes are not just swayed on a conscious level, they are also influenced by encoded forms of expressions, such as rituals.

A mental paradigm change begins in the mind of every person and within every society, requiring contributions from the respective other. It does not begin in the political or economic worlds. Hence, everyone has the responsibility and chance to consider and implement "his or her own global ethics", contributing to a heterogenic and appropriate sequencing of human development.

The arrangement with the other begins with our mind-sets; it begins with the internal, socio-cultural pre-structures (patterns) of our world-views and self-other perceptions. Accordingly, for Hans Küng, central issues of a global ethics are then:

> "…reconciliation, understanding, communication and approximation. (…) This requires, in terms of tangible political [annotation: or overall cultural] action: mutual cooperation, compromise and integration, instead of confrontation, aggression and revanche." (Küng 2001: 25).

Common to all global ethics approaches is a direct reference to the theories of networking and arrangement. That accords directly the conclusion of the evolutionists Margulis and Sagan, who state that:

> "Life did not take over the globe by combat, but by networking" (Margulis/Sagan 1986: 15, see chapter 1.4).

As mentioned in chapter 1.4, central to a global ethic is that it reflects and thereby prevails the functioning of life in terms of:

> "…quality instead of quantity, cooperation, instead of competition and partnership instead of domination", (Capra 1996: 232, cp. chapter 1.8.7 for "competitive cooperation").

In this context, Küng writes about the need for "a new political constellation" in order to react to the global issues we face. Instead of formulating the aim politically, it could also be formulated economically - or in this case, socio-culturally. Required, is "a new socio-cultural composition". Common to all approaches is that:

> "…manifestly they pre-determine a mental paradigm change (…). For this transformation new organisations are not sufficient, it needs a new mind-set", says Küng. (Küng 2001: 25)

Although a mental paradigm change can and perhaps must be promoted by the institutions and other protagonists on the societal identity level as well, the main agents of the mental change come from the global civil society. In the human cultural system every person is first of all an end in itself. Second, every person is a co-creator, decision maker and transformative participant of society. Thus, the mental paradigm change initially connotes a movement from below, which concerns every individual citizen of the world society.

This bears a comparison to Paulo Freire's quiet revolution from below through education and particularly empowerment through literacy. The political scientist Ronald Inglehart coined the term "silent revolution" (Inglehart 1977), which describes a revolution brought about through long-term cooperation instead of a short-term "Coup d'État" or regicide. By means of a profound reform, a quiet revolution symbolises an implicit and socio-cultural transformation or mental change, capable of preventing a violent revolution.

Immanuel Kant wrote, that education shall empower learners to liberate themselves and society (Kant 1803: 697).

For Freire this liberation begins with the ability to comprehend "one's own actions in this world as transformative action" (Freire 1975: 30). Garaudy refers to Freire's pedagogical approach as well as to Kant (Kant 1803: 697). Garaudy states:

> "The purpose of education is no longer to reproduce the values of an established order, but to raise awareness concerning the antagonisms of this order and by these means (…) to accomplish the 'subjective conditions of liberation'." (Garaudy1977: 180; see chapter 4.10 "Bridging Tensions").

The principle role of civil society as powerful and globally interdependent In-group symbolises the global equity of all people. Concerning this equity Küng states inter alia that:

> "…national, ethnical and religious difference must no longer be perceived as "harassment", but rather as possible enrichment. While the old paradigm always postulated an enemy, even a hereditary enemy, the new paradigm has no more need of enemies. Instead it calls for partners, competitors and antagonists, and instead of military confrontation it builds on competition." (Küng 2001: 26).

Such competition can be understood as competitive cooperation, since the different parties do not aim to play a zero-sum game, where one wins at the expense of the other (cp. chapter 1.8.7). Competitive cooperation rather aims for "positive-sum-games", or win-win situations for the benefit of all involved. That is enabled through the mutual creation (Christian von Ehrenfels: "Gestalt", see chapter 1.4) of added value through competition within cooperational demarcations. For this reason, Küng underlines the importance of welfare and peace in terms of "cooperation *with* the other" instead of a rather randomly organised co-existence "against" or "beside" the other, (ibid.).

❖ Example:

An example of competitive cooperation is sex. In interplay the partners approach one another and "compete"; move "against" another. The bonding (referring to unity) is as essential as the countermovement (referring to difference) and indeed sometimes the act results in the creation, the genesis of a new life.

Economic competitive cooperation – instead of competitive domination – can be assured by a legal framework, which qualifies and controls the scope of economic action. Within this framework, or eco-social market economy, which – besides controlling monopolies and mergers – would promote social and ecological standards, the different firms could compete for their benefit *and* the benefit of society.

Political competitive cooperation also takes place in any parliamentary democracy (and federal state) when opposition competes with the government to a certain degree, while they collaboratively refine – also and sometimes especially through dissent – the political state for the sake of all citizens.

Returning to the mental aspect of structural change, the InterAction Council states:

> "A better social order both nationally and internationally cannot be achieved by laws, prescriptions and conventions alone, but needs a global ethic." (InterAction Council 1997).

Küng further develops this concept of a global ethics:

> "This societal consensus, which a democratic system can not force, but which a democratic system presupposes (…) represents a collective base stock of values and standards, rights and duties, a common ethic: an ethic of humankind. Such a global ethic is neither an ideology, nor a superstructure. It rather concentrates the religious-philosophical resources of humankind, which are not regulated by law, but which shall enter the meaning-perceptions and mindsets of people. (…) The voluntary commitment to a common ethic lastly does not rule out its backing through law." (Küng 2001: 28).

❖ Example:

As example, Küng mentions the International Criminal Court (ICC), which was established in 2002 as a permanent tribunal to prosecute individuals for genocide, crimes against humanity, and war crimes.

The goal of a global ethics will be better achieved if the approach to reach this goal reflects the content of the ethics. This means that a mental change towards increased cooperation may fail if the promotion of change is dominative, instead of cooperative (and participative as will be shown in chapter 3.15 "Ethical Antagonism – the Discrepancy between Sustainable Awareness and Behaviour". This in turn means, that a heterogeneous global ethics requires continuous participation: There are no universal truths. There exist rather processes and procedures to concertedly approach sustainability. Accordingly, sustainable development is the concerted and continuous discovering of aspects of global unity in a global diversity of socio-cultural meanings, patterns and identities. Sustainable development is also the process of diversifying socio-cultural meanings, patterns and identities.

In the following statement, Laszlo first describes his theory of the global ethics' composition and refers to its non-dictativeness of that mental paradigm change:

> "A planetary ethics is an essential measure of current human development. We all have our private moral: our personal ethic, depending on our personality, situation and goals. It reflects our unique origin, heritage, family situation and community. Simultaneously we have got a public moral. This public ethic is valid within our towns, our ethnic group, our national state. The group in

which we live, demands a public ethic because it enables the group to organise and constitute itself. It reflects the culture, social structure, economic development and environmental circumstances with which the group is confronted. Furthermore there is a universal moral – a planetary ethic. This ethic is required by humankind, so that all its members can live well and develop themselves. A universal moral is an essential element of the private as well as the public moral. It addresses the conditions of world society and of world-citizens who live in freedom and dignity without destroying the chances of others. It does not dictate the specific characteristics of our private or public moral. It rather ensures that no attitude arises which would be destructive to the global community and to our essential anthroposphere." (Laszlo 2003: 126, 127).

3.1.3 Global "In-Group"

The global and "integral, civilising transformation", (Laszlo 2003: 44) aims to achieve the integration of all people as equal members within a (heterogeneous) community. This is comparable to the idea of a global "In-group", (Auernheimer 2003: 71). Referring to education Karl-Heinz Flechsig mentions the necessity of common orientations:

> "The determined individualistic goals of education often are interpreted and realised in terms of a naïve, neo-liberally penetrated egocentrism. This requires a concentration on (…) alternatives, as well as on new educational movements which assert collective orientations." (Flechsig 2002: 72).

An enormous shock to human arrangement on earth were the Second World War, the following disasters in Nagasaki and Hiroshima (August 1945) and the long period of human reorientation. In response the United Nations Organisation was founded on October 24th 1945, to promote, regulate, and control the human, global In-Group. The UN-constitution states:

> "Charta of the United Nations – *We* the Peoples of the United Nations … *United* for a Better World" (United Nations 1945).

Moreover, the Preamble declares:
> "(…) to promote social progress and better standards of life in larger freedom (…), to practice tolerance and live together in peace with one another as good neighbours, (…) to unite our strength to maintain international peace and security (…)" (ibid.)

The idea of an In-group is that whatever one member does to another member, he is aware that he is doing it to the whole community and to himself. Hence it does not only promote rights, but evokes interdependences and responsibilities/duties. It aims to create the appropriate balance between self and respective other, creating a common sphere. The creation of a common sphere means that self and other become co-creators of an overall corporate identity. Elias calls this a "we-I-balance". However, he declares that this balance is currently "disharmonized towards the 'I-side' ", (Elias 1991: 209f).

An In-group therefore prevents social destruction and safeguards stability and sustainability. Sustainable development, therefore, aims to rehabilitate the "we-I-balance".

Nevertheless, "In-group" does not connote total equalisation of power (cp. chapter 2.4 "Global Village" and "One World": from Global Interdependences to Shared Challenges" and figure 27 "Diversity, Power and Participation"). The term "In-group" rather describes an

arrangement between selves and respective others, which can be understood as non-idealistic competitive cooperation between protagonists. Such competitive cooperation (cp. chapter 1.8.7) is equivalent to sustainable diversity. It is a socio-culturally "economic" arrangement or synergy, which creates added value or win-win situations for the self and the respective other in an interdependent social world. An In-group and the required sustainable meaning are "economic" because they are functional, their function being to foster human dignified existence in the present and for future generations. Such sustainable meaning and the meaning creating and representing In-group are not ends in themselves; they are patterns of human organisation at a certain point in time and as such means (functional) to human sustainable autopoiesis. This is important because as such, they are not universal and static. Instead they remain contextual and flexible in order to foster human dignified existence in the present and for future generations. Patterns of a world society (e.g. expressed through different nation-state concepts, or different lifestyles), just as sustainability-meanings are open processes "on the move" rather than tempo-spatially detached and therefore universal conditions. This also means that there is no ultimate socio-cultural identity-composition of a "good world citizen". Societal organisation patterns as well as socio-cultural identities vary over the time; they change from place to place, from social group to social group, from group member to group member, who are heterogeneous in themselves. Empowering sovereign socio-cultural protagonists with unique socio-cultural identities requires the training of how to use cultural tools for human, mimetic, socio-cultural organisation. Hence they must learn how to – ludically and mimetically – organise themselves, and that means to arrange with the other (e.g. the other person, perception, science, truth, society) in meaningful ways. Accordingly, they must not be taught to reproduce particular, already established patterns of such organisation, but rather to ludically explore, question and confirm or innovate them. Sovereign socio-cultural protagonists require competencies for mimetic arranging and for meaning-making in order to generate, consolidate, communicate and innovate socio-cultural patterns of their In-groups as well as patterns of sustainability meanings.

3.1.4 Ethics of the Other

"There would be no necessity to say I, if there were no you.", writes Buber (Buber 1995: 63). Without a "you", without the other, the "I", the self, could not exist. The reason for this is that as a "swarm of participations", the self is co-created, stimulated, composed by and involved with the other (e.g. the other person, meaning, identity, self, world-perception, or ethics). Ricoeur entitled his book: "Oneself as Another", (Ricoeur 1992). Hence, the conclusion is: "While I need the other in order to be, the other needs me" (ibid.). Both depend on the respective other in order to generate, maintain and develop the respective self. The self and

the other inter-depend. Both require difference and uniqueness, not in terms of equality, because equality would make the other dispensable, but in terms of alterity. Self and other reciprocally expand the horizons of their respective possibilities. Additionally they mutually create a common sphere, when they arrange mimetically, so that they create multi-perspectivity (cp. chapter 1.6/ 1.6.6) and thereby stability in terms of sustainability ("s[us]ta[ina]bility", means "stability"). Such stability, or sustainability includes the required aspects of organisation. This means that beyond social integration it requires environmental and economic standards of human meanings, expressed in lifestyles and socio-cultural patterns of societal organisations (e.g. particular but sustainability achieving structures, rituals, wording, narrations, values, attitudes, the focus of education, of politics, of science and media, etc).

To achieve this broad, sustainable socio-cultural diversity by means of socio-cultural differences is essential for the forthcoming evolution and autopoiesis of humankind. In a situation of global socio-cultural inter-connectedness, resulting in the acceleration of socio-cultural transformation and complexisation, arrangement with the other is essential. Such arrangement is capable of preserving a dynamic diversity; moreover, it harnesses and develops the potential of this diversity. The autopoietic power of culture unfolds through mimetic movements with the other. Therein, mimetic movements enable cooperation and synergy for the benefit of all involved. This means that mimetic interchange nurtures added value (synergies), ontological self-making as a reciprocal act of the self and the other (autopoiesis) and a socio-cultural emergence shift to a higher (more complex and adjusted) level of human organisation. Agile socio-cultural diversity connotes a great (theoretical) capacity for sustainability. That treasure can be accessed through mimetic arrangements between socio-culturally diverse protagonists. Such mimetic arranging signifies the continuous shifting of human organisation. In the case that it proceeds successfully (cp. chapter I and particularly 1.3.1.1), it means an increased capability to act and react on shared challenges.

Based on this thesis, Levinas coined the term "Ethics of the Other" (Levinas 1954). This expression speaks to the mutual dependence of the self and the other. The current dilemma of the nation-state (national politics, unable to regulate global economics, cp. chapter 2.1.4) as the (contemporary) medium for democracy provides an example.

❖ <u>Example:</u>

Only through the liaison with the other national states sufficient potency of political regulation can be assessed on global as well as on local scale, because the global and the local are connected to such an extent that it remains rather theoretical to divide them. States which cooperate with another indeed seem to loose autonomy to a certain extent, but in exchange the literally can expand the horizon of their possibilities and influence.

The wording "Ethics of the Other", also connotes a notion of respect for the other. It is not an ethic of the self, to which the other is solely instrumental. The other is rather perceived as instrumental while simultaneously representing an end in itself. Furthermore, because of the heterogenic composition of socio-cultural identity, the "ethics of the other"-applying self is aware to co-represent the other as well as to be co-represented through the other. Self and other reciprocally create – and participate in – their identities. Therefore, the ethic of the other symbolises an approximation between (or affiliation to-, cooperation with-) self and other rather than a distancing (opposing to, competition with-). Different from the meaning of an "ethics of the other", the wording seems rather to depict the self's difference to the other, than to concentrate on their relation by means of an "ethics of relation" or an "ethics of mutuality". In the next chapter, a more appropriate wording is presented.

According to Tullio Maranhão (see chapter 1.5):

> "my freedom and my possibilities in life are not determined by my own being, the entity of my existence. My freedom and my possibilities have their beginning in the other; not because of his agreement or authorization, but because of the fact that the freedom and possibilities of my inner core would be meaningless if there were no outside from which they derived." (Maranhão 1999: 82).

Freedom, justice, peace, prosperity, viability, welfare, human dignity, and the unfolding of socio-culturally sovereign identities and thereby of cultural diversity can not be achieved against, or in competition with the other. Instead, they are created and must be re-created in collaboration with the other.

The ethic of the other represents an attitude of mutuality or arrangement and promotes co-operational pacts with the other. An ethics of the other is a value-framework which facilitates self and other to mutually to fill shared needs and satisfy shared expectations and desires. For an individual or for societal protagonists, who apply an ethics of the other, the other is subjectified and becomes tangible. The new role of the other is the role of a neighbour.

3.1.5 Ethics of Neighbourhood

The idea of perceiving the other as neighbour fosters the approximation of the self and the other, while it simultaneously maintains their difference. Moreover, through the lack of hierarchy in the relation with a neighbour, there is a reduction of prejudice and stereotypes. The hierarchy inherent to domination is substituted by competitive cooperation and the mystification of the other is substituted by the tangible existence of the other, "who lives next door". A ground for productive collaboration is generated. Alternatively the expression "ethic of reciprocity" or of mutuality could also be used.

Central to this ethics is the mediation between the different actors; the ethics signifies a frame for collaboration and defines the "dos and don'ts" of neighbourhood attitudes. This

ethical frame is mental in character; it is an imaginary space, forum and playground for the ludic, mimetic movement, interplay and mutual development of the respective selves.

Jörg Zirfas writes:

> "The moral ground of such an ethic of mediation [annotation: the mediation between "neighbours"/ between the self and the other] are the regulative principles of self-respect and justice, which stress the idea of trying to understand the other in his own language." (Zirfas 2003: 47).

The term "ethics of neighbourhood" was fist used by the UN-Commission on Global Governance. Their report from 1994 with the title "Our Global Neighbourhood", refers to the Brandt Report from 1980 and states in chapter one:

> "The collective power of people to shape the future is greater now than ever before, and the need to exercise it is more compelling. Mobilizing that power to make life in the twenty- first century more democratic, more secure, and more sustainable is the foremost challenge of this generation. The world needs a new vision that can galvanize people everywhere to achieve higher levels of co-operation in areas of common concern and shared destiny." (The Report of the UN-Commission on Global Governance 1994, cp. Brandt 1981).

This is further developed in chapter two, which states:

> "Neighbourhoods are defined by proximity. (…). People may dislike their neighbours, they may distrust or fear them, and they may even try to ignore or avoid them. But they cannot escape from the effects of sharing space with them. When the neighbourhood is the planet, moving away from bad neighbours is not an option." (ibid.)

That captures precisely the concept of competitive cooperation and mimetic arrangement: The aim must not be to foster absolute equality, connectedness, not even absolute peace, but to maintain differences and thereby diversity. The task is to deal with such differences, friction, ambiguity and controversy and not to step out of competitive cooperation, for example, through domination or escape. Brandt continues:

> (…) Being global neighbours requires new ways of perceiving each other as well as new ways of living.
> (…) Without a global ethic, the frictions and tensions of living in the global neighbourhood will multiply; without leadership, even the best- designed institutions and strategies will fail." (ibid.).

Although the commission concentrates on global governance and legal affairs, it promotes the mental dimension of inventing a global meaning (of mutual respect and neighbourhood), which subsequently can (but must not) be formal, or even legalised. The report states: "Establishing an ethical dimension to global governance requires a threefold approach." (ibid.) While the third approach speaks of international norms, the first and second approach, rather refer to values, rights and responsibilities originating from the socio-cultural mind-sets of the people. The three approaches are:

1. "Enunciate and encourage commitment to core values concerned with the quality of life and relationships, and strengthen the sense of common responsibility for the global neighbourhood.
2. Express these values through a global civic ethic of specific rights and responsibilities that are shared by all actors, public and private, collective and individual.
3. Embody this ethic in the evolving system of international norms, adapting, where necessary, existing norms of sovereignty and self- determination to changing realities."
(ibid., chapter two).

A comparable approach is developed by the UN-World Commission On Culture and Development. Cuéllar states:

> "As our futures will be increasingly shaped by the interdependence of the world's peoples it is essential to promote [socio-]cultural conviviality. Such co-operation between peoples with widely different interests can only flourish when they all share certain principles. The Commission defines the following five main elements of a global ethics:
> - human rights;
> - democracy and the elements of civil society;
> - the protection of minorities;
> - commitment to peaceful conflict resolution and fair negotiation; and
> - intergenerational equity.
>
> It is incumbent upon all governments to give effect to such principles. But the implementation of a global ethics requires other actors as well: transnational corporations, international organisations, and the global civil society. All three can and must be influenced and mobilised." (Cuéllar 1998: 40-47).

The heart of a global ethic is captured in the UN Commission On Global Governance's statement: "People should treat others as they would themselves wish to be treated." (The Report of the UN-Commission On Global Governance 1994, chapter two).

The commission believes "that all humanity could uphold the core values of respect for life, liberty, justice and equity, mutual respect, caring, and integrity." (ibid.). Still, this is far from being a new approach to safeguarding human dignified existence and development.

It is similar to Kant's "Categorical Imperative" or to the so-called "golden rule" (cp. chapter 3.1.5/ 3.2.7). A categorical imperative would be an absolute, unconditional requirement that exerts its authority in all circumstances, and is both required and justified as an end in itself. In his "Groundwork of the Metaphysics of Morals", (1785) Kant offers three progressive versions of the Categorical Imperative on which moral commands are based:

1. 'Act as if the maxim of your action was to become, through your will, a universal law of nature.'
In other words, would we be happy for others to act in the same way we do?

2. 'Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as a means, but at the same time as an end.'
This means that humans are the most important factor in any ethical decision-making. Human suffering is never justified as a means to any end.

3. 'So act as if you were, through your maxims, a law-making member of a kingdom of ends.'
This implies respect for the self and the other. It promotes cooperation because in cooperation one considers the other to be a means in himself, as a subject instead of an object, which precludes attempts of domination.

The implementation of a global ethic can probably neither be achieved solely bottom-up (from the societal basis/civil society to institutions), nor solely top-down (from the institutions to the societal basis/civil society). Both approaches are important and complement one another. The approaches are not necessarily contradictory since the institutions are supposed to represent the civil society.

❖ Example:

An example of an ethical conversion into binding policy is the constitutional law of the Federal Republic of Germany, where the Categorical Imperative finds its expression. Article 2.1 concerns personal freedoms and declares:

> "Every person shall have the right to free development of his personality insofar as he does not violate the rights of others or offend against the constitutional order or the moral law." (Constitutional law of the Federal Republic of Germany, Article 2.1)

The constitutionally guaranteed freedom of the individual reaches as far as the delimitated freedom of the other.
Other examples of legal instruments for intercultural understanding and cooperation are of course the UN Convention On Human Rights and the International Criminal Court in the Hague. Another example is the (optional, non binding) UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions (2005, further information in chapter 3.2.7).

The former President of Germany, Johannes Rau, defined the role of institutions like this:

> "I understand my position in terms of a dual responsibility: The President must speak for the German people and he must help minorities to make their voices stronger. (…) I want to listen, so that nobody is left unconsidered. I want to establish new discourses, if they were interrupted, discourses between east and west, between young and old." (Rau 1999).

Theoretically, the democratic system aims to formalise, standardise and guarantee what would otherwise be up to goodwill and personal attitude. There is no question that this is an ideal approach and, globally speaking, the exchange between institutions and civil society fails too regularly.

❖ Example:

There is disrespect for human and democratic rights, such as freedom of expression, information and communication. Another example is the formally legal but ethically rather "illegal" laissez-faire philosophy of economic neo-liberalism, as well as other unsustainable human behaviour. This occurs not only on the national level. The dilemma of democracy and the national states, which seem incapable to conduct global economics, show that this is increasingly a global problem.

The question about the content of global rights emerges. The InterAction Council even goes one step further and complements the rights-talk through a Universal Declaration of Human Responsibilities. While rights are rather reactive – they prevent malpractice – "human responsibilities" aim to be proactive, they promote ethical comportment. Rights protect possible victims, whereas responsibilities apply to all actors, including possible perpetrators. Indeed, to say, "people should treat others as they would themselves wish to be treated", (InterAction Council 1997) means two things. It means that "people want something", and

that "if people want something, they must do something": there is an obligation of performance. The approach of "responsibilities" addresses this obligation.

The InterAction Council consists currently of 48 members, all former heads of state. The renewed declaration from 1997 states:

> "The initiative to draft a Universal Declaration of Human Responsibilities is not only a way of balancing freedom with responsibility, but also a means of reconciling ideologies, beliefs and political views that were deemed antagonistic in the past. The proposed declaration points out that the exclusive insistence on rights can lead to endless dispute and conflict, that religious groups in pressing for their own freedom have a duty to respect the freedom of others. The basic premise should be to aim at the greatest amount of freedom possible, but also to develop the fullest sense of responsibility that will allow that freedom itself to grow.
> (…) freedom without acceptance of responsibility can destroy the freedom itself, whereas when rights and responsibilities are balanced, then freedom is enhanced and a better world can be created, (ibid.).

The responsibilities concern the following five main categories, which are further divided into 19 articles. The mentioned five main categories are:

1. "Fundamental Principles for Humanity,
2. Non-Violence and Respect for Life,
3. Justice and Solidarity,
4. Truthfulness and Tolerance,
5. Mutual Respect and Partnership" (ibid.)

The recently introduced Earth Charter emphasises four similar principals, which are further divided into 16 articles. The mentioned four principals are:

1. "Respect and Care for the Community of Life
2. Ecological Integrity
3. Social and Economic Justice
4. Democracy, Non-violence and Peace" (Earth Charter 2000, cp. chapter 4.2.4).

Naturally, such ethics must be heterogenic and flexible to be able to transform over time. Furthermore, required is their implementation, rather than precise wording; they must emerge from theoretically available information into practiced knowledge.

3.1.6 Discourse Ethics

The German philosophers Jürgen Habermas and Karl-Otto Apel are the originators of modern "discourse ethics," (cp. Habermas 1983/Apel 1988). Discourse ethics illuminates an important aspect of a global ethics. Discourse ethics implies a collaborative negotiation about meanings, without fixed expectations regarding the results. The result is that discourse becomes a synonym of mimetic interchange and arrangement because it generates, consolidates, communicates and innovates mutual respect and reciprocity. Those parameters of arrangement are not only promoted through the discourse; they constitute the discourse itself.

Discourse ethics therefore mediates reflective, flexible self-conceptions and conceptions of the other. As one aspect of mimetic arrangement, discourse involves the self and the other and it creates a third sphere. This third sphere connotes the common and shared and derives from the mutuality and reciprocity of discourse.

While obtaining the uniqueness of and the difference between the involved, self and other discursively establish "unity in diversity". Different actors with different opinions, meanings, and desires are united through the commitment to and application of discourse. The discourse may uncover similarities and differences, consensus or controversies. Discourse can cause friction and this may be uncomfortable for those involved. However, as long as both are committed to discourse, they also foreclose the assimilation of the other. In this sense, discourse does not define particular meanings, it does not define what is right, or wrong and does not predefine standards for environmental protection, social integration, or economic viability. Discourse ethics simply safeguards the capacity to work with multi-perspectivity, thus producing a framework and defining open space in which environmental, social and economic issues can be negotiated. It is not a "contentual ethics", hence a doctrine which presumes singular truth, but rather a "processual ethics", hence a pragmatic attitude to explore heterogenic thruths.

Discourse ethics is a practical, applied ethics that builds on and lives from narration and performance. Moreover, it initiates and organises narration and performance. Tullio Maranhão explains:

> "In order to perform my commitment towards the other within a discussion, I must be able to accept dissent and to remain open for discussion even under difficult circumstances. Yet, the symbol of commitment is not the spoken word; it is communicated by the gesture of speaking which recognises the uniqueness of the other who I face as a person." (Maranhão 1999: 83).

According to Jean Francois Lyotard, "In order to engage with the other I have to enter the sphere of dissent, the empire of dispute", (Lyotard 1984). Discourse naturally involves power; discourse is negotiation and thereby it intrinsically fosters "communitication". This means that discourse generates, consolidates and communicates community. Due to the involvement of power in discourses, this community not only fosters unity, but tensions and dissents as well. As long as the involved parties maintain their commitment to discourse, these tensions and dissents unfold within cooperative limits, so that any competitive approach undergoes cooperative means. Cooperation does not connote harmony, but involves – and often requires – conflict. Conflict is a competitive attempt, but only relatively. Discrimination and other self-other polarisation attempts in turn are not cooperative; in their case rules the competition over the cooperation.

That means cooperation still allows certain competition.

Through discourse power circulates. Discourse ethics has often been criticised for this fact. However, there is a qualitative difference in *how* power circulates. For example: A criminal can be sent to prison and in some countries may even receive the death penalty. While imprisonment may keep him in, or at least allow returning to the societal discourse, the death penalty simply eliminates him. Both cases represent a power divide. Regardless whether it is right or wrong that the person is judged, or fair or unfair how the person is judged, there is an essential, even existential difference in the exertion of power. There appear manifold, qualities of how power can be exerted and regulated in a more fair way, for example in case of trial: the rule of law and respect for human rights during the trial, the possibility of reversion, the length of the condemnation, the condition of the prison, etc. Power needn't be eliminated or disclosed from discourse; the task is rather to qualify power. Regarding the global inequalities and oppressions, the discourse as such already approaches sustainability. From a global perspective, the further equalisation of power already connotes sustainable development.

Discourse does not rule out the circulation of power, but it does foreclose the assimilation of the weak.

In this context it is imperative to differentiate the role of the disrupter, for example, a criminal. The disrupter's role is not identified by his or her societal "non-role". Such a determination would imply that he obtains his meaning solely from his societal context. This determination would legitimate the death penalty, since a disruptor would be without meaning, rights and value. Instead, the individual is an end in itself. Hence, society has the responsibility of detecting the disruptor in order to protect society's members *and* re-socialise the disrupter. Indeed, in a democratic sense, the disruptor has an essential societal meaning as he indicates failures of the system. The disruption must be seen as the responsibility of the disrupter as well as of the system itself. Hence, it is not right to eliminate the (life of the) disruptor, for example through the death penalty, but there is a responsibility to reintegrate him.

Through its communicative nature, discourse constitutes the social human being and thereby any socio-cultural expression.

From this perspective, war and domination are socio-cultural expressions as well. However, the human cultural mode aims to achieve human regulation through organisation – and the strongest form of regulation appears to be cooperative.

War and domination are intrinsically competitive; they should *remind* humankind of the sustainable alternative. War and domination are possible socio-cultural actions. As such, aren't they alternative forms of socio-cultural meaning, identity and expression to be legitimately explored? War and domination have already been explored; today an estimation

of the scientific, religious, political and economic state of the world can be – and has been – drawn in detail. The contemporary state of human life connotes a contingent moment when mankind's dignified future is at stake. It is a moment of global fragility and sensibility in social and ecological terms. In this moment a macro-shift of human self-perception and sustainable organisation is required. There is a great variety of ethical attitudes, concepts and expectations. However, today such ethical behaviour (e.g. environmental aware behaviour) is no longer an option, it is no alternative to non-ethical behaviour (e.g. pollution). Ethical behaviour is an obligation, because human behaviour concerns the existence and moreover the dignified existence of mankind. Due to scientific knowledge, technical innovations and effective communication, everything is possible; this includes the possibility of sustainability as well as of destruction. Especially in this "one world" or inter-dependent "global village" where the other increasingly defines the self, where socio-cultural meanings transform continuously and become more complex, ethical responsibility is required. Such ethics, however, is not an option; it is a simple, practical constraint. Hence, for mankind, the choice which has to be made is no longer of "cooperation or domination" but of "development or envelopment", "construction or destruction" and "autopoietic empowerment or self-elimination". Domination *had* its meaning, today it is a "luxury" that can no longer be afforded. Indeed, the effects and functioning of cooperation and peace are also explored. This exploration has shown that it is worth it to focus on cooperation, instead of competition in human interaction, or to compete within cooperative boundaries, abstaining from the assimilation and domination of the other. There is no alternative to competitive cooperation and discourse, even if the other protagonist intends to compete, assimilate and dominate. While cooperative attitudes promote networking, competitive attitudes promote a vicious cycle of aggression.

❖ <u>Example:</u>

That is why war or the death penalty, as well as "wars of liberation" such as in Iraq and Afghanistan are not "sustainable" interventions and options. Measured by the principle of arrangement, dictatorship and the Jihad must indeed be condemned, as must the death penalty and hegemonic unilateralism. They aspire to erase the other. Therefore, the new task is to refine the quality of cooperation through ethical coordination and practice.

A principle of mimetic arrangement, as well as of discourse, is the freedom of thought: every idea is worth considering; there are no "wrong" ideas. This must be respected in discourse in order to maintain it. Imperative to the freedom of thought is that it must not undermine the underlying system, the discourse itself. The freedom to be difference and unique functions within a frame of commitment and unity in terms of mutuality and cooperation. Difference alone is insufficient.

For Freire the „attitude of discourse (…), is the necessary precondition for restructuring a society which aspires to strengthen what determines the human." (Figueroa 1989: 113/ cp. Freire 1974: 69, 113f).

In the first place, a discourse ethics is not a matter of "overlapping consensus" in terms of a "largest common multiple" in terms of a particular content or meaning. Discourse ethics is not normative, does not declare aligned structures, formal roles and rules, although normative regulations may have great importance for global co-habitation. Important for a global ethics of discourse is rather the attitude of - and ability to achieve – consensus with others. Such ethics shall not disseminate and enforce particular socio-cultural meanings, but provide the preconditions to negotiate (about) socio-cultural meanings. Such ethics is rather the least common denominator, or founding principle of a humane society. In this sense, a global ethics is the attitude and actual performance of cooperative discourse, which aims for better arrangement between socio-cultural protagonists. In the second place, of a discourse ethics comes the actual *consensus* of the respective discourse, hence the socio-cultural meanings which are mutually (i.e. participatorily) created throughout discourse.

The unity of a global In-group is, firstly, determined by the commitment to discourse as a medium, or mode of meaning-making and meaningful identity-progression. Secondly, that unity of a global In-group is determined through particular socio-cultural meanings, hence through patterns of socio-cultural identity and societal organisation.

Discourse ethics is the attitude to search for solution that is globally accepeted and locally adaptable and realisable. It corresponds to the global ethic s an evolving concept, which transforms over time in order to adapt to, or even to precede, historical and local situations, composing a dynamic network or performative web of relations. Michael Walzer states, in this context, that ethic means solidarity "for a time" (Walzer 1983).

Hence, a discursive, global ethics advances a globally united, contextually different world.

❖ <u>Example:</u>

There can be unity in the global perception that social, environmental and economic issues must be considered. There can even be consensus that they shall be equally considered. Diversity unfolds in different perceptions of responsibilities and development strategies. One protagonist, for example, a representative from a developed country may say: "We must protect the environment, whatever it costs". A representative from a developing country may respond: "we want to respect the environment, but we have a right to develop our economy, just as you did over the last century. For us, this is economically and thereby socially and, to a point, environmentally sustainable. It is our approach to balance these three dimensions of sustainability." For both sides, these diverse approaches and contributions seem to make it difficult to proceed with sustainable development. But precisely this dissent, this multi-perspectivity on shared problems, gives us the greatest capacity for sustainable development. Both protagonists use discourse as medium, moreover they have – and actively contribute – different development alternatives, so that the development itself becomes a participatory and therefore comprehensive project. Through the discursive pact, they regulate themselves, which

means that they develop and potentially modify their structural patterns of self-other perceptions and arrangements.

For Habermas, any ethic pre-determines an overall "self-understanding discourse" (German: „Selbstverständigungsdiskurs") or a self-dialectics of society, (Habermas 1984). This self-regulation produces approved and more appropriate, adjusted self-perceptions of societies and resilient, sovereign socio-cultural identities (on all levels), which are capable of reflective gap analysis and cohesive, strategic acting. An "*appropriate*" self-perception is measured by globally desired and emerging (meaning) standards "for all", such as integration, peace and wealth.

Freire and Habermas emphasise that the level of development of a society can not primarily be determined in terms of civilisation, technology and economy, but "by the degree of credible discourse", as a parameter for "cultivation" or "culturality", which again concerns the mind-sets of people as well as formal societal organisation. Freire and Habermas write,

> "The more a society is developed, the more the different claims are performed discursively." (cp. Habermas 1983/Apel 1988).

Apel suggests quasi as precursors for credible discourse, the Socratic dialogue and the scholastic disputation, thus an axiomatic ethic of discourse (Apel 1999: 66).

A discursive global ethics promotes a democratic, discursive competition, which approaches cooperation. It answers the urgent need for a paradigmatic shift in human relationships.

Dieter Senghaas expresses this discursive arrangement and regulation politically. He states:

> "The civilisation of politics and peace in terms of intra as well as inter-state interaction should be understood as a non-violent and violence preventing political process. Communication and compromise shall create conditions for the cohabitation of societal groups or states and folks, which do not put at risk their existence or their life-sustaining interests and which do not harm the people's sense of justice to such a degree, that after trying seemingly all peaceful possibilities, they believe in violence as their only relief. Thus, in order to achieve a civilisation of politics and peace, continuous endeavours are required, safeguarding the trustworthiness of expectation (protection from violence), rule of law (protection of freedom) and economic prosperity (protection from distress and poverty)." (Senghaas 1994: 34f).

Indeed, Walter Bagehot (1872/1971) describes democracy as "government through discussion", where "everything is debatable", as concludes Jacob von Burckhart (1905/1982).

The new challenge is no longer technological, economic, political or scientific, but rather socio-cultural; it is the challenge to create a "cultural revolution" (cp. Faure 1972: 163), in which, not only elites, experts, institutions and public representatives take part, although these are important agents of implementation. In this regard, it is different from the "Chinese Cultural Revolution", also denoted as "Great Proletarian Cultural Revolution", (1966 – 1976),

which was launched by Communist Party Chairman Mao Zedong on May 16, 1966 to secure Maoism (known domestically as Marxism-Leninism-Mao Zedong Thought) in China as the state's dominant ideology. That pseudo "cultural revolution" was based on excessive murder, (a million estimated to have been killed), abuses, destruction, restrictions and atrocity propaganda.

In the context of this text, a socio-cultural revolution is understood as a mental movement, a paradigm change or quiet (r)evolution, developed and implemented by civil society. The term socio-"cultural revolution" signifies the further development or enrichment of the precursor revolutions, (i.e. revolutions in knowledge production, science, industry, technology, economy, information etc.), for the integration and prosperity of humankind.

In this regard, science, economy and technology have an inferior, instrumental role to play in the maintenance of human and environmental dignity. A socio-"cultural revolution" aims to create a sense of human responsibility for an integrated web of life. It is mediated through applied discourse ethics and inter-relates the economy, society and the environment in terms of sustainability.

3.2 Sustainable Development

The following discussion of sustainable development summarises the previous chapters. The aim is not to reinvent sustainability, but rather to integrate social, environmental and economic development issues with phenomena, such as "culture" and "socio-cultural diversity" into the conceptional framework of sustainability. Furthermore, this chapter utilises and combines existing scientific approaches particularly ofsuch as "Education throughout life", the Agenda 21 and the definition of the Brundtland report.

In 1972 the World Commission On Environment and Development (WCED) organised the United Nations Conference On the Human Environment in Stockholm. In the same year the UN Environmental Programme (UNEP) was founded and the Club of Rome report "The Limits to Growth" (Meadows, Club of Rome 1972) was released. That report, the foundation of UNEP as wll as the mentioned conference fostered attention for environmental concerns. In this process the global community acknowledged that more exploration was needed concerning the inter-relationships between the environment and socio-economic issues of poverty and underdevelopment. The concept of sustainable development emerged in the 1980s in response to a growing realisation of the need to balance economic and social progress with concern for the environment and the stewardship of natural resources.

The conclusive terminology "sustainable development" was not invented by the WCED but by the World Conservation Union (IUCN) and was first seen in its "World Conservation Strategy" (IUCN, UNEP, WWF 1980).

The concept of sustainable development builds on three dimensions or pillars: the economy, the environment and society. For example, the mentioned "World Conservation Strategy", a document developed by the World Conservation Union (IUCN) in close cooperation with the United Nations Environmental Programme (UNEP), the World Wildlife Fund (WWF) and others, defines development in the context of sustainability. The report states:

> "Development is defined here as: the modification of the biosphere and the application of human, financial, living and non-living resources to satisfy human needs and improve the quality of human life. For development to be sustainable it must take account of social and ecological factors, as well as economic ones; of the living and non-living resource base; and of the long term as well as the short term advantages and disadvantages of alternative actions." (*World Conservation Strategy*, IUCN-UNEP-WWF 1980: 3, 18.)

The concept of sustainable development is meant to achieve an appropriate interrelation between those three factors, or dimensions of society, economy and environment, in order to sustain what the title of the Brundtland Report declares as "Our Common Future" (Brundtland 1987). The concept and term "sustainable development" gained worldwide momentum with this publication of the World Commission on Environment and Development in 1987. The "Brundtland Report" is named after Gro Harlem Brundland, president of the commission and former Prime Minister of Finland, (Brundtland 1987). The commission defined sustainable development as:

> "…development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (Brundtland 1987).

This definition maintains that while development may be essential to satisfy human needs and improve the quality and standard of life, it should occur in such a way that the capacity of the natural environment, society and economy to meet present and future needs is not compromised.

According to Hauff, the report emphasises:

> "We recognise that 'development' was more than just economic growth in the developing countries. (…) 'Sustainable development' therefore becomes the development-goal for developing as well as for the industrialised countries." (Hauff 1987:4)

The publication "Caring for the Earth: A Strategy for Sustainable Living" created by the International Union for the Conservation of Nature, usually called World Conservation Union (IUCN), the United Nations Environment Program (UNEP) and the World Wildlife Fund (WWF) in 1991, contains a definition of sustainable development which complements the one from "Our Common Future". It defines sustainable development as:

> "…improving the quality of human life while living within the carrying capacity of supporting ecosystems." (IUCN/WWF/UNEP : 1991).

All together, humankind and the supporting ecosystems make up the mentioned "web of life" (Capra 1996, cp. chapter 1.4). Sustainable development recognises the interconnectedness of human beings, their economic activities and the surrounding natural environment.

The Brundtland Commission definition emphasises the importance of meeting human needs in a manner that respects intergenerational responsibility while the IUCN/WWF/UNEP definition emphasises the importance of improving the quality of human life while protecting the earth's capacity for regeneration. The two definitions together provide a good understanding of the meaning of sustainable development as benefiting both people and ecosystems.

The UN Conference on Environment and Development in 1992, the Earth Summit, gave high priority in its Agenda 21 (United Nations 1992) to the role of education in pursuing the kind of development that would respect and nurture the natural environment. It focused on the process of re-orienting education in order to foster values and attitudes of respect for the environment and envisaged ways of doing so. By the time of the Johannesburg Summit in 2002 (United Nations 2002) the vision broadened to encompass social justice and the fight against poverty as key principles of development that is sustainable. The human and social aspects of sustainable development meant that solidarity, equity, partnership and cooperation were as crucial as scientific approaches to environmental protection. In the first paragraph of its preamble, the Agenda 21 introduces the reference framework for sustainable development:

> "1.1. Humanity stands at a defining moment in history. We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being. However, integration of environment and development concerns and greater attention to them will lead to the fulfillment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future. No nation can achieve this on its own; but together we can - in a global partnership for sustainable development." (United Nations; Agenda 21: 1992)

Chapter 36 of Agenda 21 (United Nations 1992) emphasised that education is imperative for promoting sustainable development and improving the capacity of people to address environmental, social and economic development issues. Ever since, sustainable development has been a common concern in all UN conferences and there has been consensus that education is a driving force for the change needed. It has also been pointed out that peace, health and democracy are mutually reinforcing prerequisites for sustainable development.

Chapter 36 defines the "basis for action". It states:

> "36.3. Education, including formal education, public awareness and training should be recognized as a process by which human beings and societies can reach their fullest potential. Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues. While basic education provides the underpinning for any environmental and development education, the latter needs to be incorporated as an essential part of learning. Both formal and non-formal education are indispensable to changing people's attitudes so that they have the capacity to assess and address their sustainable development concerns. It is also critical for achieving environmental and ethical awareness, values and attitudes, skills and behavior consistent with sustainable development and for effective public participation in decision-making. To be effective, environment and development education should deal with the dynamics of both the physical/biological and socio-economic

environment and human (which may include spiritual) development, should be integrated in all disciplines, and should employ formal and non-formal methods and effective means of communication." (United Nations; Agenda 21: 1992)

The 2002 Johannesburg Summit – the UN World Summit on Sustainable Development – broadened the vision of sustainable development and re-affirmed the educational objectives of the Millennium Development Goals (UN Millennium Declaration; United Nations 2000) as well as of the Education for All Dakar Framework for Action (UNESCO 2000). Furthermore, the Summit proposed the United Nations Decade of Education for Sustainable Development as a way of signalling that education and learning lie at the heart of approaches to sustainable development. In its 57th Session in December 2002 the United Nations General Assembly proclaimed the education decade as the period 2005 – 2014, with UNESCO as the lead agency.

A brief history of the political evolution concerning sustainable development:

1972　The United Nations Conference on the Human Environment in Stockholm, organised by the World Commission on Environment and Development (WCED). Release of the Club of Rome report "The Limits to Growth" (Meadows, Club of Rome 1972). The foundation of the UN Environmental Programme (UNEP)

1980　The "World Conservation Strategy", developed by the World Conservation Union (IUCN) in close cooperation with the United Nations Environmental Program (UNEP), the World Wildlife Fund (WWF) and others. It puts environmental protection, economic and social aspects of development into one context (IUCN, UNEP, WWF 1980).

1987　The report "Our Common Future", also known as the Brundtland Report, from the United Nations World Commission on Environment and Development (WCED)

1990　The World Declaration on Education for All, a UNESCO program, which aimed to meet the learning needs of all children, youth and adults by 2015. It was launched at Jomtien in Thailand and has six goals to promote equality and (access to) quality education (UNESCO 1990).

1991　The publication "Caring for the Earth: A Strategy for Sustainable Living" by the World Conservation Union (IUCN), the United Nations Environmental Program (UNEP) and the World Wildlife Fund (WWF), (IUCN, UNEP, WWF 1991). It reveals the goals of the "World Conservation Strategy" from 1980.

1992　The "Agenda 21": Initiated by 172 states, the United Nations Conference on Environment and Development, also called the Earth Summit, adopted the "Rio - Declaration for Sustainable Development" to promote sustainable development (United Nations 1992).

1995 "Our Creative Diversity": The report by the World Commission for Culture and Development focuses on (socio-)cultural diversity as a means to human being and Becoming (Cuéllar 1989).

1996 "Learning: The treasure within". Report to UNESCO of the International Commission on Education for the Twenty-First Century. Also called "Delors Report", by Jaques Delors and other education experts (Delors 1998).

2000 The Millenium Development Goals: Adopted by the United Nations, the aim of the so called MDG's is to raise the living standards globally in order to conduct a more sustainable development by 2015. It focuses for example on education, poverty reduction, more economic equity between developed and developing countries and the generation of an agile global partnership to meet these goals (United Nations 2000).

2000 The Dakar Framework for Action promotes Education for All (see also above, UNESCO 1990); it addresses international and especially national actors. The text is adopted by the World Education Forum Dakar, Senegal, 26-28 April 2000 (UNESCO 2000).

2002 The "Johannesburg Summit". The UN World Summit on Sustainable Development or simply called "Earth Summit" reveals the principles of the Agenda 21. The assessment showed quickly that poverty and environmental degradation had increased. At this occasion the Johannesburg Declaration on Health and Sustainable Development was appointed and released (United Nations 2002).

2005 UN World Summit: The United Nations reviewed the progress of the Millennium Development Declaration.

2005- United Nations Decade of Education for Sustainable Development (UN-DESD):
2014 In this decade there will be a focus on the promotion of quality education. Coordinated by UNESCO it aims to link sustainable development with Education for All approaches.

2009 The "Bonn Declaration" was adopted by the UNESCO World Conference on Education for Sustainable Development, March 31 – April 2, 2009, Bonn, Germany. It reveals the aims of the UN-DESD (UNESCO 2009).

Sustainability is a holistic and inclusive perception of development and differs from polarising and excluding neo-capitalist, racist (i.e. colonialism) perceptions of development. Moreover it recognises the environment in a dual sense; as an end in itself and simultaneously as a means to human wellbeing.
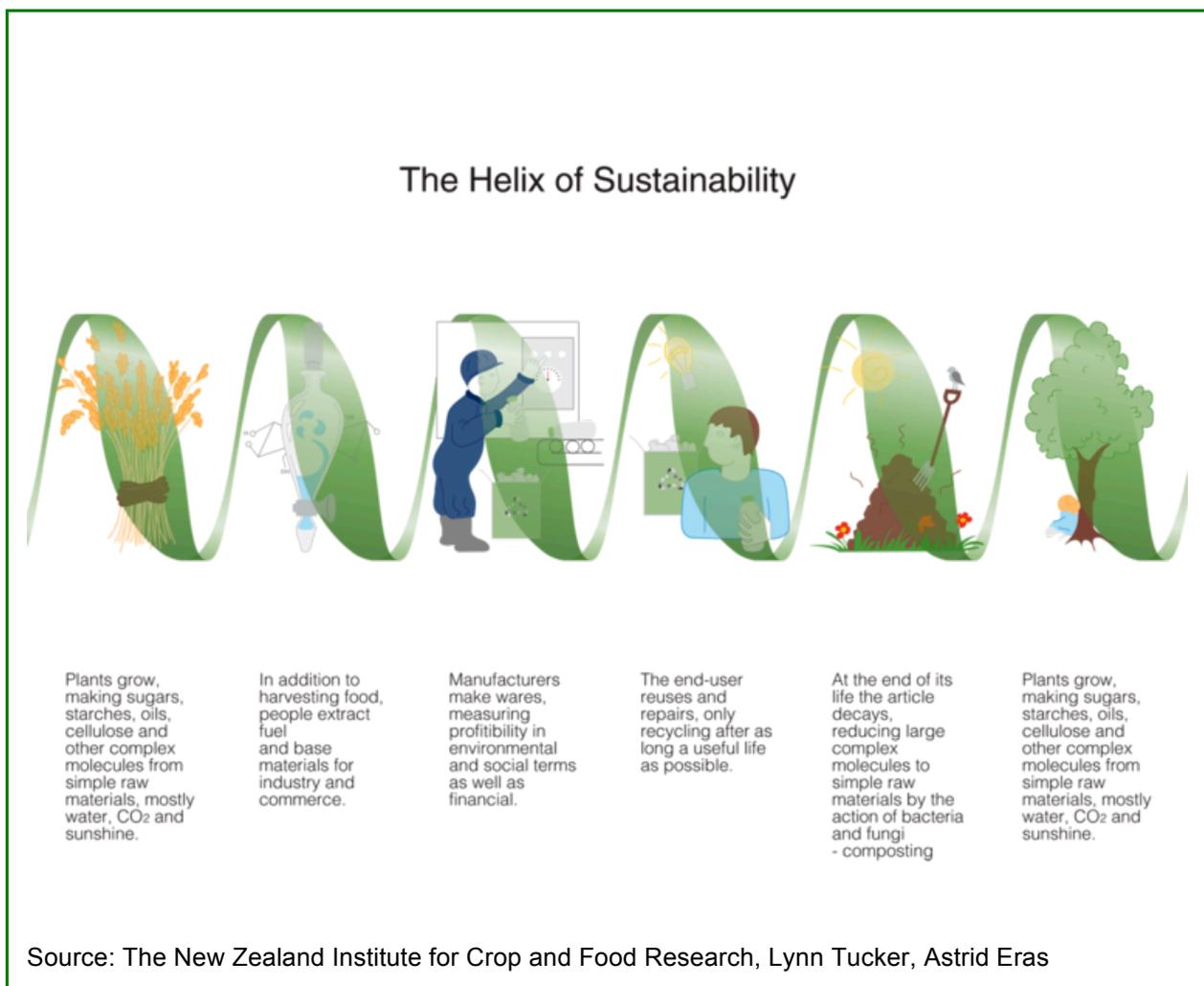
Haber describes the sustainability inherent, systemic interrelatedness:

> "Sustainability does not only concern continuity, but resources as well because the life of all organisms depends on a steady inflow of resources and equally on an outflow. They are 'flow-through' systems or 'input-output systems'." (Haber 1995: 19).

A continuous "flow-through" (circulatory) living system requires balanced social, economic and environmental "input and output" in order to maintain its continuity and be sustainable. This means that the three dimensions of sustainability must be attuned to one another. The idea of an input-output system accords with the mentioned feed back loops, which signify and promote autopoiesis, (cp. chapter 1.4.1 and 1.8.8 for "feed back loops").

Figure 30 illustrates the minimum environmental impact concept – the vision of a neutral input-output production and consumption system. It shows that sustainable development builds on circularity similar to feed back loops, promoting circular systems which promotes self-preservation, or respectively suatainability.

Figure 30: The Helix of Sustainability

The Helix of Sustainability

Plants grow, making sugars, starches, oils, cellulose and other complex molecules from simple raw materials, mostly water, CO_2 and sunshine.

In addition to harvesting food, people extract fuel and base materials for industry and commerce.

Manufacturers make wares, measuring profitibility in environmental and social terms as well as financial.

The end-user reuses and repairs, only recycling after as long a useful life as possible.

At the end of its life the article decays, reducing large complex molecules to simple raw materials by the action of bacteria and fungi - composting

Plants grow, making sugars, starches, oils, cellulose and other complex molecules from simple raw materials, mostly water, CO_2 and sunshine.

Source: The New Zealand Institute for Crop and Food Research, Lynn Tucker, Astrid Eras

Humankind did not only invent great technological innovations, for example, concerning communication, agriculture or industry. Humankind also invented something entirely new:

waste. Different from natural circulatory "cradle to cradle" waste is a product that is useless, while in nature anything has a means to something else, it continuously transforms its form and function. Some examples of human waste are the emissions of CO_2, electronic waste or atomic waste, which pollute and impair the balance of the ecosystem to which humankind belongs and on which it depends.

❖ Example:

A plastic bag is used for an average of 30 minutes, though it takes about 100-400 years for decomposting, (Stubenrauch et al. 2010).

This destroys the ecosystem, its functioning and self-sustaining biodiversity. Thereby human beings break apart the above-mentioned "flow-through". They interrupt the integrity of wealth and life on earth in its typical diverse and dynamically transforming, adjusting, context-creating and innovating patterns. Haber explains:

> "mutation and selection are the main forces that lead to the development of living beings. This allows for a plenitude of adjustments to a large variety of contexts and conditions. This most likely explains the – nowadays very popular – appreciation of the diversity of life [note: biodiversity and socio-cultural diversity]. It is in accordance with the principle of the self-organisation of life and as well as with ecosystems [note: and socio-cultural networks] which are self-sustainable." (Haber 1995: 20).

Human socio-cultural diversity is the equivalent of biodiversity; the integrity and mutual integration of both are measures for sustainable development.

The multi-perspectivity inherent to socio-cultural diversity enables protagonists to recognise strengths and weaknesses, opportunities and threats, comparable to a SWOT-analysis. Subsequently it empowers humankind to generate complex solutions for complex problems. In practice, current human development is unsustainable. Social integration and environmental integrity depend now more than ever on the "cultural competencies" of humankind in assessing gaps in organisation and adjusting socio-cultural patterns to rapidly changing tempo-spatial contexts and requirements. "cultural competencies" are possessed by those who are able to deal mimetically with the other. Mimetic interchange facilitates socio-cultural meaning-making and effective identity progression, allowing for the self-organising potential of socio-cultural diversity in terms of multi-perspectivity (see chapter I and IV).

Unsustainable is not only the state of environmental integration of humankind, but furthermore the state of social integration of humankind as such.

❖ Example:

Signs of environmental degradation are, for example, climate change, sour rain, desertification, the melting of glaciers and loss of bio-diversity through human lifestyles. Signs of social disintegration are, for example, poverty, disrespect of human rights and the neo-liberal economic system. War, economic and political inequalities, discrimination against indigenous peoples and neo-capitalism, which

subordinates social welfare to economic growth (and the economic benefit of a minority to the dependence of the majority), are a few examples which indicate that the seemingly rational human being has not yet recognised the value of their own dignity as such.

The concept of sustainable development does not allow for the polarisation of the economy on the one side, and social and environmental values on the other. It recognises the interrelatedness of these dimensions and thereby, despite a widespread criticism that it is too vague, sustainability has pragmatic ideals.

The ideals of sustainability, to be able to live life in dignity, have respect for present and future generations, and carry out socio-economic development within the capacity of the ecosystem, are not alarmingly abstract; they are alarmingly theoretical (cp. chapter 3.2.9). This means that humankind is theoretically aware of social, economic and environmental maladjustments, still it does not foster adequate development in a practical sense. This gap between awareness and practice requires a mental paradigm change, which aims to analyse and innovate:

- who we are (cp. chapter I)
- in which context we are situated (cp. chapter II)
- what we would like to achieve, and (cp. chapter III)
- how to achieve these aims (cp. chapter IV)

This concerns not only individuals, but all socio-cultural agents on the intra- and inter-individual, the intra- and inter societal levels of socio-cultural identity: civil society and particular movements (chapter 2.2. for "particularisation"), business men and women, politicians/governments, NGOs, media representatives, teachers, parents, scientists and religious leaders.

When describing sustainability, it is crucial to mention its democratic character and meaning. The concept of sustainable development promotes participation and social integration in terms of mutuality, mimesis and reciprocity (chapter 1.3), democratic rights as well as duties (cp. for example chapter 3.1.5 / 3.2.7 for "the Golden Rule"). As mentioned above, the contemporary challenge for humankind is to deal with the other, who/which brings complexity into our lives: through the other the self is exposed to different socio-cultural meanings, perceptions, individual identity patterns and patterns of societal organisation. Furthermore, the other does not only represent something different, but the other offers something alternative to the self, which puts the own socio-cultural meanings and identity in question. A socio-cultural protagonist is sovereign when he is able to question and eventually transform the own self as much as necessary in order to approach to/arrange with the other (affiliation to the other, promoting unity). Simultaneously a socio-cultural sovereign protagonists is able to resist such affiliation, hence to endure the own socio-cultural identity and meaning compositions as much as possible in order to unfold uniqueness (opposing to the other, promoting diversity), while remaining arranged (by means of cooperation).

The mimetic interplay with "the other" generates, stimulates and innovates sovereign identities, which throughout the process become increasingly able to arrange and profit with the other in terms of mutually "added value" and synergetic networking. This mutuality, the mimetic interplay and cross-arrangement, requires an open but defined space, a framework. The equality of all, inherent to democracy, provides this framework formally, politically. A diversified (socio-culturally. diversely generated and interpreted) sustainability ethics is the ethical equivalent. It fosters and is a result of unity (by means of ethical connectedness of socio-cultural protagonists) in diversity (of socio-cultural identity and meaning patterns).

In their publication "Early Childhood Education Contributions to Sustainable Development", Pramling Samuelsson and Kaga write about democracy:

> "Nurturing respect for, and appreciation of diversity cannot be realized without adhering to democratic values and practices. Democracy is one fundamental value embedded in sustainable development, and a requisite for a just society where everyone's participation in the social, cultural, economic and political life is valued and counted. Learning about democratic values and practices can and should start in the smallest unit of society – the family – at birth (...)." (Samuelsson, Kaga 2008:13).

3.2.1. The Concept: Developing Development Alternatives

Sustainability, in a broad sense, is the capacity of human beings to endure.

In ecology the word describes how biological systems remain diverse and productive over time. In sociology it describes the converging towards social integration and integrity in terms of peace, wealth and dignity. In economy it describes prosperity and growth, admittedly not as an end in itself, but as a means to securing cultural diversity as well as biodiversity, biological productivity as well as social integration and integrity. Furthermore, the integration of economy in the concept, allows one to consider economy as an integrated element, instead of as an antipode to environmental responsibility and socially dignified lives. There is now abundant scientific evidence that humanity is living unsustainably.

A familiar concept, inspired by Aristotle and Gestalt theory, is that the whole is more complex, and in this regard different, than the sum of its parts (cp. Ehrenfels 1890). According to the theory, the sustainability concept aims to refer the three systems, economy, environment and society to one another and create synergetic effects. Thereby, one dimension of sustainability can strengthen the other. The dimensions can not adjust to human social and environmental requirements, desires, values, beliefs and perceptions if they are separately or autonomously developed because they would be detached and competing instead of cooperating in terms of synergy. The integrity of one of the dimensions derives from the relatedness to "the other" two dimensions, hence the dimensions interdepend. Sustainability is the framework which defines and determines one of the dimensions through the two others. Sustainability, therefore, promotes the absolute integrity of society, the economy and the environment. This concept is theoretical, and to some

degree idealistic, and utopic. Therefore, in more practical terms, sustainable development promotes the mutual integration of the three systems as much as possible.

Moreover, because sustainability can be perceived differently in distinct socio-cultural and historical contexts, it is crucial to note that the principle of mutuality (or of reciprocity) connotes the key idea of sustainable development. Mutuality refers to the mimetic interplay and cross-relation between one protagonists and the respective "other" in order to create sustainable evidence. According to the concepts of swarm intelligence, mass-psychology (chapter 1.6), multi-perspectivity (cp. chapter 1.6.6), system theory (cp. chapter 1.4.1), autopoiesis (cp. chapter 1.4.1) and a discursive ethics of neighbourhood (cp. chapter 3.1.5 and 3.1.6), humankind can develop most appropriately if one refers mimetically (cp. chapter 1.3) to the other (cp. chapter 1.3.1.1).

In this regard the theory of sustainability can be broken down into very simple axioms. The theory of sustainability need not, and when so only secondarily, (and then in diversified, socio-culturally patchwork-like manner) promote particular meanings, values, or (dogmatic) truths. It rather promotes the preconditions for meaning making, such as socio-cultural diversity and sovereign identities. Indeed, it relates development to society, environment and economy, but the interpretation of these sustainability-dimensions are socio-culturally open and not predetermined. That means, there can be different concepts of (social, economic and environmental) sustainability. The holistic character of sustainability thereby distinguishes the sustainability-discourse from other ethics and equity discourses.

On the level of practice, the three dimensions play an equal role in promoting sustainability. Whereas, on the ethical level the difference remains that society as well as the environment have intrinsic value, they are ends in themselves, while economy is a means to promoting social wealth and environmental integrity. More precisely, economy is a social phenomenon and tool; it is hence ethically subordinated. Nevertheless all three dimensions of sustainability share an equal status within the concept (cp. Figure 31, right below). This shows that "sustainable development" is not (at least not primarily) ideology-based, but functionally and operationally oriented; it aims to be pragmatic and practicable.

As an evolving, and thereby necessarily controversial, concept or ethics, sustainability is dynamic and polycentric. According to the principle of "unity in diversity", sustainability is a socio-culturally participative concept.

Since the 1980s, human sustainability has implied the integration of economic, social and environmental spheres in order to "meet the needs of the present without compromising the ability of future generations to meet their own needs." (Brundtland 1989). Transmitted to the United Nations General Assembly as an Annex to document and in order to "improve the quality of human life while living within the carrying capacity of supporting ecosystems." (IUCN/WWF/UNEP : 1991).

McKeon states:

> "Sustainable development is often thought to have three components: environment, society, and economy. The well-being of these three areas is intertwined, not separate." (McKeown 2002).

The sustainability triangle illustrates the interdependence between social, economic and ecological development.

Figure 31: The Three Dimensions of Sustainability (Source: Adams 2006).
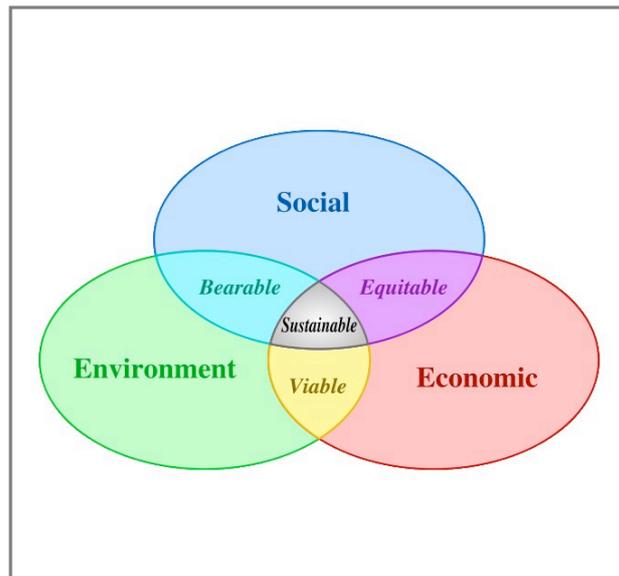
3.2.2 Sustainability in Reference to Society, Economy and Environment

Sustainability is defined by the correlation and interdependence of its three dimensions. These three dimensions can not be separated from one another. It is, for example, not possible to develop the economy and then to develop social justice and then to develop ecological integrity. The development of each of the three dimensions is only sustainable if it refers to the other dimensions. Economic growth is not sustainable if it disregards societal and environmental requirements. Consideration of the environment does not foreclose economic growth, but it is desirable to identify and implement environmentally friendly economies. Moreover the protection of the environment shall not enable indigenous peoples to live traditionally in environmentally sensitive areas with high bio-diversity. Social protection through employment rights must not eliminate employer rights and economic prosperity. Synergies, added-value and win-win situations are imaginable and possible.

❖ Example:

Sustainable development, for example, is illustrated not only by the movement for the reduction of carbon emissions and carbon capture, but also through the search for technical and industrial solutions for the *usage* of CO_2 as resource for production, according to the entrepreneurship principle: "Take a social or environmental problem and turn it into a business opportunity". Society, lifestyles, consumption patterns and policies can be adjusted to environmental requirement, in order to accomplish technical efforts of environmental protection.

Aspects of sustainability can be different depending on the locality, and they can refer more to particular groups (i.e. societies, movements) than to others.

Referring to the relatively contextual requirements of sustainable development Pramling Samuelsson and Kaga argue:

> "It was clear that relevant concerns and issues differed in developing and developed countries. In the former, the most pressing concern was children's survival and development in the early years – in families and communities – and that supporting and empowering families and communities to ensure adequate care, protection and stimulation through expanded access to health, nutrition, sanitation and water provisions, appeared most needed. Concern for curricular changes, for example, seemed secondary for the majority of the population. Meanwhile, in the developed countries, more attention is given to concerns about how to improve the quality of early childhood education in the service of sustainability – e.g. classroom practices, curriculum and pedagogy and early childhood teacher education. Inequity – disadvantaged groups such as low-income families, ethnic minorities, those living in rural and remote areas and urban slums – was recognized as a concern and barrier to achieving sustainability in both worlds. (…) Early education for sustainable development cannot be dealt with only in abstraction – it needs to be rooted in the local concrete reality of young children if it is to have real meaning and impact. To some extent, it is possible to discuss general features of education for sustainability that would apply to all situations. However, real-life questions faced by children, their families and communities, and arising from specific local contexts, are central to shaping what learning for sustainable development should look like. This is where participation by children, families and communities becomes essential." (Samuelsson and Kaga 2008).

In the following, the text looks at some chosen aspects of sustainability, which focus on one of the three dimensions without excluding the relevance of the other dimensions.

Sustainable Aspects of Society:

Blewitt states:

> "Social disruptions like war, crime and corruption divert resources from the areas of greatest human need, they damage the capacity of societies to plan for the future and generally threaten human well-being and the environment." (Blewitt 2008: 96).

In this regard, "peace", a seemingly nostalgic vision, proves its continued relevance. Further sustainable aspects of society are: democracy, justice, equality, human rights and duties, the Golden Rule and an ethics of neighbourhood.

Social Global Issues (cp. "Global issues" in chapter 1.1 and figure 2):

Poverty, human rights, HIV/Aids, human trafficking, child mortality, war, crime and corruption, food shortages, the lack of basic hygiene, the spread of incurable diseases, ethnic cleansing, and the lack of education inhibit the development of society. Further problems are nuclear weapons, food dumping, international migration rules, unequal rights for women and men, and the crisis of democracy (national states and policies, incapable of regulating globalised economy, cp. chapter 2.1.4).

Sustainable Aspects of the Economy:

De Long states:

> "By the 20th century, the industrial revolution had led to an exponential increase in the human consumption of resources. The increase in health, wealth and population was perceived as a simple path of progress." (de Long 2000).

However, in the 1930s economists began developing models of non-renewable resource management (this is described by the Hotelling's rule, cp. Devarajan, Fisher 1981:65-73). Furthermore models of welfare were developed for an economy that uses non-renewable resources (this is called the "Hartwick's rule" cp. Hartwick 1977:972-74). Neo-capitalism undermined social and environmental values. Or put differently, the environment and society became economic externalities. Neo-capitalism replaced social integrity and environmental protection with economic growth, based on neo-liberal, political "laissez-faire". Concepts of sustainability argue that economic growth, especially continuous economic prosperity and vitality, go together with, and can not be separated from, social and environmental, ethical and political frameworks. Current democracy-compatible contra-concepts are the eco-social market economy as well as approaches such as the Tobin and Carbon Tax. Economic production patterns sometimes represent socio-cultural identity. In this case they have meaning in themselves. Otherwise, economy is a means to social wellbeing and environmental integrity.

Economic Global Issues:

The dysfunction of the global economic system/neo-capitalism can be seen in effects such as the current financial crisis, caused by financial mismanagement on the economic side and inefficient control and conduct on the political side. Political instability, corruption and wars are sometimes caused by economic interests and they may also harm economic security. Other elements that affect the economy are climate change and an insecure energy supply because of unsustainable energy from fossil resources. Controversial issues appear, such as intellectual property rights and regulations for biotechnology, trade, investment, competition, international labor, E-commerce and for global financial architecture. The current economic and political systems make it possible for a few people and nations to profit from others who often live below dignified living standards.

Sustainable Aspects of the Environment:

The earth can be perceived as a living organism, at least it hosts living systems. One of these systems is humankind. Humankind is part of the ecosystem and as humankind unfolds in socio-cultural diversity, the natural environment unfolds in bio-diversity. If humankind and the environment are mutually integrative – and that requires the appropriate socio-"cultural competencies", patterns and meanings – then the ecosystem is self-organising, hence enduring.

As the earth's human population increases, natural ecosystems decline and changes in the balance of natural cycles have a negative impact on both humans and other living systems.

Not only the quantity of human beings on the planet, but also their lifestyles, referring to the quality of their consumption and production patterns, result in a deep ecological footprint:

> "The ecological footprint is a measure of the load imposed by a given population on nature. It represents the area of the Earth's surface necessary to sustain levels of resource consumption and waste discharge by that population." (Wackernagel, Rees 1996).

Figure 32: Population Growth

Graph showing human population growth from 10,000 BC – AD 2000, illustrating current exponential growth. Source: http://www.naturenorth.com/YOTF/World_Population.jpg
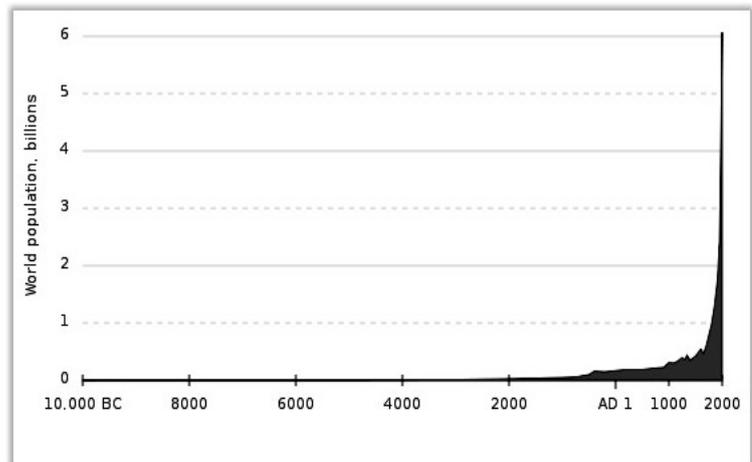
It is possible that sustainable solutions to the integration of society, the environment and the economy are required in a quantity similar to that of the growth in human population.

Figure 33: Rising Population – Hectares of Available Land per Person
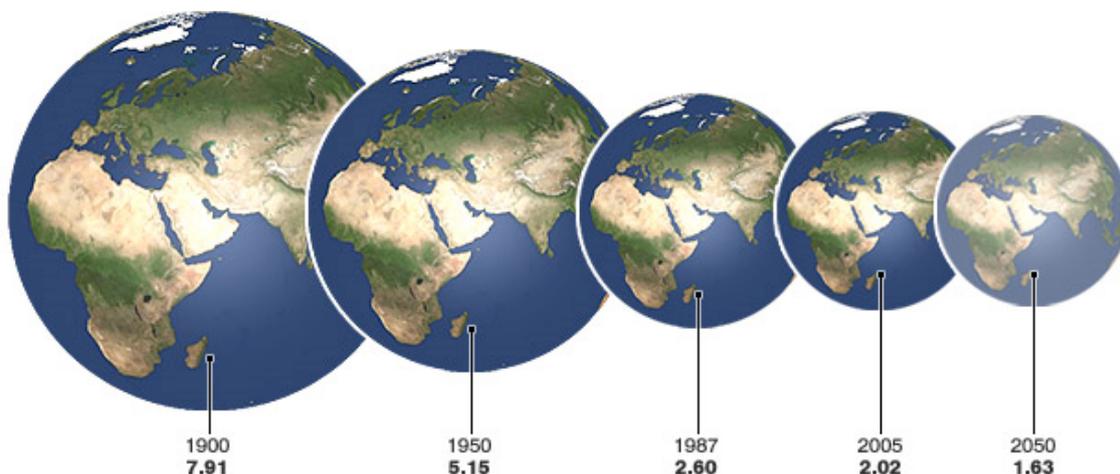
Source: BBC http://news.bbc.co.uk/2/hi/in_depth/629/629/7056601.stm

Environmental Global Issues:

Climate change, desertification, genetically modified food, meat production and other reasons for excessive land and water-use, monocultures, fertilisers, biodiversity losses, fisheries depletion, deforestation, water pollution and deficits, maritime safety and pollution, transport, and environmental refugees are examples of global issues that affect the environment. The destabilised ecosystem has effects on human existence, on our ability to

live dignified lives in general and on all aspects of human organisation, such as economic and political systems.

The definition of sustainable development given by the Brundtland Commission is frequently quoted and has undergone various interpretations. Definitions of sustainability may be expressed as statements of fact, intent, or value with sustainability treated as either a "journey" or "destination". Questions about where we are now, where we need to be going, and how we are to get there, are all open to interpretation (Cp. Holling 2000). cp. Structure of this text, see introduction) and will depend on the particular context under consideration (: "Sustainable Development an Evolving Concept", UNESCO 2001).

One useful explanation is put forward by Helen Bergsten (Chalmers University of Technology; Bergsten 2006). Bergsten explains:

> "Sustainable development is a perspective or a vision rather than a definition and provides room for many different starting points". (ibid.)

Another frequently used text is the United Nations Millennium Declaration, in which the message is that we must ensure that basic human needs may be satisfied for all human beings without damaging the life-sustaining system of our planet.

A clear common message in the perspectives and definitions gathered from different international contexts is that the time line encompasses the present and all future generations, and that there is always a global perspective. Individual involvement and responsibility are also integral parts of the concept of sustainable development.

Critical questioning is one essential element necessary for achieving sustainability because questions incite discourse and mobilise more questions, thoughts and involvements than answers could. This includes the questioning of concepts of sustainable development as well. The OECD asks:

> "How can we meet the needs of today without diminishing the capacity of future generations to meet theirs? Sustainable development implies a broad view of human welfare, a long term perspective about the consequences of today's activities, and global co-operation to reach viable solutions." (OECD 2010).

3.2.3 Critical Contemplation about Sustainable Development Concepts

There are hundreds of definitions for sustainability and sustainable development. Sustainability is obviously difficult to comprehend. It has been regarded "as both an important but unfocused concept like 'liberty' or 'justice' " (cp. Pearce, Barbier, Markandya 2000; Blewitt 2008) and as a "feel-good buzzword with little meaning or substance" (Dunning 2006 and cp. Marshall Toffel 2005: 673–682).

According to Pezzey, by 1997 there were already more than 5,000 definitions for sustainability. (cp. Pezzey 1997). In order to escape this dilemma, Pezzey differentiates

three aspects of sustainable development. According to Pezzey, the respective development can be sustainable (balancing economy, society and environment), sustained (continuous), and survivable (providing basic needs), **(**Pezzey 1997).

Just as Pezzey's definition provides a new view of sustainability, the diversity of all (even contradictory) definitions provokes and incites frictions, negotiations – and discourse. This discussion and the questioning inherent therein, in turn, are essential aspects of dynamic and participatory sustainability, because they evolve the "open" (not strictly predefined, hence evolving) concept and make it just, participative and adjustable to tempo-spatial contexts. Just as the conceptualisation of sustainability requires controversial negotiations and various participations, the concept is an "open source". That means it is merely a resource to inspire manifold interpretations and diverse implementations. It seems disadvantageous that due to its openness, the definition of sustainability cannot be precise and the concept(s) can be ambivalent and even contradictory.

An ethics, or "social contract" (Dahrendorf 1992: 50) such as sustainability requires participation to such an extent that at its root it is an ethics of negotiation and discourse. Discourse is not only cooperative; it also involves competition, and therefore conflict. Dahrendorf states:

> „The innovation of a 'social contract' [annotation: a sustainability ethics] proceeds through social conflicts. They provide the paragons and forces for change. Just as the 'social contract', the social conflicts also transform over time." (Dahrendorf 1992 : 50)

The steady evolution, which Dahrendorf describes as "transformation over time" (ibid.) ensures the appropriateness, adequacy, socio-cultural relevance – and sustainability of human development.

According to Eblinghaus and Stickler:

> "This ambiguity must not be perceived as a conceptual coincidence or deficit, which must be solved; it is rather a central attribute of the concept. (…) There is no unifying definition of sustainable development. Sustainable development is a discursively generated and therefore contradictory product." (Eblinghaus/Stickler 1996:37).

Indeed, controversy, ambiguity, and the diversified, polycentric character of "sustainable development" are part of the development process. These effects evoke and even provoke competitive cooperation. Moreover, represent these effects diversity. Sustainability aims to foster diversity because of its regulating, poetic value. Moreover, sustainability aims to incite identities to become and be sovereign, to be and become "swarms of various mimetic participations". For these reasons, the concept of sustainability is diverse and evolving. It is because of the controversial, criticism-evoking, diversified, polycentric character of the concept that it becomes pragmatic.

The criticism of sustainability, nevertheless, must be constructive, which means that diverse perceptions must be as inclusive as possible in order to prevent dogmatic fundamentalism and as precise as possible in order to prevent conceptual relativism.

Referring to the pragmatic aspects of the diversified sustainability ethics, Morris Dickstein writes:

> „Pragmatism, like modernism, reflects the break—up of [socio-]cultural and religious authority, the turn away from any simple or stable definition of truth, the shift from totalising systems and unified narratives to a more fragmented plurality of perspectives." (Dickstein 1998: 4).

Dickstein states:

> "The revival of pragmatism has excited enormous interest and controversy in the intellectual community (..). It has appealed to philosophers, European theorists looking for an alternative to Marxism, and postmodernists seeking native roots for their critique of absolutes and the universal." (Dickstein 1998: 1).

And Diggins declares:

> "pragmatism offered uncertainty and plurality as an answer to exhausted past ideas of authority" (Diggins 1994: 342; cp. Bernstein 1992).

In contrast to totalitarian, absolutist, fundamentalist, dogmatic and ideological patterns of organisation, an inclusive and therefore diversified and controversial sustainability concept is participatory and democratic. Dubiel argues that:

> "Democracy is the public performance of dissent." (Dubiel 1997: 426; cp. chapter 3.1.6 for "discourse ethics").

Ahrenhövel writes:

> „The pragmatist does not search for final answers. He rather aims to replace 'less helpful world-perceptions' with 'more helpful and adequate world-perceptions' (cp. Rorty 1994: 38). The starting-point for this perception is the thesis that our complete knowledge is 'descriptive and refers to our social requirements' (ibid. 39)." (Arenhövel 2000: 215).

In other words, objectivity is inter-subjectivity and thereby intentional. Objectivity is not the decoding "reality", according to the Thomas-Theorem (of self-fulfilling prophecy) objectivity rather encodes "reality" (cp. chapter 1.7 for "objectivity and subjectively intentional reality"). Ahrenhövel concludes:

> „From a pragmatic perspective, neutrality or objectivity are therefore not normative predicates; they rather certify a fragile balance between different interests in terms of a transitional/temporary consensus. Whatever appears as a fair decision and whatever seems to be appropriately organised today, can – with the knowledge and experiences of future generations – be described as wrong or unfair. Social structures are therefore the transitionally/temporarily stable result of dynamic and conflictive negotiation processes." (Ahrenhövel 2000).

Such negotiating of concepts and, in this regard, a discursive sustainability ethics, as well as the practical development of sustainability, require socio-cultural diversity. Sustainability, therefore, must democratically promote and protect a socio-cultural diversity of meanings,

identifications, perceptions and expressions, interpretations strategies and applications. A sustainable equilibrium of socio-cultures must contain measures to eradicate diversity-eliminating efforts, such as absolutism, fundamentalism, discrimination and extremism, which limit socio-cultural freedom and mimetic arrangement, multi-perspectivity, autopoiesis and competitive cooperation.

Indeed it is desirable to have more precise and universal definitions of sustainability. But it appears important to keep definitions or perceptions of sustainability open, inclusive and dynamic. By these means the definitions and perceptions can be contextualised and implemented through explicit, contextualised action (i.e. production patterns, policy) and the rather implicit lifestyles (i.e. consumption patterns, motivations/behaviour, lifestyles, etc).

3.2.3.1 The First and Second Dialectics of Sustainable Development

On an abstract level, there are two dialectics of sustainable development. They compliment one another and can provide information to help us further comprehend the broadness and impreciseness or "pragmatic openness" of the sustainability concept.

The first dialectics of sustainable development:

Sustainability has to overcome the social, economic and ecological mistakes of humankind. Exacerbated by industrialisation and socially, economically and environmentally unsustainable lifestyles, these mistakes have led to global issues (cp. chapter 1.1. and figure 2). Regarding this fact, one can neither expect nor define a globally elaborated (differentiated, precise and especially unified, singular) concept of sustainability, at least not within a couple of decades. Humankind is confronted with global (dimension of space) as well as dynamic and omnipresent, long-term (dimension of time) challenges. These world- (dimension of space) and simultaneously inter-generational (dimension of time) problems result in the first dialectics of sustainability. That first dialectics states that complex social, economic and environmental challenges require complex (socio-) cultural potential (or potency), such as a socio-cultural diversity of meanings, sovereign identities and protagonists, equipped with "cultural competencies" in order to comprehend and overcome the challenges. At the same time, a potent human species will always generate complex challenges, for example through technical innovations, socio-cultural patterns of political and economic organisation and through new lifestyles.

Figure 34: The first dialectics of sustainable development
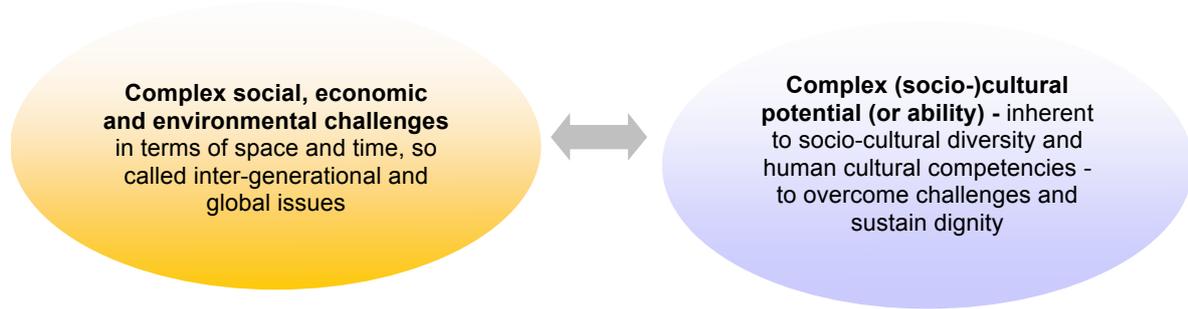
Two of the guidelines for overcoming complex problems are: Think global act local (dimension of space). Think long-term act now (dimension of time). Furthermore, explicit "thinking" is important, but it is only possible and appropriate if it is rooted in implicit meanings, identifications, desires and values (cp. chapter 3.2.9). Adequate, lifelong education for sustainable development and the maintenance of socio-cultural diversity are two resources, which promote such meaning from the bottom-up. Top down approaches must provide an adequate democratic eco-social framework; the policy to control and guide the economic system by long-term social and environmental means.

The second dialectics of sustainable development:

A discursive ethics of sustainability evolves, negotiates about and continuously recreates sustainability. That evolving is important because today we cannot know what challenges have to be overcome. Sustainable development is the process of detecting and overcoming such challenges, particularly through the innovation and adjustment of hitherto socio-cultural meanings, identities and societal patterns. Hence sustainability is an evolving concept and discourse, competitive cooperation and mimetic interchange are the modi of evolving.

This is the second dialectics of sustainable development: due to the requirement of multi-perspectivity and because socio-cultural diversity is an end in itself, sustainability must – in order to generate and sustain itself as a meaning or global ethics – be able to unite, or frame specific (i.e. particularly content-related, locally relevant, participatory) sub-definitions and sub-meanings. In other words, sustainable development refers to global (dimension of space) and continuous (dimension of time) development. That requires a cohesive concept, or ethics, capable to cohere otherwise random socio-cultural meanings to a unifying sustainability meaning (dimension of unity).

"Pure" unity however would be equal to the homogenisation of differences. Required is the "conceptional multi-perspectivity", which evokes from the participation of many sustainability-conceptionalists in sustainability meaning-making. The concept of sustainability requires different sustainability perceptions, interpretations and variations (dimension of heterogeneity

and diversity) in order to remain functional and not be ideological (cp. chapter 1.5 for "unity in diversity").

Figure 35: The second dialectics of sustainable development
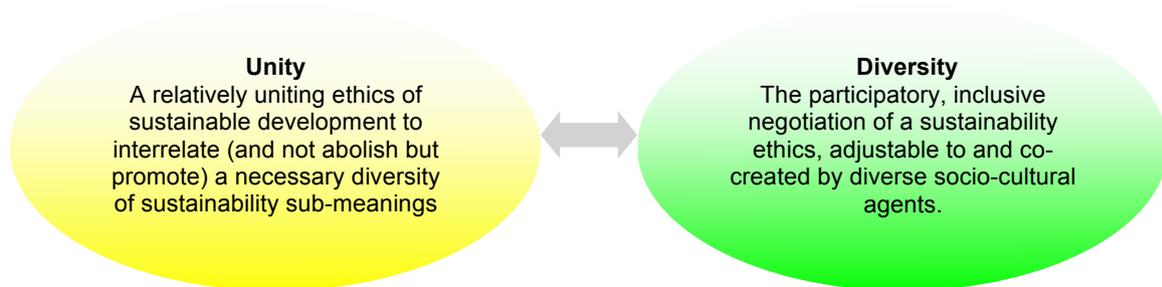
The above described socio-culturally inclusive character of sustainability (see chapters 3.2.4; 3.2.5, 3.2.7 and particularly figure 38, below) allows for the continuous development and enhancement of perceptions of sustainability and, thereby, sustainable actions and lifestyles. Contradictory to this integrative, or inclusive character of sustainability, an exclusive (segregative, differentiated) and thereby precise perception and definition of sustainability (see figure 36, below) would possibly foster ethnocentrism, fundamentalism, extremism and ideology (by means of "over-exposed values", cp. figure 39, below). Such rejection of the principle of mutuality and openness suspends the principle of diversity and multi-perspectivity. Although an exclusive and precise sustainability definition would be easier to formalise (i.e. in terms of policy, rights and duty standards), standardisation prevents conversions to contextually particular (i.e. local) socio-cultural perceptions and meanings. Such sustainability definition would be theoretical and not pragmatic, or globally and continuously practicable. Socio-culturally diverse protagonists mimetically generate, consolidate, communicate and innovate diverse, theoretical and practical sustainability approaches, each with unifying and diversifying aspects.

❖ Example:

Human Rights are one political and ethical element of sustainability. Yet despite the universalisation of Human Rights (dimension of unity), their interpretation and implementation remain particular/contextual, e.g. they differently respected in different places to different times.

Hardi and Zdan explain:
> "Thus the design of a sustainable world - the choice and degree to which 'certain features' are to be sustained - will depend on the operating set of values, values which will shift over time and will vary within communities and from place to place." (Hardi/ Zdan, 1997:9)

The discursive and dynamic "texture" of a sustainability ethics does not suffice for factual sustainable development. It is not sufficient to discuss the topic in publications, science, media, government, organisations, schools, through field projects and policy, ethic codes and movements, etc. The discussions are only sufficient if they cause the concept to evolve and if

they incorporate a variety of different perceptions into relatively common meaning. Therefore it is important to mimetically arrange with "the other" - the other socio-cultural protagonist who represents and shapes a different sustainability meaning.

In other words, over time it is indeed necessary to approach the concept through discussion and to aim for more precision and relative, integrative universalisation/ standardisation. This search for - and criticism of lacking - precision is indicated by the numerous publications and public, institutional discussions about the meaning, content and definition of sustainable development. The concept of sustainable development must reach a point of maximum standardisation while maintaining a maximum level of openness. The concept of sustainability is heterogenic, it consists of manifold participations, influences and transforms continuously. It can converge (approach) standardisation but never totally reach it.

In this context and from a mathematical perspective, "convergence" describes a parable that is ever approaching to a graph, without reaching it. A concept, such as sustainability can converge to a singular definition, without reaching such singular, or absolute definition. The concept of sustainability will and must remain heterogenic in order to evade absolutism (determinism) through an absolutistic (deterministic) definition (as in figure 36 and figure 39, curve B and A2, below).

"Convergence" also means that there must be limits to conceptual relativism, openness and dynamism. Sustainability concepts evolve over time and are complex at any one given moment. It must be possible through all socio-cultural communications to generate, consolidate, communicate and innovate socio-culturally diverse and globally standardised perceptions of sustainability. This can be guaranteed only by a tolerant, holistic and inclusive sustainability concept such as the one presented in this text.

Pedagogical concepts are no means in themselfes but must prove themselves in practice. The concept of sustainability is, due to its inclusive, open and rather vague character not a means in itself. No single concept seems to be able to capture the diversity of other concepts. It is itself the concept of sustainability is a cluster of particular (not universal) environmental, economic and social sub-values and sub-meanings. Other concepts, such as peace or an eco-social market economy, democracy, equality of opportunity and Human Rights, contribute essentially to sustainable development as sub-concepts.

It is expected that this conceptual strain or friction, resulting from the evolving and contradictory character of the pluralist concept, will strongly incite and provoke discursive negotiations. These negotiations, in turn, foster and regulate the generation, consolidation, communication and innovation of more elaborate concepts, definitions, indicators, socio-cultural patterns and meanings, identifications and explicit actions as well as implicit attitudes.

3.2.4 Distinguishing Three Possible Concepts of Sustainable Development

Often development theories or concepts are thought of as being effective if they are precisely defined. Sustainable development instead aims to involve diverse socio-cultural actors and meanings in order to empower its creators and the concept of sustainability with multi-perspectivity and poietic potency.

This refers to the first dialectics of sustainability, which aims to overcome complex problems through complex and dynamic organisation and the cross-relation of diverse meanings on all identity levels. Indeed this greatly reduces the possibility of defining sustainable development as precisely as a law of nature.

The second dialectics of sustainability argues that a participatory, sustainable and ethical unity fosters (and results from) a diversity of meanings and sustainability perceptions ("unity in diversity"). In the following, three different approaches or concepts of sustainability are illustrated.

Development towards sustainability is the process of approaching to socio-culturally relatively concerted and therefore integrative meaning – a meaning that arranges (unites/integrates) different meanings with one another in order to make sure that human existence endures and to foster human dignified living. The variation between sustainability-perceptions is substantial and often controversial. For example, one person believes that the "invisible hand" of the free market economy regulates the arrangement of companies, countries and people, promoting human wellbeing (neo-liberalism). Someone else believes that a market is only integrative and free if the freedom is socially and environmentally defined (eco-social market economy). Negotiations about market economies are sustainable. Through these negotiation processes economic concepts may be developed that are more sustainable than previous concepts, for example, so that an eco-social market economy will eventually prevail over neo-liberalism.

In this sense, sustainable development is also the process of reducing the variance between sustainability meanings (and concepts) in order to achieve more sustainability, or more sustainable integration.

The following three figures illustrate how diverse perceptions of sustainability (represented by strings) relate over time to a uniting, still theoretical and utopic ethics of sustainable development. According to the principle of self-similarity (cp. chapter 1.3.1.4) a string of perception itself is a bunch of perceptual sub-strings, which are in turn bunches of socio-culturally particular meanings, values, desires, beliefs, etc. They are perceived implicitly and/or explicitly by socio-cultural actors on all identity levels - by individuals, organisations and institutions.

Figure 36:
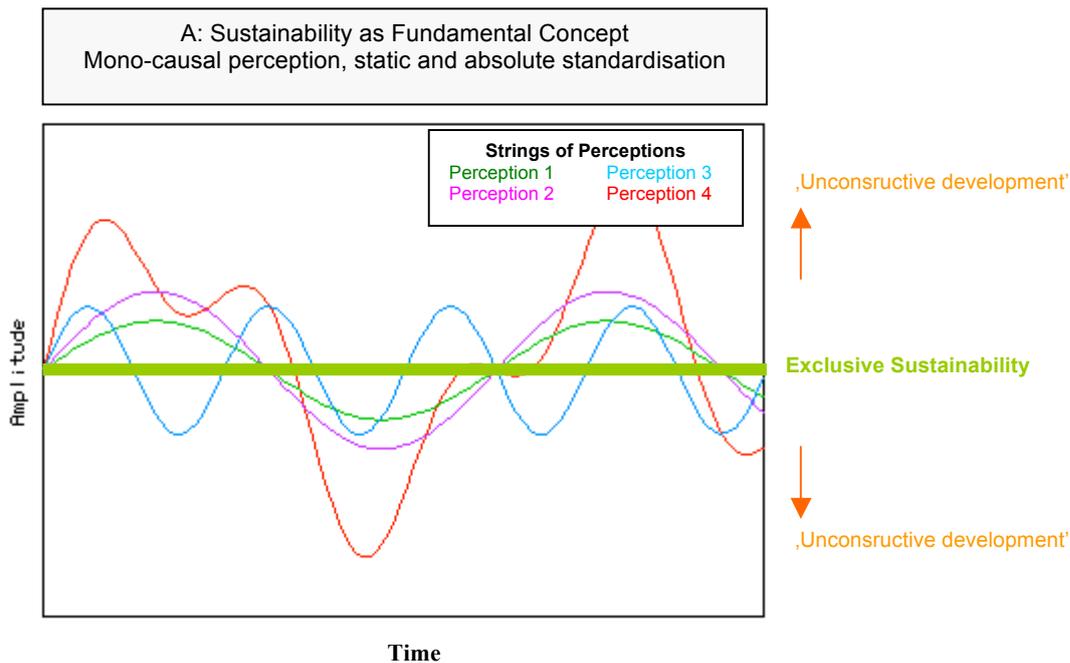
- Advantages:

The singular, homogenous perception of sustainability promises to define, measure, monitor, evaluate, and control the status of sustainability in different societies. It provides absolute criteria for the promotion of best practices.

- Disadvantages:

Due to its absolutistic abstraction (homogenisation) of sustainability, the concept is totally theoretical and not applicable. It strongly compromises and ignores the necessary local and particular interpretations, perceptions and imaginations about sustainability and thereby reduces the probability of global adaptation. A singular ("mono-causal") perception of sustainability is fundamentalistic, ideological, intolerant and possibly ethno-centristic. The undermining of socio-culturally particular and therefore diverse perceptions of sustainability prevents sustainable cross-stimulation, innovation, adaptation and application. This concept of sustainability actually prevents sustainable development.

Figure 37:

B: Concept-Relativistic, Integrative Sustainability
Tolerant and non-developing, ever imprecise perception
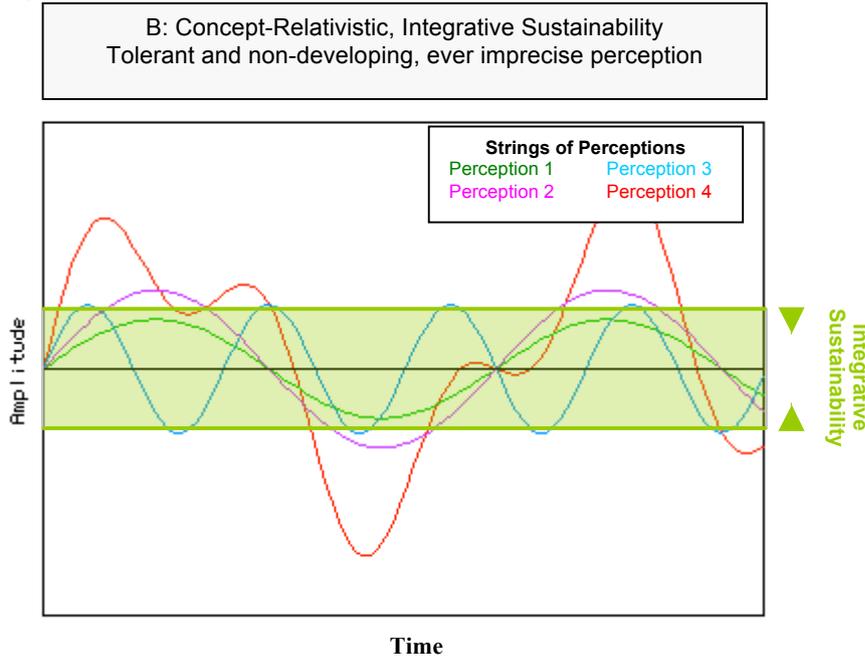
- Advantages:

This concept is integrative. It includes different socio-cultural sustainability meanings and bestows of a relatively capacious definition-latitude. This allows different socio-cultural actors to participate in and identify with this perception of sustainability. This concept of sustainability reflects what sustainability should foster: the ability to deal with differences, and it is generated through a diversity of perceptual contributions/participations. This sustainability-concepts is not homogenous, it allows no exclusive and precise definition. Thus it is heterogenic and rather an assembly of perceptions of "sustainabilities".

- Disadvantages

This perception of sustainability works rather as a description than as a definition, which makes it difficult to communicate. The greatest disadvantage of this concept is that, although it is integrative, it is rather static. The definition of sustainability in this concept is as fixed as in figure 1. It is hence neither evolving nor developing through socio-cultural interplay and communication, such as negotiation, criticism, discussion or application. This concept is simply broad, but it is fixed in its broadness, foreclosing conceptual development. Hence, it would probably remain theoretical and not emerge on the supra-societal identity level or become a part of shared meaning in terms of a common ethics.

Figure 38:

B: Integrative Sustainability as Convergence Concept
multi-causal perception and relative standardisation
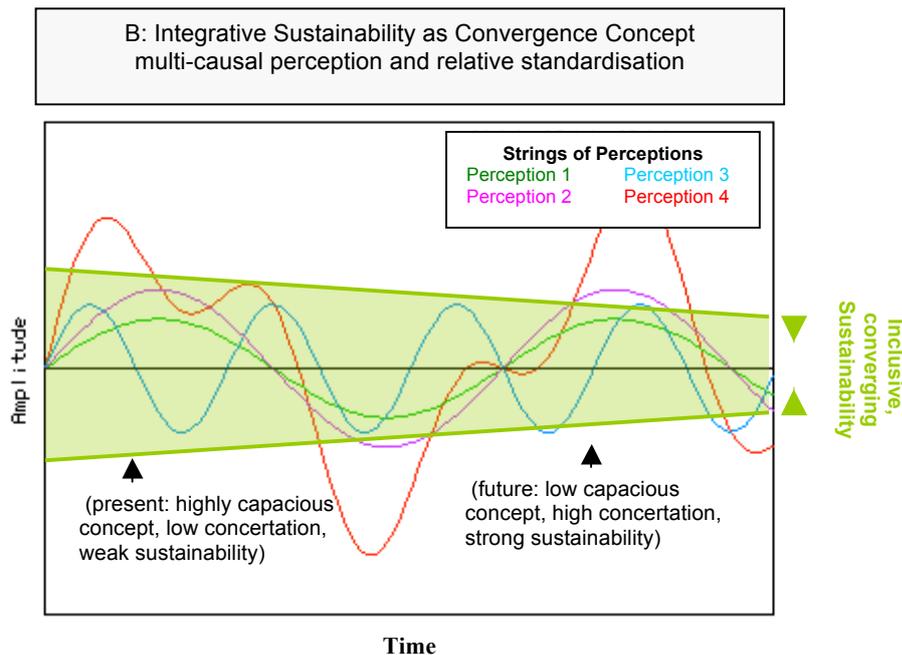
- Advantages:

This holistic, multi-linear perception of sustainability maintains the decentralised and participatory socio-cultural multi-perspectivity (chapter 1.6 and 1.6.6) on the intra-, inter-individual and the inter- and supra-societal identity levels (cp. chapter 1.3.1.2 for "dimensions of socio-cultural identity"). That concept of sustainability maintains the dynamics - the development - of the concept. It enables integrative development and incites processes of mutual arrangement. "Unity in diversity" is an important aspect of the concept (cp. above: the second dialectics of sustainable development). In this regard the term "sustainability" describes a limited definition of a concept, which unifies (Dimension of unity) different perceptions. This unification is does not connote the homogenisation of these different perceptions. It is rather a capacious concept, which provides open space for diverse perceptions (dimension of diversity). In this regard this concept of sustainability resists homogenisation and moreover fosters particular perceptions of sustainability. A multi-linear, heterogeneous and therefore relatively integrative sustainability concept allows for "different approaches in different contexts" (Bonn Declaration §15, in: UNESCO 2009).

It does not only respect the dynamic, socio-cultural diversity of meanings, it also uses these meanings to mimetically create a re-adjustable and hence applicable ethics of sustainability. This refers to the first dialectics of sustainable development in that it associates with the potential of socio-cultural diversity and its inherent multi-perspectivity to overcome complex problems.

In contrast to figure 2 this concept is not static. It converges (approaches) over time towards to more precise, but nevertheless diverse and polycentric perceptions and definitions of

sustainability. That means, over the time, sustainability perceptions converge towards increased concertation and precision, while remaining heterogeneous. From a highly capacious concept which affords not very concerted perceptions and which therefore promotes weak sustainability it converges over time to a comparatively low capacious concept with a relatively high degree of concertation, promoting strong (effective) sustainability.

According to the theory, as over time this concept of sustainability only converges to – but never absolutely reaches – standardisation, it is not fundamentalistic or ideological, but tolerant and integrative. This concept promises to be the most pragmatically applicable and de facto the most sustainable version out of the other above mentioned 'options'.

- Disadvantages:

This perception is communicative; it incites and requires continuous negotiation, dialogue, reflection, adaptation and innovation. Hence, there is no imediate definition possible with this conceptual approach. Moreover, the mentioned dialogue will be accompanied by strong criticism and confusion due to the relatively imprecise and controversial, poly-centric definition(s). These processes are fuelled by the intent to converge (approach, develop) the concept towards increasing precision. The criticism of the concept must not be eliminated since sustainability promotes critical thinking and criticism essentially nourishes the concept. For these reasons this sustainable development perception is uncomfortable for its protagonists. The dilemma is that sustainable development is a global and complex issue, involving all people and societies, which in turn does not allow for an absolute abstraction (precise definition). Such abstraction, however, would be very helpful for defining, indicating, measuring, monitoring, evaluating and controlling the status of sustainability in different societies. A homogeneous concept of sustainability would moreover allow for effective innovation transfer on a short-term basis. The disadvantages of such tight coupling are described in concept A.

2.3.5 Integrative Sustainability as Convergence Concept – Practical Applications

This text uses the third concept (concept C) as basis for discussion, the "integrative sustainability as convergence concept". The reason for this is that it refers most appropriately to the two above mentioned dialectics of sustainability and because sustainable development means maintaining the interplay between consolidating and innovating forces:

- *innovating forces*: These forces arise from the diversity inherent friction between the different strings of particular sustainability perceptions. They disturb, stimulate and thereby potentially innovate consolidated perceptions of sustainability.

- *consolidating forces:* These forces are enabled through the relative and increasingly precise definition of sustainability. They represent established sustainability perceptions.

❖ Example:

The use of oil in the production of goods and energy enabled humans to raise living standards. It seemed "sustainable", according to previously established/consolidated sustainability perceptions. Scientific insights have shown that this perception of sustainability must change; they proved that there is a relation between the use of oil and climate change. Subsequently, most sustainability perceptions were innovated to take the environment into consideration. This means that sustainability perceptions can not be singular, mono-causal and eternal; they must consider and integrate "other" sustainability perceptions.

Sustainability perceptions, the expression of these perceptions and their negotiation can foster a certain standardisation. This means that even though the perceptions of different socio-cultural protagonists about sustainability can be very different, as long as they struggle and negotiate about them, more standardised perceptions and more accurate implementations of sustainability can be developed. Sustainable development is the process of achieving such relative standardisation without diminishing its inclusive and polycentric character.

Standards refer less to definitions than to the trend of analysing the state of the world in terms of social integrity and environmental integration. The following example describes how two different socio-cultural protagonists (Chinese and European representatives) with different sustainability perceptions mutually developed more standardised perceptions and more accurate implementations of sustainability.

❖ Example:

China and the EU, interrelating and negotiating based on environmental issues and values China and the EU struggle with one another about their respective rights and duties concerning environmental degradation. While the European Union tends to call upon China to engage in environmental protection, China responds, pointing out that Europe developed because of its industrialisation and environmental degradation in the 19th and 20th centuries. The political powers in China therefore recognise that they have the right to develop industrially as well. There are environmental protection programmes in China, but these are rather marginal compared to their (environmentally degrading) industrialisation efforts. Even though the discussions may not be far reaching, compared to 50 years ago (a very short time in human development) these discussions and the growing interest from sides of governments and civil society are a commendable step forward. The process is slow and the environmental degradation is substantial, but there is no alternative;, China can not be forced by the EU to practice more environmental protection. Promoting the competitive cooperation process of environmental consideration and protection is sustainable, even though it could be more sustainable. Indeed, due to global inter-dependences within the "global village", there is no alternative to immediate environmental protection, even in regard to the case of China. It is, nevertheless, essential that it comes through a process of inter-relation and negotiation, based on environmental issues and values.

There can be discussions about sustainability that do not result in sustainable enhancement and practical implementation. As a general rule, discussions will in most cases contribute to the exploration and development of sustainability perceptions, meanings and actions. These

perceptions can be discussed and developed without a sustainable result, for example, a real sustainability paradigm shift. On the other hand, there can be no sustainable results without adequate perceptions. This is why it is so important to concentrate on the perceptions of sustainability and why perceptual mimesis, the reciprocal generation, consolidation, communication and innovation of the meaning of sustainability is part of sustainable development.

It is remarkable that there can not be sustainable enhancements without discussions and other mimetic exchange. Moreover, due to the integrative, diversified character of sustainability and the dynamics arising from contextual changes, definitions, meanings and perceptions of sustainability must be continuously refined. The mimetic meaning-making of sustainability adjusts the diverse sustainability perceptions to social, environmental and economic contexts and requirements.

In this regard, the respective definitions, meanings and perceptions of sustainable development have less priority than the modes of operating such norms – the processes of defining, reflecting, negotiating and communicating about sustainability. This allows socio-cultural protagonists to assess and access diverse sustainability alternatives, which makes successfully applied sustainable development more feasible.

It can be expected that the effects of practically applying "integrative sustainability as convergence concept" are represented by strong movements and trends. These trends are brought to life by civil society (including individuals) and other societal elements/institutions such as governments, NGOs, schools, media, science, the corporate sector, religious institutions and communities, etc.

Thus, the concept maintains and will always maintain a certain conceptual relativism. That relativism functions as an open space for the generation, consolidation, communication and innovation of alternative and possibly more accurate sustainability perceptions. Conceptual relativism may weaken the development of sustainability, of definitions and perceptions. Nevertheless, since neither definitions nor perceptions are to be heterogeneous the discourse itself, as the mode of operation, can be the building ground for complexity-reducing, more precise definitions.

It is on various formal and informal levels and through the various socio-cultural protagonists (individuals, movements, organisations, etc) that integrative concepts of sustainability are defined, communicated and continuously innovated through discourse and competitive cooperation. Sustainability configuring "discourse" refers to all sorts of communication, including language, rituals and other ways of performing socio-cultural meaning.

Figure 39 "Integrative Sustainability as Convergence Concept – Practical Application" summarises the above elaborated aspects of sustainability and illustrates the convergence and bundling of sustainability perceptions over time. For a better understanding of the figure, here the different elements of the figure are explained:

- **Challenges over time** (x)

As humankind develops solutions to problems it creates new problems, which require new solutions. Sustainability challenges are long-term global issues, or "problems without passports" (Kofi Annan), which endanger social, environmental and economic regulation and cohesion.

- **Values over time** (y)

Values are the counter forces to challenges. They enable protagonists to overcome problems. Values are collective agreements in that they allow socio-cultural actors on all identity-levels to analyse the gaps in their socio-cultural organisation (this includes meanings and identities) and to adjust this organisation in order to overcome these gaps.

- **1972**

In 1972 an already existing scepticism about the sustainability of human development was formally and publicly released. It was the year of the World Commission on Environment and Development's (WCED) conference, which demanded a more appropriate, sustainable form of development, the Club of Rome report "The Limits to Growth" (Meadows, Club of Rome 1972) and the foundation of the UN Environmental Program (UNEP). This year did not mark the beginning of sustainable development, but the advent of explicit perceptions of sustainability.

- **A1 – (Strings of) sustainability perceptions**

These strings or streams of sustainability perceptions illustrate an increasing correlation and inter-relation with "the other"; with neighbouring strings or streams.

They are reduced in amplitude while maintaining their diversity. In this regard, they converge to (develop) increased cohesion of sustainability perceptions and promote increasingly strong sustainability performances. Moreover, they aim to create a "swarm" of diverse, but relatively united visions of a sustainable future (D).

Annotation:

Sustainability values enable and represent appropriate hence sustainability-sound meanings, socio-cultural identities and societal organisation patterns. Shared challenges require that

protagonists share values to some extent as well in order to promote concerted, coherent and effective human action.

- **A2 – Abstract, simplified sustainability perception**

This line represents an abstract and simplified perception of sustainability, mostly relevant for scientists and institutions. It is the expectation of a random variable, an average value of sustainability. As such it descriptive not determining (like the sustainability exclusive concept in figure 36: "sustainability as fundamental concept", above). Such mono-causal representation is artificial, but makes it possible to create and formally legitimise scientific research, political regulations and programs. The beginning of this line represents the 1972 WCED Conference, which would be followed by the "IUCN World Conservation Strategy", 1980 (IUCN, UNEP, WWF 1980) and Brundtland Report, 1987 (Brundtland 1987) on the linear slope, etc.

- **B – Perception string with over-exposed values**

Curve "B" occurs near the "value-axis". It draws a "perception string" which over-exposes "sustainability-values". Such over-exposing is a situation in which the respective values are perceived as means in themselves, without measuring their means on their functional capacity to sustain the value applying and operating community. Over-exposed values are no longer oriented to and legitimised by the challenges to be solved, and are therefore absolutist, fundamentalist, extremist and ideological. This is possible only through the undermining of, or detachment from other sustainability perceptions, which can cause serious friction and conflict. In this regard string B is not sustainable.

❖ Examples:

Eco-extremism, socialist-terrorism, anti-authoritarian education, holy wars

- **C – Perception string with over-exposed challenges**

Curve "C" occurs near the "challenges-axis". It illustrates a perception which disregards challenges and underestimates sustainability values, so that it amplifies the challenges. It represents a laissez-faire attitude, which does not regulate for equality: it can be found in the competition-based hegemony of the strong over the weak. Neo-liberalism, for example, represents political de-regulation resulting in a socially and environmentally unsustainable economic system. This perception destabilises a world with inter-depending socio-cultural actors. Just as with perception "B", the implementation of this perception is only possible through the undermining of or detachment from the other.

Neo-capitalism, materialism, or the so called "Islamic terrorism"; what seems to be ideology or even value-based is often a political and economic quest concerning power and influence. In case of the so-called "Islamic terrorism" the Koran does not legitimise terrorism. This fraudulent misinterpretation seems rather propagated for reasons of (political, economic) power.

- **D – Sustainability as utopic group of "fixed-stars"**

Nomads orient themselves by looking at fixed-stars. Of course, while travelling, they will not reach these fixed-stars, yet they, nevertheless, provide orientation to the Nomads. Metaphorically speaking, socio-cultural protagonists are just like nomads on a journey towards sustainability. That sustainability is utopic, but it provides motives and meanings, which in turn fuel sustainable development.

Luhmann states:

> "Human rights can be declared without restriction. They (…) are self-determined descriptions, which to not represent reality, but which facilitate to criticise reality." (Luhmann 1997: 992 f.)

This criticism (or respectively questioning) of reality is a basis for – and criteria for conducting – development. What Luhman says about the human rights also applies to the concept of sustainability. It is a utopia and offers as such an alternative to currently prevalent socio-cultural meanings, identities and societal patterns, possibly shaping human development.

That utopia is not homogenous, but relatively heterogeneous, symbolised group of fixed-stars, or cluster of diverse visions describing, from different perspectives, what sustainability could be.

Figure 39: Integrative Sustainability as Convergence Concept – Practical Application
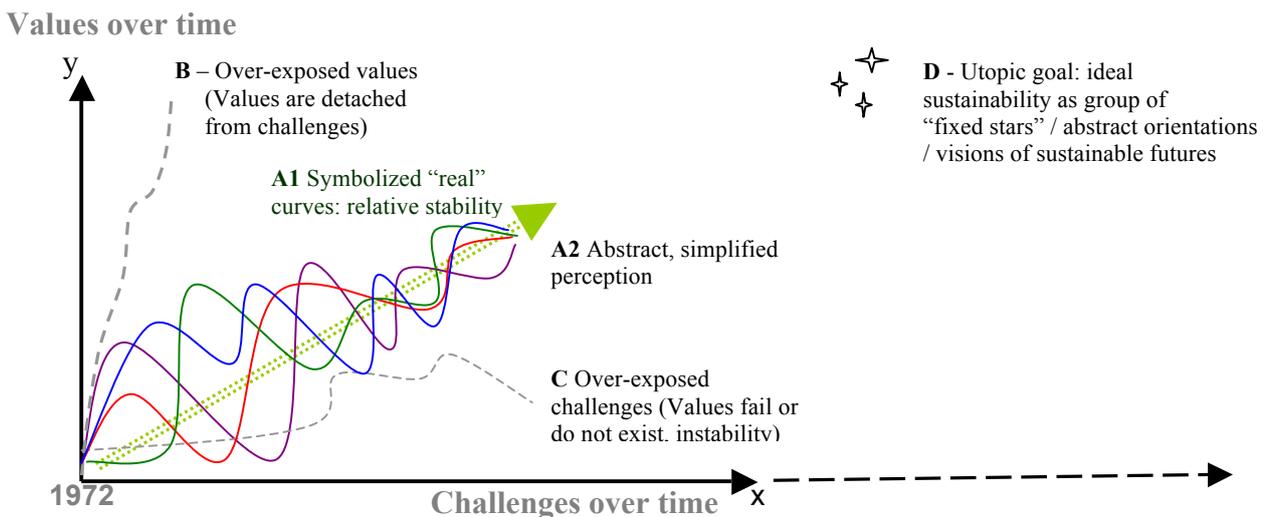
Practically applying "sustainability as convergence concept" addresses the two dialectics of sustainability (cp. "the two dialectics of sustainability" in chapter 3.2.3.1) as follows:

Reference to the 1st dialectics:

Challenges require values (or meanings of sustainability), which support the handling of these challenges. The greater the challenge, the more comprehensive and the stronger socio-culturally established (hence effective) must be the regulating values and meanings. This refers especially to the ability of people and institutions to deal mimetically with the other.

Annotation: In the discourse concerning sustainability it is essential that education be addressed in order to empower the culture-inherent human competencies that enable arrangement with "the other" (cp. chapter I and 4.1.2).

Reference to the 2nd dialectics:

The perception strings B and C show great divergence; they neither relate to other perception strings nor do they aim to fulfil visions of sustainability. Thus, the A1-perceptions (see figure above) engage in a converging process, heterogeneous "movement" (diversity) towards a cluster of sustainability visions (relative unity), According to swarm-intelligence, the neighbouring perception strings correlate without ignoring or mimicking one another, but by arranging with and complimenting the others.

In summary, a sustainability ethics functions as a sort of supra-societal sub-matrix. It bestows socio-cultural identities on all levels with orientation, complex meaning and with the techniques needed to generate, consolidate, communicate and innovate these orientations and meanings. Practical expressions of this otherwise implicit meaning are the principles: "think global, act local" (dimension of space), and "think long-term, act now" (dimension of time). In order to represent common desires and adjust human development to future imperatives, sustainability must be socio-culturally adjustable and evolving. It must be relatively open and integrative. This is necessarily the case because different socio-cultural protagonists, such as organisations and scientists, politicians and civilians participate in co-creating sustainability ethics. For these reasons, sustainability is a cluster of inter-related, polycentric and dynamic visions, beliefs, desires, perceptions and meanings.

Culture functions as mode of human organisation, thus it enables and "sustains" human organisation in dynamic and diverse manners. In this regard, sustainability is a pragmatic, cultural tool for envisioning and focusing on adequate development. Sustainable development, therefore, functions as a communication-based and socio-culturally polycentric interface between:

- the traditional meanings and their expressions in organisation modes (operation techniques) and patterns (organisation designs), and

- the newly arising or newly recognised challenges (global issues), which may require the innovation of organisation patterns and modes.

The "integrative sustainability as convergence", hence participatory sustainable development can successfully deal with the two dialectics of sustainable development. Hence, the concept enables to deal with – and reduce – complexity. Such integrative sustainable development provides and incites, for example, meanings, which foster integrity within human beings, and an appropriate integration of humankind into the natural environment.

Culture does not provide organisation patterns; these are rather socio-culturally and historically particular. Culture provides the communication and networking modes that enable the generation of these patterns. The current organisation patterns of humankind, expressed for example through industrialisation, national governments, sciences, religions, or trade-systems, represent the differentiation and diversification of human development. Moreover they increased human wellbeing. The same patterns, however, are responsible for global issues, which pose challenges to humankind. To overcome these challenges, humankind need not be re-invented. It is sufficient to access the human "treasure within" (Delors 1998): the cultural modes of organisation; the modes of mimetic, mutual and ludic meaning generation, consolidation, communication and innovation in order to generate networks, arrangement with and through "the other". Culture, therefore, provides the modes needed to create sustainability perceptions sustainably. It can ensure that sustainable development not only aims to achieve sustainability, but that it is itself "sustainably developed". The following chapter will take a closer look at the relation between (socio-)culture and sustainable development.

3.2.6 The Role of Culture in a Global Ethics of Sustainability

Gerhard De Haan emphasises the importance of a mental approach, or mental paradigm shift, for achieving sustainability. He states:

> "Global sustainable development depends on behavioural transformations and an extensive mental paradigm shift. Already administrational measures, such as tax reforms, laws and decrees demand for public acceptance and approval." (de Haan 2000: 131).

Sustainable development, and especially education for sustainable development, therefore, make up cornerstones of civilisation in terms of "cultivation" and "culturality" (cultural agility and capacity). They are the central means for an adjustable, contextual and therefore "dynamic conservation" of the planetary unfolding of life. This means that the aim of a sustainability ethics is to protect the unfolding of life, not through a single and static decision or framework, but rather through a dynamic, continuous and locally particular discourse about sustainable socio-cultural patterns, meanings, implementations and conversions of the ethics. Sustainable development is a concept in continuous evolution.

The International Conference on Environment and Society: Education and Public Awareness for Sustainability (UNESCO-EPD) stated in 1997:

> "Sustainable Development is as much an ethical precept as a scientific concept, as concerned with notions of equity as with theories of global warming. Sustainable Development is widely understood to involve the natural sciences and economics, but is even more fundamentally concerned with culture: with the values people hold and how they perceive their relations with others. It responds to an imperative need to imagine a new basis of relationships among peoples and with the habitat that sustains human life." (UNESCO-EPD 1997).

The United Nations Economic Commission for Europe states in its "2005 Strategy for Education for Sustainable Development":

> "Our vision for the future is of a region that embraces common values of solidarity, equality and mutual respect between people, countries and generations. It is a region characterized by sustainable development, including economic vitality, justice, social cohesion, environmental protection and the sustainable management of natural resources, so as to meet the needs of the present generation without compromising the ability of future generations to meet their needs." (UNECE 2005).

A global ethic of sustainability connotes and fosters an attitude of sustainability; the internalisation of, and involvement in, the development of sustainability-meanings. Hence, it connotes a culture of sustainability. Such a global ethics of sustainability strengthens the autopoietic power of culture because it promotes the cultural principles – and techniques – of mutuality, mimesis, arrangement, auto-poises, competitive cooperation, discourse and networking.

It was shown in chapter I that a strong socio-cultural identity and self-perception is essential for mimetic movements towards, and arrangement with, the other as neighbour. Chapter IV emphasises how culture simultaneously educates and generates such culturally rooted and culturally competent identities. Sustainable development is, in this regard, a *renaissance of culture* itself. A global ethics is no longer only a "culture *of* sustainability", but it also connotes the use and mobilisation of culture *for* sustainability. In a manner of speaking, sustainability signifies human cultivation by means of activating the cultural, human defining competencies. Socially, environmentally and economically imbalanced, globalisation appears to entail a loss of cultivation, a (current) impairment of human autopoiesis. However, as a crisis connotes a condition of instability (in this case un-sustainability), it holds a great *potential* for stability (or sustainability), a potential to do better. Central to overcoming un-sustainability, is the mobilisation or renaissance of "culture"; the gathering of cultural techniques for mimetic arrangement. Such arrangements safeguard multi-perspectivity - a pre-condition for the ability to assess and access development alternatives. This process or performance is the core of sustainable development.

The United Nations Commission on Culture and Development refers to this renaissance of culture in the report "Our Creative Diversity":

> "People, however are not self-contained atoms; they work together, cooperate, compete and interact in many ways. It is culture that connects them with one another and makes the development of the individual possible. Similarly, it is culture that defines how people relate to nature and their physical environment, to the earth and to the cosmos, and through which we express our attitudes to and beliefs in other forms of life, both animal and plant. It is in this sense that all forms of development, including human development, ultimately are determined by cultural factors. Indeed, from this point of view it is meaningless to talk of the 'relation between culture and development' as if they were two separate concepts, since development and economy are part of, or an aspect of, a people's culture. Culture then is not a means to material progress: it is the end and aim of 'development' seen as the flourishing of human existence in all its forms and as a whole." (Cuéllar 1998: 24).

Sustainability is neither a doctrine, nor a strategy of intervening in human development, creating a new human species. This text rather argues that a sustainability ethics arises from already existing, cultural parameters of humankind:

- the general mode of culture (cp. chapter I and particularly 1.4):

It facilitates the generation, consolidation, communication and innovation of socio-culturally different meanings and identities. The mode of culture provides techniques for the overall organisation and regulation of different socio-cultural protagonists, and the arrangement of different socio-cultural identities. It creates the unity of and inter-relatedness between different socio-cultural protagonists, identities and meanings.

- particular socio-cultural patterns (cp. chapter 1.1):

It creates multi-perspectivity. This means that different socio-cultural protagonists on every level of identity have different perspectives on shared human development challenges, such as the global issues mentioned earlier (cp. chapter 1.1 and figure 2 for "global issues"). These different perspectives provide development alternatives. That diversity facilitates sustainable development and it represents human dignified life. Therefore diversity is sustainable and fosters sustainable development.

This cultural potential to foster sustainable development must be actively, consciously and explicitly strengthened. Chapter 1 elucidated the overall cultural synthesis of arrangement, networking, autopoiesis, integration, and other cultural principles, which are common to *any* human identity and which depict the Homo sapiens as the "wise humans". A "culture of sustainability" therefore functions through culture *for* sustainability.

3.2.7 Sustainability: Homogeneous Doctrine, or Heterogeneous Global Ethics?

Regardless of how coherent the concepts of sustainability may appear, the question arises of whether a global ethic leads to or aims for a cultural uniformity, contradicting the call for cultural diversity. Does an ethics signify global equality and homogenisation? Or can a global ethics resemble and foster a heterogenic, hence diverse and diversifying frame of reference?

A global ethics of sustainability is first of all an imaginative act; what can be achieved must first be imagined. (Education for) sustainable development nurtures the creative competence to imagine before carrying out the co-creation of societal developments.

Furthermore, sustainability is an imaginative pact between other socio-cultural protagonists and with future generations. By investing in the freedom of choice for future generations, we expect them to carry on with realising and innovating our values and meanings. This motivates human beings to foster a process, which goes beyond the lifetimes of individual persons and historical periods. Certainly the motivation for sustainability is not altruistic or charitable; it is a typical win-win procedure. Current generations benefit from developing their sustainability meanings and actions. Whether or not future generations appreciate our perceptions of intergenerational sustainability, in our imagination they will do so. In return for maintaining of our current sustainability meanings and perceptions, these future generations gain power; the power to make free choices, for example, to choose lifestyles and development models. This imaginary deal between present and future generations connote an intergenerational pact.

This means that the socio-cultural protagonist of today (present generations) expands the horizon of possibilities for future generations. That freedom allows future generations to innovate and proceed with their own development models freely. These developments then, would be based on the heritage of present generations. The result is the imagined supra-generational "immortality" of present generations; the transcendence of physical mortality through socio-cultural heritage.

Interestingly, this is analogous to traditional, mostly religious desires of overcoming the duality of life and death. Examples for such overcoming or transcendence are the achievement of holiness and the nirvana, or to go to heaven. Throughout history, religion has always closely accompanied so-called "high cultures", i.e. civilised, comprehensively organised societies. Bestowing societal life with meaning and the motivation to conduct human development is represented in all of the world religions. Simultaneously, since apart from all of the differences in the world religions there is an essential common interest, it shows that indeed, a global ethics does not foreclose uniqueness and diversity.

The basis of all religions is to create and provide meaning; a meaningful life on earth, a meaningful death, a meaningful universe, and a meaningful community of human beings with meaningful rituals. Both, religions and sciences aim at universality. While the religions create religious meaning, science creates scientific meaning. From a scientific (humanities) point of view, both are cultural approaches to shaping socio-cultural patterns.

The following paragraph presents some citations, which demonstrate how religion fosters socio-cultural approaches. The citations address the categorical imperative, the Golden Rule and illustrate that an ethics of reciprocity can indeed be of universal value and already practically applied without condemning and homogenising socio-cultural diversity. The Golden Rule thereby shows the pragmatic value and sustainability of unity in diversity. Moreover – and this is also essential to the perception of sustainability which this text reinforces – the Golden Rule emphasises the relevance and pragmatism of an ethics of neighbourhood and mutuality/reciprocity (cp. chapter 3.1), as co-defining elements of sustainability. In the following the text presents examples of the Golden Rule in different religions and philosophies, which represent socio-cultural meanings and identities.

❖ Example:

~1280 BCE "You shall not take vengeance or bear a grudge against your countrymen. Love your fellow as yourself: I am the Lord." - Tanakh, new JPS translation, Leviticus 19:18, Judaism.

~500 BCE "Hurt not others in ways that you yourself would find hurtful." - Udana-Varga 5:18, Buddhism.

~500 BCE "One word that can serve as a principle of conduct for life [is] reciprocity. Do not impose on others what you yourself do not desire." - Doctrine of the Mean 13.3, Confucianism.

~500 BCE "The Sage...makes the self of the people his self." Tao Te Ching Ch 49, tr. Ch'u Ta-Kao, Unwin Paperbacks, 1976. Daoism.

~500 BCE "What you do not want done to yourself, do not do to others." Analects of Confucius 15:24, Confucianism.

~200 BCE "What you hate, do not do to anyone." - Deuterocanonical Bible, NRSV, Tobit 4:15, Roman Catholic Church and Judaism.

~150 BCE "This is the sum of duty: Do naught unto others which would cause you pain if done to you." - Mahabharata 5:1517, Brahmanism and Hinduism.

~100 CE "In everything, do unto others as you would like them to do unto you; that is the meaning of the law and the prophets." - Sermon on the Mount, NRSV, Gospel of Matthew 7:12, Christianity

~ 700 CE "Do unto all men as you would wish to have done unto you; and reject for others what you would reject for yourself." - Hadith, Islam.

~1870 CE "He should not wish for others what he does not wish for himself." - Bahá'u'lláh, Epistle to the Son of the Wolf Bahá'í Faith.

In philosophical thought:
~400 BCE "Shouldn't I behave unto others, as I like they behave unto me?" Plato

~400 BCE "Do not do to others what would anger you if done to you by others." - Socrates.

~100 CE "What you would avoid suffering yourself, seek not to impose on others." - Epictetus.

The query of human arrangement has accompanied human history and human socio-cultural patterns since the beginning of time. Due to the challenge of globalisation and the threat of science encroaching on the territory of religious meanings, new hybrid, comprehensive and

systemic approaches to a global ethic have emerged. Science and religion have promoted the principle of competitive cooperation.

❖ Example:

The two following (pilot-) initiatives can be looked at as examples of the application of this principle. Moreover, they constitute a synergy between religion and science, aiming at the creation of a global ethics and promoting sustainability.
These are examples of religiously swayed global ethics initiatives:

1. *The World Conference of Religions for Peace:*
The conference developed "The Kyoto Declaration of the First World Assembly 1970" which states:
"Never has there been such despair among men. Our deep conviction that the religions of the world have a real and important service to render to the cause of peace has brought us to Kyoto from the four corners of the earth. Baha'i, Buddhist, Confucian, Christian, Hindu, Jain, Jew, Muslim, Shintoist, Sikh, Zoroastrian, and others – we have come together in peace out of a common concern for peace.

As we sat down together facing the overriding issues of peace, we discovered that the things which unite us are more important than the things which divide us. We found that we share:

- A conviction of the fundamental unity of the human family, and the equality and dignity of all human beings;
- A sense of the sacredness of the individual person and his conscience;
- A sense of the value of the human community;
- A realization that might is not right; that human power is not self-sufficient and absolute;
- A belief that love, compassion, selflessness, and the force of inner truthfulness and of the spirit have ultimately greater power than hate, enmity, and self-interest;
- A sense of obligation to stand on the side of the poor and the oppressed as against the rich and the oppressors; and
- A profound hope that the good will finally prevail.

Because of these convictions that we hold in common, we believe that a special charge has been given to all men and women of religion to be concerned with all their hearts and minds with peace and peacemaking, to be the servants of peace. As men and women of religion, we confess in humility and penitence that we have very often betrayed our religious ideals and our commitment to peace. It is not religion that has failed the cause of peace, but religious people. This betrayal of religion can and must be corrected." (World Conference of Religions for Peace 1970).

2. *The Parliament of the World's Religions and its "Declaration toward a Global Ethic":*
The Parliament describes a global ethics as:
"A fundamental demand: Every human being must be treated humanely: (…) There is a principle which is found and has persisted in many religious and ethical traditions of humankind for thousands of years: What you do not wish done to yourself, do not do to others. Or in positive terms: What you wish done to yourself, do to others! This should be the irrevocable, unconditional norm for all areas of life, for families and communities, for races, nations, and religions." (Parliament of the World's Religions (1993).

The institution declares four "Irrevocable Directives":
1. "Commitment to a Culture of Non-violence and Respect for Life
2. Commitment to a Culture of Solidarity and a Just Economic Order
3. Commitment to a Culture of Tolerance and a Life of Truthfulness
4. Commitment to a Culture of Equal Rights and Partnership between Men andWomen" (ibid.)

What the Parliament of the World's Religions describes as "culture" is similar to the term "ethics", used in this text.
In their approach to generating – through discursive conferences - an "overlapping consensus" as a minimum standard for comprehensive cooperation, the initiatives are similar to initiatives such as:
- The InterAction Council and its Universal Declaration of Human Responsibilities, (1997),

- the UN-Commission on Global Governance and their report "Our global Neighbourhood" (1995),
- the International Conference on Environment and Society and their report "Education and Public Awareness for Sustainability" (UNESCO-EPD, 1997),
- the UN Decade for Education for Sustainable Development (2005-2014),
- the UN Commission on Culture and Development and their report "Our Creative Diversity" (1995),
- the World Commission on Environment and Development and its report "Our Common Future" (Brundtland Report, 1987),
- the UN-Millennium Declaration (Millenium Development Goals, 2000),
- the UN-Universal Declaration of Human Rights (1948),
- the mandate and the Charter of the United Nations Organisation (1945) itself,
- the Agenda 21 (1992),
- the Earth Charter Initiative (2000),
- diverse Club-of Rome Reports, as well as the subsequently presented
- UNESCO Declaration on Cultural Diversity (2001)
- UNESCO Convention for the Safeguarding of Intangible Cultural Heritage (2003)
- the UNESCO Convention on the protection and promotion of the diversity of cultural expressions (2005).

Through their similarities and their international, "cross-cultural" and supra-confessional character, all of the above mentioned initiatives and organisations prove that a global ethics of neighbourhood, of the other, of mutuality and reciprocity, condensed into an ethic of sustainability is not alien to human culture. It is rather the disentanglement and condensation of established socio-cultural meanings. In this regard, a sustainability ethics does not diminish or homogenise the diversity of socio-cultural patterns (e.g. of religion), but facilitates their arrangement.

In her book *Common Values*, Sissela Bok (2002) discusses three categories of global values, which she calls "down-to-earth values". They are: "the responsibility to help others and be loyal", "a limited assemblage of constraints against specific forms of violence and dishonesty", and perceptions which release a "process-oriented equity" between the self and the other by means of reciprocity.

Concepts of global, hence supra-societal ethics, based on values, such as reciprocity and mutual respect, moreover represented for example in the political concept of democracy, are often criticised to be ethnocentric. The Nigerian writer and Nobel prize laureate for literature, Wole Soyinka contributes to the discussion about an element of a supra-societal ethics already in existence: Human Rights. Despite its global nature, the Human Rights ethics apply to different socio-cultural settings *beyond* the "Western" hemisphere. Concerning the accusation that Human Rights connote "Western" imperialistic values, or ethno-centrism, Soyinka explains:

> "That is not true like this: For me Human Rights are not western values, humanity is not a privilege of the West. It is possible that in the West those thoughts were articulated more extensively and were written down more often in books. But any old African [socio-] culture is acquainted with structures that control violence. Sometimes this is done through traditional rituals, in other places you may find distinguished political structures of rules and regulations – it is all

there! For this reason I do not accept the assertion that we have adopted 'Western values'. We keep hold of our values." (Wernicke 1997).

And Thomas Hausschild concludes:

"The world of the so-called primitive – [socio-] cultures with low technological levels, allegedly without publicness, without institutions and laws – this world of ethnicities and tribes holds manifold examples for ethical behaviour. (…) If we want to establish a generally binding, universal ethics, paradoxically we first have to concern the subject we want to establish – and this, the ethic is already inherent in these unknown [socio-] cultures (…)", (Hausschild 1999: 100).

Wulf and Merkel declare:

"Assumptions about [socio-] cultural differences and similarities are always assumptions about relations, not about qualities of individuals or collectives." (Wulf/Merkel 2002: 69).

A global ethics deals with the subject of relations; it aims to assure an integrative socio-cultural network consisting of sub-networks in order to protect the uniqueness of socio-cultural qualities. Moreover, a global ethics does not pre-determine the composition of the network itself, but rather allows for the mimetic processes of networking. It treats socio-cultural diversity as an end in itself and furthermore a pool for development stimulation and development alternatives by means of multi-perspectivity. Without complex stimulation, there can be no complex development. Without socio-cultural diversity there can neither be sustainable development, nor a theory of sustainability.

Sustainability is an evolving concept, a medium and vision, created by human beings to help them adapt to their own challenging innovations, while maintaining the consistency of successful evolutionary (patterns of) organisation.

Sustainable development is development, which enables dignified human existence to endure. And because human beings are "cultural beings" – they regulate themselves culturally – the "enduring" addresses the human cultural system. This means that sustainability allows the cultural system of humankind to endure. Therefore, sustainability implements what culture facilitates: mimetic arrangements between self and the respective other.

Through mimetic arrangement every socio-cultural protagonist can access different perspectives on, and perceptions of, meaning. This enables the protagonist to generate his position through the inter-change, within the overall cultural system and within particular socio-cultural meaning and identity-representing patterns. This extends the potential for self-reflection, critical measurement and responsiveness.

In this context, the UN Commission on Culture and Development refers to socio- "cultural freedom", enabled by and unfolding within a safeguarding framework, such as a global ethics of sustainability. It states that socio-cultural freedom is enabled,

"…by protecting alternative ways of living (which) encourages creativity, experimentation and diversity, the essentials of human development. Indeed, it is the diversity of multi-cultural societies and the creativity to which diversity gives rise that makes such societies innovative, dynamic and enduring." (Cuéllar 1998).

An ethical framework fosters mutuality by means of competitive cooperation, liberates socio-cultural diversity and arranges socio-cultural differences. In order to arrange socio-cultural protagonists and represent different socio-cultural meanings, the ethics facilitates and requires participation. According to Wulf and Merkel this participation derives from the socio-cultural contribution of many different protagonists in the process. They state:

> "The central question is: Which forms and processes of globalisation are desirable, and how can we contribute to the realisation of these? Globalisation is perceived as a difficult but principally open process, collaboratively developed by many people. Since the difference between the processes of globalisation and the co-creation of the living environment [German: "Lebenswelt"] necessitates different competencies, the co-creation of these processes by many people is indispensable." (Wulf/Merkel 2002: 15).

Socio-cultural diversity becomes the management-system, creator, and medium of an ethics in which the audience directly participate as much as possible and through which they identify themselves.

Küng argues that global ethics is not the "superstructure" in the sense of Hegel and the communitarian movement:

> "which makes the specific ethics and different religions and philosophies dispensable. A world ethics rather refers to an ethical minimum, which is common to all religions, cultures and civilisations, or to a necessary minimum of values, standards and basic perceptions", (Küng 1997: 3, 5).

A global sustainability ethics calls for a globally interlinked (i.e. cohesive) and locally diverse (i.e. unique) world. It does not aim to centralise the human network of socio-cultural protagonists through the implementation of a uniform, homogeneous socio-culture. It rather aims to sustain the character of a decentralised socio-cultural network by means of a democratic division of power, through socio-cultural participation in terms of mutuality.

Uwe Jean Heuser and Gero von Randow write:

> „Network: The often used metaphor describes the decline of the classical hierarchy and of the perception that nation and business would be the essential areas of society. Today, more flexible and complex structures occur. Within these structures people continuously reconfigure the norms." (Heuser/Randow 2001).

It is for this reason that a renaissance of culture or "culturality" (i.e. cultural agility, networking capacity) is required and sustainability, which aims to ensure that the human socio-cultural network endures, promotes "culturality".

Coming back to the question of whether a global ethics is homogenising, another question can be posed: Couldn't there be a global socio-cultural pattern, such as a global ethics, which promotes socio-cultural heterogeneity as constitutional principle; an ethics of heterogeneity, of the other, of cultural diversity? This would be an ethics that does not simply aim for maintaining a passive co-existence with different socio-cultural protagonists, as

represented by the current laissez-faire philosophy of "live and let live", (demonstrated for example by the north-south conflict, neo-liberal market economy and other socio-cultural structures and patterns). This ethics would rather relate and actively mobilise common concerns. Certainly every socio-cultural protagonist must be different from others in order to remain unique and meaningful. But therefore the protagonist must as well interplay and unite with others. A certain relation with the other makes it affordable for the self to be different. The unity with others makes it possible to create common concerns and strategies for overcoming shared problems. The denominated global ethics would not be a constitution of norms and dogmata, but a discursive, mimetic forum for conjoint development.

Conjoint development does not only refer to the establishment of a more quantitative In-group, which includes all protagonists; it rather connotes a differentiated, qualitative and regulative In-Group, which organises all participating. The quality of such an In-group is measured by its capacity to engage in mimetic arrangement, which in turn is measured by competitive cooperative meanings and attitudes. In this context, sustainable development requires the ability to mutually asses gaps in organisation (cp. chapter 2.4 for "swot analysis"), access the socio-cultural pool of development alternatives (cp. 1.6/ 1.6.6 for "multi-perspectivity" and chapter 3.2.1 for "developing development alternatives"), and select and implement different development models. Throughout these processes of concertedly "developing development" the In-group as such, and its members in particular, must be competent at dealing with the complexity and controversy of these developments arriving at more sustainable development. The members of such an In-group must bestow sovereign socio-cultural identities (cp. chapter 1.2 et al. for "sovereign identity"). A sovereign identity is one which is able to perform mimetic interplay and resist attempts to step out of competitive cooperation, for example, through self-dissolution (strong adjustment to others and low self-esteem), the assimilation of the other (e.g. domination and discrimination) and the annulment of the common sphere, the pact and relation with the other (annulment of reciprocity, aiming for self-sufficiency and "socio-cultural autarky").

During this mimetic interplay, the rights of the other and the right to difference remain indefeasible. Thus, socio-cultural diversity and in this regard mutuality and mimesis maintain supreme, universal priorities of a sustainable global ethics. Hence, this global ethics is oppositional to a socio-cultural uniformity.

Unity in diversity means that many cultural protagonists (e.g. ethnicities) make up a heterogenic cultural universe ("uni-verse") by means of singularity, or a "multi-verse" or "meta-verse" by means of plurality. According to Jack Campbell:

> "The challenge is to achieve a unity in diversity, and, for this, it is not sufficient for individuals to be diverse – they need to be collaborative as well." (Campbell 2001: 6).

A unity in diversity builds on what Apel calls a "complementary solution", which he describes as:

„(…) a solution, which requires a relationship of mutual appreciation. The solution should concern the different perceptions of meaningful life and it should concern 'strong values' of the different [socio-] cultural traditions on the one hand and the unitary and therefore universal, normative principles of intercultural equity and co-responsibility on the other." (Apel 1999: 53).

Bernard Charlot refers to the "complementary solution" when he argues that the rights, resulting from a global ethics can be contradictive. He explains:

"Certain forms of cultural difference can contradict basic human rights, especially concerning women and children. It must be clearly affirmed that the plea for pluralism is not synonymous with the authorization of relativism: The right to [socio-] cultural difference can not bestow men with the right to refuse women access to public life, to expose children to dangerous labour without the possibility of receiving an education, or to mutilate children (e.g. genital mutilation). The right to difference obtains its legitimacy from the equality of dignity of all human creatures and therefore it can not be applied against this dignity and equality." (Charlot 2002: 183).

Charlot emphasises the principle of competitive cooperation, which allows certain contradictions within a generally cooperative framework. Thus, heterogenic (e.g. complementary, controversial) perceptions, meanings and solutions can unfold as long as they do not contradict the heterogenic system itself. That means, friction and conflicts are generally possible, but in order to unfold their stimulating potential for sustainable development the unfolding of friction and conflict is relatively limited.

Sustainability remains a pact with the future. Sustainable development is the ever compromising path to that utopic vision. Simultaneously the faith in revolutionary results over the long-term must be increased. Culture is a powerful instrument, responsible for the evolutionary success and agility of human being. However, cultural processes of socio-cultural macro-evolution (or "macro-shifts") take their time.

Not to know the precise tenor of socio-cultural constraints concerning a global ethics must not lead to the condemnation of the entire ethics. Difficulties remain, solutions are not absolute. Uncertainty is a common state of affairs; it is this "regular irregularity", which is responsible for, and always has been responsible for, the stimulation of further human development. The task is not to find a final, static and ultimate solution, but rather to be able to find compromises, which sustain the possibility of further development. Compromise and the tolerance of ambiguity are necessary throughout the creation of ethical standards in order to remain reactive as well as pro-active in the face of dynamic socio-cultural transformations. Local and global contexts, the content of socio-cultural meanings and the composition of identities transform continuously through, for example, the birth and death of people, civilisations and epochs, through discoveries, technologies, trends, etc. A global ethics must bridge tensions that derive from these contexts; it must provide orientation in moments of rapid and profound change and when serious challenges occur. Furthermore, questions arise such as: What does 'neighbourhood' mean to nomads, to citizens of New York, to the Inuit?

A global ethic is not culturally relative; it promotes pluralism, mutual enrichment and stimulation.

The global ethic provides the parameters of assessing gaps and refining the ethic: it is committed to respect, discourse, mutuality and reciprocity in order to achieve the maximum benefit for all with a minimum amount of compromise. This means that a global ethics of sustainability rather promotes the mode of its own creation and continuous re-creation, than actual particular sustainability patterns, such as truths and values. There are and always will be sustainability truths and values, but these can not be universal, or only to a certain degree. The mode of a global sustainability ethics is mimetic interchange and arrangement, which can be furthered through education. Nevertheless, there are and will be many different educational patterns – i.e. a diversity of educational approaches for sustainable development.

The Johannesburg Declaration on Sustainable Development (United Nations 2002) acknowledges in paragraph 16 that cultural diversity should be used to ensure sustainable development:

> "We are determined to ensure that our rich diversity, which is our collective strength, will be used for constructive partnership, for change and for the achievement of the common goal of sustainable development." (ibid.).

Laszlo adds:

> „A continuously peaceful world will not be constructed by the elimination of [socio-] cultural differences, but through a collaboration which utilizes this diversity productively." (Laszlo 2003: 123).

The "UNESCO Declaration on Cultural Diversity" as well as the subsequently presented "UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions" are two examples of a discursively developed, normative and formal ethical frame for global integration. Such formalisation of a global ethics can conduct the assessment and implementation of an applied ethic. A global ethics however, is not synonymous with such normative and formal, often political documents.

During the 31st UNESCO General Conference, the Universal Declaration on Cultural Diversity was adopted. Similar to the "Human Right Convention" it is a result of an inter-cultural dialogue, which developed ethical values and guidelines that express a globally valid, or at least considered meaning. The declaration, as well as the convention rather understand "culture" as, what the text calls "socio-cultural patterns" (particular socio-cultural expressions).

The Universal Declaration on Cultural Diversity states in Article 1:

> "Cultural Diversity: the common heritage of humanity. Culture takes diverse forms across time and space. This diversity is embodied in the uniqueness and plurality of the identities of the groups and societies making up humankind. As a source of exchange, innovation and creativity, cultural diversity is as necessary for humankind as biodiversity is for nature. In this sense, it is the common heritage of humanity and should be recognized and affirmed for the benefit of present and future generations." (Sténou 2002/ UNESCO 2006).

Koïchiro Matsuura, Director General of the UNESCO links the Declaration to a global ethics.

He declares:

"The Declaration aims both to preserve cultural diversity as a living, and thus renewable treasure that must not be perceived as being unchanging heritage, but as a process guaranteeing the survival of humanity, (…). This Declaration, which sets against inward-looking fundamentalism the prospect of a more open, creative and democratic world, is now one of the founding texts of the new ethics promoted by UNESCO in the early twenty-first century." (cp. Sténou 2002).

The 33rd session of the UNESCO General Conference adopted the "Convention on the Protection and Promotion of the Diversity of Cultural Expressions" in October 2005.

Some of the principle statements from the preamble are:

> *"Being aware* that cultural diversity creates a rich and varied world, which increases the range of choices and nurtures human capacities and values, and therefore is a mainspring for sustainable development for communities, peoples and nations, (…)
> *Recalling* that cultural diversity, flourishing within a framework of democracy, tolerance, social justice and mutual respect between peoples and cultures, is indispensable for peace and security at the local, national and international levels, (…)
> *Taking into account* that culture takes diverse forms across time and space and that this diversity is embodied in the uniqueness and plurality of the identities and cultural expressions of the peoples and societies making up humanity, (…)
> *Being aware* that cultural diversity is strengthened by the free flow of ideas, and that it is nurtured by constant exchanges and interaction between cultures, (…)
> *Emphasizing* the vital role of cultural interaction and creativity, which nurture and renew cultural expressions and enhance the role played by those involved in the development of culture for the progress of society at large." (UNESCO 2005).

The Convention explicitly addresses sustainable development, for example in Article 2.6.

Principle of Sustainable Development:

> "Cultural diversity is a rich asset for individuals and societies. The protection, promotion and maintenance of cultural diversity are an essential requirement for sustainable development for the benefit of present and future generations." (ibid.).
> And: Article 13 – Integration of Culture in Sustainable Development
> "Parties shall endeavour to integrate culture in their development policies at all levels for the creation of conditions conducive to sustainable development and, within this framework, foster aspects relating to the protection and promotion of the diversity of cultural expressions." (ibid.).

This shows once more that a global ethics of sustainability is no homogenising force, but a mental framework to promote arrangement, peace and the Golden Rule by means of competitive cooperation.

3.2.8   Introduction to Education for Sustainable Development

This chapter introduces what chapter IV develops further. It indicates a general orientation of explicit (e.g. formal or non-formal) education for sustainable development. Generally, this text considers education to be an essential approach for the incitement and unfolding of the

implicit learning of socio-cultural protagonists. In this sense, the text argues that sustainable development requires anthropological "culture-education". The for this is that such education – an education which re-roots human development through mimetic learning to the "wise" capacities of Homo sapiens (Lat.: the "wise human") – empowers human-native poitetic competency to shape the social, environmental and economic aspects of the world. It can promote socio-cultural diversity and unity simultaneously through a concentration on and strengthening of human – cultural, mimetic – attributes and competencies.

The word "sustainability" describes a situation in which society, environment and economy develop cohesively and one dimension (aspect) of sustainability strengthens the other, comparable to competitive cooperation. In this sense, sustainability is a reference system and imaginary framework with which to arrange society, the economy and the environment for the sake of human development and the endurance of human dignified existence.

Socio-cultural meanings, represented for example through socio-cultural identities and more formally through science, religion, politics, civil society (organisations) and media, provide diverse indicators for analysing human integration. Increasingly alerting scientific insights are appearing, a fast and profound transformation of traditions (socio-cultural patterns and heritage) is occurring and civil society, religion and political institutions are increasingly unable to defend social and environmental integrity and appropriately regulate the private sector. Furthermore, humankind is increasingly unable to overcome the contingency crisis it is confronted with. These are only a few of numerous examples that serve as evidence for the stagnation of human integrity and integration. The three dimensions of sustainability are seriously out of tune with one another.

An improved form of management is necessary and possible. Education for sustainable development aims to close this gap through reconnaissance, awareness-raising, enlightenment and the holistic empowerment of participants in socio-cultural organisation and meaning-making. Wulf states:

> "Cumulatively the understanding arises that current processes of globalisation make up a challenge, which the pedagogical system can not disregard if it aims to prepare the next generation for the responsible co-creation of these processes.", (Wulf 2002: 75).

The UNESCO writes about the UN Decade for Education for Sustainable Development (2005-2014):

> "There can be few more pressing and critical goals for the future of humankind than to ensure steady improvement in the quality of life for this and future generations, in a way that respects our common heritage – the planet we live on. As people we seek positive change for ourselves, our children and grandchildren; we must do it in ways that respect the right of all to do so. To do this we must learn constantly – about ourselves, our potential, our limitations, our relationships, our society, our environment, our world. Education for sustainable development is a life-wide and lifelong endeavour which challenges individuals, institutions and societies to view tomorrow as a day that belongs to all of us, or it will not belong to anyone." (Section on Education for Sustainable Development, UNESCO: 2006).

The previous space-time continuum is in a process of intense transformation (cp. chapter 2.1), which goes far beyond globalisation. Socio-cultural meanings and identities change profoundly and rapidly; simultaneously global issues, such as climate change, population growth and poverty increase. In this "transformation-of-all" moment it is outstandingly remarkable that there is a phenomenon that does not change: the cultural "operation mode" (cp. chapter 1.4 for "culture as mode of human organisation and auto-poiesis"). Culture operates and facilitates the generation, consolidation, communication and innovation of socio-cultural patterns, such as meanings, and individual and societal identities. Cultural "operation modes" are synonymous with "cultural techniques". These modes or techniques intrinsically enable the arrangement between selves and respective others, hence they create human networks, which are mutually implicative. In this sense cultural techniques are all those techniques, which enable for mimetic interchange and arrangement between socio-cultural protagonists. Language, performance and narration are such cultural techniques. Particular languages, specific performances and different narrations, in turn, are socio-cultural patterns or particularities, which "only" represent these techniques.

Mimetically, self and other reciprocally expand the horizons of their individual possibilities and the horizon of their common possibilities. This means that in mimetic processes socio-cultural identities on all levels generate, consolidate, communicate and innovate reciprocally the self, the other and that which is common. Culture creates unity in diversity (cp. chapter 1.5 and also 3.2.3.1 for "the second dialectics of sustainability"). Thus, it potentiates multi-perspectivity in terms of the human ability to take different perspectives on shared challenges (cp. chapter 3.2.3.1 for "the first dialectics of sustainability"). Moreover, it potentiates the human ability to create and access a pool of diversity-inherent development alternatives (or meanings).

Mimesis fosters "conservative", as well as creative competencies. Established socio-cultural meanings, identities and organisation patterns create coherence and must be protected (*conserved*). In the moment of a contingency crisis, they are threatened. But mostly the threat only reflects their incapacity to maintain (e.g. social, environmental and economic) coherence. Thus, the eternal conservation of socio-cultural meanings, identities and organisation patterns is not a solution because they are not only ends in themselves, but means for ensuring enduring human social integration, environmental integrity and economic appropriateness. In this regard meanings must not only create meaningful – but also adjust to new – social, environmental and economic contexts. The current contingency crisis of human identity and global issues (cp. chapter 1.1 and figure 2 for "global issues") shows that the currently consolidated socio-cultural meanings, identities and organisation patterns are dysfunctional.

It is important, but sometimes insufficient to insist on conservative meanings. In order to innovate meanings, identities and organisation patterns and readjust them to their functional roles, creativity is required. Creativity is the one force that is able to deal innovatively with complexity; it enables protagonists to face complex global issues differently, and this difference is required. Once those different meanings, identities and organisation patterns are implemented, they must be continuously innovated and simultaneously consolidated. Creativity can be trained in manifold ways through adequate education. Being creative contributes to the competence to shape sustainability, moreover it performs and expresses human dignity, hence it is already sustainable in itself.

The creation and adjustment of sustainable meanings, identities and organisation patterns demand creative competencies of socio-cultural protagonists. Creative innovation arises through mimetic interchange - through opposing and affiliating movements with the other - because the other challenges and stimulates the self, which evokes innovation. A protagonist is particularly creative when he opposes and competes with other protagonists by cooperative means. This puts stress on the socio-cultural system and keeps it reactive and flexible; able to adjust to profound and rapid changes in social, environmental and economic contexts.

Homo sapiens, however, are not wise, only because of their ability be creative, but also because of their potential to consolidate ("conserve") for example established meanings, socio-cultural identities and societal organisation patterns. The questioning and innovative re-creation of meanings, identities and organisation patterns must have limits because if, for example, an organisation, such as a state, or a company is too dynamic, it may not have sufficient constitutional and structural elements (institutions, laws, traditions, meanings). The result is that it can neither promote stability nor orientation. This means that in fact both are required, the ability to be creative, different and unique as well as the ability to consolidate, unify and relate. Opposition to the other is validated through affiliation with the other, competition is validated through cooperation, creativity through consolidation and diversity is validated through unity. The challenge for socio-cultural protagonists is to maintain their own socio-cultural identity while moving between those antagonisms. The self is validated through the other, and through arrangement with the other. What is meaningful, sustainable, and valuable? People find answers to this through socio-cultural interchanges with the respective other, not "alone". Through mimetic interplay they generate, consolidate, communicate and innovate meaning, meaningful self-identities and ideas and imaginings of meaningful organisation.

Education for sustainable development, therefore, aims to empower learners to be sovereign in the interplay with the other. Obviously, the learner can and must also comprehend and consider what scientists, politicians, civil society and other societal actors perceive to be necessary for sustainable development (e.g. to reduce waste, to be economically responsible, etc). But these are rather specific and not necessarily universal values of a possible perception of sustainability. Before such differentiation and contextualisation of socio-cultural life, the preconditions must be strengthened for socio-cultural protagonists to generate, consolidate, communicate and innovate socio-cultural meanings, identities and organisation patterns. For socio-cultural protagonists (i.e. learners) to do so, they require the other (e.g. the other protagonist, learner, meaning, pattern, perception of sustainability). More precisely, they must mimetically inter-change with the other.

Information arising from mimetic interplay is meaning(ful), because it connects, networks and hence synergetically organises selves and others without eliminating their dignifying and unique differences in terms of socio-cultural diversity. That organisation, the unity in diversity, enables them to face and deal with complex problems.

Nevertheless, such mimetic interchange is not easy because it continuously involves difference, friction, and ambiguity, so that the challenge is to maintain competitive cooperation and not to assimilate the other or lose one's own sovereignty.

In this context, sovereign socio-cultural identity (cp. chapter 1.2 et al.) is an identity on any identity level, able to perform the mentioned mimetic meaning-generation, consolidation, communication and innovation processes. From this perspective, a socio-cultural identity or a protagonist is sovereign when he engages in such mimesis in competitive cooperation with the other; he arranges with the other, without assimilating himself and without undermining the other. Sustainability comes along as pact between the self and the other to mutually analyse: (1) their relation and the subsequent potential for development (cp. chapter I), (2) their context / situation (cp. chapter II), (3) their goals (cp. chapter III), (4) and their strategies for reaching these goals (cp. chapter IV). This involves notions about – and uncovers – common strengths, weaknesses, opportunities and threats (cp. "swot analysis", chapter 2.4).

Consequently, the structure of this text corresponds to the alignment of education for sustainable development, because – just as for the text – the educational response to the challenge of globalisation is to raise the questions: Who are we (as human beings, as socio-cultural, unique agents)? Where, (in which context) are we? Where do we want to go (what do we want to achieve; which existence is meaningful and which development is adequate)? How do we achieve this goal (to be able to be and remain what we are: "wise" human beings with socio-culturally diverse meaning-perceptions and lifestyles)? (cp. chapter "Introduction"). Education for sustainable development is the process of exploring these questions and of exploring alleged answers. The manner of exploring should be creative, critical, self-

regulated/participatory for the learner; it should be a process together with others, guided, not anticipated through pedagogues in order to evoke sovereign identities, capable of dealing with complexity, overcome moments of contingency and incertitude.

The above-mentioned questions are the typical measures for a gap analysis, and these measures are consequently used to structure this text (cp. "Introduction"). Through mimesis the respective others expand the "horizon of possibilities" (Iser 1978) of the respective selves in terms of multi-persepctivity (cp. chapter 1.6 and 1.6.6). This, in turn, potentiates the comprehensiveness and quality of their analyses and of their subsequent adjustment of meanings, identities and organisation patterns by means of integrative and comprehensive lifestyles, values, rituals, narrations, policies, etc. Even with a pressing issue such as human sustainable development, it is difficult to decide for all people on earth what is sustainable, what is meaningful, what is appropriate socio-cultural organisation and how to achieve it, how to behave and produce sustainably, and what to desire? Who should decide what sustainable patterns are? Obviously all involved socio-cultural protagonists - governments (top down), just as school children (bottom up) – should be involved in this process.

However the issue of sustainable development is turned, it's essence comes down to successful mimetic interchange as it arranges protagonists, leads to comprehensive decision and meaning-making, and unfolds "Our Creative Diversity" (Cuéllar 1998). In order to train such interchange education for sustainable development exposes the learner to social situations, such as group decision making, which involve for example moments of group success or conflict. Social learning (e.g. peace education and community education), however is greatly fostered as well through focusing on economy (entrepreneurship education) and environment (environmental education). As a result of their own participation and of professional guidance, learners are more open and motivated to deepen their knowledge and co-shape social, economic and environmental dimensions of human living.

- ❖ Example:

Environmental education, for example, need not *declare, or postulate* that the environment is important and endangered. It need not provide (although in practice it can suggest) a list of what the learner can contribute to environmental conservation, for example, recycling, economising water and electricity, etc. Environmental education should rather introduce the student to the functioning of the ecosystem, to the importance of bio-diversity, to the enthrallment of nature experiences and to the ongoing destruction of environment. It excites and thereby incites the students to pose their own questions and ludically and actively assess their own responses and new approaches with intrinsic motivation.

Not only from a didactic perspective, but also considering a globally inter-depending, rapidly changing, locally different world, education must not provide static answers of how to develop sustainably. Sustainable development requires a diversity of development alternatives and providing static answers would possibly homogenise the learner's minds to

invent such alternatives and contribute thereby to sustainable development. Thus, education should be a tool with which to endow the learner with the creative capacity to dynamically invent to on their own initiative adequate responses to unsustainability, such as local and global issues. This means that *such* an education for sustainable development is possible to "globalise". In this sense, education for sustainable development promotes not an ethics of ready-made answers, truths and solutions to predefined challenges, but rather an ethic of questioning and an ethics of reciprocity, applicable in different conditions, socio-cultures and ethnological world-views. In this regard, education for sustainable development conserves and renews the potentially autopoietic, uniting network of socio-culturally diverse protagonists. Hence, it generates, consolidates, communicates and innovates socio-cultural unity in diversity.

Discourse can be perceived as the practice of dynamic diversity. According to discourse ethics, the focus of education for sustainable development is to discuss and deal with the above described questions, concerning meaningful existence and development. Central to (education for) sustainable development is the process of deliberation, awareness-raising and the exploration of questions, as they signify the involvement of the learner in and his consideration of relevant issues. The actual 'answers' to what sustainability is, or could be, are by-products, which arise from such discourse. In the same manner, a sustainable future is rather a by-product of sustainable development.

Culture evokes mimesis; mimesis maintains culture; in an extent that culture and mimesis are not clearly distinguishable. Mimesis is so to say the pragmatic side of culture-theory, it is the operational implementation of the phenomenon culture. Human beings (Homo sapiens. Lat: "wise human") are "wise", whenever they perform mimetic interchange. In this sense, mimesis is the essence of human being; it determines the quality of human existence and human development. Education can and will not try to reinvent the human being, but rather will endeavour to empower the human cultural, mimetic competence in order to develop comprehensively. Mimesis plays a double role in sustainable development. First, it generates, consolidates, communicates and innovates humane, sustainable meanings, identities and organisation patterns; hence, it is constructive. Mimesis is a means to sustainable development. Second, it unfolds socio-cultural diversity, the difference, uniqueness and dignity of socio-cultural identities and protagonists; hence, it is descriptive. Mimesis is an aim of sustainable development; it is an end in itself. For education, this means that it must promote mimetic learning. Mimetic learning, in turn, requires and simultaneously encourages sovereign identity. The reason for this is that the self is a swarm of participations. Accessing the other mimetically enables protagonists to access their "other selves", allowing protagonists to become more agile. In other words, arrangements with the

other facilitate the dealing with ambiguity and complexity and they expand the protagonists' horizon of possibilities. This includes for exmple or example possibilities for sustainable integration, for the development of development alternatives and for the consolidation or "creative destruction" of previous meanings, of one's own identity and of societal organisation patterns.

Although there are many approaches in education to addressing environmental, societal and economic issues, the question is whether these often locally or context specific approaches are globally valid. In reality, these approaches often seem too controversial to allow for the definition of an "overlapping consensus" concerning education for sustainable development.

Education for sustainable development, therefore, must not promote alleged "sustainability-truths", but rather, as a priority, focus on operation modes through the empowering of the cultural (operation) competencies for sustainability meaning-making and mimetic arrangements between socio-cultural protagonists. That means, instead of promoting "sustainability-truths", or doctrines, education for sustainable development incites learners to explore sustainability and discover their own meaningful notions of it.

For this reason, education for sustainable development supports learners to cultivate competencies. It capacitates protagonists in areas such as creativity, co-creation, curiosity, mutuality, reciprocity, arrangement, identity progression, mimetic movements, etc. Those competencies build a viable foundation for the adjustment of human communities, with whatever local, national, regional, global or historical and subject related (e.g. social, economic, environmental) particularities, to sustainability. Indeed, education for sustainable development focuses on what is contextually relevant concerning human social, environmental and economic life. But in order to speak of a theory which identifies education for sustainable development apart from contextual particularities it would be important to "distillate" something like an essence of such education.

While what is contextually relevant is impossible to presume, to generalise or to universalise, the mentioned foundation of education for sustainable development seems possible to generalise in global terms. The reason is that "cultural competencies", which shall be promoted through education are human-native, so that such general educational criteria, or foundation is culture-anthropologically legitimated.

"cultural competencies" are synonymous with being human; they define the human being. It is also for this reason that they sustain human development, since the inability to regulate humankind culturally furthers human "envelopment" in terms of unsustainability. Hence, such "cultural competencies" are not socio-culturally specific. This legitimises the universality of educational theories and concepts, which aim to promote learning and teaching for sustainable development by means of cultural, mimetic learning and the empowerment of

"cultural competencies". Obviously the particular interpretation and practical implementation is not universal.

Clearly, in order to validate and apply this theoretical concept in practice it must be socio-culturally specific and interpretable. There can be many different approaches to the strengthening of mimetic learning. A strong focus on the teaching of cognition and the intellect of learners and the disregard of social dimensions and mimetic learning, for example, in school curricula, does not correspond with education for sustainable development theory.

Sustainability is not possible without globally cohesive approaches. But sustainability issues differ depending on place, socio-cultural requirements and historic episodes. For this reason, sustainability is a controversial, inclusive and evolving concept. For education this does not mean teaching alleged sustainability contents because they are difficult to universalise. Education for sustainable development rather aims to teach how to generate, consolidate, communicate and innovate meaning with and through the other. Education for sustainable development must, first of all, be a pedagogic approach that promotes "Learning: The treasure within" through "education throughout life", as Jaques Delors puts it (Delors 1998). Discussing educational science for sustainable development does not aim to reinvent the wheel, but rather to provide the relevant criteria in order to choose appropriate approaches. Education for sustainable development aims to capacitate the mentioned culture-inherent competencies, which enable people to collaborate, cross-relate, and to perform mimetic interplay in terms of the making of cohesive meaning. In different socio-cultural learning traditions, in different countries and for different socio-culturally particular groups, there can be different ways to do so. Ethnologists report that there are, for example, societies with more individual, and others with more collective, operation and organisation patterns.

Measures for educational frameworks, such as policies, school concepts, curricula, teacher trainings and pedagogic approaches, which guarantee a maximum of sustainability-relevant pedagogy, are globally applicable without ethnocentric undermining of socio-cultural diversity. Examples of such frameworks, orientations and combinable approaches will be presented in this text.

Examples of theories and programs, which orient education towards sustainability are: the "learning throughout life" approach (Delors 1998, cp. chapter 4.1.3.1 and 4.1.3.4), democratic and open (but defined) education and learning, the Golden Rule (cp. chapter 3.1.5 and 3.2.7), the earth charter education initiative (cp. chapter 4.2.4), project based and performative learning (cp. chapter 1.8, 4.1.4 and 4.2.2), intercultural education (including the focus on differences and frictions in one's "own" socio-culture), the life-situational approach

and discovery learning (cp. chapter 4.2.1), community education and development (cp. chapter 4.1.3.2) and entrepreneurship education (cp. chapter 3.3.3 and 4.1.3.2). Education for sustainable development of course has the aim of focusing on social, economic and ecological system cohesions through practical learning experiences in – and theoretical consideration of – social, economic and ecological conexts. Furthermore, there are sustainability principles such as "Think global, act local" and "Think long-term, act now", the above-mentioned Golden Rule as well as practical and applicable examples, such as the School for Life concept and projects (cp. chapter 4.2.6). They all have in common the goal of empowering the learner with the ability to shape his socio-culture (cp. de Haan 2002 et al) and to engage in mimetic interplay with "the other" (cp. Wulf 1992, 2003 et al, cp. chapter 1.3 for "mimeetic learning").

One of the challenges for current education is again, not to answer, but to discursively reflect with learners on the question: "Which globalisation for sustainable development?", or respectively: "How should and could globalisation be shaped to promote sustainable development?" As globalisation penetrates the tempo-spatial continuum, the space-related principle of the Agenda 21 to "think global, act local" (United Nations, Agenda 21:1992) remains relevant for (lifelong) learners, though it must be accomplished by the time-related principle of "think long-term, act now". The current globalisation process threatens human sustainable development.

The active and autonomous dealing with the issue of current globalisation enables the learner to access different perceptions of globalisation and come to their own conclusions. Furthermore, it enables learners to innovate and transform globalisation in a way that is compatible with sustainability and to contribute to a mental paradigm change.

Wulf writes about the challenge of globalisation:

> "In this situation pedagogy and education are challenged; it is imperative to develop new representations of the other, new trans-national loyalties and solidarities." (Wulf 2002: 80).

For this purpose, an education is required which *empowers* the learner to deal with difference. Dealing with difference however is more eligible to train in a tangible context, for example in collaboration with other learners. Hence even discussing globalisation, education for sustainable development seems to achieve its aims for cohesive, meaningful development best through intra- and inter-personal mimetic interchange. Such education for example:

- promotes "the respect of different patterns of discourse", (Koller 1999),
- uncovers the "other self", or
- detects aspects of the self in the other.

Valorising and sustaining socio-cultural differences, education must also promote similarities, unity, cross-relation and cohesion in order to capacitate the cohesion of humans living on earth by means of social, environmental and economic equity (cp. "second dialectics of sustainable development", chapter 3.2.3.1). Wulf argues that both, similarities and differences go well together. He states:

> "We develop similarities through the apperception and acceptance of differences rather than by trying to abstain from differences." (Wulf 2002: 80).

In this sense, education for sustainable development provides – or it is – a framework or "playing field" for the ludic exploration of the self, the other, and the common as well as of possible solutions to contextual, tempo-spatially complex problems, such as global issues and their specific (e.g. local, political, scientific, religious, social, economic, environmental) characteristics.

There is no singular, universal education for sustainable development concept. Learning for sustainable development rather requires a diversity of concepts. However, these concepts may have something in common. Abstract, possibly common cornerstones of Education for sustainable development are - or according to the theory of "cultural competencies" should be:

- *Mimetic learning* is not just a crosscutting aspect, but is rather the essence of education for sustainable development because it activates meaning-making competencies, and such meaning is a precondition for the consideration and shaping of the social, environmental and economic contexts. Moreover, mimetic learning is synonymous with human dignified existence, and hence it is intrinsically sustainable. Mimetic learning is the process of interchanging and arranging with the respective other (person, perception, meaning, self). Mimetic learning can be mentally/cognitively and performatively. Mimetic learning stimulates the ability of learners to participate in the sovereign, co-created mimetic interplay, for meaning generation, consolidation, communication and innovation with and through the other in terms of sovereign socio-cultural-identity formation. Such sovereign socio-cultural identity is capable of withstanding the other, dealing with and relating to the other, and creating the cohesion necessary to generate, consolidate, communicate and innovate socio-cultural meanings, identities and organisation patterns in collaboration with other socio-cultural protagonists.

- Education shall incite the learner's own *identification with sustainability and the internalisation of its meaning.* It enables the learner to explore and discover, interpret, co-create and consolidate perceptions and motivations by – and for – himself in a

participatory manner. This means that the learner participates in learning procedures (such as school lessons, or technical and vocational training). Education for sustainable development does not aim to infuse externally what is supposed to be "sustainable", but aims to incite intrinsic sustainability-perceptions. This means that it does not define what is sustainable and what is not sustainable or provide ready-made truths, but instead assists learners in the development of their own "sustainabilities".

- Mimetic learning for sustainable development *additionally addresses specific (for example local, situational) challenges*:

  "Education for sustainable development must explore the economic, political and social implications of sustainability by encouraging learners to reflect critically on their own areas of the world, to identify non-viable elements in their own lives and to explore the tensions among conflicting aims." (Section on Education for Sustainable Development, UNESCO 2002: 12).

- Sustainability issues involving society, environment and economy, can feed into mimetic learning and thereby contextualise education. For example, in discussions or theatre plays, which have intrinsic mimetic potential, issues such as HIV/aids, waste production and management, local community life, socio-cultural heritage and others can be explored. Challenges become pedagogic resources to further the learners' comprehension of social, economic and environmental system cohesions and the discovery of one's own personal limits, opportunities and duties for impacting and co-creating these systems.

- Education assists the learner in making sovereign *sustainable gap-analyses* of their own as well as societal integration, environmental integrity and economic appropriateness. Hence, education assists the learner to assess gaps in sustainability meanings, identities and societal organisation patterns. Thereby, the learner can overcome contingencies and ethical antagonisms, such as self-other, we-they, presence-future, right-duty, local-global, economy-society-environment, etc. Education is the process of exploring questions such as: Who are we, what is the context of our existence, what (sustainability) do we want to achieve and how do we achieve this goal?

- Education can incite such sustainable gap analyses through the provision of a "playing field" for mimetic interchange, coupled with the consideration and comprehension of social, economic and environmental system cohesions. Being acquainted with definitions of sustainability, with one's own socio-cultural position (identity) and with societal organisation patterns (such as political, civil society, media, scientific, religious, economic systems of one's "own" and other societies), provides the pre-conditions for such gap analyses.

- Knowing more about the self and other, as well as about societal, environmental and economic contexts and the gaps in their regulation, evokes the search for and development of sustainability. Therefore education provides discursive, project-based and real-life-situation based (cp. "life-situtional approach" in chapter 4.2.1 and "School for Life" in chapter 4.2.6), pedagogical approaches that aim to *explore and apply sustainable development*, instead of input-based (indoctrinating, intervening) approaches.

Education can cause the learner to "discover" this impressive cultural reality through regulated exposure to culture and its operation modes by mental as well as physical performance and training.

Examples of potent mental performances in this context are: discourse with others, reflective, interdisciplinary thinking and the exploration and consideration of complex issues, such as technology, globalisation or education itself.

Examples of potent physical performances are: ludic group activities, sports, dance, theatre, music, and art in general. Such performative learning addresses different skills and particularly also body-knowledge, a dimension of knowledge that is accessed and expressed by the body. Similar to cognitive, intellectual knowledge, body-knowledge aims to convert the socio-cultural identity, integrate the self into the social and natural environment and arrange with others through interaction. Performatively, and especially ritually, socio-cultural meanings are "communiticated" (cp. chapter 1.8.4 for "ritual communitication", chapter 1.8 / 4.1.4 for "rituals and performative learning"). The distinction between mental and physical performances is rather theoretical. From a practical point of view, they are mutually complementing. Human interaction is shaped – and shapes – physical, ritually encoded as well as performatively created communication and interpretation, ludically enabling cohesion, conformance (consolidation) and innovation. It enables the reflection and deflection needed for the construction and creative destruction of the canonical. In terms of culture, human cognitive interchange and performative interactions aim to create and dynamically, continuously re-create mutual references and a common sphere. Both, the mental and physical educational approaches build together the groundwork for the intervention in and regulation of the state of being - and becoming.

Since both approaches are based on mimetic interplay (e.g. intra-individual and inter-individual discourse), they promote through mutuality and reciprocity the main parameters of cultural organisation and cultural sustainability. Education for sustainable development must benefit from this acknowledgement and holistically nurture the human potential for cohesion through mental and performative approaches to teaching and learning. It trains the learner

creatively or *ludically,* to continue the performative "*game*" or the "*art*" of human being and development.

The United Nations Economic Commission for Europe describes the role and content of education as a vehicle for sustainable development. UNECE states in their Strategy for Education for Sustainable Development:

> "Education, in addition to being a human right, is a prerequisite for achieving sustainable development and an essential tool for good governance, informed decision-making and the promotion of democracy. Therefore, education for sustainable development can help translate our vision into reality. Education for sustainable development develops and strengthens the capacity of individuals, groups, communities, organizations and countries to make judgements and choices in favour of sustainable development. It can promote a shift in people's mindsets and in so doing enable them to make our world safer, healthier and more prosperous, thereby improving the quality of life. Education for sustainable development can provide critical reflection and greater awareness and empowerment so that new visions and concepts can be explored and new methods and tools developed." (UNECE 2005).

Possibly the most practicable effective implementation of learning for sustainable development would be to begin by promoting the notion of community itself through tangible community involvement for example of schools and through conscious reflection (inactive, mental performances) about community in small learning communities. School students for example are no applicants for entering into society after their apprenticeship. Education for sustainable development rather requires that students actively participate in the school community, for example by means of democratic education. Community education furthermore means to leave the classrooms and explore patterns of the surrounding community, getting involved with neighbours, companies, politicians, etc.

❖ Example:

Such tangible community performances can, for example, be created through discussion in classrooms and through the participative democratic frameworks of schools, where students participate in meaning and policy-making, co-creating constitutions, regulations for discussions, rules, sanctions, preventions, etc. Another way of strengthening community – and in this case school – identity, is school parties and celebrations (cp. chapter 1.8.4 for "rituals and the mambo dance example").

In a community we consider the other as neighbour with same as well as different attributes (e.g. same, or different values, rituals, symbols) compared to ourselves. Experiencing the other as neighbour is the central message of (education for) sustainable development, transferable to whatever level of identity, to the individual, to society or to the global community. Neighbourhood, community and mimetic arrangements are the basis for shaping social, economic and environmental conditions. Therefore, shaping competency (the competency to co-shape sustainable development; de Haan 2002, cp. chapter 4.1.2.1) and mimetic learning are mutually dependent. In other words, mimetic learning is the central aspect of shaping competence. However, mimetic competence must be accomplished

through an acquaintance with social, economic and environmental strengths, weaknesses, opportunities and threats (cp. chapter 2.4 for "swot analysis").

De Haan explains that Education for sustainable development empowers protagonists:
> „to understand the own involvement with and reflection of questions concerning futurable economy, the human relation to nature as well as social relationships." (De Haan 1996: 131).

In other words, education for sustainable development aims to elucidate the system cohesions between the three constituents; society, environment and economy. This will empower the learner to find his own position and role within the constellation of these interchanging systems and to participate in shaping global and local processes, such as politics, production, or consumption patterns, solidarity and lifestyles. Moreover, education for sustainable development promotes the understanding of the global, thus infinite *interdependence* of socio-cultural agents, such as individuals, institutions, nation-states and communities.

Explicit education is not the only instrument with which to develop individual identity. Folk psychology and "everyday education" contribute as implicit as significant to identity development (see chapter 1.15), so that explicit (formal and non-formal) education may accomplish the impact of the omnipresent, implicit (informal) education. Therefore it is necessary for educational sciences and practical pedagogy to enter the often ritualised organisation patterns of implicit, "invisible" education or "socialisation" and access "The Hidden Dimensions of Education" (Wulf 2006). Performative education, discovery learning, and the situation approach are approaches that focus on real life situations; they aim to learn from life (Zimmer 2000, Preissing 2003, cp. chapter 4.2.6 for "School for Life" and 4.2.1 for the life-situational approach), "throughout life" (Delors 1998), for life.

Education for sustainable development, therefore, aims to strengthen the already existing cultural, autopoietic force of human beings in their roles as learners and creators. In other words, education for sustainable development aims to create a cultural renaissance through the promotion of "cultural competencies". It is an formal education for "culturality", accomplishing the cultivating folk-acknowledgment or "everyday education" and guiding it towards sustainability. "Culturality" refers to mimetic and co-creation competencies. "Education for culturality" empowers the learner to uncover his or her unique characteristics, desires, meanings, values, priorities and visions, in order to promote the dignity of the individual learner and the diversity of the societies and communities to which the learner belongs.

Education for sustainable development does not aim for the "cultivation" of the learner in terms of indoctrinating conformity, homogenisation or standardisation.

"Culturality" derives from and fosters unity, cross-reference, co-participation and co-creation; it therefore enables protagonists to mimetically develop socio-cultural unity in diversity.

Different from "culturality", cultivation derives from and fosters uniformity and the reduction or elimination of socio-cultural particularities. Education in terms of cultivation forms the learner. With the reduction of socio-cultural diversity and the diversity inherent multi-perspectivity, with the disregard and exclusion of the other and of the alternative (e.g. meaning, or identity), with the focus on self and the consolidated organisation-patterns, society loses its capacity for self-empowerment, innovation and regulation. In other words, it loses its capacity to deal with complex global issues.

The potential inherent in socio-cultural diversity (cp. chapter 1.4 for "autopoiesis", chapter 1.6 for "multi-perspectivity" and chapter 1.8.4 for "communitication") must be continuously re-activated; it must be performed throughout life (cp. chapter 4.1.3) – and through the mimetic interplay with the other. The cultural principals of mimetic arrangement and autopoiesis describe how sustainability can be developed, but as mentioned, there is no automatism. This is the reason why the mentioned "folk-psychology" and implicit "everyday education", socialisation and socio-cultural conditioning, must be accomplished through explicit education for sustainability approaches.

In summary, the feed-back loop of education for sustainable development proceeds as follows: Education empowers socio-cultural protagonists in their role as learners for "culturality", which contributes to the strengthening of "culture for sustainability". This in turn develops an "ethics of sustainability", advancing the "education for culturality" and strengthening the sovereign identities of socio-cultural protagonists, able to participate in such mimetic learning performances successfully and to develop sustainably, etc. .

3.2.9 Ethical Antagonism – The Discrepancy between Awareness and Behaviour

In modern human lifestyles there is a discrepancy between awareness and actual behaviour concerning sustainability. Schauer discusses the phenomenon in the context of environmental protection. He states:

> "Awareness about environmental issues is actually quite developed. Regarding actual behaviour the contrary appears to be true. Research looking at the life-styles of one third of the population shows that two thirds of them go on holidays by car and almost one half does not economise warm water. There is an incredible discrepancy between consciousness and behaviour; an eco-schizophrenia. (…) The correlation between environmental awareness and comportment is very low." (Schauer 2000/ cp. 2002).

Besides the environmental dimension, the problem of behavioural "schizophrenia" appears relevant in the contexts of society and the economy as well. Concerning society, for example, there is awareness about social aspects of sustainability requirements, but often they lack

solidarity and cohesion to back them, especially on an international level. Children's rights, for example, are a tool for the protection of the most vulnerable humans but apparently they are not effectively implemented. Concerning the economy, for example, the theory of a free market economy is convincing, but thus far neo-liberalism has been put into place; a free market requires (social, economic and environmental) regulations to unfold. This shows that there are already approaches to reaching sustainability but they lack the necessary implementation.

How does such a thing occur? What are the measures for preventing sustainability-schizophrenia? This chapter attempts to explore answers to these questions.

In his book "Innere Kündigung" ("Inner Dismissal") Brinkmann describes how employees develop an attitude of defiance if their work-situation is contradictory to (the unfolding of) their socio-cultural identities. In order to prevent dissent and promote the commitment of an employee, Brinkmann writes of the importance of mutuality and participation in the work-situation. He explains:

> „Besides the formal contract, every employee unconsciously makes an additional psychological contract with the employer. This psychological contract consists of desires, expectations and wishes concerning the employer." (Brinkmann/Stapf 2005).

Brinkmann argues that those wishes are for:

> "furtherance, respect, appreciation and participation. If those desires, wishes and expectations are not realized, the result is often a conscious decision [note: of the employee] to restore the balance. Subsequently, employees reduce their commitment and motivation and backtrack into a cocoon-state in order to await better moments. Furthermore we know of forms of active annulment of the inner contract: An employee who feels profoundly disrespected may try to take revenge, which can even result in sabotage, in order to have the feeling of recreating an equal situation." (ibid.)

In order to get socio-cultural protagonists to identify with sustainability and evoke a civil ethics of sustainability, education for sustainable development must enable protagonists to comprehend social, economic and environmental challenges and to be active in the shaping of the world around them. This makes it possible for socio-cultural protagonists in their roles as learners and creators, to participate in the making of sustainability-meanings and in the literal *act*-ive, *act*-ual application of these meanings (application through action).

Taking the criteria described by Brinkmann to promote identification, education for sustainable development fosters *furtherance* by stimulating and inspiring the learner to develop their own, inner motivation, to consider sustainability issues and to develop sovereign identity through mimetic learning. This is how education for sustainable development fosters *respect*, the second of Brinkmann's criteria to promote identification. *Appreciation* of the learner is shown throughout the mimetic learning process, as it is not the result of the learning, but the learning process that defines the learner's importance. Learning that is ludic and creative develops not only the ability to co-shape human development and to

construct sustainability-meanings, additionally it is also an end in itself. Hence, the learner is appreciated as he is. Education for sustainable development empowers learners to *participate* more actively and purposefully in meaning-making and human development. But participation must also address the participation of the learner in education, the participation hence in the creation and conducting of the learning process itself. In this regard, shaping competence (de Haan 2002; cp. chapter 4.1.2.1) is not only the ability to shape the social, ecological and economic environment, but also to shape in a purposive and sovereign manner their own learning process (self-regulated learning) and to generate, consolidate, communicate and innovate their own socio-cultural identities in competitive cooperation with others.

"Sustainability-schizophrenia" has something to do with old images of development, images which were generated, globally consolidated and communicated and which have not yet been innovated. Sustainability represents an innovative image of development. Sustainable development is not only the realisation of that utopic future, but it is also the development of image(s) of sustainability. The former UN Secretary General Boutros Boutros-Ghali argues that it is necessary to generate a new image of development:

> "As development becomes imperative, (…), we are faced with the necessity of giving new meaning to the word. Reflecting on development is thus the most important intellectual challenge (…)." (Report of the International Commission on Peace and Food 1994).

Education for sustainable development is not an image campaign for the advertisement of sustainability images, or universal doctrines, it is rather an "imagination campaign". That means, education for sustainable development promotes imagination processes and incites learners to imagine a sustainable world, as a basis to uncover the unsustainable status quo and as a basis to act. Education or sustainable development, therefore, is the anthropological-educational campaign to incite the generation, consolidation, communication and innovation of sustainability imaginations.

Garrison writes about the phenomenon and power of imagination in creating (civil) images:

> "(…) imagination allows us to unveil future possibilities in present actualities. When Martin Luther King Jr. declared that he had 'a dream' of a racial harmonious nation, he was not reporting the results of an exercise in pure reason. Reason alone will not provide prophetic moral values, nor was King reporting an empirical fact. Dreams can be perceptions of how things morally *ought* to be, visions of our best possibilities. (…) Prophetic leaders of all kinds, including visionary teachers, must vividly imagine the ideals and values that they seek to realize through the exercise of practical reasoning. Teachers, too, must be reasoners, poets and prophets." (Garrison 1997: 177).

Referring back to the importance of participation, Tilbury and Wortman explain:

> "Participation in education for sustainability helps learners to self-organise, become more self-reliant, and develop a stronger sense of community identity. Rather than relying on outside specialists or managers, participation can engage more stakeholders in becoming a part of the process of self-governance and decision-making. (…) participation provides a shared vision, a greater sense of unified purpose and community identity." (Tilbury/Wortman 2004: 54).

Instead of a passionate identification with sustainable development, often the perception predominates that a single person can not influence complex global structures. There is a lack of motivation, faith and curiosity in many social protagonists, and engaging in sustainable development is often perceived as being as futile. The result is passivity, ignorance or even frustration; a widespread dilemma that is not only an effect, but which also becomes a cause of the "sustainability- schizophrenia". People often seem to push off the responsibility of sustainable development to experts, politicians, institutions and companies, transferring the responsibility to the other.

Like democracy, sustainable development and education for sustainable development require civil participation. Values of democracy and of sustainability are effective only if they have the status of a civil ethics. In the Stockholm Initiative for Global Security and Governance, representatives from north and south stated:

> "Democracy can not be implemented externally, but must come from an internal demand. Democracy is not developed from the top-down, but must come from the bottom-up." (Stiftung Entwicklung und Frieden 1991: 56).

Considering participation, the German educational scientist and expert for education for sustainable development Gerhard de Haan writes:

> "Sustainability does not only require knowledge and self-reflective thinking and action. Without relating education for sustainable development to the lifestyles of citizens, to their desires (…) and to their visions of sustainability, it will probably be very difficult to achieve." (de Haan 2000: 133).

Thus, education for sustainable development must not only promote the participation in social, environmental and economic contexts as well as the self-responsible participation of learners in their own learning process. To do so, education for sustainable development must directly relate to the learning environment (context, situation). Such a "life-situational approach" (cp. Zimmer 2000, Preissing 2003 and chapter 4.2.1) empowers the learning person to first gain awareness of their *own* perception concerning their *own* respective life-situation, as an individual in a society. Based on comprehending the own local social, environmental and economic contexts it is easier for the learner to comprehend social, environmental and economic system cohesions on global scale. This enables him to assess his local integration within the global context and to acknowledge alternative options for the adjustment of his role, perception and context for the sake of global cohesion. In this way, education can assist the learner in expanding his perception of his own situation and making it compatible with sustainable development. Education thereby initiates imaginative transitions between one's own situation (the self, the canonical) and the ideal of sustainability (the other, utopia). As mentioned, the situation approach enables the individual to assess his situation in respect of sustainability, so that he may innovate and shape it, if desired.

Current trends in globalisation have created global issues, which represent the great challenges to sustainable development. There is the need for the development of a sustainable globalisation. Globalisation thereby is an example of the kind of complexity which education for sustainable development must address. It shows that education deals with complexity. In this sense, it is the challenge for sustainable development to make something abstract and invisible comprehensible and tangible for the learner.

As a human "product", or human creation, globalisation is *neither* a destiny or a mystery, *nor* is it unshapable, or unconductable. Indeed, impacting on the world does not only mean to leave ecologic, or other "footprints", but that impact can be sustainable as well. For an individual, doing so can have indirect effects on society, economy and the environment as well as direct effects on one's personal quality of life.

❖ Example:

An example for active participation of learners in economy is entrepreneurship (see chapter 3.3.3 and 4.1.3.2). Entrepreneurship is an ongoing, intense and complex learning experience. It greatly influences one's own life and is a way to take part in the formation of society, the economy and can also impact the environment.

Starting from local and immediate learning environments (situations), and reflecting global system cohesions, education for sustainable development makes globalisation tangible. This "tangibilisation" refers to the ability to comprehend and co-shape social, environmental and economic macro-processes and thereby shape global contexts, such as globalisation. It enables protagonists to more effectively manage, move and orient themselves in global contexts and requires from its protagonists differentiated perceptions. Furthermore, the "tangibilisation" of globalisation makes it possible for socio-cultural protagonists in their roles as learners and creators to connect the abstract outside world to their "own" tangible socio-cultural identities. People who are aware of their interdependence and with their global neighbours of various religions, skin colours, ethnicities, traditions, etc., will try to arrange with one another in order to obtain security, meaning, rights, and influence in terms of sustainability.

It remains difficult to shape globalisation, but understanding one's own role and responsibility, limits and opportunities makes it possible to generate, consolidate, communicate and innovate one's own socio-cultural identity in reference to global contexts. If one feels like part of the global village it is easier to take an active role in the development of that global community. This is the basis for the prevention of the "inner dismissal" (Brinkmann, see above) - to feel furthered, appreciated, and respected and to participate in the shaping of the social, environmental and economic context in meaningful ways. Education for sustainable development is therefore not reducible to one global approach to schooling or technical or vocational training and development. It is the sum of educational

approaches, which furthers culture-anthropologically rooted deduced education by means of mimetic learning and the promotion of "cultural competencies". Learners and teachers who apply this principle of mimesis, perform competitive cooperation. The Golden Rule, "Do unto others as you would have others do unto you" and the principle of mimetic arrangement thereby "sustain sustainability": They prevent inner dismissal and connect the learner to the culture-anthropolically uniting and otherwise heterogeneous and participatory ethics of sustainability.

3.3   The Role of Culture for the Three Dimensions of Sustainable Development

This chapter focuses on the cultural dimension of sustainable development. It addresses briefly the relations between culture and the three pillars (or dimensions) of sustainable development - society, environment and economy - and concludes by discussing sustainable development as a cultural approach.

3.3.1   Society and Culture

The interrelatedness of culture and society is covered extensively in chapter I.

From the theoretical, culture-anthropological perspective, culture is the matrix of human being, a mode for synergetic networking through the mimetic arranging of protagonists. From a practical point of view there exist different approaches to interpret and express culture socially, which causes humankind to unfold in socio-cultural diversity. Socio-cultural protagonists, whether on the individual or on the societal level, are culturally defined and united. Simultaneously, these protagonists utilise different socio-cultural meanings to configure their social identities. The reverse is also true as the socio-culturally diverse identities of these protagonists evoke different social meanings. In this sense, culture is the matrix, the modus of human poiesis. Unity in diversity, or culture, unites socio-culturally different protagonists (e.g. people, social movements, societies), unfolding a diversity of socio-cultural patterns. This diversity is the driving force of sustainable development. The reason for this is that, in terms of multi-perspectivity, different socio-cultural protagonists provide different development alternatives, offering a pool of identity-concepts, lifestyles and meanings that are locally and contextually adjustable. Socio-cultural diversity is capable of overcoming human adversity. Thereby, socio-cultural diversity evokes (a uniting ethics of) sustainable development capable of overcoming human envelopment.

An ethics of sustainable development is a socio-cultural tool that promotes mimetic arrangement through competitive cooperation and thereby enables the maximum human capacity to unfold, while avoiding the assimilation of the other. Thereby a maximum of socio-cultural "players" can participate in the ludic mimetic interchange of meanings – which aim to assist the perseverance of humankind. The endurance of humankind is measured by agile

socio-cultural diversity and the concerted generation, consolidation, communication and innovation of enduring concepts – represented by socio-cultural meanings and identities. (For more information about society and culture cp. Chapter I).

In this sense, culture is a medium for social regulation; it provides techniques, such as narration and performance to facilitate the integration, arrangement, and secure and efficient organisation of social groups. By means of mimesis, mimetic arrangement, interchange and learning, culture enables (or socio-cultural protagonists enable through the application of cultural techniques) the generation, consolidation, communication and innovation of integrative, socio-cultural meanings. For these reasons, culture characterises the human being as a wise being (Homo sapiens). Culture is therefore not only constructive (constructing and developing society), but an end in itself (defining human existence in terms of dignity).

In an era of globalisation, understood in terms of global socio-cultural interaction and increasing interdependence, and in an era of "complexisation", understood in terms of compounded global issues, sustainable cohesion requires orientation. This orientation must inter-relate all cultural protagonists. It facilitates the assembly of socio-cultural protagonists within coherent, creative, viable, self-regulative and heterogeneous (in terms of diversity) networks (creating unity). These social networks develop reciprocally with global bio-diversity, in order to maintain their endurance. In other words, socio-cultural diversity must be regulated in order to regulate humane and sustainable development. Diversity requires mutuality because self and other reciprocally expand the horizon of their possibilities and create a common sphere capable of developing multi-perspectivity and human autopoiesis.

Mutuality transforms contrariness and dichotomy into amendment and comprehensibility. The resulting arrangements represent not only difference, but also commonality in terms of unity. Fostering this "unity in diversity by ensuring social integration through environmental integrity is synonymous with sustainable development. In order to further the sustainability principle of unity in diversity, education must address the learner's ability to engage in mimetic arrangements with the respective other.

Unity denotes globally shared concerns that are discursively assessed through many particular (e.g. local and historical) consultations and participations. Unifying approaches, such as a global ethics of sustainability, require the adjustment to particular contexts. Its meaning arises from the actual participation of socio-cultural protagonists in the ethics and from their application and implementation of the ethics beyond theory.

The aim of such unity is the global sustainable arrangement of different socio-cultural protagonists and their integration into a global network. That network is bound together through a framework of meaning, which enables any protagonist to find, create and develop his own socio-cultural meanings and unique identity. In such sustainable organisation the socio-cultural protagonist is appreciated, participates and contributes pro-actively and continuously to an as much as possible stable, sustainable condition. The protagonists does that through social cooperation, aiming for synergetic arrangement between protagonists, foreclosing and resisting asocial, destructive competition and war in terms of domination.

3.3.2 Environment and Culture

This chapter compliments the content of chapter 2.3, "The Impact of Globalisation on the Environment". Humankind, culturally regulated and socio-culturally organised, defines what is environment (1), and moreover it affects it practically as a consequence (2):

1. The defining of the concept of "environment", is a culturally facilitated and socially implemented, thus socio-cultural act: Since culture equips humankind with (the techniques and competencies to create) socio-cultural meanings and orientation, it is culture that determines our understanding of environment. The definitions and perceptions of environment relate to socio-cultural contexts and meanings. One hundred years ago it was common to perceive nature as a resource to be exploited and, in this regard, as a means to human existence. Today, nature is more and more seen as the biological framework in which we live, create and express ourselves. Human beings see the environment through a socio-cultural lens. Like reality, the environment is actually an intentionally created perceptual representation of the environment. That means "environment" is a perceptional concept, intentionally created. "The" environment as such does not exist, or at least it relates to socio-cultural contexts, which are as diverse as they are dynamic. Nevertheless, the socio-cultural interpretation of the environment must not be random, but functional. Currently this functionality is determined by its sustainability. This means that socio-cultural meanings, and in this regard perceptions of environment, are required, which maintain bio-diversity, mainly in order to ensure the endurance of human (cultural and physical) existence, not only in terms of survival, but also in terms of dignity. A sign of this dignity is, for example, the existence of equal opportunities for present and future generations (cp. chapter 3.2 "sustainable development").

2. Through our socio-cultures, that means through lifestyles (e.g. through production and consumption) based on socio-cultural meanings, we directly and actively co-create and influence the natural environment. The exponentially growing knowledge of humankind has lead to an exponentially growing impact of humankind on the environment. Such knowledge

is a form of socio-cultural expression and creation and it currently threatens nature's bio-diversity. Bio-diversity in turn determines the social living opportunities so that the environmental destruction destructs the social living opportunities. Without comprehensive sustainable development, which includes indeed all of the three dimensions of sustainability, we seriously endanger the future of humankind and what's more the future of the blue planet (the ecosystem as a whole). There is no alternative to sustainable development: there is no development if it is not sustainable. Whatever effects humankind always inter-depends with culturally swayed considerations. For example, there is no environmental degradation if human beings don't recognise it. Still today, for many people there exists no environmental degradation and not believe in manmade climate change, which obviously doesn't mean that climate change doesn't affect these people. The challenge for human beings is to come close to recognitions and perceptions, which make it easier to conduct sustainable development. A recognition, which considers environmental degradation and which evokes adequate, responsible behaviour is more likely to deal with, shape and reduce the degradation and thereby to sustain good own living conditions as well to sustain good living conditions for future generations. Recognition and perception, the interpretation of "reality" (cp. chapter 1.7) are intrinsically cultural phenomena, created throughout mimetic interchange with others. Theoretically, the more (intense) a socio-cultural protagonist interchanges mimetically with others, the more he profits from socio-cultural multi-perspectivity (complex collective intelligence) and the better he may approach considerations which are more likely to be sustainable.

In any case, since perception and consideration are cultural phenomena, sustainability is a cultural asset. Moreover, because culture mediates arrangement, cooperation and regulation, sustainability is synonymous with "culturality" and sustainable development is synonymous with "culturisation" in terms of humanisation, (see chapter 3.10, "Global Ethics as a Culture of Sustainability"). It is not altruistic and charitable to respect bio-diversity, but necessary in order to sustain the cultural human system.

The UN World Commission on Culture and Development states about the human consideration of the "web of life":

> "It has become clear that any approach that deals with biophysical exchanges between societies and the environment is incomplete. The notion of sustainability raises the question of how nature itself is conceived and consequently of the cultural values that condition a society's relationship to nature. Important variants in attitudes to ecological sustainability demonstrate the need for a culturally diversified approach to issues of culture, environment and development. As well as for an analysis of mechanisms that perpetuates views or actions beneficial or harmful to the environment. (…) The crux of the problem of assuring a sustainable world is understanding the full range of possible interactions between and among humans and their natural environment and choosing from this spectrum those forms of interactions that sustain life." (Cuéllar 1998).

The environment is culturally defined, which means that the perceptions of environment are socio-culturally determined. Consequently, the last sentence of Cuéllar's citation makes it

clear that environmental integrity also requires socio-cultural diversity. The reason for this is that socio-cultural diversity unfolds human multi-perspectivity. This in turn makes it more likely to consider the environment in a way that sustains life (for example biologically). Socio-cultural diversity represents a pool – or as Cuéllar calls it, a "spectrum" – of development alternatives. Human multi-perspectivity can uncover gaps in human organisation, including environmental aspects. A pool or "spectrum" of development alternatives provides not only general answers to help overcome these gaps, but answers, which fit particular contexts (i.e. regions, periods and particular communities/societies).

3.3.3 Economy and Culture

This paragraph addresses the economy's relevance to sustainable development and explains how culture determines the economy.

Perceptions of globalisation are often limited to economic globalisation. Possibly, the reason for this is that the economy profits from and actively shapes globalisation, while politics, the environment, and society currently, although not necessarily, undergo a process of global interference and weakening. There are two aspects of economy in the context of sustainable development. First, sustainable development must promote (or sustain) economic agility and prosperity – but within socially and environmentally determined limits. Therefore, second, sustainable development minimises and possibly forecloses damages to social welfare and environmental integrity. Delors states:

> "The truth is that all-out economic growth can no longer be viewed as the ideal way of reconciling material progress with equity, respect for the human condition and respect for the natural assets that we have a duty to hand on in good condition to future generations.
> We have by no means grasped all the implications of this as regards both the ends and means of sustainable development and new forms of international cooperation. This issue will constitute one of the major intellectual and political challenges of the next century." (Delors 1998: 15).

Radermacher writes:

> "Markets produce efficiently the right, as long as the basic conditions are pertinent. If those conditions are wrong, markets produce just as well the wrong." (Radermacher 2002: 149).

This means that free market economy is per se supportive to sustainable development. However, this requires a rather strict definition of freedom that is determined through environmental and social integrity because society and environment are ends in themselves and because they encourage economic prosperity and agility.

A cultural emancipation and renaissance in terms of comprehensive "culturality" emerges to sway the economy by sustainable means. Only a global ethics can generate a "level playing field"; that is a canon of normative and formal standards (e.g. political, democratic) of applicable rights and binding, sanction-able responsibilities.

The market economy symbolises the economic conversion of the discussion-principle: it is based on negotiation and bargaining; on competition within a cooperative framework, which forecloses monopolies (note: monopolies signify the domination and assimilation of the other). To review, a discussion does not prevent power relationships, but simply reflects them. The simple discourse implies however that differences of power do not supersede discourse through domination. Discourse is an allegory of the cultural, mimetic principle of competitive cooperation; it stimulates both, self and other, while creating a common sphere. In order to promote "creative destruction" (Marx, Engels 1848: 226; Schumpeter 1999), as well as productive competition (i.e. between private companies) and to maintain this on a long-term basis, a frame for economic activity is required. It must regulate the competition within an overall ethical, normative and institutionally controlled framework of cooperation (tolerance). This frame regulates the sustainable economic interplay of private companies, hence the use of the above mentioned term "playing field" is appropriate.

Consequently, Radermacher states:

> „Through globalisation, the economy became even more efficient at generating economic success, but simultaneously it became considerably less efficient at achieving social and ecological aims. If politics aims to reaffirm appropriate basic conditions for a globalised economy, the market can be redesigned to become the most efficient instrument for eco-social aims." (Radermacher 2006).

Referring to the founder of the market economy, Adam Smith, and distancing his views from neo-liberal positions, Radermacher agrees with the above mentioned thesis that the market per se only functions within a framework of basic conditions. If a global ethics of sustainability made up such a framework, then an eco-social market economy could contribute to sustainability in return, serving humankind and caring for the environment.

In the economic realm, as well as in other social contexts, there are two main approaches to making change. The top down approach is a sort of global governance in the form of a superior international and binding legal framework implemented and maintained through an institution for the control of monopolies and mergers and for the controlling of sustainable production patterns. The other approach is the bottom up approach, which mobilises the consumer's power to control sustainable economics. To a certain degree, the demand (of consumers) determines the supply (of products through private companies). Production patterns can be normatively and formally regulated, although they also require a strong ethical foundation in civil society in order to equip politicians with a mandate and the power to do so. In particular, consumption patterns are not simply dictated; they are based on the rather independent decisions of consumers. Still, it is possible to reflect upon and modify these consumption patterns.

Economy as such is neither contradictory nor conducive to sustainable development. The question is rather, *which* economy contradicts and which is conducive to sustainable development. De Haan writes:

> "Sustainable development must not be associated with economic stagnancy or zero growth, but rather a growth under different parameters and high pressure to innovation." (De Haan 2000: 127).

The deductive approaches – bottom up and top down – to sustainable economic regulation can be accomplished through negotiated environmental agreements. Such environmental commitment connotes that economic "players" are not (only) forced, but desire for their own benefit, to adjust their production patterns, aligning themselves with sustainable requirements. There are several economic benefits that arise from respecting and contributing to sustainable development.

Only a few central aspects shall be presented here. Sustainable development creates business opportunities as is highlighted in the following principles for entrepreneurship: "Take a social problem and turn it into a business opportunity"; "tuning in to societal values", or "value for money" refer to "sustainability as business case" (e.g. the use of renewable energy) because "sustainability/ethics pays". Sustainable production patterns, the respect for social and environmental standards, public-private partnerships ("PPP") and corporate social responsibility ("CSR") can lead to better public images of a company. Furthermore does sustainability not only effect the public, but can also increase the motivation of employees and managers. Thereby, a sustainably responsible company can strengthen the company's corporate identity, adhering the "inner contracts" of employees with their employers (Brinkmann/Stapf 2005, see chapter 3.2.9). This leads to added-value-effects in terms of innovation and flexibility, and the economic viability and stability of the respective company.

Through sustainable core businesses, beyond public private partnerships and corporate social responsibility initiatives, companies can contribute to increased democracy and transparency (instead of corruption) and social as well as environmental wealth (instead of degradation). Private companies can positively impact and modify difficult situations or issues, such a corruption, poverty, unequal opportunities, or diseases, fulfilling duties usually carried out by government and civil society. Stable social, environmental and political contexts in areas of production, facilitates for example financial calculations, reduces employee turnover and increases with productivity the company's prosperity.

❖ Example:

Improving the health of employees through Anti-AIDS/HIV programs, reduces the loss of qualified workers and raises productivity. Stopping erosion through ecological agriculture, etc. secures economic production and improves the image of the business in society.

Such approaches, with respect to (economic) sustainability, refer to the principle of "trade not aid". They show that sustainability must not be expensive for enterprises but can even pay off. This leads to revalidate the rather altruistic fair trade concept. Eventually, altruism and seemingly selfless charity reproduces and maintains the imbalance of power between the privileged and unprivileged. In contrast, "trade not aid" aims to create win-win situations for all involved.

Moreover, entrepreneurship can attack monopolies and promote economic diversity through the "creative destruction" of monopolies, or "business as usual" and because "small is more efficient", creative and flexible than big and inflexible monopolies (cp. Zimmer/Faltin 1996/1999, Kawasaki 1998 et al.).

A market economy functions when it has access to a plurality of communicating and competitively cooperating market places. The market symbolises diversity of "shareholders" instead of monotony and domination, promoted by monopolised companies. Initially, such diversified marked is the natural enemy of monopoly.

Socio-cultural diversity can develop when there is freedom, assured and defined through a regulative, organising framework of informally ethical and/or formally legal character. A free market economy functions only within a regulative, compulsory framework. The laissez-faire economy will simply destroy the market with the kind of dominating monopolies that are seen within "neo-liberalism". The market doesn't function autonomically - Adam Smith refers to this autonomy as "the invisible hand of the market". Although marked can *be* functioned if it is regulated through adequate meta-conductions which safeguard social and environmental requirements and which safeguard marked diversity.

Economic diversity is a means to sustainable development. Admittedly, economic diversity does not connote economic sustainability. Sustainable development rather connotes the instrumentalisation of the economy for social and environmental ends and this is more likely achieved through a diversified market.

The economy is a social instrument, and the original mandate the economy must meet is to complement social and environmental cohesion, dignity and wealth. This is the required active role of the economy in the movement towards sustainable development.

Developing images and visions of sustainability is an act of cultural self-regulation. This sustains the potential and fertility of human cultural self-regulation.

Not only the appropriate images, but also current socio-cultural patterns are culturally generated. Now an innovative adjustment of patterns and images is required, images which do not consider economy as an end, but as means to develop sustainability. Such allocation,

or eco-social determination in turn sustains social integration, respect for the environmental viability and economic prosperity. The economy is a cultural asset. Culture – in its modes of ludic operation – defines the human being (Homo ludens). Accordingly, education for sustainable development assists the ludic Homo sociologicus, (Dahrendorf 1977), the social human who acts and reacts rationally in terms of socio-ecological integration, using the economy wisely (Homo sapiens) to support these aims. Humankind organises through mutuality and reciprocity. Accomplishing the Homo sociologicus the Homo sapiens shapes sustainable development if he unfolds as Homo ludens (Huizinga 1939), humans who learn and self-organise playfully as well as the Homo reciprocans (Dohman, Falk, Huffmann, Sunde 2006), cooperative actors who are motivated by improving their environment. This contrasts to the Homo oeconomicus (Ingram 1888), the human who is seemingly rational and a narrowly self-interested actor with the intention to make judgments towards his subjectively defined ends, undermining the identity as Homo *sapiens*. The Homo oeconomicus describes humans who organise through competitive individualism and domination of (instead of cooperation with and adjustment to) social and environmental constituents.

Human rationality is embedded in human "culturality". In other words, it is in fact irrational to undermine social and environmental ends for economic benefit. The reason is that in an interdependent world one can only benefit on the short term if he looks only for his own interest without arranging with others. An unregulated and dominating economic system might possibly destroy itself.

Radermacher states: "We need an honest concept of growth.", (Radermacher 2002: 34). Economic development is a means to sustainable, planetary development – and economic growth is a means to "socio-cultural growth" or prosperity in terms of socio-cultural diversity, social welfare and dignified living standards. According to Cuéllar this means that:

> "Development has to be seen in terms that include cultural growth, the fostering of respect for all [socio-]cultures and for the principle of cultural freedom" as it is stated in the report "Our Creative Diversity" (Cuéllar 1998).

The economy is designed to fulfil the needs of its creator, of humankind as a whole, taking into consideration our interdependence with nature.

In addition to these perceptions of economic opportunities to – and threats of – sustainable development (cp. chapter 3.2) will introduce how economic activity in terms of innovative entrepreneurship and entrepreneurship education can contribute to the unfolding of socio-culture and the progression of socio-cultural identity.

3.4 Sustainable Development – A Cultural Approach

"Our common Future" (Brundtland 1987) can be sustained through "Our creative Diversity" (Cuélar, UNESCO report from 1998). Cuéllar states:

Culture is the driving and creating force of our lives and of planetary development. Education for sustainable development aims to intervene in this development and to guide and conduct it pro-actively towards sustainability. For this reason education, sustainable development and the renewing power of cultural diversity as well as biodiversity are interdependent. As an ethics, sustainability is a cultural tool because it fosters the integration of socio-cultural individual and societal protagonists as well as of socio-cultural meanings concerning society, the environment and the economy.

In this context sustainable development is an act of "culturalisation" in terms of scientific humanism. That means sustainable development is not only an alleged ethical doctrine to "cultivate" and re-create mankind, but a culture-anthopologically rooted, furthermore scientific interdisciplinary concept, based on the simple principles of reciprocity and mimetic arrangement.

The cohering systems of society, environment and economy are reciprocally implicative. Each of these systems or dimensions competes with the other two. In this context, sustainability can be perceived as the framework, not for the eradication of competition, but for the safeguarding of the cooperative means of competition. This means that the economy can promote economic prosperity so long as it does not threaten social wellbeing and environmental integrity. Social living standards, for example, the existence of freedom, can exist so long as they do not threaten economic productivity and environmental intactness. Environmental protection can be promoted as long as it does not confine environmental agility and social welfare. Thus, the three dimensions are not only reciprocally implicative but mutually defining.

The visual image of that concept can be expressed with the symbol of a triangle: Each of the three "dimensions" interrelates and overlaps with the other two. They are not parallel and co-existing "pillars", but make up an interconnected, directly related and interdependent system, which develops sustainability. In this figure, culture makes up a complementary design; a circle that frames (embeds or defines) each of the three interrelating pillars as well as their overall system of sustainability.

In the same way that culture equips us with a frame of socio-cultural meanings, values and sense, culture constitutes the development of sustainability. Everything within the circle is culturally determined.

Figure 40:   Sustainable Development – A Cultural Approach

Culture

The three interlinked dimensions of Sustainable Development:
the **Economy**, the **Environment**, and **Society**
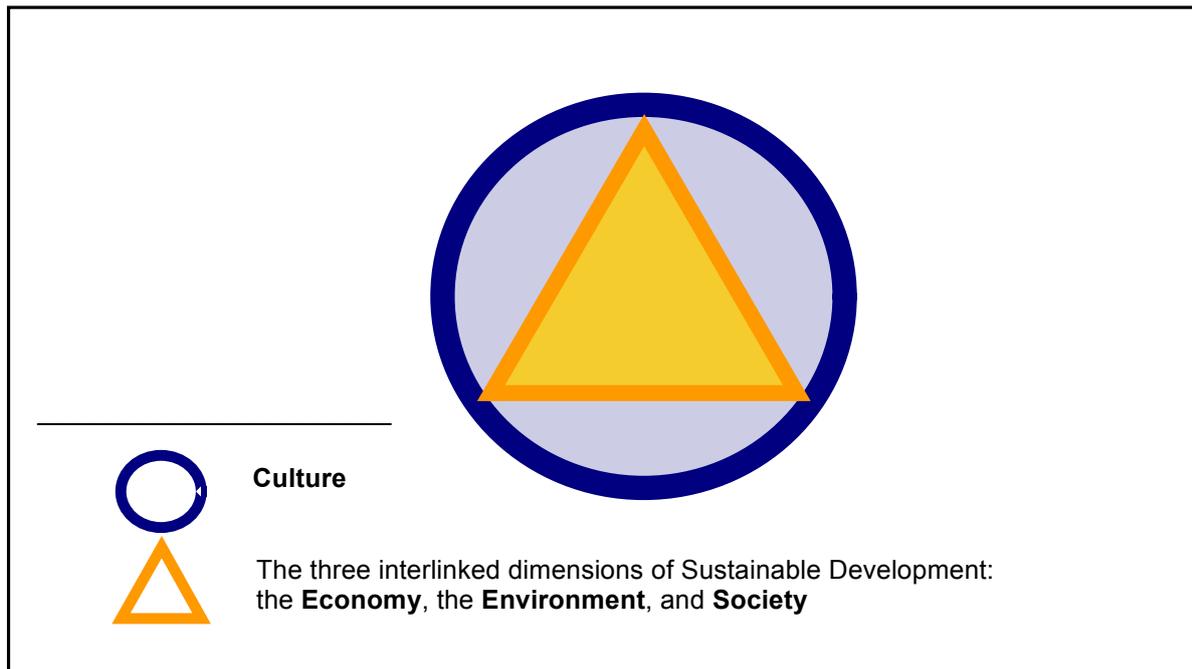
3.5   Summary

Without a common, inclusive frame, which an ethics of sustainability represents, there is no global communality, cohesion, integration and arrangement. The global common sense first has to be developed and has to grow throughout history in order to manage global challenges. That common sense is relevant if humankind aims for approaching a "common future".

It was mentioned earlier that the world is greatly interdependent. This means that, in reality, there is no alternative to a common approach and hence to a comprehensive, heterogeneous ethics, which provides sustainability-criteria for socio-cultural meaning-making. It can be dangerous if everyone does what he wants (live and let live) without regarding the other or common interests. The future refers to "Our Common Future" (Title of the Brundtland Report, which mentioned for the first time the urgency of sustainable development; Brundtland 1987). Our common future requires a common, global ethics. Stating that there is no alternative to a common future means that there is no alternative to a common ethics, which in turn is a media for human beings to negotiate what "common" means. In its essence, a global ethics does not anticipate or predefine values, or meanings, it rather incites humans to seek for and define values and meanings mimetically, reciprocally and through competitive cooperation.

This ethics does not homogenise socio-cultural patterns, but promotes unity in socio-cultural diversity, thus it is heterogeneous and dynamic. The principles of "unity in diversity" as well as of "mimetic arrangement" are central to this process.

The contents of such an ethic do not arise automatically, the essentials are rather already rooted in cultural traditions: spatially they can be found all over the planet and temporally, throughout history. The contents of an ethic of sustainability can not be *discovered*, they can only be *uncovered*. To extract sustainability meanings and develop them by means of a more explicit and systematic global ethics, is the task of human beings in the modern age. The term "human", again, concerns all the different socio-cultural identity levels, individuals as well as social groups. Since meaning derives from difference, it is the cultural diversity (of cultural identities) that manages sustainable development in a deliberate manner, so that different sustainabilities emerge in different places and at different times.

The task, especially for education, is to mobilise the human power of consciousness simultaneously to mobilising the inherent and often unconscious cultural capacities to human regulation, such as mimetic interchange, ritual poiesis and performative as well as narrative learning. Meanings are generated, consolidated, communicated and innovated performatively and then they are incorporated. Performative learning empowers socio-cultural protagonists in their roles as learners and creators to create meaning and progress sovereign identities capable of engaging in mimetic arrangements with the other.

Common and therefore universal values must be developed participatorily, for example, through democratic discourse, which naturally connotes mutual respect as a means of cooperation. Discourse is in this context not only understood as exchange of linguistic expressions; it includes all forms of culturally stimulating interaction and interchange. Rituals play an important role in this development because they determine all modes of discourse. It is important in this discursive cooperation that everyone has a voice. Participation is essential. If the aim is that everyone shall identify with and practice the results of this discourse, then everyone should be able to contribute.

The final goal is not to produce an explicit written document, developed on political, or scientific high-level expert panels. The aim is rather a pro-cultural attitude of global human autopoiesis and communality, an ethics of neighbourhood. The ethic must be lived, applied and celebrated in order to function. It is developed through the small interactions that people encounter in their daily-lives, by all the confrontations and meetings in civil society. This concept of decentralised development, as well as the valuing of discourse and respect for others, may already make up the essence of a global ethic.

The aim is to uncover current gaps in human organisation, appearing, for example, as global issues, in order to put alternative courses of development into action. While socio-cultural diversity provides these alternatives, education for sustainable development plays a crucial role as well. The following chapter addresses an education that is appropriate for sustainable development.

CHAPTER IV   WHICH EDUCATION FOR SUSTAINABLE DEVELOPMENT? PEDAGOGIC CONCLUSIONS

4.1 General Estimations

The successful evolution of humankind – measured by its agility – derives from the human cultural potential for cooperation and efficient self-regulation. Humankind develops across the globe in diverse ways; it represents a pool of heterogeneous, plural and alternative socio-cultural meanings and a multitude of perspectives, which enable protagonists to engages in creative action and respond to complex problems with increasingly complex responses. Through the constant and dynamic, ludic, mimetic and interplay, cultural diversity re-stabilises the overall system, not only of humankind but also the ecosystem.

This ideal stability of the system, in terms of the continuous integrity of humankind and the environment, is synonymous with sustainability. Sustainable development is no "attachment" to human development, but it is its advancement. There is no (human) development if it is not sustainable. Everything else would rather be "envelopment", or respectively the stagnation of development, which, in a increasingly profound and rapid changing world put the human system at risk. In this sense, sustainable development is the respectful re-orientation of human beings to the human means to be cultural, to ensure the endurance of the autopoietic, cultural human system through mimetic arrangement and competitive cooperation. Such development is the process of continuously sustaining the network pattern of life, which is considered as an end in itself.

A characteristic of the human being is his specific capacity for autopoiesis, understood as the "cultural competencies" to move towards sustainability through mimetic arrangements with the other. Due to this competency, humans have influence on – and control over – their circumstances. With "cultural competencies", human beings generate transformative power over complex social, environmental and economic processes. The new contexts, deriving from this influence, often create new challenges and the need to overcome these by means of sustainable recreation and reorganisation. Industrialisation, for example, raised living standards, but it also caused pollution and systematised social exploitation. Thus the new challenge is to deal with pollution through the establishment of regulatory laws, and the development of renewable energies, innovative production patterns, etc., and to deal with social exploitation through labour laws, the organisation of cooperatives and other measures.

At this point, formal education needs to prepare members of society to be able to address development challenges with effective interventions and to nourish humane responsiveness. In this regard, education is an explicit instrument for the self-regulation of humankind, empowering protagonists with cultural, mimetic competencies and sovereign identities in order to sustain the human cultural system.

This does not mean that education, because it is an explicit instrument, must exclusively be applied to strengthen the explicit potential of human being in terms of cognition and conscious rationality. Formally as well as informally, education rather creates a space in the daily life of learners for the holistic development of the essential human qualities of integrity and mutual integration. Education promotes the unfolding of explicit *and* implicit, (e.g. every-day knowledge, performative, creative, artistic and ritual) "cultural competencies".

4.1.1 The Role of Education

The current state of the world is not characterised by extensive cohesion, but rather there is increasing diffusion of human self-identity. That means, humankind lacks of perceptions of what global issues are, it lacks of strategies for overcoming these issues as well as it lacks clarified responsibilities of who must do what. Interests of developing and developed countries are greatly controversial and not only on the political level, but as well in economics actors seem to achieve their own immediate (short-term, rather than long-term) benefits. Interventions, such as the Millenium Development Goals seem comparatively helpless and incapable to evoke a sustainable paradigm shift. Simultaneously changes the world quickly and profoundly so that "the other" is omnipresent, which leads to friction and conflict. That is fine – as long as socio-cultural actors are capable to deal sovereign with that complexity. The global issues, such as climate change, poverty and HIV/aids, populations growth and the financial crisis however show, that the socio-cultural meanings, self-identities and societal organisation patterns are overburdened with these complex challenges. Who are we? What is the context in which we live? What do we strive for? And how to achieve these visions? The global issues are symptoms to show that current answers to these questions are insufficient, or respectively that the discourse and discussion of these question lacks agility and participation.

The result is not the annulment of the individual's role, according to the motto "these problems are too complex for me to make a change".

According to the chaos theory, a system exposed to bifurcation (radical transformation and extensive contingency) reacts very sensitively to *any* modification. That puts actors on the micro level of society, such as individuals, social movements or small organisations (e.g. NGOs) in the position to participate in shaping development.

The system "world", consisting of humankind and the environment, becomes increasingly decentralised and fragmented. Due to the system's sensitivity, individuals and groups have the responsibility (as well as the great opportunity) to involve themselves in socio-cultural meaning-making, and in a global ethics of sustainable development.

The complexisation of the "world", appearing for example as globalisation, increases the requirements as well as the possibilities for individual protagonists to co-create and participate in the shaping of human development. For education this means that it can take on a highly influential role by preparing protagonists, such as individuals or groups, for their involvement.

A socio-cultural paradigmatic shift is not only necessary, it is also *possible*. Therefore, education must *coordinate and manage* that growing civil "power from down" (bottom-up; cp. Zimmer, Faltin 1996) and it must also encourage people to consider their own socio-cultural contexts, meanings and competencies as precious resources. Such resources can contribute to meaningful – or sustainable – development. Education must reconnect people with the history, ethnicity and socio-culture of their origins and of their choice in order to enable them to explore, consider and relate to alternative configurations. This mimetic movement with the other can also cause inter-social, trans-cultural mixed-forms, such as ethnic bricolage and cross-composed socio-cultures (cp. chapter 2.2.4), enriching and stimulating the culturally diverse, and continuously transforming network of humankind.

Education can encourage mimetic interchanges with the other; it can expose the learner to the other and guide him throughout mimetic processes. Mimetic arrangements require, but they also strengthen, sovereign identity (cp. chapter 1.2 et al.) Metaphorically speaking, mimetic arrangements require cultural protagonists with their feet on the cultural ground. The protagonist can go towards the other (explore the other and the self from the perspective of the other) and they can take a step back when their own freedom is challenged, which can happen since mimetic interchange can lead to feelings of insecurity, friction, controversy and ambiguity. In this context, sovereign identity is synonymous with mimetic competency. Sovereign identity enables the person (or any other socio-cultural protagonist) to detect differences, understanding them as unique characteristics (dimension of diversity) and to detect similarities with the other (dimension of unity). The world is rapidly changing and extremely diverse, so that no universal meanings and values can be transported through education. In the following, the text further develops the concept of sovereign socio-cultural identity and its role in education and learning.

Learners must identify with socio-cultural meanings, (such as sustainability meanings), which is difficult if they only "learn" to repeat what seems to be meaningful and sustainable for their teachers. Instead, learners must discover and interpret meanings for themselves and by

means of mimesis; they must not only adjust themselves to alleged sustainability meanings, but must create their own meanings. For this reason, education must not impose sustainability-meanings, but rather pose the question, "what could sustainability look like?", exposing the learner to sustainable and un-sustainable situations and teaching the learner to generate, consolidate, communicate and innovate socio-cultural meanings and identity in competitive cooperation with others. In short, education must not impose sustainability-meanings, but must empower the learner's cultural competencies to generate, consolidate, communicate and innovate meanings on their own initiative.

Culture will play a role in human development either because the cultural unfolding of human poietic power and humane dignity are oppressed (e.g. wars in Afghanistan, Lebanon, Vietnam, etc.), or because the cultural potential is used to inspire, organise, implement and protect political regulations, which foster peace and socio-cultural diversity, economic regulations for markets, and environmental precautions. Education can prepare the groundwork for the conversion of cultural principles, such as networking, mimetic arrangement, and competitive cooperation into ethical meanings, policy and other norms. It can contribute to the adequate alignment of governments, NGO's, companies, academia, media representatives, religions and other institutional stakeholders of sustainability.

Education for sustainable development fosters the renaissance of the organising principle of culture in a critical moment of human contingency. It is not an image campaign, advertising images of sustainability, or universal doctrines. Education for sustainable development, therefore, is the campaign for the generation, consolidation, communication and innovation of new images through the promotion of image- and meaning-making "cultural competencies" (cp. chapter 3.2.9 "Ethical Antagonism – the Discrepancy between Sustainable Awareness and Behaviour"). This does not mean that these images will be randomly created; if they aim for sustainable development they will concern unity and diversity, uniqueness and equity, the image of the self, of the other and of the commonly shared. As mentioned in the beginning of the text: "The future (…) is an act of the imagination", (Ziegler 1987, see chapter 1.1). Although it sounds romantic, education for sustainable development allows the learner to imagine and dream. Dreaming and imagining are creative acts and as any creative act they are able to deal unconventionally with conventions. This kind of liminal shift or transition is required in order to access new socio-cultural meanings, identities and organisation patterns, which are capable of overcoming current challenges (e.g. contingency and global issues) in terms of sustainability.

In this context Duane Elgin writes:

> "We can not build a future we can not imagine. A first requirement, then, is to create for ourselves a realistic, compelling and engaging vision of the future that can be told simply", (Elgin 1991: 77).

Elgin thereby refers to an image that makes tangible the abstract concept of global sustainable development, condensing it into a comprehensive and comprehensible matter.

This means that if sustainability is imagined, an alternative future can be created, and this future's quality will depend on what is imagined. In this light, the presence incarnates as the intersection of heterogenic imaginations of future. In other words, the present is the future of past imaginations. Education then appears as the medium or catalyst for the promotion of imagined qualities, i.e. it fosters imagination-capacity as well as relating the learner's imaginings to matters of sustainability.

Due to their dynamic and heterogeneous nature, images for example of "a good and meaningful life" are as unpredictable as the final realisations of them. However are images swayable and conductible towards sustainability. And indeed the concept of sustainable development is often criticised for being too all-inclusive. But it is exactly *this general vastness that enables* the conversion of heterogeneous, complex and culturally diverse images of sustainability into applied sustainable development. Sustainability is not only the concerted result of discursive reconcilement; it is not an absolute, universal and uniform ethics. Sustainability is also a heterogeneous and thereby extensive concept because the diversity of sustainability images, perceptions and concepts powers mutual stimulation as well as complex and cohesive development. The vastness of the concept allows for extensive participation, however, according to the theory of integrative sustainability as convergence concept, over time the vastness should be reduced through increased consolidation, without reducing the grade of participation (cp. chapter 3.2.4).

The development of sustainability begins in the minds of people. Education can contribute to create images, which increasingly relate to and develop sustainability. In other words, education contributes to the transformation of the chaos of imaginings about development and sustainability into a cosmos of meaningful sustainable development. This requires of the individual the competence to imagine and envision possible futures - even utopia.

The UNESCO Commission on Education and Development elucidates the broad and fundamental dimensions of what today is called "education for sustainable development". Faure states:

> "Like the capacity to think clearly, the individual's imaginative faculty must also be developed; imagination is at the source of scientific invention as well as artistic creation. Any education which for rational reasons concentrates on teaching so-called objective facts rather than stimulating creative desire is going against the grain of what Albert Einstein experienced: 'The most beautiful thing we can experience is the mysterious. It is the source of all true art and science'." (Faure 1972: 67).

If images are to be effective in the sustainable sense, they must be discursively negotiated and participatively developed by all socio-cultural protagonists. Education can catalyse the process by:

1. promoting and training competencies,

2. condensing, transporting, performing, critically deliberating, and reflecting images and ethical concepts and

3. by stimulating as well as innovating existing ethical believes.

Thereby education can,

> "assist young people in the management of knowledge and arising desires for sole responsibility, and through knowledge, experiment and experience it can develop personal abilities to help deal with the increased complexity of life and lifestyles.", as states Wulf, (2002: 81).

Human life is characterised by a colourful cultural diversity that covers the planet. As there are different facets to human life, there are different approaches to culturally-focussed, or anthropologically substantiated education for sustainable development. The UNESCO Section for Education for Sustainable Development states:

> "There is no universal model of education for sustainable development. While there will be overall agreement on the concept, there will be nuanced differences according to local contexts, priorities and approaches. Each country has to define its own priorities and actions. The goals, emphases and processes must, therefore, be locally defined to meet the local environmental, social and economic conditions in culturally appropriate ways. Education for sustainable development is equally relevant and critical for both developed and developing countries." (2006).

Christine M. Merkel contributes to the discussion about the linkages between culture and learning:

> "The socio-cultural context in which an individual learns is heterogeneous. Every human being is profoundly influenced by the knowledge, abilities, perceptions and myths of his society. Simultaneously every person enriches his environment with the so called socio-cultural capital inherent in his ideas and individual creativity. Those learning procedures are natural; they take place informally, experimentally and continue for one's entire life.", (Wulf/Merkel 2002: 134).

Because sustainability must be adjustable to historically changing and geographically different socio-cultural contexts, sustainable development is often described as an evolving concept. Sustainability is not achievable as a static status quo, it is naturally developing. Reversely, development (i.e. human development and the dynamic conservation of the environment) must be sustainable in order not to stagnate.

Education for sustainable development helps learners to both construct and reinforce a democratic, humane and equitable socio-cultural network. Co-operation, empathy, fairness, respect and peacefulness are practised throughout this inclusive and participatory learning process as a means to their internalisation and reflection.

Holzbrecher emphasises the task of education to promote the learner's,

> "ability to reflect reciprocal expectations, attributions and differential interpretations." (Holzbrecher 1997: 215).

And to develop,

> "the ability to communicatively deal with uncertainty, difference and a diversity of possibilities." (ibid. 217).

Moreover, according to Holzbrecher, education must incite,

> "the ability to consider one's own perception as biographically as well as historically-socially swayed." (ibid. 225).

Holzbrecher's systemic understanding of (intercultural) relation-setting emerges in the educational imperative,

> "to perceive oneself as an increasingly active element of the 'whole'."(ibid. 224).

What enables arrangement, inclusion, socio-cultural integrity and thereby sustainability, is the mimetic interplay with the other. Mimetically the self can experience itself from the perspective of the other and reconfigure its identity. The "opposite self" (or the affiliated other) also benefits from the expanding of their own "horizon of possibilities" by putting itself in the position of – and arranging with – the respective other. This is possible when a self regards the respective other as an *equal subject* instead of an *unequal object*. Arrangement occurs when two or more socio-cultural protagonists neither assimilate the respective other to the self, nor assimilate the self to the other, but connect to each other through the identification of similarities and differences. Dealing successfully with difference and diversity comprehends the competence of the socio-cultural to resist assimilation- and elimination attempts. This competence can be cultivated when education incites and guides the learner's stimulating confrontation with difference and diversity by means of peace education. Accordingly states Adorno:

> "The claim that Auschwitz must never be repeated is the first priority of education. That priority is so much significant that I neither believe it is necessary to explain this nor do I believe that an explanation is required." (Adorno 1969).

Education is the process of guiding of the learner through processes of self-other arrangements; it incites the learner's development, strengthens the learners sovereignty to cope with difference and deal with complexity, thus it prevents the stagnation and collapse of mimetic movements, (cp. figure 3 for "cultural shock").

Arrangement is the moment when unique identities remain different and related to another. This requires the mentioned sovereign identities - identities able and willing to experience the difference of the other - to explore lessons and limits, differences and commonalities. Sovereign identities are (pro-) active partners in communication and cooperation because they support mimesis, mutuality, reciprocity, an ethics of the other, of neighbourhood and sustainability through the mobilisation of culture for sustainability.

The sovereignty is not derived from a sealing-off from others, but rather from the mutual interplay with others and the ability to question, reflect, innovate, re-compose and re-organise their own self-identity. "Je, est un autre" states Rimbaud (French: I is someone else. Rimbaud May 15th, 1871). A sovereign identity (whether on the individual or societal level) is a synchronous moving swarm of manifold participations, connecting the identity to its social

environment and thereby bestowing it with meaning. In its unique composition, that meaning represents the identity, but goes beyond what the identity could have created autonomously. Individuals, for example, are micro-swarms of participations, embedded and participating in a macro-swarm of societal participations. Simultaneously, such sovereign identity is unique and can not be replaced by any other identity. This applies to any identity on whatever identity-level (cp chapter 1.3.1.2 for "dimensions of socio-cultural identity"). Every human possesses cultural mimetic competencies. These competencies, however, can be differently developed. Mimetic interchanges are as lively as they are risky; they can provoke friction, insecurity, fear and contingency and the mimetic process can get stuck (cp. figure 3 "cultural shock). Meaning-making consists of the generation, consolidation, communication and innovation of socio-cultural meanings (as well as of identities and societal organisation patterns). It can be very uncomfortable, and again provoke friction, fear and insecurity, to uncover meaning-gaps (cp. chapter 2.4 for "swot analysis") and successfully innovate consolidated meanings. In such moments of the mimetic process, sovereignty decides upon development or envelopment, sustainability or contingency. Through mutual arrangements and their unity in diversity, sovereign identities contribute to multi-perspectivity and thereby to sustainable development.

In form of an culture-anthropological "scientific humanism", education for sustainable development therefore promotes sovereign socio-cultural identity. Sovereignty is, in this context, synonymous with dignity, freedom and agility. Sovereignty does not connote an infallible human being and there is no identity without weaknesses. Education that promotes sovereignty does not aim to manipulate or shape the learner's identity, but rather guides the learner in becoming aware of their own weaknesses and the weaknesses of the other. It strengthens the learner's awareness of their abilities and limits. In this sense, education helps the learner to deal with his own fallibility, learn from mistakes and deal with the "fallibility" and sometimes controversial difference of the other, without judging it in a discriminating sense. Moreover, sovereignty is not synonymous with resilience and unalterability; sovereign protagonists are not "untouchable". To the contrary, being sovereign enables them to be sensitive. Sovereign identities are not monolithic blocks or static entities. Instead, they change their composition and continuously alter their identity, affiliating (cooperating) with the other as much as possible and opposing (competing with) the other as much as necessary to ensure the endurance of their dignified uniqueness (dimension of diversity) while promoting mimetic arrangement (dimension of unity). The other includes "the other self"; the unknown, surprising, and contradictory aspects of a socio-cultural identity composition.

For sustainable development sovereign identity plays a dual role, it is a means to (functional for) sustainable development and sustainable development is a means to promoting

sovereign identity. Socio-cultural identity intrinsically represents the reciprocity, mutuality, maturity, responsibility, reflectivity and creativity, which determine the global ethic of sustainability.

Auernheimer refers to the autopoietic ("self-making") nature of education:

> "Education fosters the learner's self-conception and self-positioning, combined with the leaving-open of world views. That is enabled through the willingness to reinterpret experiences and to dialogically perform a change of perception. Estrangement is an essential element of the educational process, multi-perspectivity the primary intention." (Auernheimer 2003: 65).

He goes on to write:

> „According to Marx, personal dependencies are replaced by abstract dependencies. For this reason individuals are not only responsible for themselves, but they must position themselves socially. This means that they must redefine their own identities and put themselves in relation with society. This is the basic idea of 'identity' as well as of 'education'." (ibid.).

In this regard, principle measures of – and tasks for – education for sustainable development are:

- To enable the development of sovereign socio-cultural identities; "identity-abetment" or "identity-incitement" (German: "Identitäts-Anstiftung")
- To enable the cooperation of those socio-cultural identities (learners) and prepare them to take roles as active "(socio-)cultural agents"
- To ensure the quality of mimetic arrangements in terms of sustainability
- To ensure the identification of sustainability as a central criteria for meaning-making and "self-making".

These tasks can be summarised by the educational principle of the "age of enlightenment": to "educate the human to be human(e)" (cp. Rousseau 1762: Émile ou de l'Éducation). An education that aims to educate the human to be human, strengthens what makes the human being human(e). According to Rousseau (ibid.), the aim is to educate the human being as a whole, that is to train all his faculties. From the perspective of cultural anthropology, Homo sapiens, the "wise human", is culturally determined.

In this regard new necessities emerge for education to mobilise and strengthen human, "cultural competencies", which equip human beings with the ability to engage in mimetic arrangements by autopoietic means.

Looking at human beings and at education from a cultural anthropology perspective, new competencies come up and traditional terms appear in a new light, such as the abilities to creativity, mimesis, dialogue and discourse, consensus, conflict management, critical reflection, solidarity, empathy, performative expression, verbal communication, narration, cooperation and networking, intuition, credibleness, trust, happiness and also love.

To summarise, they are cultural, mimetic competencies, which empower socio-cultural protagonists to generate, consolidate, communicate and innovate socio-cultural meaning with the other throughout life. These culture-inherent competencies resemble the reputed and increasingly discussed "soft skills". In a strict sense, "cultural competencies" – in contrast to the notion of soft skills – are not additional competencies ("add-ons") that compliment the abilities of an already competent protagonist. As "key-competencies" or "life skills", (see Dakar Framework or Action 2000 – chapter: meeting our collective commitments, Article 7.3), "cultural competencies" are imperative for the generation (and sustenance) of socio-cultural identities. They do not compliment the abilities of socio-cultural protagonists, but rather generate, maintain and renew the (substance of) socio-cultural identity.

Education, in this light, appears initially to be "conservative". Education for sustainable development does not invent a new human; it mobilises what already is: culture – the human autopoietic force and mode of human development. Education for sustainable development is also not original, or even innovative, but rather "folkloristic". Folklore is Latin and is composed of the word "folk", which is the same in English, and "lore" which means transmission, or wisdom. Consequently, education for sustainable development promotes that which is written on the entrance of the Temple of Delphi:

"Recognise yourself, become who you are".

"Yourself", in this phrase, addresses everyone who lives in the global village or global community. Here, the terms "folkloristic" and "conservative" are not used in the common manner, but rather contradictory to common usage. They call attention to the fact that education for sustainable development re-orients protagonists to the essence of initial human being. Culture as the medium for arrangement, networking, relationships, identity, multi-perspectivity and other features described in chapter I. These features are facilitated through implicit, and highly creative human-native "cultural competencies" to deal with complexity (i.e. chaos, conflict, confusion, contingency, incertitude) through the mimetic, participatory making of meanings which enable human beings to perceive, imagine and act meaningfully. Through mimetic interchange culture maintains (sustains) itself as a self-referential, thus autopoietic, thus sustainable system.

Education for sustainable development therefore evokes the learner's consideration and making of social, economic and environmental appropriate meanings, identities and societal organisation patterns indirectly through the mobilisation "cultural competencies", or skills of learners. It puts the learner in the position to explore, discover and question the world as it is

and – guided by pedagogues, together with other learners – to develop own, personally relevant sustainability-perceptions, meanings and identities.

The relations to and arrangements with others allow learners for multi-perspectivity and help them to uncover the internal strengths and weaknesses of the arrangement as well as the external opportunities and threats to overcome (cp. chapter 2.4 for "swot analysis"). This learning challenge must involve the three dimensions of sustainability.

4.1.2 Characteristics of Human Being: The Cultural Competencies

In order to overcome inertia, contingency and diffused or deranged socio-cultural meanings, identities and organisation patterns, and in order to achieve social cohesion, economic agility and environmental integrity, competencies are required. These competencies help the socio-cultural protagonist or learner to asses, or even anticipate, a challenging situation and react to it. In order to participate in co-shaping dealing with, and overcoming such challenging situation, the self (the learner) must not be a monolithic or static "element", but rather a diverse, learning and therefore changing (diversifying) element, or system. This enables the self to engage in a liminal performance; the adjustment of the self to meet a situation and the shaping of the situation in respect to the (requirements) of the self. This allows for integration and integrity in sustainable terms. The text assesses the thesis that these competencies are not something that can be acquired like a foreign language, but something intrinsically humane, which can be strengthened through learning.

In every chapter, the text carefully develops numerous aspects of culture as the essence of human being. In this regard, "cultural competencies" are not assets to human being; they are the essence of human being, (cp. also chapter I and 4.1.2). As such they can and should be furthered, and that means further incited, through education by means of "culturalisation". Admittedly aspects of culture, or respectively of the cultural mode of human organisation are interrelated in such a manner that they are rather inseparable and analogical, which makes it difficult and a compromising effort to list them. Overall cultural aspects are multi-perspectivity, ludic creativity and autopoiesis through mimetic interchange as a process throughout self and the respective other constitute their cultural unity in socio-cultural diversity. Unity in diversity, as a principle of culture, represents an integrated system, a pool, network, cluster, or assembly of participating protagonists on individual and societal identity levels. Unity in diversity also enables human beings, through multi-perspectivity and the provision of socio-cultural meaning and development alternatives, to overcome shared, complex challenges through the development of even more complex answers.

Generally, "cultural competencies" include the following, overlapping aspects:

- The ability to learn throughout life and with others, or:
- Mimetic competence: The ability to generate, consolidate, communicate and innovate self, other and a common sphere. This enables protagonists to deal with complexity cohesively and contribute to – and access – multi-perspectivity (cp. chapter 1.3, 1.3.1.1 and 1.6). Decentralisation of power through participation in the (continuous) creation of socio-culturally diverse multi-perspectivity and contextual (i.e. socio-environmental-economic) meaning-making.
- The creation of socio-cultural synergies: the whole is more complex than its pieces (in terms of "Gestaltung", see chapter 1.3.1.1 and 4.1.2.1)
- The promotion of "communitication": the generation, consolidation, communication and innovation of common meaning and community by ethical means, (cp. chapter 1.8.4 and 2.2.2 for "communitication" and chapter 3.1; 3.2 for "global ethics of sustainability")
- Integration in socio-culturally changing contexts, while maintaining one's integrity
- Arrangement and networking (cp. chapter 1.4 and 1.5) with the other, which includes the competence to deal with creative friction, controversy and ambiguity within the frame of:
- Competitive cooperation (cp. chapter 1.8.7): competing with the other within the boundaries of cooperation (cp. 3.1.5 and 3.2.7 for "the Golden Rule") to safeguard ludic and sovereign affiliation and opposition to (aspects of) the other, but also the interplaying between unity and diversity, sameness and differences, self and other, the known and unknown, present being and future visions, etc.
- Mutuality and reciprocal "expanding of the horizons of possibilities" (Iser 1987).
- Sovereign identity: The efficient, sufficient and effective socio-cultural identity progression and mimetically-ludic identity-composition in order to be able to arrange with the other, without assimilating, discriminating, or eliminating the other or dissolving the self (cp. chapter 1.2 et al. for "sovereign identity"). Moreover the capacity to deal with contingency, insecurity, friction and conflict, which may occure throughout mimetic interchange with the other. Sovereign identity connotes the ability to recognise, accept and eventually learn from own mistakes and to take responsibility for mistakes.
- Dealing ludically with differences and complexity as a result from creativity *and* sovereign identity. Moreover perceiving challenging differences and complex problems as learning opportunities.
- Contextual adjustment through the co-shaping of socio-cultural organisation patterns in order to gain complexity and hence promote poiesis (regulation) of the

organisation.

- Promoting the Homo sapiens (Lat.: the "wise human"), the Homo ludens (learning through creative and ludic trial and error, cp. Huizinga 1939) the Homo sociologicus (who arranges with neighbours through competitive cooperation, cp. Dahrendorf 1977) as well as the Homo reciprocans (who cooperates with others to reciprocally improve their living environment, cp. Dohman, Falk, Huffmann, Sunde 2006).

- Ritual interplay and performative learning for the organisation and promotion of meaning-making and meaningful identity generation together with others. Fostering the performative generation, consolidation, communication and innovation of body knowledge and mental capacities.

- Clustering and accumulation of meaning – synthesising chaos into cosmos (i.e. the generation of identity on all levels and the generation of knowledge/information for the sake of dignity, prosperity and sustainable development).

- Fostering cognitive, intellectual, analytical skills.

- Considering the self, the other and the possible common sphere, also in order to better consider the context (i.e. global issues).

- Considering the web of life as an end in itself; consideration of the other and the commonly shared.

- Promoting the identification with sustainability meanings and resilience to antagonistic attitudes (cp. chapter 3.2.9) through active participation in socio-cultural meaning-making.

- Guiding self-generated learning and the development of desires and motivation to participate in and identify with sustainability.

- Enabling the progression of one's own identity and managing the risks of contingency, (contingency as the stagnation of mimetic arrangement and meaning-making with the other). (cp. Figure 4: Phases of Identity-formation – A cultural process, chapter 1.3.1).

In their essence, "cultural competencies" enable socio-cultural protagonists in their roles as learners and participants in social life to generate, consolidate, communicate and innovate socio-cultural meanings, identities and societal organisation patterns. This ability derives from mimetic interchange and through mimetic arrangement with the other.

"Cultural competencies" enable protagonists to deal with difference and complexity because they allow the self to arrange with the respective other, who represents difference and complexity. Just as mimesis proceeds ludically (cp. chapter Huizinga 1939 for "Homo ludens") and liminally (cp. chapter 1.8.5 for "the liminal phase"), difference and complexity become "playmates", or phenomena to which the self can take a new position – through the

other who enables the self throughout the mimetic arranging to access this position.

In other words, protagonists are culturally competent when they are able to comprehend, maintain and foster the phenomenon of uniqueness, which makes the self differ from the other, and the phenomenon of unity, which connects both. The challenge is that throughout the mimetic arrangement with the other, uniqueness (difference and diversity) and togetherness (arranging/unity) proceed simultaneously, although they may seem contradictory to one another.

By means of multi-perspectivity, which derives from arranged socio-cultural differences within the uniting common sphere, self and respective other mutually expand their horizons and ponder:

- "Who am I? Who are you? Who are we?"
- "Where (in which – e.g. social, economic, environmental – context/situation) am I? Where are you? Where are we? What is the situation? What is problematic and what is advantageous about this situation?
- What do I want to achieve? What do you want to achieve? What do we want to achieve? What is required to improve the situation? What is meaningful?
- How do I achieve this? How do you want to achieve this? What can we do to achieve our aims and improve the situation?"

(Cp. „Introduction" and „Overview: Theses, Key Questions and Structure of the Text").

Porter describes this as follows:

> "In a complex mass society we need to come to terms, at one and the same time, with how we can strive for equality, how we can respect difference, and how we can develop a new understanding of our social condition. Some of the questions are:
> - What do we have in common,
> - what do we need to share,
> - what do we need to be jointly responsible for, and
> - what process will best enable us to answer these questions?
> - How can social cohesion be furthered when there is a heightened awareness of difference?
> - How can an active civic culture with strong public discourse be developed and maintained in a more fragmented society?", (Porter 1997: 94).

What is central to a global ethics of the other (cp. chapter 3.1.4), of neighbourhood (cp. chapter 3.1.5) and sustainability (cp. chapter 3.2) is not the answers to these questions because in a time of rapid and profound transformation and in a diverse socio-cultural world, answers are relative and temporary. Central to such ethics – and promoted through "cultural competencies" – is the questioning itself, as well as the discourse that surrounds such questions (cp. chapter 3.1.6 for "discurse ethics"). Such questions capture issues central to existence and development and therefore they must consider society, the economy and the

environment as well as the cohesion of these three dimensions of sustainability.

The character of "cultural competencies" has been discussed in detail in other sections of the text, particularly in chapter I, which assessed humankind through the lens of cultural anthropology. This chapter unites these aspects of cultural self-regulation through the approach of "cultural competencies". The cultural anthropologist's perspective on mimetic learning for sustainable development is complemented through a very comprehensive pedagogic competence-concept: the shaping competence (de Haan 2002). Because the "cultural competencies" approach is anthropological, it defines what is essentially humane and how this humanity can be strengthened in order to sustain human and moreover *humane* development. It is therefore extensively universal, but abstract and intangible. The "cultural competencies"-focus assesses the question of whether there can be a global and intergenerational concept of education for sustainable development; it tries to extract the essence of education for sustainable development. The "cultural competencies"-approach is able to provide legitimisation to different concepts of education for sustainable development, such as the "shaping competence", which will subsequently be discussed.

In this regard, the shaping competence is more specific than the concept of "cultural competencies", because the concept of shaping competence focuses on a certain place (Germany, Europe) and on a certain context (e.g. formal education/schooling). That has the advantage to be pragmatic and practicable, it can be easier transferred into practice than the more abstract "cultural competencies", but it is also more difficult to universalise the concept of shaping competence. The concept of cultural competences tries to provide shaping competence with a certain anthropological "legitimation", "cultural competencies" somehow "distil" the essence of shaping competence, so that it can be easier universalised and transferred to other places and contexts.

"Cultural competencies" refer generally to the art of living in terms of dignified being and meaningful becoming. From this perspective on education it is not relevant what "dignified being and meaningful becoming" means precisely for the respective individual, who can interpret this phrase in their own particular way. It is, however, essential that pedagogues and learners respect the principle of mutual arrangement and competitive cooperation (cp. 3.1.5 and 3.2.7 for "Golden Rule" and 1.8.7 for "competitive cooperation") so that self and other can develop themselves mutually, promoting dignified diversity and functional and uniting multi-perspectivity. "Cultural competencies" safeguard the framework for mutual arrangements; they do not anticipate particular meanings, or values. Promoting "cultural competencies" (through formal education) rather means to mobilise the constitutional (pre-) conditions of comprehensive meaning-making and of meaningful (thus most likely sustainable) development.

Therefore "cultural competencies" empower protagonists to generate, consolidate, communicate and innovate meaning, meaningful self-other identities and societal organisation patterns, which promise to sustain the meaning-making community. Meaning-making is – just as identity – "an act of integration" (cp Habermas 1981). This applies as well for meaning-making processes and efforts, because only if an identity is successfully integrated in a network of others, it is meaningful in the sense that it provides the individual with security and also dignity (for example quality of life beyond survival). Obviously that integration must by means of the unity in diversity principle not connote assimilation, but arrangement with others (unity) and simultaneously difference to others (uniqueness). In this contexts sustaining connotes the mutual integration of human beings (arrangement with other and achievement of unity in diversity) and it connotes the integration of humankind in the ecosystem.

According to the connection of sustainability and integration, the text accepts that meaning is concerted agreement that is mutually developed by different socio-cultural protagonists, resulting in arrangement. This leads to the assertion that dynamic meaning making processes are an allegory of sustainable development. "Cultural competencies" enable learning itself and simultaneously they are effects of learning. Mimetic learning can foster these competencies. In this sense, education can not reinvent the human being, but it can strengthen these competencies (cp. chapter 4.1.7 for "intravantion vs intervention" and chapter 4.1.8 for "open space education"). Moreover, the concept of "cultural competencies" clarifies the essence of pedagogy and education (for sustainable development) as being mimetic learning-performances or learning in social contexts. A socio-cultural protagonist on an individual (i.e. a student, or a teacher) or societal (i.e. an institution or social movement) identity level, (cp. chapter 1.3.1.2) is culturally competent when he/she is able to arrange with the other in terms of competitive cooperation (cp. chapter 1.8.7). Such a "sovereign identity" is able to deal with difference and complexity, represented by the respective other (this includes the "other" influences within the self). In other words, a socio-culturally "sovereign identity" is culturally competent when it mimetically arranges with the other.

In contrast to "soft skills" or "human capital", "cultural competencies" and "sovereign identity" do more than contribute to the social compatibility of individuals or to a societal framework. Beyond the functional aspects of facilitating social integration and participation they also address the being itself and emphasise for example, to happiness, fear, ambiguity, or creativity.

This means that, in contrast to "shaping competence" (see next chapter), which merely concentrates on (participation in, or shaping of) future development, "cultural competencies" (and the concept of sovereign identity) explicitly emphasise on the (condition of) human

being at present, fostering dignity and uniqueness of the learner. In other words, are "cultural competencies" functional and because they feature the intrinsic characteristics of human being per se, they are means in themselves. They do not "only" aspire to shape development, but they constitute development in the way that societies are sustainable in the extent as socio-cultural protagonists are culturally competent.

"Shaping competence" and the "cultural competencies" consider a common subject "education for sustainable development" from different perspectives.

Through their anthropological approach, "cultural competencies" and the concept of sovereign identity are measures – and provide "open space" – for diverse pedagogical approaches and frameworks, which will be presented at the end of this text.

Such frameworks focus pedagogically on mimetic learning. The acquisition of specific learning contents (e.g. the different subjects in school) and the acquisition of competencies are means to this aim. Explicit, content-based learning can function as a medium for mimetic learning so that the explicit and content-based knowledge acquisition becomes a relevant side-effect of mimetic learning and education as such.

Radically speaking, there is no such thing as learning that is not mimetic, hence that does not include the respective other. Increased mimetic foci in educational approaches can also increase the amplitude of content-based knowledge that is internalised. Content-based learning, in turn, can not promote mimetic learning. But mimetic learning is the equivalent of human being and becoming, which means that it must be the starting point for measurements of human development, sustainability and education as such.

By discussing "cultural competencies", the text aims to question globally prevalent understandings of "learning". This explicitly calls understandings of learning and education into question which promote schooling identical with instructionism and memorisation of "lessons to be learned" in order "to become a valid citizen" in a meritocratic sense. Moreover the text aims to provide orientation for education that promotes sustainable development. Complementing this rather culture anthropological search for legitimisation of education and pedagogy, the concept of shaping competence is greatly relevant for (measuring) practical implementation of culture competencies strengthening pedagogy.

4.1.2.1 "Gestaltungskompetenz" (Shaping Competence)

"Cultural competencies" and "shaping competence" (Gestaltungskompetenz, de Haan 2002) are similar, yet not fully complementary. The "cultural competencies" perspective generally allocates shaping competence anthropologically (see above). Thus the text aspires through the anthropologic derivation of "cultural competencies" to validate the elaborated concept of shaping competency and support its discussion beyond European perspectives on education for sustainable development.

The Agenda 21 functions as guideline, or framework for global sustainable development. The appeals for social wellbeing, environmental integrity and economic prosperity as well as for the participation of children and youth in decision-making, require appropriate competencies and a mental paradigm change.

Subsequently, the German national model programs, "21" (1999 – 2004) and "Transfer-21" (2004 – 2008), aimed to orient school education towards education for sustainable development. The development and dissemination of concepts, materials and implementation-structures involved about 200 German schools in the "21" program. The results were further established and developed in collaboration with about 20 of these schools. The following is a citation from a guidebook about "Gestaltungskompetenz", (the German word for shaping competence), which draws on the insights that came from these two programs. Prof. Dr. Gerhard de Haan, who coordinated the programs and who coordinates the UN-Decade on Education for Sustainable Development for the German UNESCO Commission, also invented and developed the concept of "Gestaltungskompetenz" (e.g. cp. de Haan 2000; 2002). He explains the complex issues on which shaping-competence concentrates:

> "The aim of education for sustainable development is the acquisition of shaping-competence. This denotes the capacity to modify and shape the future of the society to which one belongs through active participation. (…). Shaping-competence focuses on the openness of the future, on the variation of the possible and on active modification. This includes aesthetic elements. Moreover, it poses questions about economic, consumption and mobility patterns. It also questions lifestyle and leisure and the shaping of local affairs and international relations. (…) This competence not only focuses on unpredictable future circumstances, but it also promotes the individual's ability to modify this future through cooperation with others." (de Haan 2000: 141,142).

De Haan clarifies the concept of Gestaltungskompetence further. He states:

> "Education for sustainable development (ESD) is particularly useful for the acquisition of Gestaltungskompetenz ('shaping competence'). Gestaltungskompetenz describes the ability to apply knowledge about sustainable development and to identify the problems of non-sustainable development.
>
> This means that the learner is able to draw conclusions about environmental, economic and social developments and comprehend their interdependence, based on analyses of the present and on studies of the future. Subsequently, the learner uses these conclusions to make comprehensive decisions before implementing them individually, jointly and politically. It is these processes that sustainable development is applied.
>
> There exist ten sub-competencies of Gestaltungskompetenz. These are:
>
> 1. To create knowledge in a spirit of openness to the world, integrating new perspectives;
> 2. To think and act in a forward-looking manner;
> 3. To acquire knowledge and act in an interdisciplinary manner;
> 4. To be able to plan and act in cooperation with others;
> 5. To be able to participate in decision-making processes;
> 6. To be able to motivate others to become active;
> 7. To be able to reflect upon one's own principles and those of others;
> 8. To be able to plan and act autonomously;
> 9. To be able to show empathy for and solidarity with the disadvantaged;

10. To be able to motivate oneself to become active." (de Haan, 2002).
In 2008 the sub-competencies were expanded by two more sub-competencies. These are:

1. To cope with individual dilemmatic situation of decision-making
2. To identify and estimate risks and insecurities
   (cp. Transfer-21 Programme 2008).

The concept of Gestaltungskompetenz is accords to the three key-competence categories of the OECD. These are:

- "Key-category   I: using tools interactively
- Key-category   II: interacting in socially heterogeneous groups
- Key-category   III: acting autonomously". (OECD 2005).

The transfer-21 program relates Gestaltungskompetenz with educational categorisations made in German secondary school curricula and framework plans. Surely, the result is transferrable outside of the German or European contexts. Admittedly, according to the principle of (unity in) diversity, this approach would probably have to be altered and socio-culturally (re-)interpreted in order to be appropriate in other contexts. This concept of shaping competence can either be adjusted to other circumstances, for example in other countries or different school types, in any case it is capable of inspiring education (policies, concepts, theories, practices) by deductive means (a priori). Still, it is very valuable to have such differentiated measures for education because this inspires the mentioned variations. De Haan explains:

> **"OECD Key-Categories and Sub-Competencies of Gestaltungskompetenz in Detail**
> The following sections set targets for the sub-competencies of Gestaltungskompetenz which are to be acquired by pupils by the end of their secondary education. These ten sub-competencies are classified in accordance with the OECD competence categories.
>
> **Key-category I: Gestaltungskompetenz in the context of 'Using tools interactively'**
>
> 1) Gather knowledge with an openness to the world and integrate new perspectives.
>   Pupils can:
>   a) name the approaches and concepts of sustainable development in government policy and civil society;
>   b) use different perspectives and forms of knowledge (for example, scientific, received and everyday knowledge) to describe global and local (non-) sustainable development phenomena;
>   c) use information gathered from different perspectives to evaluate requirements for sustainable action and patterns of behaviour;
>   d) describe and evaluate cultural and ecological diversity.
>
> 2) Think and act in a forward-looking manner.
>   Pupils:
>   a) are aware – in a manner appropriate to their lived experience – of methods of research for assessing the future (for example, scenario technique, planning games, future workshops), in order to analyse problems of non-sustainable development and anticipate possible opportunities for sustainable development;
>   b) evaluate and apply the findings of research done on the future in the drafting of sustainable development processes with regard to ecological systems, social justice, economic developments and political action.

3) Acquire knowledge and act in an interdisciplinary manner.
Pupils:
  a) can describe and explain the composition, functioning and development of the biosphere;
  b) can describe and explain relations of interdependence for the characterisation of non-sustainable global development (e.g. by using the syndrome concept);
  c) can describe overarching concepts of sustainability (e.g. strong and weak sustainability) and can analyse the impact that the implementation of these concepts could have on future development;
  d) can describe concepts of sustainability in the areas of technology, economics, trade, mobility, land use, construction and housing, consumerism and leisure using specific examples;
  e) can describe and explain test criteria for sustainable development (e.g. indicators and auditing procedures);
  f) can describe and evaluate aspects of globalisation and the perspectives of countries at different stages of development;
  g) can describe and evaluate the differences between renewable and non-renewable resources and their use (e.g. renewable raw materials, fossil fuels);
  h) can describe and evaluate concepts and visions of social justice;
  i) can describe the fundamental human rights and conventions as stated in international law, and are in a position to judge their local and global significance;
  j) can analyse and evaluate interdependencies between the environment, economics, conflicts, poverty and violence, taking account of historical causes and their consequences in the present.

Key-category II: Gestaltungskompetenz in the context of 'Interacting in socially heterogeneous groups'

4) Ability to plan and act together with others.
Pupils:
  a) can name and analyse different standpoints on sustainability in groups, looking into their underlying justifications, and can resolve controversies democratically in this context;
  b) can describe prejudices, negative stereotypes and forms of discrimination, and can cite means of common intervention to combat them;
  c) can name social, economic and political causes of human rights abuses, can work together to formulate possibilities for protecting human rights, and are in a position to present forms of action for human rights in manner which is appropriate for the addressees and situations in question;
  d) can plan forms of solidary collective action to protect the future, taking account of global contexts, and implement these in specific cases.

5) Ability to participate in decision-making processes.
Pupils:
  a) describe solidarity and concern for the future of humans and nature as common and societal tasks;
  b) can demonstrate how cooperative problem-solving can help in the development of strategies for action in the field of sustainable development;
  c) can describe and demonstrate negotiation processes on aims and processes of sustainable development in the event of practical and political differences (e.g. in the form of planning games and mediation);
  d) can constructively overcome differences of opinion and conflicts with regard to issues of (non-) sustainable development.

6) Ability to motivate others to get active
Pupils:
  a) can describe the success of their own and joint learning processes in the context of sustainability and demonstrate how these can be used for further learning;
  b) can describe their own and common motivations for participation in democratic decision-making processes and in action for sustainability;
  c) can describe and evaluate forms of common involvement in actions of solidarity (e.g. against poverty, discrimination, environmental risks).

Key-category III: Gestaltungskompetenz in the context of 'Acting autonomously'

7) Ability to reflect upon one's own principles and those of others
Pupils:
   a) can describe lifestyles which support sustainable consumption patterns, environmentally and socially acceptable mobility and leisure, and health;
   b) know and can justify production and purchasing criteria for products in regard to environmental, economic and social considerations;
   c) can discover and evaluate the underlying justifications, forms and effects of their own lifestyles and those of other people and societies on the living and working conditions of other people and on the biosphere.

8) Ability to plan and act autonomously
Pupils:
   a) know and can justify their personal rights, needs and interests, describing their limitations in regard to sustainable development processes and the rights of others, and considering the rights of future generations;
   b) can demonstrate their own ability to plan and act autonomously through the realisation of a project for sustainability;
   c) can create their own life plans from the perspective of sustainability, and can describe personal projects and how these can take shape.

9) Ability to show empathy and solidarity with the disadvantaged.
Pupils:
   a) can describe and evaluate ways of taking on individual, social, economic and political responsibility for (non-) sustainable development processes;
   b) can describe possibilities for showing empathy and solidarity with poor, disadvantaged and oppressed people and communities on both local and global levels;
   c) can describe their empathy for nature and act adequately.

10. Ability to motivate oneself to become active.
Pupils:
   a) can describe and evaluate their personal responses to dilemmas, and uncertainties;
   b) can describe their motivations for participating in democratic decision-making processes and in sustainable activities;
   c) apply self-motivation processes to get involved in sustainable forms of living and management." (de Haan et al. 2007).

Although "Gestaltungskompetenz" defines goals for learning, these goals also influence educational concepts, approaches and practice. In this regard, "Gestaltungskompetenz" is not only a criteria for the measuring and auditing education, but it also orients and inspires educational planning and implementation. Thereby, the concept of Gestaltungskompetenz essentially inspires and impacts on the following chapter.

4.1.3 Education Throughout Life and for Sustainable Development

Social, environmental and economic aspects are the parameters for the concept of sustainable development. What are the parameters of education for sustainable development? Parameters of education for sustainable development is the mobilisation of "cultural competencies" as well as the fostering of shaping competence (Gestaltungskompetenz). But how can that be pedagogically implemented? Following the text aims for answering this question through the detection of five different types of learning,

through linking these types of learning with the three parameters of sustainable development and through the provision of practice examples. Furthermore, results of this analysis will be visualised.

Education for sustainable development can be understood as supporting five fundamental types of learning. These types of learning provide quality education for all learners and generally foster sustainable human and planetary development. These five types of learning are defined by Delors' approach to "education throughout life".

In 1996, the UNESCO published its report "Learning: the treasure within" (Delors 1998).

The report is the result of global analysis conducted over a period of three years by the International Commission on Education for the Twenty-First Century. President of the 1993 founded commission was the former President of the EU Commission, Jacques Delors. The report gains credibility particularly because of the involvement of many international scientist who worked intensively together over a period of three years. The report is based on comprehensive analysis and consultations. For these reasons, the report is part of the criteria for orienting education in the twenty-first century.

It calls for a strong international collaboration concerning questions of education and aims to reorient education to sustainable development and to life (the ecosystem and human cultural identity) itself. Delors speaks in this context of "learning throughout life". That has a dual connotation. First, it perceives life as a resource for learning not only as a phenomenon to be managed. That connotes it is most beneficial for the learner to learn from life for life. Second, "learning throughout life" connotes that learning itself can be lively and it can – depending on the respective pedagogy – be an expression of life in dignity, so that learning itself becomes an allegory to sustainability.

Based on an initial "four-pillar model" the concept of "education throughout life" addresses four different types of learning. Thus, education should provide open space for learners to learn throughout life and pedagogues should guide learners on throughout their learning experiences. Doing so, learners will, for example, address real-life situations (cp. Zimmer 2002) to "think global and act local" (Agenda 21), as well as "to think in long-terms and act now". In this sense they may address the increasing complexity and dynamics of global issues, as well as they may ludically discover and explore sustainable opportunities.

The "pillars" of "learning throughout life" are:
1. learning to know
2. learning to do
3. learning to be

4. learning to live together

In the context of the United Nations Decade of Education for Sustainable Development 2005-2014, the "learning throughout life" concept was complemented by a fifth dimension:
5. learning to transform oneself and society.

This fifth pillar was suggested by a number of Latin American educators in cooperation with UNICEF during an analytical process of UNICEF for providing recommendations upon the Delors Report. (cp. Black / UNICEF 1999).

What is central to the approach is not the content or particular skills that should be achieved. Central is rather the focus on learning itself – in terms of the general competency of learning to learn, as a means of being and for participation in the development of a lifelong learning society, which lives in a "global village".

Besides "learning to learn", there is another focus of the report: it emphasises on the human networking pattern in terms of peace between and arrangement of people. The far-reaching transformations of hitherto meanings socio-cultural identities and societal organisation patterns require a better understanding of other people and the world at large; they demand mutual understanding, peaceful interchange and cooperation. Having adopted this position, the Commission has put particular emphasis on one of the four pillars that it proposes and describes as the foundation of education: learning to live together. Developing an understanding of others and their history, traditions and spiritual values and, on this basis, creating a mental shift, which, guided by the recognition of our growing interdependence and a common analysis of the risks and challenges of the future, would induce people to implement common projects or to manage the inevitable conflicts in an intelligent and peaceful way. The commission describes the other three pillars as the basis for learning to live together.

Complementing the "learning to live together" model, the value of "learning to transform oneself and society" addresses collaborative, mutual development of common meanings, socio-cultural identities, perceptions and patterns of societal organisation.

Delors' pillars of education fit well with an arrangement and mimesis-oriented education for sustainable development. They also complement the measures of Gestaltungskompetenz as well as of "cultural competencies". "Learning throughout life" is able to explain how learning for socio-cultural meaning generation, consolidation, communication and innovation can be promoted. Nevertheless, there is not yet a substantiated combination of these two

approaches; of sustainable development with its three dimensions – society, economy and environment – and "learning throughout life" with its five pillars. This text therefore combines both concepts and compounds them into education for sustainable development.

Relating the five pillars of education throughout life and the three dimensions of sustainable development results in a classification of fifteen operational aspects of education for sustainable development. There are also conceptual aspects of education for sustainable development, such as mimetic learning, performative learning, or ludic interchange and there are goals, such as the development of shaping competence, sovereignty, and the capacity to deal with the other, with difference and complexity. In contrast to conceptual aspects, operational aspects of education for sustainable development can be easily transferred into practice. Nevertheless they remain abstract, which is not an obstacle but an opportunity to interpret them in manifold ways according to different social, environmental, or economic contexts. Contextualised, the fifteen mentioned classifications of education can be used as guidelines for curriculum development and pedagogic practice. This chapter will briefly discuss examples of how these fifteen aspects can be interpreted in school context.

Yet, the approach remains theoretical and rather abstract. However, once an outline or guideline for education for sustainable development is drawn up and substantiated, possible approaches, concepts and good practice examples can easily be detected.

It must be emphasised that it is not required, (and in this text it is also not done), to reinvent the wheel by creating new approaches, but rather it is crucial to identify a diversity of existing approaches to education for sustainable development. This shall provide a pool of modes and patterns that will help implement increasingly comprehensive and humane education for sustainable development (see chapter 4.2 for "good practice examples").

4.1.3.1   The Five Pillars of "Education Throughout Life"

Given the rapid changes brought about by scientific progress and the new forms of economic and social activity, the emphasis has to be on combining a sufficiently broad general education with the possibility of in-depth work on a selected number of subjects. Such a general background provides learners with the competence to conduct lifelong learning, in so far as it lays the foundations for "learning throughout life".

The following is a brief insight into the different pillars of education as they are defined by the International Commission on Education for the Twenty-First Century (Delors 1998):

Learning to Know

Learning to know aims to foster the ability to intellectual or cognitive comprehension. Such

learning enables one to acquire a variety of acknowledgements and to understand the own social, environmental and economic contexts. This is the basis needed to be able to generate, consolidate, and communicate new knowledge and to innovate this knowledge again, if required. Hence learning to know is an elementary building block for shaping-competence. Thereby, learning to know furthers sustainable development.

Learning to know develops knowledge, values and skills. It is the process of searching for, acquiring as well as creating knowledge. For example it leads protagonists to:

- develop critical thinking
- acquire tools and information for understanding the world
- learn about "glocal" world challenges
- understand sustainability concepts and perceptions
- learn about environmental, economic and social aspects of human life, history and development
- develop perceptions of environmental, economic and social system cohesions
- develop ideas about - and reflect gaps of - human sustainable organisation, as well as the sustainability-related responsibilities, duties and opportunities of people, communities and societies
- acknowledge that fulfilling local needs often has international effects and consequences
- address the learning and living context, i.e. consider global issues and local situations (space), find out more about history and develop future visions.

Learning to Do

In addition to learning to do a specific job (in terms of expert knowledge), this approach to education throughout life should, more generally, entail the acquisition of a competence that enables people to deal with a variety of situations, which are often unforeseeable. Moreover, it should develop the competence to work in teams, something which educational methods do not at present pay much attention to.

In many cases, such competencies and skills are more readily acquired if learners have the opportunity to try out and develop their abilities. This is possible, for example, when learners are involved in work experience or social work, especially if this work is reflected upon intellectually, or also through theatre (cp. "Theatre for the Oppressed", chapter 4.2.2).

Learning to do addresses practical knowledge, or the ability to apply learned knowledge practically. Such "know-how" can be possessed through, or rather throughout practical experience – for example through mimicry and other personal experiences – within a social

or professional environment, which incite the apply theoretical knowledge practically.

Learning to do is a criterion for education to support learners to comprehend all areas of life and is not particularly limited to the acquisition of mechanical skills. The acquisition of "know-how" to do, enables the learner to act precisely and successfully in a particular field of interest and/or relevance, so that an intended result can be achieved. Independent from the knowledge that is required to do a specific job, personal and practical experiences are indispensable for "learning to do".

Practical knowledge expands one's capacity to master a greater variety of expected and unexpected life situations. Moreover, a great "know-how" equips the learner with the power to generate and to innovate, hence to shape, or adjust to the surrounding reality (cp. below, "learning to change oneself and society"). "Doing", or action brings people together; it is performative and has a high potential for "communitication" (cp. chapter 1.8 and 2.2.2), promoting especially "learning to live together". Especially the life-situational approach (cp. Zimmer 2000, Preissing 2003), which uses real life situations as educational input (cp. chapter 4.2.1 for "life-situational approach"), recommends to begin creative and complex learning processes with literally "doing" the best to solve "real life problems".

Learning to do develops knowledge, values and skills for active problem solving, for engagement in productive employment and recreation. For example, it leads protagonists to:

- act as well as to think
- better understand and discover global and local sustainable development issues
- act appropriately, based on the understanding of global and local sustainable development issues
- acquire technical and professional training
- apply learned knowledge in daily life
- be able to act creatively and responsibly in one's environment
- foster social learning and hence socio-cultural diversity and unity through action
- deal with different situational challenges competently and get involved in shaping these situations and overcoming challenges through methodological and technical "know-how".

Learning to Be

This pillar was the dominant theme in the Edgar Faure report "Learning to Be: The World of Education Today and Tomorrow", (Faure 1972). Its recommendations are still very relevant, because according to Faure in the twenty-first century everyone will need to exercise greater independence. That requires learners to develop sovereign socio-cultural identities, hence the sovereignty *to be* together with others and arrange with others (cp. chapter 1.2 et al. for

"sovereign identity"). This enables protagonists to adjust to – and sustainably co-shape – an increasingly complex and dynamic reality. A sustainability-consciousness, combined with a stronger sense of personal responsibility complement such sovereignty and facilitate to attain common goals. Delors' report stresses a further imperative: none of the talents that are hidden like buried treasures in every person must be left untapped, but instead must be empowered. Some of these talents are: memory, reasoning power, imagination, physical ability, aesthetic sense, performative "communitication", mimetic arrangement, a certain self-confidence and the aptitude to communicate with others. These talents or competencies are likely to promote "cultural competencies", such as the competencies to mimetic learning and networking. In the context of sustainability it is crucial to mention that the unfolding of talents – and learning per se – is not only a means for "becoming" in terms of development, but it is simultaneously a means for "being" in terms of individual happiness, liveliness and intrinsically humane, socio-cultural dignity. Learning for sustainable development also means *to be,* because being means to learn and learning means to be. Learning to be is a means in itself and additionally it is functional, or constructive, because it is also the process of (pedagogic encouraging for) self-development. Learning to be, does not mean that the learner has to learn something before he may be for example a good citizen. Indeed, this perception of learning and education is quite common. Delors' approach and the approach of this text is to understand learning to be as a sort of learning which emphasises and strengthens what already is there, including the learner's personal skills, talents and "cultural competencies", including curiosity and desires of learners.

"Learning to be" facilitates the development of self-confidence and greater security in whatever one does. Hence, "learning to be" promotes the development of sovereign identities that are able to perform mimetic arrangement (cp. chapter 1.2 et al. for "sovereign identity"). Sovereignty heightens one's capacity for approaching the other, interchanging with the other and arranging with the other in terms of "communitication" (cp. chapter 1.8.4 and 2.2.2). The ability to generate, consolidate, communicate and innovate such communities, or arrangements with others is sustainably sovereign when it is performed without diminishing or assimilating self or other, so that it fosters socio-cultural diversity and (comm)unity at the same time. "Learning to be" strengthens the learner's tolerance with other people, perceptions, and meanings; it facilitates the dealing with crises, with differences and complex challenges. This ability is a crucial precondition for sustainable development.

"Learning to be" can mean finding out more about ourselves. Everyone is who he or she is, based on their socio-cultural context and biographic experiences. Moreover, the self is a "swarm of participations" (Perkins 1992) and socio-cultural "identity is an integration" (Habermas 1981:214ff). According to Rimbaud (1871) who states that "je est un autre" the

other co-constitutes the self. This means that learning to be requires the other, because the other co-shapes the self (cp. chapter 1.2, 1.3, 1.4 and 1.5). This underlines the importance of the cultural principal to mimetically "perceive oneself from the perspective of the respective other" (cp. Wulf 2002: 84). Introspection, self-observation, analysis of one's own attitudes and behaviours, but as well also less self-centred moments of involvement, interchange, conflict and even of temporary self-dissolution in social groups: all of this contributes all to our "learning to be". It helps us to find out more about physical, intellectual and emotional limits and opportunities.

"Learning to be" relates directly to our life experiences. It enables learners to comprehend and conduct their own lives (or biographies) and to accept and process it. This helps learners to live in the present, hence to "be" relatively independent and sovereign; to consider the future calmly and not filter it, for example, through irrational, constrained, and eccentric expectations and fears. The resulting happiness is an end in itself; it dignifies human "being". Moreover, it incites sustainable "becoming" (i.e. sustainable development) because it facilitates comprehensive attention and flexibility in moments of crises. Happiness results from and promotes creativity, which in turn ensures a high capacity to deal with complexity (i.e. complex and dynamic, global and local, present and future social, environmental and economic challenges).

Education for Sustainable Development addresses "learning to be" by promoting sovereign identities, able to be and to "become" (develop) in dignity, to share with others when it is possible and to restrain when it is necessary. That arrangement happens without stepping out of competitive cooperation, which situates the other as neighbour and partner. Furthermore, "learning to be"-relevant education for sustainable development deals with the integration of all three realms of sustainability – environment, society, and economy. Moreover, it contributes to a person's complete development: it addresses for example mind and body, cognitive and emotional intelligence, sensual sensitivity, aesthetic appreciation and spirituality, as they signify a whole (holistic) set of human being.

Learning to be develops competencies for well-being on all identity levels (cp. chapter 1.3.1.2 for "dimensions of socio-cultural identity") and it fosters the sustainable sovereignty necessary for protagonists to co-shape development. For example, it leads individuals to:

- see oneself as a responsible actor with opportunities and duties to ensure positive outcomes for the future
- encourage discovery of the self and experimentation with being alone, in a group, in nature, the managing of conflicts and ambivalent situations and dealing and arrange with others.
- discover universally shared values (e.g. the golden rule, peace, human rights, or an

ethics of sustainability)

- develop one's personality, sovereign socio-cultural self-identity, self-knowledge and self-fulfilment
- consider and appreciate the role of others in the process of one's own being and becoming
- be able to act with greater authenticity, autonomy, judgment and personal responsibility
- learn to arrange with the unknown "other" (i.e. the "other self", the other person, perception, value, meaning, priority, etc)
- learn to "be" socially agile, environmentally aware, and economically creative and responsible, which includes sharing with others and living in communion.

Learning to Live Together

Living together requires being able to tolerate, respect and generally appreciate the "other" person, socio-cultural meaning, opinion, value, perception, etc. This is not only achieved through politeness and benevolence toward others. For example, it is insufficient to have the golden rule in mind (see chapter 3.1.5 and 3.2.7) and to believe in mutuality. Instead, it is important to actively involve oneself with other people and to take risks, i.e. the "risk" of trusting, loving, being honest, getting in conflicts and other ambivalent situations. Learning to live together means developing magnanimity and authenticity, which are not reduced to societal rules and codes of polite behaviour. This refers especially to our attitudes and feelings towards others, our communication with them, our motivation and will to arrange with them and our ability to resist the usage of stereotypes, prejudices and discrimination.

A sincere and cordial attitude, sympathetic and courteous appearance and a certain ethics of relationship (cp. chapter 3.1.5 for "ethics of neighbourhood") enable one to gain the respect, appreciation and trust of others. This (unfolding of the) ability to establish relationships between people is crucial to sustainable development because inclusive networks (cp. chapter 3.1.3 for "global In-group") are increasingly able to anticipate, oversee, comprehend and overcome challenges to their stability – or to their sustainability (cp. chapter 1.6 and 1.6.6 for "multi-perspectivity"). Moreover, as already mentioned in the chapter on "learning to be", being is an end in itself, but there is no being without others. No socio-cultural "identity" is an isolated unit or monolithic block, but rather a patchworked, unique swarm of "other" participations (cp. chapter 1.2).

Learning to live together develops competencies for mimetic interchange and cross-arrangement with others in terms of "communitication" and peace. For example it leads protagonists to:

- participate in the discourses, meaning-making processes and socio-cultural identity progression in increasingly pluralistic, multi-cultural societies

- apply competitive cooperation; cooperate with others without discriminating against or assimilating the other and without suspending or assimilating oneself. According to the Golden Rule and the principle of mimetic arrangement, the self cooperates with the other as much as possible and differs to (i.e. competes with) the respective other as much as necessary in order to maintain his unique and dignifying self-identity. This constitutes ethical unity (notion of cooperation) in socio-cultural diversity (notion of competition) and safeguards human well being at present as well as human autopoietic and in this sense sustainable multi-perspectivity.

- develop an understanding of other people and their biographies, histories, traditions, socio-cultural meanings and expressions as well as their rights

- tolerate, respect, welcome, embrace, and celebrate differences in people and diversity in societies

- be able to cope with situations of tension, exclusion, conflict, ambiguity and violence

- promote a mental paradigm change, which supports more social integration, environmental integrity and the reorientation of economic activities and concepts to meet social and environmental needs

- participate in the generation, consolidation, communication and innovation of societal organisation patterns: consider and co-shape structural systems, such as the democratic state, a democratic school, a neighbourhood, family or community, which function as inclusive reference systems

- build their capacity for community-based decision-making, social tolerance, environmental stewardship and the improvement of quality of life.

Learning to Transform Oneself and Society

Globalisation is one symptom of a profound and rapidly increasing social, economic and environmental transformation. This transformation results in complex challenges, which redefine, for example, space and time, opportunities and risks, dependences and liberating relationships, the self and the "others", as well as meaningful being and development. This increasingly fast and profound transformation impacts socio-cultural identities; i.e. people, communities, societies and institutions.

It is central for sustainable development that human beings recognise, comprehend and co-shape challenging situations pro-actively. Additionally, it may be appropriate to adjust one's own socio-cultural identity, for example, perceptions and values, according to new situational requirements. Industrialisation, for example, represents a period of human development that also forced people to adjust their values; they reconsidered human well being and protected

people from exploitation. Eventually in the near future, industries must increasingly respect environmental standards in order to legitimate their business and in order to trade prosperously, because of growing awareness in civil society.

In this sense, a pre-condition for co-shaping these above-mentioned effects of human behaviour (e.g. industrialisation/production as well as consumption patterns), is the ability "to transform oneself and society". The shaping-competence (de Haan 2002a, cp. chapter 4.1.2.1) is especially crucial for developing sustainably as it mobilises people to sovereign participation in these "glocal" transformations (cp. Robertson 1992).

"Learning to transform oneself and society" through and for sustainable development fosters integrative, anti-discriminative behaviour, respect for the environment and peace as well as (international) solidarity. This can be enabled through a synergy of cognitive-intellectual, practical-performative, social abilities and motivations (cp. for example chapter 4.2.4 for "the Earth Charter"). Learning that stimulates and involves mimetic interchange between the learner and other persons (social learning), contributes to the learner's ability to generate, consolidate, communicate and innovate his/her integration into meaning-networks. Meaning-networks are for example communities, such as families, school classes, social movements, neighbourhoods, states or even the world-community with relatively shared – and therefore meaningful – socio-cultural imaginations, visions and principles (German: Leitbild).

Social learning, learning with and from others, acting and communicating, interplaying and struggling, exploring one-self, others and the common: such learning experiences help one to discover the "other self" (relating others to one's own self-perception) and the solidarity that can exist with others (relating the self to others). Throughout social learning and being frictions and feelings of reduced freedom arise. The confrontation with the other throughout mimetic interchange is intrinsically ludic, but not necessarily always joyful. According to the culture shock diagram (figure 3, chapter 1.3) which shows the different phases of mimetic interchange in a dramatised manner, the interchange can involve friction, conflict and confusion. To recognise such situations, accept them, or try to change them while resisting the discrimination and exclusion of others, resisting to utilise seemingly securing, because polarising ideologies, resisting as well the repression of conflicts and resisting self-dissolution is crucial for living together. Positively expressed, to communicate one's own position, listen and respect the other position, question oneself carefully while remaining self-confident and arrange with the other patiently – are the elements of "learning to live together".

"Learning to transform oneself and society" requires arrangement with others, and this arrangement must not only produce co-existence, but mutual involvement, exchange and development. Meaning as well as meaningful – or sustainable – development, require

commonality. They are results of "communitication", concertion and discursive negotiation. Commonality, therefore, describes the ability to concert meaning generation, consolidation, communication and innovation. Commonality, society, community, social movements and human networks, are social organisations; they are meaningful for their participants. In order not only to generate, but also to consolidate, communicate (activate and celebrate) these networks and innovative their socio-cultural patterns, people must be motivated and competent, sovereign and creative. Thus they can develop concerted meaning-making, poiesis and formal as well as informal, structural and performative organisation.

This means that the phenomenon of mimetic movements is central for "learning to transform oneself and society", so that pro-active mimetic learners cross-relate, arrange and re-arrange with others. This maintains the overall regulating, poietic network (unity) and lively socio-cultural diversity of "selves and others". (cp. chapters 1.2, 1.3, 1.4, 1.5). Such learning processes are means to being and they are creative. Creativity in turn is not only an allegory for personal dignity and happiness, but is also a precondition for dealing with – and dismantling – intense, complex and dynamic challenges as they appear globally and locally. The task is to overcome complex challenges (cp. chapter 1.1 and figure 2 for "global issues" and chapter 3.2.3.1 for "the second dialectics of sustainability") through the mutual creation of even more complex solutions. Social and environmental problems, which result from industrialisation, require for example social and environmental answers, such as consumption values and production standards.

In the context of education, such creative and social learning appears more like coaching than like schooling. From this perspective, lifelong learning connotes not only the adjustment of and to a changing world (e.g. the globalisation of businesses and information), but also the development of the learner's creative potential, personality and socio-cultural identity.

Delors' Report encourages all societies to work towards a necessary shift in the field of education, so that none of their talents, every human being's "treasure within" (Delors 1998) gets lost.

Learning to transform oneself and society (learning to change) develops competencies for transforming attitudes and lifestyles, meanings and organisational structures. For example, it leads protagonists to:
- learn with and from others
- perform social interchange with others, arrange and develop common organisation
- generate, consolidate, communicate and innovate (comm)unity in diversity (the unity as framework for diversified, diversifying uniqueness and particularities)
- prevent the dissolving of the self into the other (self assimilation), or the other into the

self (assimilation of the other), as well as the assimilation of self and other into a third (homogeneous) constellation. Instead, it leads one to transform oneself, inspired by the "other", so that a diversified community arises.

- discover the other self, to see oneself from the perspective of the other
- work toward a gender neutral, non-discriminatory society
- develop the ability and will to discover and adopt sustainable lifestyles for ourselves
- promote behaviours and practices that minimise our ecological footprint
- be respectful of the earth and life in all its diversity
- act to achieve social solidarity
- promote democracy in a society where peace prevails
- integrate the values inherent in sustainable development, practically and theoretically into all aspects of learning
- encourage changes in behaviour to create a more viable and fair society for everyone
- incite people to reflect critically on their own identities, communities, motivations and meanings

4.1.3.2 The Three Dimensions of Education for Sustainable Development

This section introduces educational approaches matching the three subjects or dimensions of sustainable development, society, economy and environment (cp. chapter 3.2 and 3.3). The concept of education for sustainable development relates the three dimensions with the concept of "cultural competencies" as well as with the concept of shaping competence. They are not separate, but mutually complementing aspects, which, when combined, create educational added value or education that develops sustainability sustainably. Education for sustainable development can not be limited to one of these approaches, for example, to environmental education. Moreover, different geographical, temporal, historical and socio-cultural contexts require the variation and adjustment of educational foci and priorities, settings and methods, in order to address the three dimensions of sustainability. Sustainable development must continuously be contextualised. This means that development approaches, or respectively sustainability-meanings must be socio-culturally specified. Sustainable development approaches and sustainability-meanings also must be adjusted to different periods of human development. Because sustainable development is an evolving concept (dimension of time) and because it requires socio-culturally diverse interpretations (dimension of space and meaning-content), this chapter provides recommendations and examples for educational practices, concepts and policies, possibly usable in different socio-cultural settings and temporal contexts.

Economy: Entrepreneurship Education

Economy is essentially linked with culture and cultural diversity: At its root it is highly

creative; it creates solutions and problems. Economy is mighty, greatly shaping society and the ecosystem. Regarding the economic impact on the social and environmental aspects of life but also on economy itself as shows the current financial crisis, current economy is unsustainable. Nevertheless, economy itself is neither sustainable or not, but it is mighty. Its sustainability depends upon socio-cultural meanings and for example the resulting political frameworks for regulating economy and utilising it for sustainable development.

Economy expresses and impacts on patterns of socio-cultural meaning, such as lifestyles, un/sustainable priorities, consumption and production. As argued below in the section "learning through economy", it is important for learners to get acquainted with the global financial system, economic interdependences, how economy impacts the environment, and the positive and negative effects it can have on human living standards. Comprehending how globalised economy undermines national democracy and how mono-causal economic growth impedes sustainable development is crucial as well for economic and sustainable "literacy", meaning-making and action. It is especially important for learners to find out more about the functioning of economy in theory and particularly also practice. Thus, approaching the field of business through eco-social entrepreneurship is a great learning opportunity. Business and entrepreneurship are often connoted with business administration. In fact, the learning opportunities which entrepreneurship and business involvement offer for sustainable development do not have much to do with administration, but with critical reflection of social and environmental challenges and the creative development of eco-social business ideas and models.

"Take a social problem and turn it into a business opportunity" (or business idea/model), is a consequent principle of potentially eco-social entrepreneurship. Entrepreneurship is the creative development and initiation of a business, with the opportunity to base it on ethical standards. Getting involved in entrepreneurship fosters knowledge and competencies on many different levels. Successful entrepreneurship does not so much require business planning, as it does the ludic development of an innovative, original business model.

Entrepreneurship education initiates profound, intensive experiences, the initiation of school companies for example. Besides the content-based aspects of sustainability (society, economy, environment), this education potentially addresses all pedagogical aspects of education for sustainable development, such as empowerment, participation, socio-cultural expression, sovereign identity-building, mimetic learning, etc.

The economy influences – moreover, it is a medium for – the development of humankind and the planet. The task for education is not to deny the economy's importance, but to use its powerful potential for the cause of sustainability – and even more, to use it creatively. Indeed, learning about and through the economy must involve the critical questioning of neo-liberalism, deliberations about the so-called free market-economy, and in this context about

an eco-social market economy.

A diversified and diversifying "culture of innovative entrepreneurship" (Faltin 2001) can promote sustainability because it is based on the questioning of common business "solutions". Such "solutions", or patterns of economic organisation are especially represented by monopolies. A "culture of innovative entrepreneurship" (ibid.) can alter and transform economic patterns practically, creatively and tangibly. The contributions of such entrepreneurial learning input strengthen identity-building, develop businesses and foster economic and cultural diversity. Entrepreneurship is a very tangible activity that challenges the entrepreneur and his team to consider sustainability and develop their "cultural competencies". Such competencies enable protagonists to achieve sovereign mimetic arrangements with others. Moreover, they describe the capacity to generate, consolidate, communicate and innovate meaning, in this case business-related, society and environment affecting meaning. That meaning addresses sustainably successful products and productions, services and their communication (marketing). Accordingly, some of the principles of innovative entrepreneurship are (cp. Schumpeter 1989, Zimmer/Faltin 1996, Zimmer/Faltin/Ripsas 1999, Nordström/Ridderstrale 2000, Faltin 2001, 1998, 2000, 2008):

- "Cogita Differenter":

  This entrepreneurship principle states that one should "think differently".

- "Functions not Conventions":

  This principle suggests taking a bird's eye view on the socio-cultural canonical, meanings and societal patterns, i.e. on productions, services, consume. This allows to uncover and question conventions – and to test if they are functional. If these conventions are dysfunctional, they may be re-interpreted as business-opportunities.

- "Creative Destruction":

  According to Schumpeter, this principle describes the destruction of conventions in order to re-configure, re-adjust and innovate them. Creative destruction is essential for sustainable development because it incites creative and therefore potentially complex, innovative construction.

- "Discover the Available":

  Often solutions already exist; they only have to be "decoded" and referred to the problem. This means that new solutions have a socio-cultural history; they do not focus on a hasty revolution, but on profound evolution.

- "Take a social problem and turn it into a business opportunity":

  This prominent principle of entrepreneurship refers to the redefinition of problems as potential opportunities. This is a fundamental requirement for overcoming global issues and promoting sustainable development pro-

actively. It illustrates that sustainability is not necessarily expensive, but that, even in the short term, "sustainability pays".

These principles represent some central means of sustainable development and sustainable meaning-making. The difference is only only that here, they are economically specified. What makes them so relevant for sustainable development is that they promote the innovation of economy through "creative destruction", when small entrepreneurs affect monpole companies and established (unsustainable) business meanings and patterns. Current un-sustainability is rooted in previously generated, consolidated yet still communicated meanings and values, such as lifestyles and production and consumption patterns. Breaking these up - critically questioning, ludically de-canonising and effectively innovating these meanings, values, lifestyles and patterns makes it possible to maintain economic functionality, flexibility, agility and prosperity. Moreover such transformation of core business – especially through eco-social entrepreneurship – facilitates to invent sustainable business.

The above-mentioned principles have in common that they mobilise revolutionary or poietic forces in the mind of the (economic) creator. They support the economic protagonist in his role as learner and business-creator to expand the "horizon of (economic) possibilities". Timmons writes:

> "Entrepreneurship refers to the ability to set up and build something out of practically nothing; it is therefore an elementary human, creative act", Timmons (1994).

Indeed, creativity is the force that can deal with – and overcome – consolidated patterns. Creativity is an intrinsic act of the imagination. Ridderstrale und Nordström state:

> „We can not expect our clients to imagine the unimaginable. That is our task." (Ridderstrale/Nordström 2000).

Faltin emphasises the aspect of creativity in its connection to sustainable development and the solving of complex problems:

> „We need entrepreneurs who do not permanently invent new desires for people, but who respond to existing problems with social, economic and artistic creativity." (Faltin 2000).

Josef Schumpeter (1883-1946), the scientific inventor of entrepreneurship-theory described entrepreneurship as „"Turning dreams into reality." (Schumpeter 1989). Entrepreneurship education explores active participation in human development, requires communication and arrangement with others; it focuses on innovation and consolidation and it strengthens personalities. Moreover, there is a very practical benefit that comes from entrepreneurial projects in institutions, such as schools: Learners take the initiative and responsibility for the development of that institution; as entrepreneurs they contribute to its financing and a unique profile of the institution. Moreover, entrepreneurship education is an open conceptual and practical space that involves many different disciplines, methods and activities. It equips the learner with the practical knowledge necessary to found his or her own business; it is an opportunity for self-development, societal participation, environmental responsibility and job

creation.

Innovations are creative eruptions and difficult to plan, that accounts as well to entrepreneurship education: a pedagogue can for example not plan or anticipate what business learners are going to create. But pedagogues can provide entrepreneurship-sound learning environments and they can guide learners throughout the process of setting up a business. In addition to entrepreneurship education, business education is a way to provide a good introduction to and insights into businesses, which may eventually be innovated in the process.

Entrepreneurship education has three main advantages:

1. It has very practical effects for the learner who acquires shaping-competence. That learner consciously reflects upon (patterns of society), participates in market-economy and has the advantage to learn how to protect the environment. Doing business brings the entrepreneur in the position to practice and implement sustainable values actively and - as a responsible citizen of the "global village" – to shape human development.

2. In a very tangible manner the entrepreneur can apply social, environmental and economic subsidence. As entrepreneur he may be encouraged not perceive himself as a passive member or victim of an "ignorant unsustainable society", but to feel as an active co-creator, citizen and humane being.

3. Due to complex and highly dynamic entrepreneurial procedures, which also require mimetic interchange with others (partners, suppliers, competitors, friends, investors, etc), the learner strengthens and develops his own personality and indispensable "cultural competencies" in terms of progressing sovereign socio-cultural identity.

Casson states:

"The essence of entrepreneurship is being different," (Casson 1990/ cp. 1982/2000).

Referring to the principle of unity which goes together with difference, one could add: "(…) But different within a certain frame of suitability", or sustainability. Entrepreneurship requires and evokes creativity, confidence, curiosity, communication skills, stamina and constancy, including the "stamina to be flexible" if necessary. Indeed, these are constitutional assets of sovereign identity trained and approved throughout the entrepreneurship processes and business involvement. However, the direct, intrinsic motivation to get involved in sustainable development through entrepreneurial activity can be best achieved through education, which is inspired by "a culture of innovative entrepreneurship" (Faltin 2001) which concerns society and environment. Faltin assesses the tasks and potential of such entrepreneurship education:

„The economy is much too important to surrender to the economists. What is needed is the economist as artist, who regains social, emotional and intellectual abilities and who motivates himself and others for meaningful actions: The inventive transfiguration of our livelihood through a

more open and rich culture of entrepreneurship." (Faltin 2000).

Society: Community Education, Peace Education and Social Learning

Successful evolution and human development in terms of sustainability are built on networking and partnership, on cooperation rather than on competition (cp. "competitive cooperation" in chapter 1.8.7). Arrangement with others in heterogeneous groups increases collective and individual creativity. In other words, social learning stimulates the development of shaping-competence, which in turn is helpful for overcoming complex problems through the invention of complex responses (cp. chapter 3.2.3.1 for "the first dialectics of sustainability"). Moreover, mimetic arrangements with others expand the "horizon of possibilities" (cp. chapter 1.2, 1.3, and 1.4), which increases one's ability to generate, consolidate, communicate and innovate concerted socio-cultural meanings, individual identities and societal organisation patterns. Such sequacious, amenable and compliant meaning-making activates and represents meaningful development. Such vital processes of concerted participation in development are most likely to lead to sustainability (cp. chapter 3.2.5 for "integrative sustainability as converging concept"), because they enable the comprehensive inclusion and aggregation of socio-culturally diversified knowledge, "sustained" from social protagonists on all identity levels (cp. chapter 1.3.1.2). The inclusion and aggregation of diversified, heterogeneous often ambivalent knowledge is only possible if the respective community or society is culturally competent, so that it can deal with difference and subsequently transfer chaotic inputs into a cosmos of meanings.

Such "communiticated" meanings not only represent the different protagonists, they also generate, consolidate, communicate and innovate the arrangement of different protagonists and their mutual integration into an agile community. Such a community is based on the discursive generating of organisation and mimetic arrangements between community participants. Community does and must not eliminate disharmonies in power and influence, but should regulate and confine such power and influence (i.e. of individuals, political parties, private companies and other powerful protagonists of the different identity-levels) by means of competitive cooperation. The resulting meaning frameworks and the development patterns (e.g. narrations, rituals, policies) of the respective community regulate the internal organisation and external (i.e. environmental) integration. Such a community has greater potential to develop in a more sustainable way (cp. chapter 3.2.5)

(Especially formal) education, a societal form of meaning generation, consolidation, communication and innovation "from the bottom up", mostly addresses the network's smallest but central components, the individuals. Through the process of their formation and the clustering of diversified identity, individuals obtain uniqueness in terms of difference (diversity) and meaning in terms of connection (unity). Community is not only constituted by individual identities, reciprocally it contributes to the constitution of individual socio-cultural

identity. Self-realisation is only possible in relation to others; it requires mimetic inter-change. Education can therefore be effective if it addresses the reciprocal generation, consolidation, communication and innovation of versatile, sovereign individual identities on the one hand and diverse communities on the other. Especially through community-activites, community-performances and their critical as well as ludic reflection, education can contribute to both, identity-building and socio-cultural arrangement in terms of "community-building". The potential of communities to be ressources for learning (e.g. about self and others) led John Dewey to speak about the meaning of "school as social centre", calling for the socio-cultural aspects of education to be in the foreground of conventional schooling. In such a school it is part of the programme that individuals learn mutually and that the school as open-learning-society develops through inter-change with the surrounding community. This double perception of community education, focussing (1.) internally on social group processes, e.g. of schools, school classes, learners and (2.) on the involvement of learners in the school surrounding community, is a major attribute of education for sustainable development.

In contrast to animals, Homo sapiens can act consciously, which implicates his unique and explicit duty, responsibility and opportunity to conduct his organisation, arrangement, and regulation and combine these human socio-cultural patterns in order to achieve peace, a sustainable economy, and environmental integrity: The task is to overcome inertia, problematic contingency and "envelopment". Human sustainable development means the development and regulation of the global, peaceful community. This requires strong cultural, mimetic competencies and these competencies can be acquired through community life and living, through performances and celebrations.

Through networking, human beings can acquire the ability to prevent - or liberate themselves from - oppression. This applies to any identity level: individuals can emancipate themselves through community involvement. For example can social or ethnic minorities if they organise themselves well through networking, oppose their oppressors. And humankind as a whole – as global In-group (cp. chapter 3.1.3 for "global In-group") – can overcome global harassments. The reason is that agile networking mobiles multi-perspectivity, which makes it easier for humankind to reduce internal friction and adjust to the environment, through adequate, mimetic innovation of socio-cultural meanings, identities and societal organisation patterns. Examples for patterns of such adequate organisation are: global citizenship, global/good governance, participation, democracy, human rights, peace, etc. Socio-cultural diversity is central to sustainable organisation because it is the practical, vivid expression of human dignity and of participatory theory as it is promoted through democracy for example. On the functional side, diversity (and the diversity enabling framework of democracy) provides multi-perspectivity, which allows socio-cultural protagonists to access and assess development alternatives, so that they are more likely to develop adequately, sustainably.

Multi-perspectivity represents a pool of opportunities to unfold "heterogeneous unity and cohesion" (cp. chapter 1.6 and 1.6.6 for "multi-perspectivity"). In other words, a vivid, socio-cultural diversity signifies a poietic network of protagonists who mutually expand the "horizons of their possibilities" in regard to:

- comprehensive meaning making,
- the generation of sovereign individual identities,
- communitiy-building (collective/societal identities), and
- arrangements with the other (i.e. the other meaning, community, person, value, perception, causality, etc) in the form of competitive cooperation.

Community education makes it easier for learners to experience and consciously reflect upon socio-cultural diversity in their learning environment. Such learning experiences on the societal, community level are especially important because they can relate the individual with the overall human world-society.

❖ Example:

Near to a school may live all kinds of people from different countries, with different religions, jobs, biographies, values, languages, world-views, etc. Accessing this diversity brings the world closer. Talking to a priest is different than reading about religion in a book, playing together with children of other skin colours is different than to be told not to discriminate others, listening stories from old people who tell forgotten things about history, or who speak about meaning and values in life, is something else than spending the time exclusively in age homogeneous groups, etc. Socio-culturally diverse communities incite learning and indeed connect learner and learning experiences to the world – if the respective educational concept and the respective pedagogue use this resource properly.

Learning throughout socio-cultural diversity increases tolerance and the ability to deal and arrange with the other. It is intrinsically mimetic learning, which makes it possible for learners (and also for the pedagogue in his role as learner) to see things differently, which is a pre-condition for uncovering insufficiencies (disintegration) of own meanings, identities and patterns to be innovated, shaped and changed. That is especially important since the unsustainable status of human development requires for paradigmatic change and the transformation of established mind-sets, self identities and societal structures, which oppress the human autopoietic capacity.

As with "Pedagogy of the Oppressed", (Freire 1970) or put positively, "pedagogy of human cultural being and human dignity, of reasonableness and peace", community education promotes sustainable development.

In an interdependent world, known as the "global village", it is insufficient and even impossible to establish closed, autonomous communities. Self-reliance and isolation are obsolete. Sovereign socio-cultural identities and protagonists even on the societal level are inclusive, open systems, which require the other. This sovereignty can be trained, performed,

discovered, established, ascertained, explored and thereby incited through community education and community involvement. Community involvement empowers protagonists to atain solidarity.

De Haan introduces "solidary cohabitation" (in German: "solidarisches Zusammenleben") as a principle of sustainability and defines it as follows:

> "It connotes the willingness and ability of people to help and support each other, particularly in their nearest communities (relationships, neighbourhood, school, working place and god-parenthood): Moreover connotes solidary cohabitation a commitment to community services through collective and anonymous solidarity. Central is the creation of humane living situations, characterised by collective well-being." (de Haan 2000: 130).

Based on this fundamental solidarity, an ethic of neighbourhood, of the other, of reciprocity and mutuality can be created to generate meaning, cohesion and an ethics which is sustainable and which develops sustainability.

Meaning requires community and because it is a socio-cultural phenomenon, it is concertedly created orientation and framework for the creation of communities. Community education localises, uncovers and activates implicit and explicit knowledge in the learning community (i.e. a school or a neighbourhood, a village, state, or private company) and the surrounding social, environmental and economic learning environment.

A life of dignity and peace that endows the same opportunities to future generations requires agile socio-cultural diversity integrated into a globally united, arranged community. Through community education the (lifelong) learner generates social shaping-competence. He assesses and improves his role, possibilities, rights and responsibilities in the context of social sustainability meanings. He poses the questions: Who are we? Where are we? Where do we want to go and how do we get there? (cp. "Introduction" and "Overwiev: Theses, Key Questions and Structure of the Text"). Over his lifetime, the learner works to find responses and put his ideas into action. Moreover, community education helps the learner to assess human interdependence not only in social but also in environmental and economic terms.

"Internal" community education refers to the arrangement between community members. The ability to arrange with others can be promoted through all kinds of social learning, appropriate for the respective community. Some approaches for community education are, for example, performative learning (cp. chapters 1.8 and 4.1.4 for "performative learning" and chapter 4.2.2 for "Theatre of the Oppressed") and the life-situation approach (cp. chapter 4.2.1). What is central is the exposure of learners to difference, the guidance of learners while dealing with difference and the learner's ability to engage in competitive cooperation, which generates, consolidates, communicates and innovates unity in diversity. "Internal" community education strengthens the internal organisation of a community and helps the community to deal with "external" input (change of environmental, social, or economic context), arrange with other communities and their socio-cultural meanings.

"External" community education addresses the relations and involvements of an (internally) learning community with others. It refers, for example, to a school that invites people who do not belong to the core school community to get involved in school life and whose learners get involved in the social life around the school. This pro-active community involvement creates added value for many people who profit from the learning community. As a result, the boarders between communities, i.e. between a school and its neighbourhood, dissolve. This shows that the dual perception of "internal" and "external" community education is only an auxiliary and artificial construction. Protagonists, and their learning processes, are always influenced by their surrounding environment. The task of education for sustainable development is to integrate the community learning-environments into educational concepts and pedagogical practices in order to expand the relevancies, commensurabilities and effectiveness of learning. All too often community influences (in school life and learning realities) come along as side effects of what pedagogues perceive as learning; they are not sufficiently used, managed and incited through pedagogues and pedagogic concepts. This appears to be a mistake since global interdependences and competitive cooperation require community awareness and social, environmental and economic shaping capacity. The negligence of social learning and community education corrupts social meanings and values and hence sustainable development. Formal education is a prerequisite for contemporary and future human development. Hence, schools are places not only of symbolic social representation and formation, but also places of performative social celebration; community centres in the sense of Dewey, for school members and members of the community. In such a community learning-centre, learners acquire values such as social responsibility, abilities, such as social criticism or mimetic social shaping competency, and they celebrate learning, uniqueness, relationships and community life. Moreover, they learn to handle conflicts discursively and peacefully, without diminishing or discriminating against others.

Environment: Environmental Education

For environmental education the same criteria applies as emphasised in the discussions about explorative "open space" education (cp. chapter 4.1.8) for sustainable development. In this context, environmental education does not connote the process of imposing the value of intactness of environment and bio-diversity to learners. It rather enables the learner to experience the environment, to perceive ecological, economic and social system cohesions and to question his or her own lifestyle. Environmental education assists the learner in discovering and confirming the environment as an inherent component of socio-cultural meaning and societal organisation patterns. Together with economic meanings and patterns, environmentally swayed socio-culture shapes sustainability-meanings and patterns. Environmental learning empowers the learner to discover the environment as an end in itself,

to discover the aesthetics of the environment and to discover the rational necessity of biodiversity for human well-being. The learner is introduced to different aspects of the environment and is encouraged to regard it from the perspective of different scientific disciplines and various tangible (e.g. practical) and abstract (e.g. theoretical/scientific) perspectives. This includes the analyses of societal strengths, weaknesses, opportunities and threats in regard to the promotion of environmental integrity (cp. chapter 2.4 for swot analysis"). Moreover, the learner practically experiences the modes of environmental regulation, such as symbiosis, synergy, and networking, etc. In another step, the learner comprehends and critically reflects on these experiences by himself and with others. The student consciously assesses his own current and alternative roles and performs what he perceives to be the most sustainable role in this situation.

John Fien states:

> „All of the major international environmental reports of recent years (IUCN, UNEP, WWFN 1991, UN World Commission on Environment and Development 1987, UN Conference on Environment and Development 1992) have stressed that the role of education is to help students to reflect critically on their place in the environment and to consider what sustainability means to them and their communities. It also involves practice in envisioning alternative ways of development and living, evaluating alternative visions, learning how to negotiate and justify choices between visions, making plans for achieving desired ones, and participating in community actions to bring such visions into effect. These all ad up to what Jensen and Schnack (1997) call 'action competence' or 'environmental citizenship'." (Fien 2001: 126/cp. Jensen/Schnack 1997: 173-178).

"Action competence" and "environmental citizenship" correspond to what the text generally emphasises in the context of "cultural competencies" and particularly emphasises in the context of shaping-competence. The citation also shows that environmental education, community education and business or entrepreneurship education, are significantly related.

4.1.3.3 Cross-linking the Sustainability Dimensions and the Pillars of Education throughout Life

Combining the three dimensions of sustainability – society, environment and economy – with the five pillars of Delors' education throughout life – learning to know, to do, to be, to live together and to transform oneself and society – results in 15 different aspects of education for sustainable development. The following graphic illustrates these interrelations.

Figure 41: Linking education throughout life and the concept of sustainable development
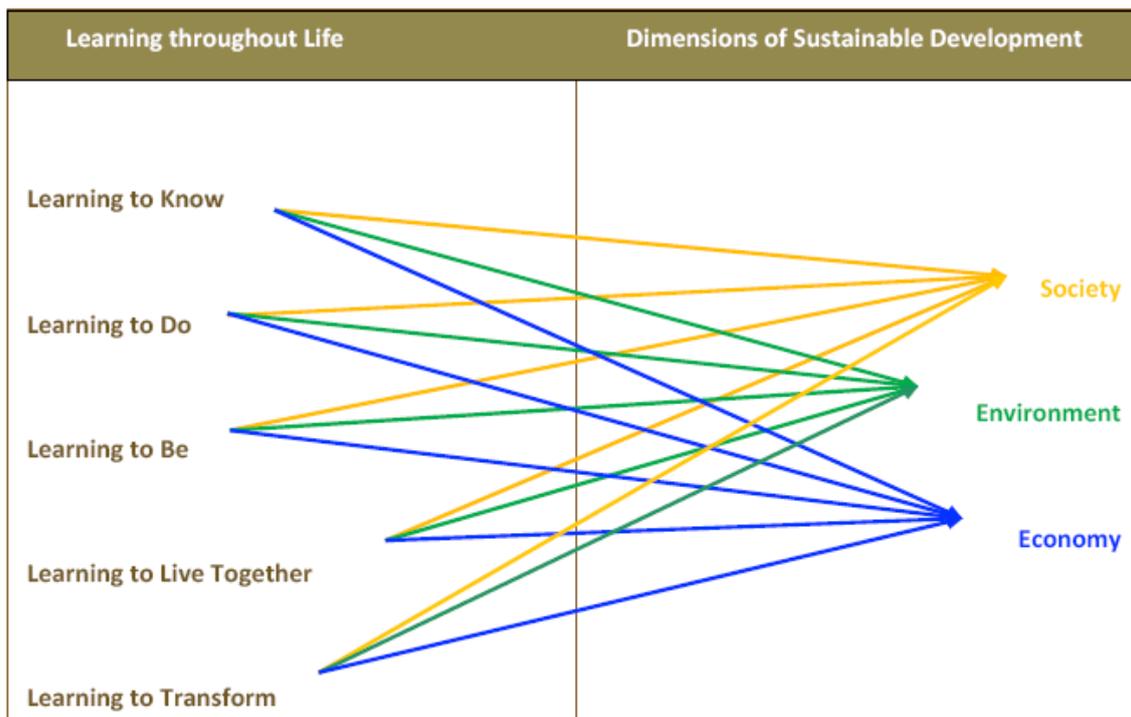
The aim of this text is not to provide a complete curriculum. This text rather makes different specifications of education for sustainable development measures. Furthermore, the text provides examples or learning episodes, for the fifteen measures of education throughout life for sustainable development. These examples are associative in character.

Hence, the aim is to initiate reflection upon the measures and to stimulate the involvement of researchers, scientists, decision makers, curriculum developers and practitioners, or any other readers. This text shall provide the general criteria for "learning throughout life for sustainable development":

Aspects and Examples of Education throughout Life for Sustainable Development:

Examples for "Learning throughout Society"

While this section of the text exemplifies implications of learning through society for sustainable development, the chapter "4.1.3.2 Society: Community Education and Social Learning" describes general aspects of learning in, from, for and through society.

1. Learning to know + Society.

This means: "Learning to know more about what society is". The task of this learning episode is to look at the features, patterns, and the socio-cultural differences and similarities of protagonists and to comprehend how societies are organised. The focus is on learning what organises societies formally, informally, explicitly, and implicitly and what role one plays.

There are languages, politics, states, rituals, small communities and "glocal" movements, modern patterns of societies, such as urbanisation and there were ancient civilisations, that failed to endure, or succeeded. There have been attempts to establish homogenous societies, which turned out to be threats to life and human dignity. Moreover, there exists a lively diversity of societies, which have own, different socio-cultural patterns, but similar modes of organisation; society is a framework for creative diversity. This learning episode facilitates the comprehension of phenomenological aspects as well as of socio-cultural protagonists within society and how they are interrelated.

❖ Practical example for (secondary) school education:

Learning can involve discourses and research about the following questions: What is organisation? What does organisation mean in nature, as well as in society (mathematics, language, culture, etc.)? What are the similarities and differences between human societies and animal forms of organisation? In which organisations/societies do I participate? Learners must find out which influences organise the school-class community, which can tell them much about the functioning of "society". There exist rituals, historic perceptions, state regulations, sympathy and antipathy between pupils, and the different members of that micro-society of the school class community have different desires, expectations, rights and duties, play different roles and have different talents and weaknesses.
This can be transferred to the whole school and the entire school community. Learners can draw an organisational chart of the school and try to visualise the different roles and hierarchies which exist in that organisation. What could be alternative designs for organising a school? Is one of the questions which facilitates to take a meta-pespective and train critical thinking by means of democracy education.
Learners can make different kinds of research (internet, interviews, literature research, etc.) about different models of state organisation: democracy, socialism, monarchy, dictatorship, etc. They can visit the company, a public institution, or any other official organisation in which for example a mother or father of one of the pupils works and make research about the different organisational aspects, including architectural settings, principles, dress-codes, rituals. Subsequently they may find out more about web/cyber communities: How are they organised? Pupils can visit for example different departments of a hospital or a municipality and ask for an organisational chart to study it. Key questions for further discussions are for example: Which failures of societal "organisation" can cause war? Which societal standards are required to prevent war and other forms or attempts of domination and discrimination?

2. Learning to Do + Society

Society is organisation, hence the question to be discussed among learners is "How is society organised?" and "How should we participate in, and shape this organisation?". The task of this learning episode is to explore ways to organise a group (i.e. school class, school, state). In other words, exploring how to generate, consolidate, communicate and innovate a community or society through networking and competitive cooperation. This includes the question, "How much cooperation is possible with others and where are the limits of cooperation? How much competition is necessary to sustain society and one's unique self-identity and where are the limits of competition?".

❖ Practical example for (secondary) school education:

In a spontaneous theatre play, pupils change the roles that are visualised in the organisational chart of your school. One student plays the teacher and other student keep their roles as student, the teacher

can join into the students group, (cp. learning by teaching, chapter 4.2.3). Students play the role of the principal and solve an imaginary or, even better, a real problem as efficiently as possible (cp. "performative learning", chapter 1.8 and 4.1.4). How would they (the students) organise the school? The aim is not only to play "realistically" in terms of mimicry, but to explore in a creative and ludic manner aspects of and alternatives for school organisation in terms of mimesis. What should be consolidated, what should be innovated? How does communication function in the process of organising the school, and which problems occur? Are there conflicts and misunderstandings, how can they be prevented and solved? What kind of communication could make the involved protagonists happier and reduce the stress typical of social work?

3. Learning to Be + Society

This means: "Learning to be (a part of) society". The task of this learning episode is to contemplate the question: Who are the others around me and how do they co-shape my personality, values, and sense of fashion, fears and happiness. And reciprocally, how do I participate in and contribute to their shaping as individuals? What unites organisations and humans all over the world, despite the wars they fight? Learning to be challenges pedagogy, not only to regard development requirements, but to respect and celebrate the learner's dignity and socio-cultural potential in the present. Ludically, it strengthens the learner's self-confidence, his right to happiness and creativity.

❖ Practical example for (secondary) school education:

Students take the example of a disabled child who gets into conflicts at school – some people are friendly, some discriminate against the disabled child. Experience/play all three roles: The handicapped, the friendly, and the discriminating students. Then the students may answer for themselves the questions:
How do I want to be treated? How would I like to be and to behave while I learn more about people in different circumstances, such as handicapped or indigenous people, or myself during moments of crisis and other difficulties. (see chapter 3.1.5, 3.2.7 for "the Golden Rule"). Students and teachers can organise an excursion, a theatre play or other school event in order to experience community. The students may identify different tasks and distribute their works, learn to take responsibility and experience tangibly to be one part of a greater whole/ community. Subsequently they may discuss strong and weak points on the organisation of the event. They may also reflect upon collaboration and competition between different people or groups (teachers, younger/older students, cliques, etc).

4. Learning to Live Together + Society

The task of this learning episode is to experience society and take an active part in co-shaping it. How do I experience my role (my responsibilities, values, etc.) in society? What makes me unique and in what ways do I conform to society? What is an ethics of neighbourhood? What is friendship and what abilities help me to arrange with others, to deal with their differences, and to respect and appreciate them? It is important to analyse one's own personal strengths and weaknesses as well as societal opportunities and threats in respect to the social, economic and natural environment if one intends to transform oneself and society. Based on such a comprehension of the gaps in - and potentials for - sustainable development, the learner can adjust his or her own lifestyle and co-shape individual as well as societal sustainability-meanings. Living together requires, but it also furthers, abilities for

mimetic arranging with others. Communicative competencies are particularly required – and furthered - through such learning.

❖ Practical example for (secondary) school education:

Students may visit someone who is seeking asylum, because he/she was a victim of (political, religious, or other) discrimination. Then, they visit a neo-Nazi, for example, in prison and talk about his/her motivation, background, etc. What (desires, such as "to have a home", or "to have security") do these people have in common and what makes these people different from one another? How could they live together? Students learn to ask, to listen, and to analyse the observations, to be patient before making any validation or judgement. They use the trip to analyse the group dynamics within the class during the excursion. What is necessary in order to live together? The learners can discuss the golden rule.
Students can also draw the "perfect town": a town where every religion and other beliefs find their place to exist together in peace. Make it an exhibition and exchange the results with a partner school in another country.

5. Learning to transform + society

"Learning to transform society" involves reflection on the different forces, which regulate and shape society, such as organisational forces (i.e. government, civil society, private sector, family, school), structural forces (i.e. education, democracy, economy, media) as well as social forces (i.e. individual, collective, political, religious, economic) and cultural forces (i.e. meaning, rituals, performances, languages, narration, values, ethics). Subsequent to acknowledging (learning to know), experiencing (learning to be) and experimenting with (learning to do) society and succeeding at approaching and arranging with the "other" (learning to live together), "learning to transform" involves the protagonists actively shaping social life. It concentrates on the benefits and difficulties that come from relations with others and it considers and practices dealing with difference, complexity, and ambivalent situations, which appear throughout mimetic learning. It strengthens the learner to perform mutual arrangements with the other person, or group and his/her/their different meanings, values, and perceptions. For the generation, consolidation, communication and innovation of socio-cultural meanings, identities and societal organisation patterns, the learner takes the social, economic and environmental contexts into account.

❖ Practical example for (secondary) school education:

Learners shall be exposed to difference: they discuss different perspectives on an ambivalent subject currently in the news, organise speeches that defend both positions of the issue. Key questions to be discussed are: How has it been possible throughout history to mobilise people for negative societal transformations, such as war, genocide or slavery? Which forces lay behind these phenomena? And how may (insights about) these human forces be used to generate, consolidate, communicate and innovate positive transformations in the context of sustainable development? What roles, for example, do the societal tools of media and education play in transformation processes? Which education and which media can transform society in a sustainable way? Which vision of society are we trying to realise, and what can the school class or the individual do to implement such visions?
Pupils reflect on the tensions between the following phenomena: abstract – tangible, individual – community, integration – exclusion, neoliberalism – eco-social market economy, local – global, cooperation – competition, young – old, myself – the other, knowledge – non-knowledge, etc. Pupils also learn more about people who have transformed society (i.e. Gandhi, Martin Luther King,

Mohammed, Jesus, Buddha, etc.). They can also learn more about manipulators of society (e.g. Hitler, Stalin and other dictators), and learn about organisations that are supposed to conduct social transformation (e.g. the United Nations, the democratic state, civil society organisations and civil society as such). Research good practice organisations and visit an environmental or human rights NGO near to you. Pupils may analyse in group-work the strengths, weaknesses, opportunities and threats of sustainable, human development. In this context, one group can, for example, focus on the role of families to contribute to human development, another on the role of media or education, on science, religion, businesses, or of the own school, of the respective government or state (in the international context) and of the individual student. Subsequently the learners discuss their observations about the cooperation in the respective working group. Students can ask each other: what dynamics occurred according to your perspective, how did you react to the others, how did others react to you, what was good and what could be better in the arranging of the working group.

Examples for "Learning throughout the Environment"

6. Learning to know + environment

The task is to comprehend the patterns (biodiversity, flora and fauna) and modes (the autopoietic ecosystem) of the environment. How does the environment function, and what challenges the ecosystem as a whole? The systemic discovery of and acquaintance with the roles of the five categories of natural life; bacteria, algae, fungi, plants and animals is particularly crucial for the comprehensive understanding of the environment. It is also essential to learn more about the four elements and their roles in sustaining and shaping the living system – planet earth.

❖ Practical example for (secondary) school education:

Study circulation systems, such as water, climate, or lifecycles. Experiment with seeds, the different elements and do research about flora and fauna near your school. With our eyes we can only see about one percent of the life that exists around us. What makes up this 1% and what the other 99%? Research the patterns, modes and elements of nature (dimension of difference) and how they complement one another, sustaining an overall cohesive, autopoietic system (dimension of unity). How do environment, economy and society inter-depend? How do human beings effect the environment through socio-cultural meanings and identities (e.g. through lifestyles, consumption and production patterns), and which roles do an intact ecosystem and rich biodiversity play for human wellbeing and development?

7. Learning to do + environment

This learning episode encourages protagonists to experience the environment. Learners explore how the environment functions. There are many different suggestions available for environmental experiments. Especially experiments concerning cradle-to-cradle, zero-emission, waste-upcycling, or carbon-neutral productions are worthy experiences (cp. "Upcycling" of Gunter Pauli 1998 and chapter 4.2.7). They relate insights about environmental systems with innovative, environmentally integrative, sustainable action.

❖ Practical example for (secondary) school education:

Pupils find out more about different forms of environmental degradation caused by human action, e.g. waste production, CO_2-emmissions from cars, industries and buildings, deforestation, water and air pollution, over-fishing, agriculture and meat production. They research out how rubbish can be used for other purposes (e.g. to build a house from bottles), and how waste can be avoided. In this context

they compare human waste production with circular systems in nature. Pupils may plant trees, practice integrated farming, or permaculture if possible, and visit a national park. Pupils may also start an own environmental initiative, such as honey production (apiculture) and learn which essential role bees play for the environment. Questions to be discussed can be: What role models exist for environmental living in urban areas? How much water do you use in your school and what kind of energy and how much? They could make an action plan for water and energy saving and implement it.

8. Learning to be + environment

This learning episode is rather simple, but essential. It encourages learners to be in nature. "Being" refers to the usage of all senses, listening, seeing, feeling, smelling, and tasting, as well as to, performative experiences, such as relaxation and action in nature. In order to sense the different, i.e. beautiful and brute sides of the environment, it is suggested to be in nature regularly, as a group and individually, and to accomplish this through lengthy nature trips.

❖ Practical example for (secondary) school education:

Go camping with the school class and experience nature through free play as well as structured experiences. Practice sports and relaxation in nature. Reflect about it for yourself and exchange observations with others. Excursions are exciting moments for pupils moments of life; excursions can be done for researching more about the questions: What can environmentally appropriate living look like and how can environmental experiences play a greater role in everyday life? Which lifestyles are required to act environmentally friendly?

9. Learning to live together + environment

This learning episode leads the learner to discover how humankind has lived with nature in the past, to understand the present situation, and contemplate what could be in the future. It highlights the interdependence of humans and the eco-system. Moreover, this learning episode concentrates on aspects of degradation, renewable and fossil energies, and ethical discussions in different countries, scientific insights concerning climate change and the opportunities and possible handicaps confronting environmental protection. Crucial is in the context of of this learning episode the reflection on current lifestyles and production patterns and strategies for sustainable development. How do human organisation patterns and socio-cultural meanings affect the environment and what patterns and meanings are required for achieving more sustainability?

❖ Practical example for (secondary) school education:

How does inappropriate co-habitation with the environment cause problems for human co-habitation, (i.e. reflect on environmental refugee situations and possible wars over water rights)? How do poverty and environmental degradation develop reciprocally in this context? Is biodiversity important and why? Find your information in libraries, on the Internet, talk with experts, take a survey with people at your school, on the street, with family members or decision makers in your area, then communicate and discuss the results. Compare the roles, rights, desires and duties of developing and developed countries in the context of environmental protection versus degradation.

10. Learning to transform + environment

This learning episode focuses on the ways - and reasons why - we impact the environmental equilibrium negatively. Based on these insights this approach to "learning throughout life for sustainable development" creatively concentrates on alternative patterns of human integration into nature. How can human beings live in an environmentally appropriate manner? One task is to find out which alternative sustainable lifestyles and production patterns exist and how they could be implemented, globally as well as locally. It is also important to understand the cohesions between environment, society and economy, explore challenges and opportunities for sustainable development and develop motivation as well as competencies for implementation.

❖ Practical example for (secondary) school education:

Students envision an environmentally integrated society. They explore the questions: which human-made, environmental problems exist and must be solved? What are possible solutions for current environmental problems? Moreover can students set up target groups who work on a chosen, particular issues. They visualise and present the results for the class and write articles for their school newspaper. Students also develop a catalogue of questions and suggestions, which refer to the problem solving of individuals (i.e. what can a student do, how can a student transform his/her lifestyle to make it sustainability-sound). Key questions to be discussed can be: Is it only necessary and pressing to transform established un-ecological meanings and structures in our minds, schools and states, etc. or can it also be fun, and eventually even economically prosperous to do so? What are the means to approach such a serious issue in a creative, ludic and fun way? If there are solutions to current problems, why are they not being applied? What can the individual learner, the school class community and the school as a whole do in order to contribute to an environmentally integrated society? Involving other students, teachers, school classes and external actors, such as NGOs or other schools requires initiative. Students explore the questions: How can this be started and organised, which challenges occur when communicating with many different protagonists, and what are the advantages and limitations to participation? How much leadership is required and what does effective leadership look like? They can develop a strategy, tasks, responsibilities and timelines for developing socio-environmental models. Subsequently they may exchange experiences, questions and good practices with other schools.

Examples for "Learning throughout Economy"

11. Learning to know + economy

This learning episode features the different building blocks of economy, such as the functioning of private companies, the concept of economic growth, the concept of sustainable development, impacts of production on the environment and the issue of poverty. Some of the tasks are to analyse the societal role of money, work and political concepts for regulating economy, such as socialism and capitalism. "Learning to know about economy" includes the questioning of the so-called "free market economy", the current, global, neo-liberal finance system and possible alternative forms of political organisation of the economy. It addresses the accumulation of power and the economic undermining of social and environmental elements by globalised companies as well as the debate concerning economic diversity versus monopolies and trade-zones. This episode questions the concepts and practices of the globalised economy and national democracies. Moreover, learners may concentrate on

economic history and the differences (challenges, opportunities, in-/equality, politics, desires, etc.) between so-called developed and developing countries. Industrialisation, colonialism and early economic globalisation, as well as the raising of living standards through the division and specialisation of labour, are all episodes or occurrences, which belong to this history.

❖ Practical example for (secondary) school education:

Discuss contradictory information, such as texts, daily news reports and documentary movies, which address economic growth and/or (un-)sustainable development. How can economic development benefit from sustainability and which frameworks (i.e. policy, ethics, incentives, education, customer interest, media) are required for the economy to contribute to sustainable development? Find out more about good practice companies in regard to economic and social integrity. Two students conduct an interview with the founder of that company and ask questions, which have been prepared by the entire class. Focus particularly on the founding stage of the company, the idea of development, and problems and solutions, which occurred during the start-up phase. Visit a private company and learn what it takes to run a business. Pay special attention to the start-up phase and history of the business, as well as to its environmental and social profile.
Discuss the (theoretical) role of the nation-state in the safeguarding of sustainability and the (factual) role, played by globalised private companies that shape un-/sustainability. Compare different political concepts of economic regulation, such as neo-liberalism and eco-social marked economy.

12. Learning to do + economy

This learning episode makes it possible for learners to actively experience (aspects of) economy. Learners *do* business, focussing on innovative, thus eco-social entrepreneurship (cp. chapter 4.1.3.2 for "entrepreneurship education"). The aim is to explore practically the question of how learners (in their roles as economic actors/entrepreneurs) can combine earning, learning and the fostering of environmental and social integrity. Entrepreneurship education is a holistic approach, which empower learners, business men and women to develop their personalities through entrepreneurial processes, which include, for example, intense reflections, communication, interdisciplinary tasks and the dealing with success and difficulty.

❖ Practical example for (secondary) school education:

Pupils look at existing services and products and try to question their logics in order to discover potential alternatives for doing that business in a better way. As entrepreneurs they may "Take a social problem and turn it into a business opportunity". The aim is to found a stundent's company or get involved in a start up.
One example is found in the field of tourism: If the pupils live in a large city they may develop a "green" bicycle tour for tourists through the city's parks and along its rivers. If there are students from many different nations in one class, students may offer personal, intercultural dinners at the homes of students. Students develop their business ideas, eventually learn relevant languages to communicate with customers, they calculate cost, income and prices, present the business for example on a website in the internet, or distribute flyers to friends, parents and people at the airport. The learners, or respectively the young entrepreneurs reflect about which tasks an entrepreneur must fulfil, which competencies are required, who can take which responsibilities ion the group and how they can share (outsource) parts of the business.
Moreover, students reflect upon questions, such as: How much money do you spend every month? Do your consumption patterns match your social and environmental values? LETS - Local Exchange Trading Systems or Schemes - are community-based mutual aid networks in which people exchange

all kinds of goods and services with one another, without using money. The students may organise such an exchange system, first for a period of one month, between two school classes. Subsequently the evaluate it, identify "learned lessons" and expand their activities.

13. Learning to be + economy

This learning episode concerns itself with the relation between well-being and work. Which role does the economy play in society and is that role supportive to a high quality of life? Do current economic patterns (e.g. consumption and production), and the current work ethos, serve human well-being or do they undermine it. Various research activities (on the Internet, in libraries, in the press, through interviews and observations, etc.) can point to linkages between high living standards in developed countries and poverty in other parts of the world. What, and how much does it take to *be* happy? How much (life-quality) do people "pay" for *being* rich, does money buy happiness or does happiness buy richness? What is it like to *be* poor? What can rich and poor people reciprocally learn from each other and how can they develop solidarity in top-down (i.e. policy and laws) and bottom-up (i.e. ethics and initiatives) approaches?

❖ Practical example for (secondary) school education:

Learn more about globalisation and global economic interweaving of companies. Talk to a young refugee or national citizen who grew up in a poor context and learn more about being poor. Draw the "vicious cycle of poverty": visualise what are the reasons for poverty, who is responsible for it, how is poverty expressed and how could it be possible, or not possible for poor people do overcome poverty? Pupils may form small groups and talk with homeless people and others near their school: what are their stories and how is it for them to be poor? Try to carry out an interview with a rich person and read in newspapers about "VIP's". Discuss the differences and similarities between poor and rich people. One task for pupils is to "think global, act local"; they ask themselves and interview experts: What would the world look like with more solidarity and what can you contribute to it? The discussion should not so much be moral, but students rather focus on really understanding empathically the life situations of people from an economical and political perspective.

14. Learning to live together + economy

This learning episode looks more closely at the role of the economy on global issues (cp. chapter 1.1 and figure 2), such as climate change, poverty, exploitation and the democracy crisis (cp. 2.1.4). What kind of economy enables us to live together in a more sustainable way, how can economy contribute to strong social cohesion and which economy is required to achieve this?

❖ Practical example for (secondary) school education:

Students learn more about the financial crisis, its effects and the reasons behind it. What would you do if you were a banker? What would you do if you were a political decision maker? What would you do if you were an adult? And what can you do as a young person? Study and discuss the Grameen Bank system and the micro-credit approach. What are their advantages and weaknesses?

15. Learning to transform + economy

The economy creates interdependences and is a powerful force for human development – or for human envelopment. "Learning to transform the economy" is the process of theoretical questioning and practical exploring of how economic forces can contribute to sustainable development. This learning episode addresses the individual and his or her economically swayed opportunities to participate in sustainable development. This particularly concerns sustainable production and consumption patterns, lifestyles, policies, as well as an ethics of neighbourhood and solidarity. How can current un-sustainability be transformed through adequate economic policy and how must the economy be transformed in order to do so? Learners explore different – possibly controversial – answers to these questions. Throughout this exploration they experience feelings of ambiguity as well as the difficulty of detecting a universal "truth". This prevents learners from getting attached to an ideology and fosters the tolerance of ambiguity. Learners find out more about their individual and collective roles in economy, for example in the context of their consume, but also in transforming economic patterns and in transforming human development through economic action.

❖ Practical example for (secondary) school education:

Read the Millennium Development Goals and learn more about their background and the problems that they address. Which strategy does the United Nations follow in order to realise these goals, and why do they fail to do so? How can top-down decision-making processes be improved? What are the decision-making procedures, rituals and patterns in your class? What is the relation between top-down decisions made by the teacher, school director, or the decision-regulating school law framework and bottom-up participations coming from the individual students or school class as a whole?
How can you participate in global decision-making through local action? Reflect on your consumption patterns: what do you consume? What do you really need and what not? Does sustainable development require less consumption, or different consumption patterns? Make a plan for more sustainable consumption. Summarise the other learning episodes concerning the economy and create an action plan for your school, school class, for yourself, your families and teachers. Communicate about it further: Write and design a flyer with recommendations for sustainable consumption and ask your parents to distribute them at their workplaces, or organise an event, such as a music event and panel discussion to which you invite relevant members of society (i.e. employees, a company chief, an NGO representative, a youth delegate, etc). You can also play the roles of these people in the context of a theatre presentation, sketch or comedy. Especially in this ludic theatrical context, it is not necessary to provide answers to the challenges, but rather to pose or evoke questions about economic establishments and un-/sustainable debates.

4.1.3.4 Conclusion: A Framework for Education

The exemplified fifteen approaches to (and measures for) education for sustainable development provide a solid framework for creative and contextually relevant interpretations, without reinventing the wheel of education. Such interpretations can be implemented into practice, trainings, curricula, auditing criteria and evaluations, educational projects, programs and laws.

The fifteen approaches to education for sustainable development are possibly adjustable to any local, or temporal context, (this does not necessarily apply to the above mentioned

examples, since they are, at times, contextually specific). The approaches unify educational measures and thereby define education for sustainable development, while promoting diversity in educational concepts, practices, policies, etc. Education throughout life for sustainable development complements various tools and methods, such as:

- The multi-disciplinarity of learning contents

This approach combines, for example, the following disciplines:

Political science, ethics, mathematics, social sciences, natural sciences, history, religion, economics, foreign language studies, and literature as well as all other disciplines taught in school

- The variety of methods and techniques:

This approach incites the usage of information and communication technologies (ICT), methods of research (accessing information through the Internet, libraries and accessing the expertise of others by talking and writing), communication and organisational skills, a sense of responsibility, the reflection and communication of experiences verbally, performatively, through art and other forms of visualisation, brainstorming, and mind mapping.

- The diversity of pedagogical approaches:

Excursions, research, learning by teaching, role-play, the conducting of experiments, group discussions, social learning, environmental learning, entrepreneurship education, mimetic learning, ludic and performative education, project-based learning, the life-situational approach, discovery learning, and intercultural education, etc.

- A multitude of competencies:

The dealing with ambiguity, friction and difference, conflict solving, experience of group dynamics, organisation skills, development of emotions, of intellectual and body knowledge in the sense of "cultural competencies" as well as of shaping-competence.

Referring to the framework of such pedagogy and learning, the teacher can only guide the class community to a limited extent. Pedagogues organise the learning performance, but in order to make the process efficient:

- The teacher must remain relatively relaxed and should not be overburdened with various tasks. Teachers can be strengthened through teacher-trainings to do so. However, success is not only in the teacher's own responsibility but concerns human resources management and organisational development.

- The students are largely self-reliant for their success and learn in relatively self-regulated manners; education aims to create learners, competent enough to shape their environment, but in order for learners to do so, education itself must be shaped by learners.
- Creative stimulations (this includes conflicts, fun and enjoyment, imagination) are perceived as the priority goals of education, even above comprehension and adequate (sustainable) conversion of knowledge into action. Whether such creative – ludic – stimulations seem to contribute directly to development or not, such positive experiences are already ends in themselves. They celebrate the dignity of socio-cultural protagonists, foster human sustainable development as "art of human being" and build the basis for mimetic learning.

Combining the "education throughout life"-pillars with the three dimensions of sustainable development, provides a model for education for sustainable development. These educational "tools" are (as is their continuous interpretation and innovation) required for sustainable development in order to transform educational planning, concepts, implementations and their dissemination.

Thus, the "education throughout life for sustainable development" guidelines are adjustable to different socio-cultural contexts and requirements. They complement– or can/must be complemented by – other approaches, curricula and settings.

The following figure illustrates the relations between Delors' learning thoughout life approach and the three dimensions of sustainable development. The resulting education for sustainable development concept (centre) is generally culturally embedded (background/circle). Culture saturates all other spheres of the educational concept.

Figure 42: Education throughout life for sustainable development
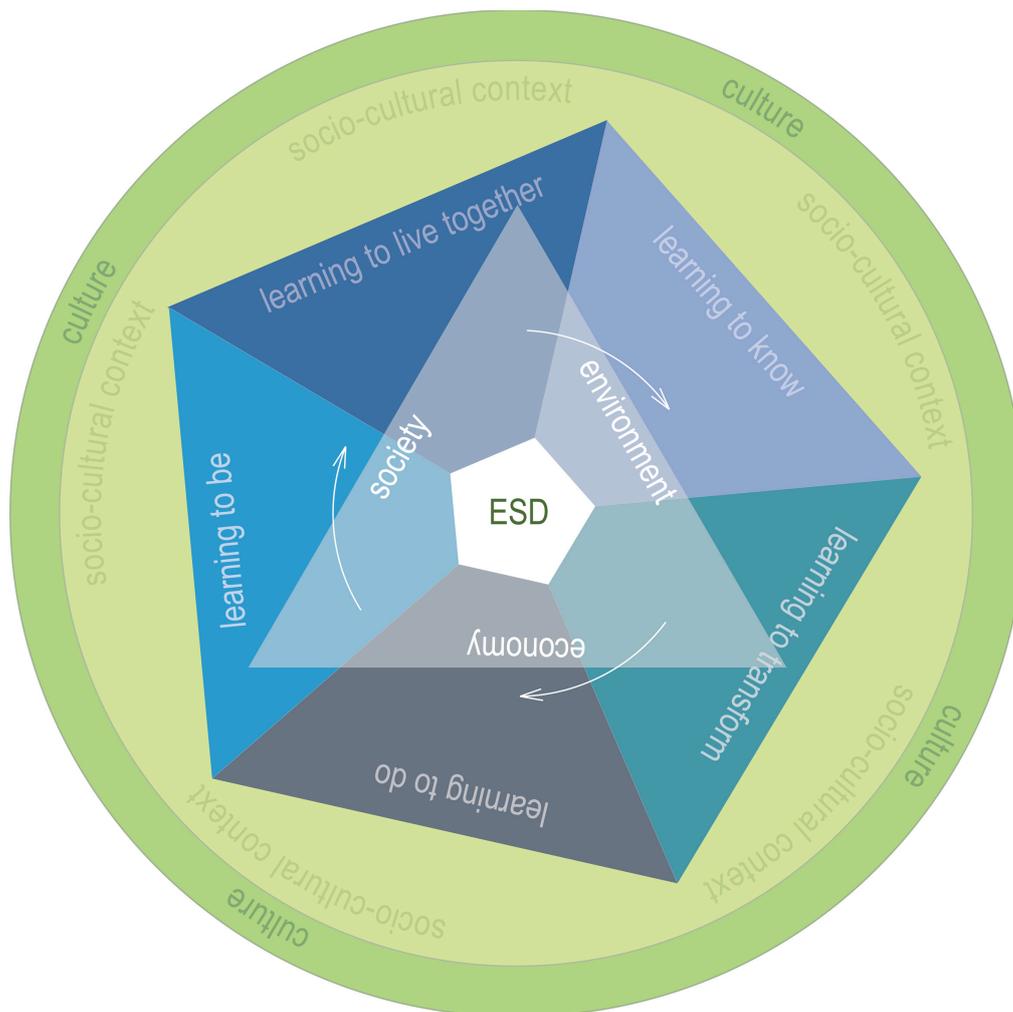
The outcome of these considerations of education throughout life for sustainable development can be further differentiated into two levels, the constitutional level and the practical level, each of which is subdivided into different categories. Figure 43 aims to further develop the measures of education for sustainable development and allocate its many different aspects in a cohesive way. This makes it easier to apply the approach.

The constitutional level defines principles and goals. While the principles are of mimetic character, furthermore promoting paricipation, the means, goals, or outcomes to be aspired are the learner's general cultural competencies and particularly acquirement of shaping competence.

The practical level denotes that the concept of "sustainability" functions as a framework to make sure learner's address the above-mentioned principles and achieve the above mentioned competencies.

De Haan states:

> "For the individual, knowledge gains societal relevance when it is (…) perceived as societal ability." (de Haan 2000: 121).

In this sense the "practical level" connotes the acquisition (learning) of knowledge in a holistic sense. Accoding to Delors (1998) education throughout life and for sustainable development promotes learning which enables the learner to know, to be, to do, to live together, to transform oneself and society. Therefore, the "practical level" is divided into three forms of knowledge:

- methodological knowledge, which are strongly promotes through adequate didactis and pedagogy, equipping the learner with general skills to live and develop in meaningful, thus dignifying and functional ways. It is the basis to use the following two "categories" of knowledge possibly in a sustainable way.
- technical knowledge, which equips learner's whith tools to participate in shaping social, environmental and economic contexts.
- Contentual knowledge (or information), which equips the learner with specific information about the social, environmental and economic contexts.

Obviously, such categorisation requires great compromises; it is very difficult and rather theoretic. Indeed, the different forms or categories of knowledge are interconnected and mutually implicative.

Education Throughout Life for Sustainable Development – from constitutional elements to practical aspects
Figure 43:

I) CONSTITUTIONAL LEVEL	**1. Principles**
	Mimetic, participative learning • Learning about the self • Learning about the other • Learning with the other about the common
	2. Means (Goals)
	Cultural competencies * • for mimetic arrangement with the other throughout life • for ludic meaning making • for progressing sovereign socio-cultural identity **Shaping-competencies *** • For comprehending the three dimensions of sustainability *and* their cohesions • For uncovering gaps in socio-cultural meanings, identities and organisation patterns • For participating in sustainable development, acquiring sustainable life skills and living adequate lifestyles

<table>
<tr><td rowspan="8" style="vertical-align: middle;">II) PRACTICAL LEVEL</td><td>1. Sustainability Framework</td></tr>
<tr><td>Education throughout life and for sustainable development
• Considering the three dimensions of sustainable development
• Considering the five pillars of learning throughout life</td></tr>
<tr><td>42. Didactics/Pedagogy, Fostering Methodological Knowledge, e.g.: **</td></tr>
<tr><td>Mimetic, participative learning
• Discovery learning
• Learning by teaching
• Life situational approach
• Entrepreneurship education
• Performative education (e.g. Theatre of the Oppressed)
• Democratic education
• Community education
• Intercultural education & global learning</td></tr>
<tr><td>3. Technical Knowledge, for example:</td></tr>
<tr><td>• Languages (reading, understanding, speaking)
• Mathematics
• Sports
• Artistic expression (music, arts, dance, theatre)
• Computer science</td></tr>
<tr><td>5. Content-based Knowledge, for example:</td></tr>
<tr><td>• Natural sciences (Chemistry, Biology, Physics, Environmental sciences)
• Social sciences (Psychology, Anthropology, Sociology, Philosophy)
• Economics
• Geography
• History
• Religion
• Political Science
• Law
• Technology</td></tr>
</table>

* "Cultural competencies" and shaping-competence (German: Gestaltungskompetenz) are similar but not necessarily complementary. The cultural-competencies-perspective rather aims to approve shaping competence anthropologically.

** Didactic/pedagogic approaches are synonymous with the teaching of (teacher) and acquaintance with (learner) methodological knowledge. They function as medium to teach the subject matter (technical and content-based knowledge). Beyond this teaching of subject

matter, didactic/pedagogic approaches promote the training of methods or of competencies, such as mimetic competence and (other) life skills as well as intrinsic motivation for sustainable Development. Moreover, these didactic/pedagogic approaches do not only further the development of learners, through their ludic, learner-based and participatory approach, they also improve the quality of life in the present. In this regard, didactic/pedagogic approaches are ends in themselves; they promote the acquaintance with subject matter and additionally they go far beyond this transmission of cognitive knowledge.

4.1.4 Implicit Performative Learning and Explicit Performative Education

Modern societies are determined by diversity, continuous diversification, and disparity (see chapter II). Therefore, (formal) education, which aims to direct societal developments, can no longer be understood with concepts of homogeneity and mono-causality. This means crucial for such education is not only the teacher who "knows", but also the self-regulated learning students who know what they require for dignified living, and in order to "play" relevant roles in society. Crucial is also not only the word and cognitive knowledge, but as well the performative action, active imagination and body-knowledge that are relevant for empowering society and individuals to possess shaping-competencies. Moreover, crucial is neither only what we already know nor to what we already refer to, but it is also "the other", the unbeknown and the non-knowledge which represent opportunities for sustainability in terms of social integration and environmental integrity. Furthermore crucial are not only the results of learning, but the lifelong, holistic learning processes themselves which dignify learning, whether it is explicitly intervening (explicit formal, informal education) or implicit (everyday learning in terms of socialisation).

Hence, adequate and transitive perceptions and concepts of education are required, which correspond to all of the controversial and disparate, native characteristics of human being (human dignity at present) and human becoming (human development). Such education strengthens the human characteristics ("cultural competencies") and empowers protagonists for autopoiesis in terms of mindsets for sustainability and sustainable behaviour.

Performative learning refers to body-based interaction. In a holistic manner it does not remain relevant only for the body, but for the entire human being and its development. Performative learning involves. for example, liminal processes (cp. chapter 1.8.5), as well as ludic interplay and creative arrangements with the "other" identity (on the individual or societal levels). Such "other identities" also represent "other" perceptions, values, roles, meanings, organisation and community patterns. Performative learning therefore describes processes of playful examination and consideration of "the other", so that the self takes the perspective, or role of the other and vice versa. Furthermore create both mutually and

throughout the performative interchange a common sphere, which is more complex than "the sum of its co-existing members". Since "life did not take over the globe by combat but by networking" (Margulis/Sagan 1986: 15.), it is the integrative and heterogeneous community, notably not the diversity assimilating and homogenous society, which enables for multi-perspectivity. Such heterogeneous, but relatively cohesive – i.e. mutual arrangement facilitating, elimination foreclosing – society increases the ability of its members to generate, consolidate, communicate and innovate collective meanings. Moghaddam states:

> "The beauty of an ideal multi-cultural society is its emphasis on finding the best cultural place for every member of that society. This is in sharp contrast to the assimilationist view, which dictates that, 'members of divergent cultural groups should discard their cultural heritage and take on the culture of the majority group'" (Moghaddam, et al, 1993).

(Collective) meaning has the role of maintaining the arrangements between its inventors and preventing their assimilation. Meaning, therefore, has the function of integrating the meaning inventors with each other and into their environment. Another term for such integration is sustainable development, which, more precisely, refers to social integration, environmental integrity and the functioning of the economy to promote social and environmental values. In an interdependent world, far over 6,000,000,000 people participate in conducting human or respectively sustainable development, and it is difficult, as a scientist, writer, as a state or organisation to define what sustainable development should be.

Therefore, education for sustainable development has two main criteria:

- First, it must be perceived as a pluralist, diverse and evolving concept, which leads to increased concertation (cp. chapter 3.2.4 and figure 38 as well as chapter 3.2.5 for "integrative sustainability as converging concept").

- Second, it must not promote sustainability values and doctrines in terms of socio-cultural *patterns* (specific characteristics of a particular socio-culture). Sustainable development must rather define frameworks or tolerant, "open spaces" for developing sustainability heterogeneously. It must, hence, promote directed pedagogic approaches (i.e. addressing society, economy, environment, global and local, past, present and imaginary future contexts), which empower protagonists with the "cultural competencies" of arrangement. These competencies connote the human-cultural, thus native *capacities of arranging* with the other. These capacities are general and inherently human techniques for the generation, consolidation, communication and innovation of meaning, identity and societal organisation.

Referring to the second criteria, modes of arrangement with "the other" are imaginative, narrative, virtual and performative. Nevertheless, in practical educational application the training of these modes must be colored with specific socio-cultural influences and the situational context.

For the case of performative learning this means that, in Germany, school-based performances could for example address economic and political decision making procedures and neo-liberal competition patterns, while in South-Africa they might refer to HIV/Aids and corruption, urban life, or address cultural heritage and development. In Germany and South-Africa, however, the mode of reference could be theatre in both cases.

Performances and performative learning adress sameness and difference and they make it ludically possible for the learner to detect and develop their connections to others, while unfolding their differences to others. Performative education is a mode for the development of arrangement competency, which is adaptable to any situation. It enables learners to performatively question, imitate, accentuate, corporally experience and thereby and analyse the condition of their societal integration and integrity, measured by socio-culturally concerted meaning. Furthermore, performances enable learners to sample, discover, consider and develop a diversity of alternative meanings and sub-meanings, identities, identifications, values, and desires.

Hentschel writes that it is a manifested aim:

> "(…) of the pedagogical application of play and theatre (…) to experiment with attitudes and perceptions, to alienate them, to recognise established patterns of behaviour, and to re-construct, innovate and adjust them." (Hentschel 1999:20).

Performances take learners into "other" worlds and introduce alternative perceptions in relatively harmless, ludically, mimetically and stimulating ways.

Thereby learners can – in diversified and dynamic manners – develop their own, unique images, imaginations, practices and visions of required development alternatives in order to lead their own – and societal – identities towards more sustainability. This leads to heterogeneous identifications, identities and meanings by means of maximum concertation, self-other-arrangements and diversified visions of an overall sustainable community and framework (unity). In other words, performative education can incite and facilitate sustainable development through the promotion of socio-cultural alteration. A functional description of this socio-cultural diversity is the concept of multi-perspectivity (1.6 and 1.6.6). Socio-cultural diversity enables identities on all levels, i.e. an individual, family or humankind as such, to generate, consolidate, communicate and innovate different (i.e. local) responses to shared complex and dynamic (i.e. global) problems, such as the contingency crisis, the democracy crisis, poverty, and climate change (see chapter 1.1. and figure 2 for "global issues"). This pool of alternative perspectives is the basis for diversified approaches, which generate answers that are more complex than the problems challenging the community.

❖ Example:

The example aims to show how scientists learn, how they generate multi-perspectivity and how they develop comprehensive knowledge.

Scientists develop multi-perspectivity through a multiplicity of publications and conferences about certain topics. The written words in their publications, and the spoken words and performed actions at their conferences are based on mimicry – imitation. In mimetic ways, and through the (varied) repetition of established narrative and performative expressions, they communicate new perspectives on the respective topic. There are, for example, affiliating performances, such as clapping and shaking hands and opposing performances, such as dismissive body-posture and abstention from clapping. Scientists are successful with their mimetic efforts if other scientists refer to their perspective, integrate it into renewed theories and thereby innovate and develop insight. Through this ritualised interchange between scientists, the scientists – in their role as learners – can reciprocally "expand the horizon of their possibilities" to generate, consolidate, communicate and innovate knowledge. This also shows that scientists aim to differ from other scientists (competition) – in order to develop knowledge collectively (cooperation). This exemplifies the theory of "competitive cooperation" (chapter 1.8.7), which:

- defines the ritual development-mode of sustainability
- defines sustainable development as a dynamically evolving and naturally diversified approach (cp. chapter 3.2)
- shows that a community (i.e. the learning community of scientists) must not be harmonious and homogenous, but that a learning comm-"unity" must be relatively controversial and diverse (cp. chapter 1.8 for "rituals and performative learning").
- is promoted through mimetic performative learning and ritualised "communitication" processes (chapter 1.8.4 and 2.2.2 for "communitication").

Just as with life itself, formal and non-formal educational approaches are also performatively interfused in an implicit manner. Nevertheless, at present, explicit performative education concepts do not play a crucial role, neither in the organising of learning communities, nor in the empowering of learners to performatively generate, consolidate, communicate and innovate socio-cultural meanings. In current educational practice, formal and non-formal meaning-making appears rather cognitive and a-holistic, which has the effect of an irresponsible deficit in moments of complex and dynamic global challenges, which require concerted, sustainable answers, based on relevant meaning. What is "relevant" must not be taught to learners, but discovered by them, based on generally cultural, thus human-native meaning-making modes, such as performance. Performative education *can* complement education – and in terms of sustainability, it *must* explicitly be integrated in cross-cutting manners in any educational approach. In other words, education for sustainable development can not afford to disregard a central educational medium – the performance. Performative learning empowers protagonists to live in dignity and move towards effective human development. It is therefore a principal asset of education for sustainable development.

4.1.4.1 Performative Learning: The Human "Being and Becoming"

All performative learning approaches enable learners to enter new, unknown worlds, for example, of values, knowledge, perceptions and expectations. Throughout mimetic performances learners experience ambiguity through their differences to others, but they also experience similarities and connectedness with others. Rituals performatively guide the learner in approaching, relating to or arranging with the "other".

Performative learning processes enable protagonists to reflect on – and literally play with – their "own" socio-cultural patterns and conventions and it dynamises otherwise static, seemingly self-evident meanings, such as values and norms, desires and self-other-perceptions. Performances "communiticate" socio-cultural networks, such as societies or movements (cp. chapter 1.8.4 and 2.2.2). They bring people together, depict differences and connections between people, and foster competition within a cooperative framework. Hence, socio-cultural meanings are performatively negotiated, which means that they are generated, consolidated, communicated and innovated. Not only the resulting meaning framework, but the mimetic performance itself, creates, shapes strengthens and sustains society. Throughout the performance, all protagonists, i.e. actors and observers, can experience that seemingly self-evident meanings (represented through socio-cultural patterns) are actually alternatives and obligations are actually options: meanings and obligations must not be as they are, thus they can be adjusted if required for a better integration of their inventors. In this sense, protagonists realise that a pool of alternatives does not jeopardise, but safeguards the integration of different protagonists in a cohesive network, which stabilises the network, while the assimilation of differences can weaken the network. Performative learning dissolves (not the existence but) the structures of norms and "what is normal", in order to subsequently confirm or innovate these norms. The performativity of societal and individual socio-cultural identities (and of education), therefore, represents the capacity of reaction and self-organisation of the respective identity. Performative learning dissolves conventions, which applies as well to the norms and "what is normal" in relationships between different actors, so that every relation gains unique authenticity and immediate truth through steady performative reconfiguration, application and presentation. This strengthens the sovereignty of the socio-cultural protagonist in his role as learner and societal participant.

The cultural power of performances to make meaning is significant, especially in moments of unsustainable human "envelopment", contingency or in moments of rapid and profound change in the socio-cultural cosmos. Performative learning is a way to utilise this power, these "Hidden Dimensions of Education" (Wulf 2006) for constructive ends and a way to celebrate human dignified being – through education. That means performative learning celebrates human being and thus, it is not only a means for the "formation" of learners, but a means in itself. This makes performative learning a substantial tool in education for sustainable development. In sumary this means:
- Performances dignify human being and performative learning is not only functional, but an end in itself; it is a characteristic of humanity.
- Ritual application and performative learning are human inherent modes of organisation, accessible and practicable for everyone. In contrast to policy, specific

disciplinary knowledge, trained competencies, such as computer skills or mathematics, these modes of human meaning-making and identity progression are "incorporated" and native. They are low-threshold opportunities for learners to participate in sustainable development.

- Performances are fundamentally important for meaning-making, "communitication" and the incitement of comprehensive human development. This is not due to their usefulness as strategic tools or because performative education leads to rationally anticipatable outcomes, but rather performances have ludic, a-rational elements with unpredictable outcomes. This fact safeguards the learner's dignity and opens up creative space for self-regulated, participatory learning. Performative learning can also be described as mimetic interplay between self and respective other. The ludic character bestows performative learning with aesthetics. "Ludic", however, does not necessarily only connote joy and fun, but rather refers to creative learning per se through experiences and trial and error, and throughout the comfortable and uncomfortable moments of life, of living with others and of lifelong (mimetic) learning.

In his "Über die die Ästhetische Erziehung des Menschen" (German: about the aesthetic education of human being), Schiller states:

> „Human beings only play in contexts where they are fully human, and they are only fully human when they play." (Schiller 1795).

Thereby, play loses something of its gamesome, "cute", and romanticised characteristics and moves into the centre-stage of human being and human becoming in terms of human development. Mimetic learning involves intense moments of solidarity with others as well as moments of relative exclusion, it elucidates similarities and differences and is inclusive of friction, controversy, conflict and happiness.

According to Schiller, and referring to the combination of the functionality of performative action to "educate" learners and the opportunity for learners to celebrate their dignity through performative action, the task of aesthetic education has two main characteristics:

1. Art, aesthetic education and therewith also performative learning are ludic, aesthetic experiences of personal (well-)being of learners.
2. Art, aesthetic education and performative learning have the ability to transform society. This is possible through the "sensibilisation of the human being" and the "refinement of character" that happens through sovereignty.

In the spirit of Schiller, it can be argued that an ethics – for example, of sustainable development – can not be imposed. Moreover, the imposing prevalence of cognition and

conscience in society and education does not provide an exit from unsustainable socio-cultural patterns, or solution to unfold the full cultural competences as it goes against human nature. Education for sustainable development must be an education, which continues throughout life (cp. chapter 4.1.3), and it can not afford to squander the potentials of performative learning.

This suggests that education should orient itself towards real life situations because they result from, and represent socio-cultural patterns. And it suggests that education should mimic meaning-making modes, such as explicit performative learning. Such education empowers learners to (unfold competencies to) shape their social, ecological and economic local environment in respect to global contexts through different and unique approaches.

Although the world is shrinking and protagonists are increasingly interdependant, a successful education for sustainable development with a performative character is not an automatism. Human beings are capable of autopoietic organisation. Nevertheless, this potential does not necessarily describe reality; human beings and societies can fail themselves. The collapse of many so called "high cultures", or respectively of ancient civilisations prove this strikingly. Mimetic arrangement, interconnection, networking, interplay and interchange are abilities, which characterise the human being as such. They are human-native implicit competencies (cp. chapter I and 4.1.2 for "cultural competencies"). Yet, if our implicit potential alone were sufficient to regulate human development, there would be no such thing as unsustainable development and no need for formal and non-formal, explicit attempts at education on the part of states, NGOs and international organisations, such as the UN. Current human development is unsustainable and previous educational efforts could not avert this situation. Hence, there is a great need for adequate education and development interventions and a mental paradigm change is required – to be achieved through explicit innovated education. (Explicit, formal) performative learning is one central and cross-cutting approach that enables learners (such as students and teachers, children and parents, civilians, government representatives, and business managers) to engage in mutual, mimetic arrangements with the other in order to generate, consolidate, communicate and innovate concerted, appropriate meaning and to possess shaping-competency. It is difficult to anticipate (the characters of) sustainable socio-cultural patterns and to explain what will be "appropriate". The theory of sustainable development, therefore, is an open, imaginative, performative, educational and conceptual space (cp. chapter 4.1.8 "open space"), which directs us towards social integration, ecological integrity, and economic proportionality in order to safeguard the freedom of choice and the dignity of future generations, preventing the contingency of human development and the escalation of human envelopment. In this regard, education for sustainable development must be an open space

where learners can gain sovereignty through mimetic learning and discover, uncover, explore and comprehend economic, social and environmental contexts as well as cohesions, challenges and solutions. Performative education can mediate such learning. Moreover, it encourages the learner to traverse demarcations, for example, between learning and creating, between acquaintance and shaping, between self and other, between past, present and future, between competition and cooperation, between being and development, and between art and constructivism.

Referring back to Schiller, the arts and performances provide assistance when traditional approaches to education and societal organisation patterns fail. Art is the process of taking alternative perspectives on meaning, on society, on perception; it represents the other and makes the other and the other perspective on us accessible. This makes the arts, and performative actions, highly relevant tools for analysing the "human state of art" in terms of the human status quo of integration as well as of development by means of a situation or gap analysis. Through the arts and also performances socio-cultural protagonists, and as such learners, can pose the questions:

- Who we are?
- What is the context we live in?
- What do we want to achieve and dream about?
- How can we get there? (cp. "introduction" and the structure of this text, which suggests implicitly that science, intrinsically is an art).

Art, furthermore, practices differentiation – of meanings, socio-cultural identities, of imaginations, perceptions, world-views, narrations, performances, etc; that means it moves in "spaces in-between", can traverse demarcations and explore the unimaginable. Education which aims to support the identity building of sovereign learners with own minds, able to think critically and not to depend on conformity must be oriented much more towards the procedural methods or modes of the arts.

Performance-art is a temporary event experienced by actors and observers. (Ever-day) performances in contrast, and particularly ritual performances, insert directly into every day life; they shape lifestyles and life proceedings. Performances conduct and co-shape biographies. They enter and influence, for example, social, therapeutic, political, or aesthetic aspects of human lives. Performances bring strangers together and incite "communitication". Such performances traverse demarcations between art and life, art and media, art and events, art and sciences, as well as art and social-pedagogies. In public space, performative (for example, artistic) interventions uncover societal (i.e. social, environmental and

economic) challenges and can make them visible. Moreover, performers develop, often together with unpriviliges parties, ludic suggestions or solutions that are relevant to the situation.

❖ Example 1:

In the European middle age people were often not allowed to speak freely and express their desires, or to participate in meaning making, as these were privileges for the clergy and gentry. Art, however, offered opportunities for people to shape and communicate folk-knowledge (folklore = "wisdom of the folk). Minnesong, narration, such as fairy tales and particularly also fables in which animals took the roles of humans are examples for such social artwork.

❖ Example 2:

The theatre play "Ab Heute Heißt du Sarah" (German: From today on your name is Sarah) of the Berlin Grips Theatre permits the audience to identify with a Jewish girl during the time of National Socialism. The play shows what it means – for a normal girl – to be stigmatised, excluded and persecuted for no reason. Moreover, the play promotes the opportunity for learners to find out and experience that there is no possible reason to stigmatise, exclude and persecute human beings. The effects of this performative theatre presentation are possibly more profound and in a way more "sustainable" than that of reading a description about the play or an article about racism.

❖ Example 2:

Many Greenpeace activities have artistic elements and are performative: Activists aggress whale hunting boats in order to protect whales, climb on factory chimneys in order promote appropriate filters, and sit on jungle trees in order to protect rain forests – as well as to raise awareness for these causes.

In contrast to theatre performances, performance art has no necessary thread, predicted or predictable course; usually, it is a rather spontaneous composition. Performance artists compose heterogeneous flowing streams of images, which require and evoke new strategies and categories of perceiving. One of the main characteristics of performance art is that performers do not play predetermined roles but interact due to spontaneously erupted strategies, which evoke the performative body-images. Thereby, performance-art provokes and confuses observers and causes them to ludically, creatively and mimetically generate new meaning or "non-meaning" (as alternative component of meaning), so that observers can relatively canonise and validate the observed scenes.

Some characteristics of performative learning are:
- Detecting and creating differences between protagonists and reveal organisational gaps (deficits of integration/ arrangement of protagonists)

Performances can show, present and exhibit differences and cracks (deficits) under the surface of relationships, community, of socio-cultural meanings, or of socio-cultural identity patterns. This detection prevents socio-cultural protagonists (actors and observers) from blind devotion to consolidated socio-cultural meanings, identities and patterns, etc.

Communities, such as families, also create different performative organisation patterns, which makes it easier for them to develop togetherness.

- Detecting and creating similarities between protagonists and facilitating mimetic arrangements with others

Additionally, performances can uncover, explore, and generate, consolidate, communicate and innovate mimetic arrangements between people by means of "communitication" and social stability and sustainability.

- Exposure to, and dealing with ambiguity

Actual performances prompt observers to generate meaning spontaneously and by themselves, with individualised, diversified results. This means that different individuals (dimension of diversity) create a collective performance (dimension of unity), which is then individually interpreted (dimension of diversity). Such feed-back loops shape society and hold it together. In this context, performances appear as the sampling, exploring and connecting of antagonistic seeming phenomena. For example, performances deal with approximation and ejection, construction and destruction, ambiguity and causality, opposition and affiliation, unity and diversity, attachment and detachment.

The observers of performances often must actively search for and create meaning and sensuous stimulation *in-between* contradictory meanings. Thus, observers are urged to deal with bits of enjoyment, with fragments of "understanding" and incertitude. Often this means for the learner, entering an irritating, provisional, unknown and orientation-less sphere. Education can build competencies when exposing learners to – and guiding them through - such experiences. The aim of education must not be to prevent the failure of the learner, but to equip the learner with performative options that facilitate success and the ludic dealing with, as well as the utilisation of, possible failure experiences.

- Requiring and shaping sovereign socio-cultural identities

Performances empower protagonists with the boundary-traversing ability inherent in aesthetic thinking; this means that performances enable the liminal competence of protagonists to traverse contradictions, resist dichotomy, avoid potentially contingent situations and to deal with difference and complexity. This in turn incites or empowers the learner to perform the "other self" and hence to innovate his or her own self-identity performatively. Performative learning teaches the performer to allow himself to be affected by the respective "other", to relate to and arrange with "the other". Such processes expand one's common "horizon of possibilities" and dignify their lives. Performative learning thereby promotes the initiation and incitement of sovereign identities – sovereign to approach, demarcate, relate to, and arrange with "the other" as well as the other elements of their own, dynamic selves (cp. chapter 1.2 et al. for "sovereign identity"). The aim is not explicit

revolution, but rather the implicit evolution or development of an integrated and integrating self.

- Bestows life with aesthetics

Performative learning creates biographically and socio-culturally unique "tattoos" (Peter Sloderdijk) on people. Performative learning is the process of "aestheticising" (not "taming", but utilising and celebrating) the wild, expressive, tabooed, hidden and surprising aspects of life. Obviously, aesthetic performative learning must be determined by the principle of competitive cooperation in order to promote sustainability. It rules out domination, for example, in the form of sexual abuse.

- Mediating tangible, low-threshold "communitication"

Performative learning is a tangible, low threshold and contextually relevant aspect of implicit learning and explicit education, which incites sovereign identities, "communiticates" societies and regulates their organisation. This means that performative learning not only has indirect and abstract effects on performers and observers, but it works with particular and (for example locally, historically or socio-culturally) specific themes and motives of the learning performers. It involves the self and the other physically. This makes it tangible and immediately relevant to local situations with possibly global contexts and it is applicable by any human being because performative learning is intrinsically human, even more so than reading, writing and mathematics, which have to be explicitly learned and taught.

- A means to sustainable development and an end in itself

Performative learning is not only body-expression and -impression (body-language) or tool for participating in development, but it contributes to human self-making and is an essential attribute of the Homo sapiens, the wise human. As such, education for sustainable development is a way to open space for performative learning and being. Performative learning, in turn, is a medium for the regulation of human development; it is an intrinsically human and humane "cultural competency". As such, it must be explicitly integrated into relevant education for sustainable development.

Performances make it possible for protagonists to switch between the common and the uncommon, between the self and the other and between construction and deconstruction. The transition and "transgression" of corporal and mental orders lead to the disturbance and therewith to the expansion of established, determined patterns of experience, interpretation and meaning. Education for sustainable development applies performative learning in order to promote:

- the sovereignty of learners,
- their performative "cultural competencies",
- the learner's capacities to perform mimetic arrangements and
- the learner's capacities to be (unique, emotional, agile, healthy, etc).

Performative learning achieves these things in a ludic and tangible low-threshold (easy comprehensible, experiencable and applicable) manner, involving the body and considering the – for example, social, environmental or economic – context. (For a practical example see chapter 4.2.2 Theatre of the Oppressed")

4.1.4.2   Conclusion: Performative Learning for Sustainable Development

"Essentially people should learn to adapt to their bodies, the basic foundation of personality.", states the UNESCO Commission on Education and Development, (Faure 1972: 68). The commission discusses the necessity of aesthetic activity as follows:

> "Today's cultural values happily incorporate a natural esteem for physical well-being: a renewed appreciation of the body as the primary source of vitality and physical harmony, aesthetic enjoyment, self-confidence, personal expression and emotional experience. Mastery of the body, of its powers and qualities requires knowledge, training and exercise. (…) The physical, intellectual, emotional and ethical integration of the individual into a complete human being is a broad definition of the fundamental aim for education." (ibid.: 156).

As part of the International Institute for Global Education, Anderson states:

> "Peace is as much a process as a goal, so it is necessary to allow students to practise peace through experiences that promote peaceful behaviours such as co-operation, compromise and negotiation." (Anderson 2002: 8).

Anderson develops this perception and relates peace education to performative, or as he calls it, activity-based learning. He states:

> "Activity based learning maximises the opportunity to harmonise the medium with the message. It increases students' involvement and validates the process of learning. In this process, teachers are not the only sources and transmitters of knowledge. Rather, teachers are expected to play a critical role in debriefing, by essentially building knowledge around the learners' own reflections on their involvement in the activity. Interaction in the activities widens the scope for learning. The dynamic interplay of ideas and perspectives creates its own momentum that can lead to unimagined outcomes from which every participant can benefit. In addition, activity-based learning incorporates multiple learning styles – often within the same activity, as students move from individual work to pair and group discussions.", (ibid.).

Self-confidence as well as confidence in others and in the positive development of a relationship, is central to an ethics of the other. This confidence can be nurtured, not only mentally, but also physically or performatively.

❖ Example:

Dance, for example, allows the dancer to approach the other and perform temporary community. Thereby, dance makes it possible for dancers to sample self-other arrangements ludically. Moreover, dance allows dancers to mimic traditional movements as well as to innovate this tradition through new interpretations. Dance is an active and ludic interplay between the imagined, the expected, the desired, the canonical and the unknown.

Performative lifelong learning mimetically transforms societal organisation, socio-cultural identity and meaning generations, consolidations, communications and innovations, it uncovers organisational gaps, samples diverse alternatives and thereby strongly influences and directs human development. As an ethics of sustainability can not be imposed, it must

develop through participatory, diverse, sustainability-converging approaches. Moreover, sustainable development requires an education that does not promote doctrines or anticipate truths, but which empowers human protagonists with the competencies to conduct development in relevant way. The current belief is that this must be a cohesive development with social, environmental and economic foci. For education, performative learning makes it possible to achieve these requirements in a tangible, low-threshold manner, involving the body and human-inherent capacities.

The power of performative every-day-life knowledge and learning, as well as the requirements of an education for sustainable awareness, for "sustain-ability" and for appropriate development, make it inevitable for explicit (i.e. formal or non-formal) education to take advantage of performative learning potentials through performative education practices and pedagogical concepts. Performative learning provides an open space for learners to develop their identities and cultural- and shaping-competencies through mimetic performative arrangements with the other.

Just as with performative education, performance art, which is another explicit application of performative phenomena, generates irritations and frictions and stimulates performers and observers. Performance art and performative education allow for mental and corporal aesthetic experiences. These aesthetic experiences are related to the experience of – and experiments with – difference. As mentioned before, these experiences and experiments address contradictions, breaks, disruptions and inconsistencies of community, meanings and identities, as well as they address desires of those who experience and experiment. Through performative acts, these differences become visible, comprehensible, and criticisable.

Besides the fact that sensuous stimulation and experiences are ends in themselves, performative experiences and experiments should be a paramount objective of education as such and of aesthetic education for sustainable development in particular.

Performative education mediates

- The ludic sampling and experiencing of the "world"
- The forming, or performing, or the performative shaping of the world and social, environmental and economic "realities" (contexts and challenges)
- The generation of knowledge and learning in a tangible, low-threshold manner

Performative education equips the performer with mimetic competencies, the ability to engage in mutual arrangement with the respective other and with "sustain-ability".

For every human being and socio-cultural identity on all levels (cp. chapter 1.3.1.2 and 1.2), interactions, experience-based (and hence experimental) learning, and changes in perspective are important elements of successful educational, or learning processes.

For these reasons, the "Hidden Dimensions of Education" (Wulf 2006), such as processes of interaction, dramaturgical proceedings of speaking, narrating and acting, as well as corporality and performativity must be moved into the center of pedagogical and educational concepts.

Chapter 4.2.2 addresses the Theatre of the Oppressed, developed by Augusto Boal, which concretises a possible approach to performative education.

4.1.5 Knowledge – Implicit and Explicit

Everyday-knowledge is ritually encoded, performed, but also performatively created and acquired. Everyday-knowledge and learning mobilise autopoietic "cultural competencies". Therefore, just as with everyday-knowledge, autopoietic "cultural competencies" are indeed determined implicitly. They must not be obtained through formal and explicit education in order to function. Every human being is inherently culturally competent, although the potential of "cultural competencies" for shaping the social, economic and environmental contexts is not necessarily used to its full capacity. This cultural capacity building, rather than the reinventing of meanings and identities, is the task of formal education.

In summary, "cultural competencies" are inherently human and implicit. Besides this implicit capacity, humankind is also able to possess knowledge explicitly. Such explicit learning, for example, leads to cognitive, theoretical, and methodological knowledge. In this context, the role of knowledge relates closely to (cultural) competencies. Admittedly this "knowledge" appears to be holistic, as it embraces the explicit as well as the implicit "cultural competencies".

De Haan states:

> "For the individual, knowledge gains societal relevance when it is not only considered as participation in social capital (Bordieu, Böhme), but especially when knowledge is perceived as societal ability." (De Haan 2000: 121).

Nico Stehr contributes to the discussion by declaring that:

> "Knowledge can be defined as capacity to action, viz. as the possibility to initiate something." (Stehr 1999: 16).

De Haan further develops this concept, stating:

> "Knowledge is not defined as available information, but as the ability to make precise statements about facts and ideas, as well as to communicate and utilise those co-creatively in the context of deliberated social action." (De Haan 2000: 136).

In this context, John Fien defines knowledge, which is required for sustainable development holistically and far not only cognitively as:

- *Awareness*: To help individuals, groups and societies acquire an awareness and sensitivity to the interdependence of natural, social, economic and political systems, especially related to questions, issues and problems arising from the processes of sustainable development.

- *Knowledge* [as sub-category of holistic knowledge]: To help individuals, groups and societies gain a variety of experiences in, and a basic understanding of, the knowledge and action competencies required for sustainable development.

- *Values:* To help individuals, groups and societies acquire feelings of concern for issues of sustainability as well as a set of values upon which they can make judgements about appropriate ways of acting individually, and with others to promote sustainable development.

- *Skills:* To help individuals, groups and societies acquire the action competence – or skills of sustainable citizenship – in order to be able to identify and anticipate problems concerning sustainability, and work with others to resolve minimise and prevent them.

- *Participation*: To provide individuals, groups and societies with opportunities to be actively involved in exercising their skills of sustainable citizenship and be actively involved at all levels in working towards sustainability, (cp. Fien 2001: 128, 129).

The World Conference on Education for All (Jomtien, Thailand, 1990) depicted basic learning needs as a form of general knowledge. In the resulting World Declaration on Education for All is stated:

> "These needs comprise both essential learning tools (such as literacy oral expression, numeracy, and problem solving) and the basic learning content (such as knowledge, skills, values, and attitudes) required by human beings to be able to survive, to develop their capacities, to love and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning." (UNESCO 1990; World Declaration on Education for All, Art. 1, paragraph 1.).

Implicit learning tools are, for example, rituals as a medium for meaning-making and the usage of the body as an instrument for performative expression, learning and communicating. Explicit learning and communication tools are, for example, language, reading and writing skills, mathematics, acquaintance of (learning-) techniques to accumulate knowledge and the conscious perception of cohesions between society, environment and economy.

Methodological (mimetic knowledge, capacity to arrange with the other), technical (e.g. mathematics, or reading skills) and content-based (e.g. scientific knowledge) knowledge can also be understood as results from – and tools to facilitate – mimesis, arrangement and integration.

Implicit knowledge is often composed of methodological knowledge, for example, the capacity for generating, consolidating, communicating and innovating socio-cultural

meanings and identity together with others. Implicit learning mainly impacts attitudes and values, notions for socio-cultural canonical and meanings. Implicit learning mediates folk-knowledge.

Explicit knowledge is often composed of content-based and technical knowledge such as theoretical information and intellectual comprehension (of social, economic, environmental system cohesions). Explicit learning is often invented by formal education, which in turn tends to concentrate on passing on explicit knowledge, such as technical and content-based knowledge. This reduces the capacity of such formal education to promote sustainable development, shaping-competence and "cultural competencies". The question is whether it is possible to foster and shape implicit knowledge formally. However, it is possible to complement formal education with a combination of explicit and implicit learning and therewith to consider, for example, body activity, performative education and experience- or project-based learning.

Habermas states:

> "Undoubtedly the individual's search for authentic self-expression and identity requires a linguistic, cultural and inter-subjective medium for expression, interpretation and communication." (Habermas, 1999: 52f).

According to Gergens, the self utilizes his explicit and implicit abilities to approach the other, reflecting and amplifying alternative socio-cultural meanings, identity-compositions and societal organisation patterns. Thereby the self can – in a sovereign and autonomous manner – escape from what a culture provides, *or* it can confirm socio-cultural settings. Moreover, the self can re-evaluate or innovate socio-cultural settings, (see Bruner 1999: 118, 119).

Education for sustainable development contributes to the cultivation of knowledge and empowers protagonists to perform sustainability-sound knowledge management in the form of scientifically substantiated humanism and "savoir-faire". This prevents a random and irresponsible meaning-making, identity progression and human development. Thus, knowledge for sustainable development pre-structures and thereby fosters sustainable results, for example, in companies (respecting and stabilising social and environmental standards), public organisations (promoting democratic values, controlling politics and economy, etc.), politics (financing of educational systems, determining economic policy, use of paper in the office, etc.), family life (economising electricity, equality of family members and participation in decisions, etc.) or personal lifestyle (sustainable consumption patterns, tolerance, appreciation of nature, dealing with difference, etc.).

Besides the explicit dimension of considering and deliberating an issue, such as the degradation of the environment, there is the implicit dimension of imagination, which plays a role, for example, in the shaping and perceiving of the issue.

Reality is culturally relative, intentionally defined and rooted in imagined perceptions. This means that imagination creates and interprets reality (cp. chapter 1.7). Both, the perception and experience of reality are created through the imagination, so that reality itself is a mental, imaginary product. For this reason, imagination is also the creating and shaping force for pre-structuring and conducting consequent action. Reciprocally, action and experience stimulate imagination. Reality is not only shaped through action, reality is also an act of imagination, moreover, actions often result from imaginations. Therefore, shaping-competence has dual dimensions; it is implicit and explicit. Generally speaking, shaping-competence is closely related to the capacity to envision a sustainable future or to shape a future vision. Moreover, shaping-competence connotes the capacity to achieve the implementation of that plan for the future. Education for sustainable development stimulates the creative capacity of human beings to form visions and, ideas as well as empowering them to take consequent action. Performative education and learning supports both, the capacity to imagine and the capacity to act (cp. chapter 1.8 and 4.1.4 for "performative learning").

As stated, human intelligence and human action derive from the explicit and implicit cultural capacity. The implicit power of culture fundamentally shapes and creates global and local circumstances. The human being's explicit capacity to analyse, re-view and direct their own development intervenes in implicit processes and complements these. Education that aims to educate human beings to be humane, must then explicitly promote the dual – the implicit and explicit – aspect of shaping-competence and "cultural competencies". In other words, education for sustainable development must consciously and explicitly mobilise and strengthen the implicit autopoietic forces of the human being.

Faure recognises the importance of the aim to train complete human beings. He states:

> "In our view there is a close correlation – simultaneously and delayed – between changes in the socio-economic environment and the structures and forms of action of education, which we believe makes a functional contribution to historical movements. Moreover it seems to us that through the knowledge it provides of the environment in which it operates education may help society to become aware of its problems and, provided that efforts are centred on training 'complete men' who will consciously seek their individual and collective emancipation, it may greatly contribute to changing and humanizing societies." (Faure 1972: 56).

Unfortunately it is not sufficient to only seek for change. As chapter 3.2.9, "Ethical Antagonism – the Discrepancy between Sustainable Consciousness and Behaviour" has shown, the identification with, and internalisation of sustainability is indispensable. The implementation of sustainability as comprehensive concept as well as intrinsic meaning can not be achieved purely through a conscious, rather explicit desire, it demands for the balanced mobilisation of the whole repertoire of "cultural competencies" of which the explicit

dimension is just one. How this mobilisation can be achieved will be examined below. Meanwhile the systemic and holistic dimension of education shall be developed.

Stephen Sterling states:

> "We are accustomed to analytic and reductionist thinking which understands things by taking them apart. But in a highly complex and turbulent world, there's a strong argument that says that analytic thinking is not enough. Indeed, by itself, it is probably increasing our problems", (Sterling 2004: 3).

Education for sustainable development must be systemic itself if it aims for the sustainable development of the coherent systems - society, economy and the environment. This means that it considers and empowers all aspects of the learner. Such education explicitly provides space for the unfolding of creativity, expression, communication and inter-play with the "other", so that all implicit forms of learning can have an impact on the learner's development.

Explicit education for sustainable development (acquisition of technical and content-based knowledge) complements the implicit components of learning (empowerment of methodological capacities, such as performativity, imagination and mimetic competencies). Indeed, explicit and implicit aspects of learning reciprocally create added value and expand the human being's competency for flexibility and systemic innovation. Both have in common that they reflect the complexity of the perceived reality in order to promote complex human responsiveness by means of autopoiesis and the holistic management of social, environmental and economic challenges.

Often, learning and especially formal and therefore explicit education is connoted in terms of cognitive, intellectual comprehension and understanding.

Faure, for example states:

> Education "trains men to understand the structures of the world they have to live in and to carry out their tasks in life", (Faure 1972: 151).

Accordingly, Lester Milbrath states:

> "It is absolutely essential to change the way we think. All other attempts at change will fail if we do not transform our thinking… A proper understanding of the way the world works requires people to think systematically, holistically, integratively, and in a futures mode ." (Milbrath, 1996: 188, 194).

Capra deepens this principle of understanding when he writes:

> "To understand things systemically literally means to put them into a context, to establish the nature of their relationships ", (Capra 1996).

Robert Flood states:

> "Valid knowledge and meaningful understanding come from building up whole pictures of phenomenon, not by breaking them into parts." (Flood 2001: 133).

To concentrate on thinking (Milbrath), understanding (Capra, Flood) and knowing (Flood), however, underestimates the required holistic character of education and learning. These mental aspects of shaping social, environmental and economic contexts, related socio-cultural meanings, identities and patterns, and developing sustainability must be accomplished through corporal, hence performative aspects of "self-making" (Lat: auto = self; poiesis = making/regulation).

As a result of explicit learning and education, the learner comprehends the characteristics and cohesion of social, environmental and economic contexts. According to the principle of mimesis, to "suspend the self and to experience as well as regard it from the perspective of the other", (Wulf 2002: 84) involves assessment of one's own actual and alternative self-perception, self-identity and societal roles from a bird's eye view. Education exposes the learner to the other and guides him through the mimetic interchange. Successful mimesis includes failure – as long as self and other maintain competitive cooperation, safeguarding their own dignity and the dignity of the other. The learner is culturally competent if he is able to be prepared for, deal with and eventually learn from failure.

Building mimetic experiences, the self is enabled to behave adequately and establish himself within the overall societal (heterogeneous and dynamic meaning) system. The competence to critically reflect on our self-perception and regard it from a "meta-perspective" is a precondition for sustainable development. It enables protagonists to assess their own responsibilities, possibilities and deficits in order to focus, as an act of integration, their own socio-cultural identity and communicative action on sustainability. The respective person or group learns *to be*, and furthermore to become, a medium or stimulator of the system to be sustained, by means of a "hominid particle", (cp. George 2001), or catalyst. The respective identity learns to utilise the provided, cultural tools of this system, such as meaning or knowledge, languages and rituals. They acquire their modes of operation, and learn to use the system on its part as catalyst, medium or stimulator for their own "self-making". Socio-cultural identity then is not a descriptive synonym for a socio-cultural protagonist or learner. (Particularly sovereign) socio-cultural identity refers specifically to the competence to participate in, and shape, socio-cultural systems. Or respectively socio-cultural identity expresses the ability to contribute to "culturalise" society and it expresses the competence for socio-cultural integration, organisation and innovation. Thus it is central to the functioning of shaping-competence. Moreover, mimetically sovereign socio-cultural identity represents cultural competence. Sovereign socio-cultural identity is both, an end in itself, and through the promotion of shaping-competence as well as "cultural competencies", it is a means to transcend socio-cultural meaning and to locate the protagonist within a socio-culturally diverse, environmentally sensitive and economically responsible network.

Established content for teaching, instructing students why and how to consider sustainability, presuming social, environmental and economic aspects of human being and development, is neither learner-friendly, nor effective, nor is it timely in moments of rapid and profound transformations. Indeed, such explicit learning efforts must be further developed and they must be accomplished through implicit methodological learning modes, such as mimetic, performative learning modes. That is why education for sustainable development requires a pedagogy which fosters competencies, rather than providing ready-made answers. Furthermore, it is also the reason why the traditional understanding of knowledge as retrievable information or informative facts, is outdated and should be replaced by a holistic understanding of knowledge in terms of "know-how", or in French language: "savoire-faire".

4.1.6 The Global Education Problem

Education is discussed as being capable of empowering people to shape their lives in a manner of human dignity now and in respect to the future. In this sense, education is one approach to human self-making and self-regulation. The dramatic state of the world in terms of social, economic and environmental disintegration uncovers a deficit of human autopoiesis and human dignity. Moreover, it connotes an educational crisis.

How can education empower the learner to identify with the meaning of sustainability and contribute to its development? How can education intervene in human existence, in meanings, societal patterns (e.g. lifestyles) and human development to promote sustainability? Which educational concepts are adequate to create a global ethics of sustainability? This evokes also the question: What kind of education already exists, how does it operate and how can the existent education be complemented or improved?

Jürgen Zimmer discusses the current patterns of formal education. He states:

> "Some schools can be heard from far off: the teacher loudly speaks phrases, the whole class answers as one. Old-fashioned schools of this kind are to a large degree products of the colonial era, their classroom teaching methods still reflecting the spirit of the 19th and early 20th centuries. Teachers concentrate on covering each small portion of the fixed curriculum, and try not only to tame the horde of young lions in the class, but also bring them all to do the same thing at the same time. The style of mechanical learning employed is the most unsuitable conceivable for making sense of interrelationships, retaining what one has learned (even after the next exam), and applying knowledge gained. This is where a disastrous vicious circle of dequalification must be broken: insufficiently trained teachers behave like slaves to a detailed prescribed curriculum and force their students to reduce the great diversity of learning and experience down to the learning of textbooks by heart. When this mechanical system, which clearly contradicts the fundamental discoveries of modern learning theories, is then further underpinned by frequent tests and exams, one could even maintain that such a school is in the position of actually mutilating the qualifying potential of the next generation. Good test results achieved within this mechanism reveal very little about the ability to retain what one has learned, or creatively apply it in any given real situation." (Zimmer 2007).

Education is a form of cultivation and socialisation. However, it not only shapes the learner, but empowers them to possess their own shaping-competencies. Obviously, this does not only refer to formal (and non-formal) education. Education, in the more holistic sense of

learning and socio-cultural identity progression, seems has a strong focus implicit or informal operation (chapter 1.7.2 "Folk Psychjology as Educational Phenomena"). This means that it includes aspects of every-day knowledge and -learning, of socialisation, mimetic learning and self-regulated empowerment. Such education is particularly determined through holistic pedagogy, which is different from many approaches of traditional and conventional formal education. It can be assumed that the indirect proceedings of learning, the daily socialisation and "culturalisation", the folk psychology or "treasure within" (Delors 1998) create and shape the main part of our social knowledge. In contrast, the directly (thus explicitly) taught or learned knowledge seems mostly content-based and technical rather than socio-culturally methodological (cp. chapter 4.1.3.4). Moreover, such formal education and explicit learning seem to influence our behaviour, lifestyle and self-perception comparatively less – at least measured by life skills and "cultural competencies" requirements for sustainability education and knowledge.

As examined, culture provides a large repertoire of cultural techniques which culturally competent protagonists acquire implicitly and explicitly and which they can use in order to generate, consolidate, communicate and innovate socio-cultural meanings, identities and societal patterns, which will lead to sustainable human existence. This repertoire is complete; it is sufficient for and proportional to sustainable development and environmentally-sound human existence and development. "cultural competencies" denote human autopoietic potential; they do not denote automatic autopoiesis. This potential and these competencies can be more or less activated, applied and utilised. Current global issues show that the state of human, internally social and externally environmental, integration is unsustainable, thus the potential for cultural autopoiesis is underutilised. Mobilising and activating this potential is the task of education for sustainable development.

This does not urge (formal) education to invent another human being; human beings with other competencies. Education for sustainable development must strengthen the existing inherent or implicit competencies in an explicit manner; so to say, through an explicitly intervening education that complements implicit potentials. Faure calls for a more holistic form of education, that goes beyond an education that is limited to the cognitive dimensions of learning. He states:

> "For training purposes, one of man's dimensions – that of intellectual cognition – has been arbitrarily chopped into pieces, while others have been forgotten or overlooked and have been either reduced to an embryonic state or left to develop in anarchic fashion." (Faure 1972: 155).

That humankind is endangering the integrity of life on earth is not justified by an inherent deficiency, the reason is found in humankind's acute incompetence *to unfold* his "treasure within" in order to overcome and regulate the self-imposed challenges.

Human beings are generally capable of sustainable development to the same extent that they are capable of unsustainable development. Education must explore this problem and

explore more adequate development alternatives in order to mobilise the human native "cultural competencies", or respectively the human competencies for autopoiesis. The current phase of contingency is indeed a moment of socio-cultural disorientation. From this perspective, the actual problem of humankind (and human self-regulation) is a "global-education problem" that Picht describes as follows:

> "The reorganisation of the consciousness, required of the political, economic and scientific elites of all nations, does not depend on financial investments, although financial backing is an important task. This is because financial investment considers neither intellectual nor moral efforts.
> Deeply-rooted, the educational crisis is a moral crisis of today's world. One does not believe in the primacy of the mind, and because one does of this, people are unable to solve their material problems. Due to the research for information and facts the question about the nature of truth is forgotten. The scientific as well as the political thinking of the 20th century is in a state of disintegration. It misses the capacity to synthesis, and our education abandons those models which promote the training of synthetic thinking. The educational crisis is – to repeat it – a mental and moral crisis. Only the mind has the creative power to overcome this crisis." (Picht 1969: 82).

According to Faure (Faure 1972), cultural power is greater than what Picht may understand as the primacy of mind, but for the re-adjustment of education to support human, sustainable development, a mental paradigm change is indispensable. This mental paradigm change depicts a well-founded, "scientific humanism" by means of a scientifically justified, sustainable ethic. It refuses to perceive education in terms of purely cognitive, content-based and technical knowledge producing process fostered through the teacher's instructionism and the learner's memorisation.

Holistic education facilitates the learner's experiencing of difference in order to empower the learner to assess "complementarity". The term "complementarity" refers to the idea that differences must not only be different (dimension of diversity), but can also complement or fulfil the respective other by creating an overall system (dimension of unity) or an overall meaning. This applies, for example, to differences between people, between values, generations, societies, economies and ecology concepts. Before the establishment of self-other arrangements, mimesis first creates frictions, controversies, and conflicts; it brings up opportunities and limits, weaknesses and strengths, and leads to feelings of ambiguity and temporary insecurity. Complementary oriented education does not aim to canonise or harmonise mimetic phenomena; these phenomena rather become a resource for learning. In this sense, learning for sustainable development does not primarily focus on sustainability, but on developing it. Therefore, it uses the mentioned phenomena – the in-between of differences, antagonisms, truths, and meanings – as a resource. It does not aim to equip the learner with orientation in moments of confusion as they arise through profound and rapid, thus complex transformations of social, economic and environmental contexts and throughout mimetic interchange with the other. Instead, education for sustainable development rather is the process of guiding the learner pedagogically throughout these

experiences. Such mimetic, contextual learning mobilises the learners own native and unique "cultural competencies", the competency to orient in moments of confusion and to proceed mimetic interchange in a sovereign manner.

❖ Example:

So called soap operas in TV for example seem to address simple challenges of human everyday social life when they emphasise on a struggling family clan, a love couple or on work life. In fact they address, although in a quite particular way the canon, the disruption and eventually the innovation of socio-cultural norms, conventions by means of "communitication".

Education for sustainable development merely aims for empowering the learner to orientate himself in confusing moments through the adequate usage of cultural mimetic competencies. It prevents contingency through empowering the learner to continue the mimetic process in sovereign manner. That includes the competence to deal with the other and the "other (aspects of the own) self", hence the competence to resist discrimination, domination and assimilation, as well as it connotes ambiguity tolerance and the ability to accept and eventually learn from mistakes.

Such diversity- and complementary-, unity- and mimetic arrangement-addressing education also must itself be diversified and complementary. Education for sustainable development therefore denotes a reciprocally accomplishing and stimulating diversity of educational approaches. Thus it deprives to claim for educational monopoly and ideology.

Education throughout life and for sustainable development points out complementary contents, (examples are provided in chapter 4.1.9 "Bridging Tensions") as well as the complementary configuration of education: In order to achieve the learner's capacity to sustainably deal with – and shape – complexity, not only different educational approaches are required to address different, for example local contexts and to explore different "roads" to sustainability. Moreover, educational approaches must in themselves posses of a diversified composition and complementary alignment. It is therefore imperative that educational approaches in themselves reflect and thereby promote the implicit dimension as well as the complementary, explicit dimension of knowledge, of learning and of teaching. Education must approach the "treasure within" on many ways (cp. "education throughout life and for sustainable development" in chapter 4.1.3).

Sustainable development is an act of "cultivation". Education a medium to this aim, although not through imposing alleged cultural meanings, but primarily through inciting "cultural competencies". Emphasising on the equilibrium and integrity of live on earth, sustainable development symbolises the "art of living". Education then could be perceived as "the art of being and becoming". In this context Faure illustrates the crisis of education and elaborates the initial role and measures of education:

"Generally speaking, most education systems do not help their clients – whether they be youngsters or adults – to discover themselves, to understand the components of their conscious

and unconscious personalities, the mechanisms of the brain, the operation of the intelligence, the laws governing their physical development, the meaning of their dreams and aspirations, the nature of their relations with one another and with the community at large. Education thus neglects its basic duty of teaching men the art of living, loving and working in a society which they must create as an embodiment of their ideal." (Faure 1972: 66).

This is underlined by another statement:

"(A bureaucratic system, habitually estranged from life, finds it hard to entertain) the idea that schools are made for children,instead of children are made of schools." (ibid.: 60).

Indeed, the educational crisis is measured on the unsustainable status quo of human (and often inhumane) existence on a macro level. Still, this roots in, or at least it is closely connected to questions of failure and success in everyday social life on the very micro level. In general, education still underutilises implicit potential for learning for example through disregarding "conscious and unconscious personalities, the mechanisms of the brain" (ibid.) and the body. Learner centred education addresses the whole human by means of empowering implicit and explicit "cultural competencies". It addresses individual talents and interests, for example through providing open (although defined) space for self-regulated learning and it considers life-situations of the learner, utilising these as resource for learning.

In the context of complex transformation and global issues the underestimation of such education and the failure of "traditional" education is risky and inconsequent. That is why the exploration of education for sustainable development fpr example on scientific, practical and policy levels is so important.

Manish Jain from the Shikshantar People's Institute for Rethinking Education and Development speaks in this context about "factory schooling" and criticises the "culture of schooling", which:

"(Article 7): Fragments and compartmentalizes knowledge, human beings and the natural world. It de-links knowledge from wisdom, practical experiences and specific contexts. (Article 8): Artificially separates human rationality from human emotions and the human spirit. It imposes a single view of rationality and logic on all people, while simultaneously devaluing many other knowledge systems." (Shikshantar 2000/ cp. Bhave 1996/ Falbel 1996/ Jain 1997).

Merkel mentions:

"Organised learning processes tend to inflexibility and uniformation, especially in the context of controlling the results of learning through examinations and certifications. Learning structures in schools tend to treat individuals homogenously and risk thereby to prevent creativity and diversity." (Wulf/Merkel 2002: 135).

And Stanley Kubrick states unpretentiously:

"I think the big mistake in schools is trying to teach children anything, and by using fear as the basic motivation. Fear of getting failing grades, fear of not staying with your class, etc. Interest can produce learning on a scale compared to fear as a nuclear explosion to a firecracker." (In: Phillips 2001).

Education is a powerful management tool for human and sustainable development as well as for dignified living in the present. Indeed, education can nurture, initiate, empower and promote "cultural competencies". However, the enormous potential of education does not

prevent educational approaches and pedagogical practice from becoming inert and oppressive. To the same degree, formal education is capable of weakening and marginalising "cultural competencies" that have to do with creativity, if it fails to meet the learners' requirements and the requirements for overall sustainable development. Therefore the perception of formal, explicit education must be elaborated: Formal educational requirements can not stop at "Education for All" in the sense of expanding the quantity of learners with access to formal education, with a rather qualitatively undefined, or under-defined form of education. It is crucial to accomplish "Education for All" through the questioning of: "Which education?" It is not only the results that are important, but the means to achieve the results as well. However, it is tautological to demand a "quality education" because education for sustainable development already represents – and is inseparable from – this quality.

As already mentioned, sustainable development signifies development per se, since unsustainable development rather leads to envelopment and collapse. What could be "development" if it is not human development, if it is not sustainable (human) development? The idea that education should contribute to human development is not new. However, perceiving education as the "key to (directing) development" is incomplete. The reason for this is that development requires socio-cultural diversity and multi-perspectivity in the present. Moreover, sustainability should safeguard human dignity in the present. Hence, education must unfold happiness and ludic experiences at present as sustainable means in themselves.

That perception of education goes far beyond the usage of education as a key for change. It constitutes sustainability by means of sufficiency and regulates sustainable development by means of efficiency.

At its root, education for sustainable development refers to a reform of formal education and a renaissance of culture and "culturality" by means of human "cultural competencies". (. In this regard, sustainable development and education together promote the renaissance of human autopoiesis in a moment of contingency. It is a priority to overcome the educational crisis because this global education problem is equivalent to, or at least it co-represents, the unsustainable status quo of humankind.

4.1.7   Educational Intervention versus "Intravention"

Culture is a multi-facetted explicit and implicit medium for meaning-making, as well as for individual and societal identity-formation. Culture creates a human reference system, which equips human beings with the competencies to arrange with one another and build up intelligent networks. It teaches how to be human and how to develop humankind in collaboration with others.

Culture marks us as human beings, unique and different to, but related with, other forms of life. Culture defines and shapes human being in the present and human development for the future. Once the impact culture has on Homo sapiens is comprehended, it becomes a matter of fact that a purely cognitive, formal education can "only" complement our complex, lifelong and often implicit learning processes.

For example, a principal part of what pupils learn in school supposedly does not result from lessons, divided into disciplines, but from the process of socialising with others and integrating into a group – a process of identification with a group and of progressing the own participatory socio-cultural identity. It is interesting that the mimetic experiences, the integrative ludic formations of self-perceptions, perceptions of the other and perceptions of the commonly shared, often seem to be the main motivation for pupils to go to school. This means that these pupils want to learn and know very well what they should learn through integration and identity-progression: mimetic interchange and arrangement with the other as a continuous, challenging and in itself meaningful learning process.

Indeed, school-life primarily is determined by the formation of the self and arrangement with others. It is also interesting and surprising that this basic social source of the learner's motivation to learn mimetically from and with others as the initial goal of education and meaning of human existence is almost not explicitly tied into formal education and particularly schooling practice.

❖ Example:

While the class works on the content, various social interactions occur: the teacher may have problems with some pupils, boys may discriminate some girls, maybe one of the pupils is in love with another, they may express themselves through fashion, some are saying intelligent things to impress others, etc. The heterogeneous school class continuously creates and experiences group dynamics: processes of affiliation and opposition to the teacher, or between students. Performatively community and community meanings are created and transformed. Nevertheless, the implicit fields of mimetic learning are left out, while teachers impose disciplinary divided contents, measuring successful learning by, indeed important, although overestimated content-based knowledge.

Mimetic learning is usually not explicitly reflected on, or even fostered in the group, nor is the entire socio-cultural potential or the implicit dimension of learning formally considered and appreciated by most curricula. Furthermore, even explicit contents are limited to specific disciplines, instead of using comprehensive, interdisciplinary approaches. This paradox of school-education shows that our current vision and version of education is rather rudimentary. Neither the needs of the pupils nor the expectations of the educational system - to prepare the pupils for leading rich, i.e. happy and sustainably integrated, lives – are met. Therefore, education must be rethought so that it is able to empower learners to unfold their cultural potentials.

Formal education often promotes what Herbert Marcuse connoted with the title of his book "The One-Dimensional Man", (Marcuse 1964). This depicts an education, which exclusively concentrates on cognitive development, thus an explicit education limited to explicit cultural potential (e.g. reading, mathematics, foreign languages), denying the repertoire of implicit human capacity (performative learning, body knowledge, psycho-social processes, competence to deal and arrange with the other).

Such education forces pupils to invest quantitative time without equipping them on qualitative levels - a situation to which Paolo Freire responded with his "Pedagogy of the Oppressed" (Freire 1970/ cp. 1974). Another approach was the UNESCO initiative "School without Borders", which envisioned a school whose "classroom" was open, or respectively "embedded" in the surrounding social, economic and environmental context of the school. In a school without borders the entire learning-environment provides more development-relevant stimulation for the learner or learning-community than a closed classroom within walls, representing limiting borders. Central to this approach is the interaction - the ludic interplay and mimetic movement - with this complex, multi-dimensional learning environment, for example, through exploring and collaborating with the local school community.

While the teacher continues his lesson, no matter what subject he examines, the room is charged with rituals and the time which earners spend in the lesson is determined through creative and ludic mimetic (inter-)action. What would it be like if education focused explicitly on this implicit (tacit) knowledge? The goal of education is to guide the learner in his development. Would education lose this guiding capacity if it "handed over" a part of the control to complex, contingent and uncontrollable implicit learning procedures concerning issues such as expression, mimesis and rituals, interplay and other "cultural competencies"? Education must not determine or dominate the human. Thus the aim is to *guide and assist* the learner *in his unfolding of what he already is* instead of predetermining what he shall or could be.

Article 26 of the UN Universal Declaration of Human Rights states:
"Everyone has the right to an education." (United Nations 1948: Art. 26.1).

However, the question remains as posed beforehand: A right to *which* education? It can not be a "factory schooling" that indoctrinates the learner to shape a predetermined identity. Instead,

> "Education should be directed to the full development of human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace." (ibid.: Art. 26.2).

Education intervenes in human development, in identity-building, and in the empowerment of learners for complex autopoiesis directed towards sustainable development. The human autopoietic force consists of explicit as well as implicit capacities. Explicit (formal) education, which:

1. is detached from the cultural context and content, denying the implicit dimension of education and focussing one-dimensionally on explicit competences, and which

2. is detached from a systemic, interdisciplinary approach, limits – and in a critical phase of contingency - endangers any development.

The educational intervention in development as a "meta-control" of the learner and his development must be accomplished by an "intravention" by means of the learner's empowerment "from inside", hence based on the learners requirements. Schooling must foster mimetic learning (cp. "education throughout life and for sustainable development", chapter 4.1.3) instead of "instructionism". This means that the learner must not only be controlled in order to prevent destructive development; he must rather be supported to regulate and shape his own socio-cultural identity and conduct his integration as well as uniqueness in the social context. This connotes not so much an educational less a self-help-assistance, because the learner is inherently able to generate his personal learning process; hence he doesn't need external help. "Intravention" rather denotes a self-regulation-assistance from sides of the pedagogues.

Educational "intravention" considers the learner to be an active, autonomous, sovereign, competent, creative and creating subject, not a passive object to be created. Learners are capable of satisfying their desire for knowledge autonomously. Through self-regulation, they build their socio-cultural identities and develop "cultural competencies". Explicit education can "intravene" in this self-determined learning process by explicitly providing "open space" for the unfolding of implicit cultural potential. Education loses control over the learner and wins control over the learner's development for the benefit of cultural diversity and heterogeneous and concerted sustainable development.

If education aims to maximise the power of human autopoietic forces, it must, as mentioned, build on the existent qualifications of the learner. That does not only concern the mental, e.g. intellectual, cognitive, imaginative competencies but also their physical counterparts, the senses: The development of (sovereign) individual socio-cultural identity is directly related to the usage of all the senses. The senses are instruments for the interpretation and co-creation of the "world" and reality. They connect us with the social and natural environment. "Intraventive" education for sustainable development stimulates, utilises and mobilises all of these resources and trains them as channels for learning.

This corresponds with aspects of Michael Gelb's theory of the "Leonardo-principle".

Inspired by Leonardo da Vinci's lifestyle, Gelb aims to promote a lifestyle which stimulates:

- Curiosità: Curiosity; the ambition for knowledge
- Dimostrazione: The willingness to learn from mistakes
- Sensazione: The sharpening of the senses
- Sfumato: Open-mindedness concerning paradoxes
- Arte/Scienza: An equilibrium of logic and fantasy
- Corporalità: The cultivation of physical fitness
- Connessione: The comprehension of network patterns regarding eco-systems and humankind, (cp. Gelb 2004).

4.1.8 Open Space Education

Education means empowerment and control at the same time. It aims to control and assure social empowerment. It aims for the consolidation and innovation of socio-cultural meanings. Education focuses on the learner's acquaintance of knowledge and addresses the learner's competencies to deal with non-knowledge.

It tries to make sure (control) that learners possess competencies, develop sovereign personalities, and perform mimetic arrangements. Although this seems learner-centred this is efficiency-oriented, just that learning results are not only measured on contentual, technical and thus checkable, intellectual knowledge.

To give up a part of the direct control in formal education and to hand it over to the complex creating and powerful force of cultural, mimetic learning; that could empower the education itself. This could be possible, first, by perceiving education as an end in itself, which moves happiness and the dignifying liveliness and creativity (not only the poietic potency) of socio-cultural diversity to the centre of education. Second, mimetic arrangement and learning with the other connotes education as something intrinsically ludic, stimulating all senses of the human body, because it promotes performative education. Third, mimetic learning connotes that students are not measured by their ability to memorise and repeat content-based and technical knowledge, but it fosters methodological knowledge through the participation and self-regulation of learners in learning episodes.

This could empower education to be closer to life (and real life situations of learners, cp. chapter 4.2.1, cp. Zimmer 2000, Preissing 2003), to continue throughout life and to accelerate the establishment of the global ethic of sustainability in the human identity.

Culture, and particularly mimetic learning equip education with al necessary tools to be effective, thus to celebrate (constitute) present human being in dignity and to regulate human development, or respectively the learners participation in it. Considering the global education problem (see above), the crisis of contingency, "problems without passports" (Kofi Annan) and the democratic/political crisis, education is not yet sufficiently effective. Considering in turn the potential of culture to shape and activate education, education can be understood as a medium for cultural unfolding. Formal and non-formal education for sustainable development can, in contrast to informal education, explicitly provide and regulate open space for the unfolding of culture in the daily life of (learning) communities, including schools and schoolclasses. It is an imaginary space for the exploration of individual identities and talents, beyond judgment and validation, and for the satisfaction of the desire to unfold unique differences as well as unity with others. The "intravention" of education is the conscious provision of "open space for cultural unfolding" – a space to explore and generate socio-cultural meaning and identity ludically, creatively, performatively and artistically, but also scientifically. It is opposite to the anticipation and indoctrination of socio-cultural meaning and identity-patterns, for example through teachers and some textbooks.

❖ <u>Example:</u>

It makes a big difference for learners of art whether they receive a white piece of paper to draw on, or are asked to fill out the template of a tree in colours, which resemble a real tree. The white paper symbolises the open space as well as the teacher's guiding support of students who draw a tree. The teacher that promotes open space would show the learner how to use pencils and paint brush and encourage the learner to find out on his own how (and if) he wants to draw a tree or anything else.

The neglecting of instructionism and the neglecting of indoctrinating socio-cultural meanings and identity-patterns leads to a connotation of education for sustainable development as the facilitation of "explorative learning". Learners will not be the passive audience of an instruction process, but active explorers of their selves, the other, and the commonly shared, assisted by teachers. The open space for unidentified content motivates the learner to ask questions on their own, to find their own answers and to critically verify existing, alternative answers on their own initiative. The more complexity the learner can assess and transform into meaning, the more sustainable, e.g. socially, environmentally, economically integrative, is the learner's own and his community's development. Self-organised, autonomous learning promotes the necessary identification with sustainability because it guides the learner to discover his own perceptions, his possible participation and role in the issue of sustainable development - as an issue of own meaning and intrinsic motivation. Hence, self-regulated, participatory and learner-centered education overcomes inertia and the examined "sustainability-schizophrenia" (cp. chapter 3.2.9).

"Cultivating Peace in the 21st Century", a Canadian teaching resource to support education targeting global issues, peace and security, human rights, cultural diversity and active citizenship, states:

> "Student-centeredness holds that youths learn best when they are encouraged to learn and explore for themselves and when they are addressed as individuals with a unique set of beliefs, experiences and strengths. In many classrooms, most instruction is based on either the "learning about" or the "learning for" approach. Learning *about* is a [annotation: cognitive] knowledge-oriented approach, mainly concerned with the assimilation and interpretation of facts, concepts, data and evidence. The learning *for* approach values acquisition or development of skills, which enables students to apply the knowledge they have acquired. [Annotation: It is imperative] (…) to add the learning *in* (or *through*) approach, whereby the actual process of learning is as significant as the intended content of learning." (Anderson 2002: 8).

The "learning through" complements Delors' "learning throughout life" approach. In the context of this text, formal education for sustainable development is understood as an initial aid and guiding support to explorative learning. Such learning provokes the motivation, desire and competence of the learner to relate the "learning for" and "learning about" to actual living-situations and lifestyles (cp. chapter 4.2.1 and 4.2.6). This is made possible through contextual learning (cp. Zimmer 2000; Preissing 2003), which promotes contextual knowledge as an asset of shaping-competence.

Furthermore, "learning through" is a process, which calls for the learner to explore, discover and possibly identify with the overall meaning of sustainability according to *his* perception.

Only through the process of one's own unfolding and "self-making" (i.e. formation of socio-cultural identity), can the learner assess, shape and take his role as a unique participant in a globally interrelated macro-process. In a mimetic-explorative manner he creates his own socio-cultural meaning and creates societal, sustainable meaning. His unfolding, which aims for dignity and social potency, requires its own, self-driven action and desire, since the value and dignity of an identity can not be defined by others. Since sustainable action and desire operate continuously and complexly, they must be generated *in* the interplay with others and not derive from the domination of others. Teachers, therefore, must not dominate or direct, but rather assist and guide the learner in his development. A decentralised, self-regulating network, such as that of humankind, is built on the stimulating interplay of different protagonists. This requires participative, integrative, global and local socio-cultural patterns. If this system tried to force its protagonists into a uniform adherence of ethical dogma, it would prevent sustainable development. The reason for this is that sustainable development promotes, but also requires, (unity in) diversity in order to activate autopoietic multi-perspectivity (cp. chapter 1.6/ 1.6.6). Education should, therefore, not promote the uniformity of learners, but provide open space for learners to develop unique, sovereign socio-cultural identities, capable of engaging in mimetic arrangements with others. Such education for sustainable development enables the learner to re-create sustainable meaning as a process of valorisation. This means that value is not imposed by the other, but verified, and

autonomously interpreted, adjusted and internalised by the self in mutual, equal and participative interchange with others.

"Learning through" and "learning throughout life" train the required competence to deal with complexity "through" ludic and aesthetic explorations of the entire learning-environment and the learner's tangible living-context. "Learning by doing" trains participation through the practice of participation, not through heteronomy. Furthermore, it promotes "cultural competencies" through ludic, creative, imaginary and physical performances *as well as* through intelligent, critical reflection and cognitive deliberation. This education does not only take place in the classroom, its contents are not only measured in terms of right and wrong, and the learner is not just between four and eighteen years old; he learns his lifelong and everywhere. At least implicit education is not an annex to, or aspect of society and social life, but integral attribute of them. Explicit, formal education in turn should increase adherence to the implicit alignments of learning in order to be more effective.

Open space for the ludic, aesthetic and explorative discovery of cultural operations, would complement the instrumental rationality of a rather traditional education, focussing on cognitive knowledge through memorisation and instructionism.

In this sense, open space must not be confounded with the laissez-faire philosophy of anti-authoritarian education. In open space education the structures of pedagogy can indeed be defined, as well as the freedoms of teachers and students. Even the existence of a curriculum does not contradict open space education. In order to maintain open space education while using a curriculum, the curriculum must have a tentative, rather than obligatory, function. It assists the teacher and provides suggestions, rather than norms that shape the education. In other words, such curriculum combines a few obligatory educational goals with a number of pedagogical options for achieving these goals. This allows not only for the creative participation of students in conducting the learning process, but it also allows and evokes the creativity and participation of teachers in shaping learning processes. Moreover, open space connotes:

- Open classrooms: the economic, environmental and social surrounding of the school becomes a laboratory for exploring sustainable development throughout life
- The entire learning community: If students explore their neighbourhood they can find out many things about life. They can gain insights into family life, work life, local challenges, business, politics, and cultural heritage. Such exploration is far more than a one-way withdrawal of information. It addresses mimetic interchange with the other and creates manifold opportunities for arrangement and collaboration with local people in terms of "community education and development". In this case, all those involved join in and profit from the learning process.

- Perceptions: starting point for open space education are questions, desires, motivations and life-situations of learners (cp. Life-Situational Approach, chapter 4.2.1). Open space education does not promote the learner's uncritical acquaintance and memorisation of already consolidated socio-cultural meanings and perceptions, for example of the world, the common, the future, the present, the valuable, etc.
- Disciplines: Education for sustainable development should open space for interdisciplinary learning and teaching. It should encourage pedagogues to step out of the strict delineations of disciplines, which limit the comprehension of human being and nature as an overall cohesive system.

The open space for both, performatively and cognitively exploring education, activates a typical feed-back loop: In the first place, open space education throughout life and for sustainable development explores and re-discovers socio-cultural meanings, particularly sustainability meanings. The discovery of such meaning (e.g. sustainability) is accomplished through their "uncovery". This means that the learner does not only discover – and confirm – socio-cultural meanings as "his" meanings, he also critically reflects on, deliberates and discusses the meaning (e.g. sustainability) in order to potentiate the integrity of the meaning through creative destruction and innovation. The discovering and "uncovering" of meanings, such as "sustainability", can be done through the conscious examination as well as through performative approaches. (Ritual) performances, explicit practices for example in dance and theatre, represent a mode of interpretation and renewal of cultural meaning, complementary to conscious and particularly cognitive approaches. Such "cultural education" is the empowering force, which will lead to offensive participation in the world-creating process towards a sustainable future. It promotes the maximum human potential for sustainable responsiveness.

Open Space or Open Space Technology, originally came to being as a method for large conferences or meetings. Open Space Technology deals productively with the dynamic complexity of groups – or with socio-cultural protagonists on individual as well as societal identity levels (cp. chapter 1.3.1.2). This method originated in the USA around 1986, developed by Harrisson Owen, it is prevalent mainly in Anglo-Saxon areas. The principal aim of the open space is to mobilise as many people as possible to solve complex societal problems. Not only is it important to involve the participants, but to generate a broad commitment to, and mutual understanding within, the challenged community. The aim is to descend from the theoretical open space approach to an actual open space operation and organisation. This assures the freedom of every participant to initiate sub-groups. Any participant can autonomously (i.e. independent of hierarchy) deal with issues connected to

the overall problem being discussed at the conference in a decentralised and comprehensive "cross-community" manner. The principle of open space is synonymous with the principle of unity in diversity. Open space is a cultivating process, capable of assessing, consolidating and promoting a global ethics (dimension of unity), while mobilising cultural differences (dimension of diversity) and thereby empowering humankind for sustainable development by means of multi-perspectivity and autopoiesis. Open space is an indispensable asset to education for sustainable development. The controlling paternalism of "factory schooling" in terms of frontal teaching, memorisation and instructionism, is replaced by the learner's autonomy within a certain – although defined – space. Open space develops the learner's maturity and respects the learner's dignity. Moreover, it uses the learner's "treasure within" – the capacity for relevant self-regulated learning. The autonomy of the learner to consider and explore socio-cultural meanings concerns for example societal, environmental and economic patterns of human organisation, represented for example by lifestyles, consumption and production patterns, politics and religion. Furthermore, it concerns the overall concept of culture as a medium for human being and development, the unfolding of "cultural competencies", the potentiated "culture-ability" and the synonymous "sustain-ability". Resuming, this derives as a mental and physical learning performance that concerns implicit and explicit human autopoiesis. Educational open space is an explicitly provided open space for implicit mimetic proceedings, thus it is an educational "intravention" in the tradition of Schiller's principle of enlightenment: "To use one's own intellect with mastery".

Open space education facilitates, it even advocates for participation. The more people (for example in a school-class) participate in and hence shape the learning procedure, the more controversies arise. Students are urged to listen to others and to express their interests; they must arrange with one another. As an outcome of a well guided mimetic learning process, they learn to respect and tolerate the other without being tempted to assimilate the other or the self. Indeed open space education promotes peace.

According to Harrisson Owen's book "The Practice of Peace", (Owen 2004) subjects of Open Space Conferences are:
- Important to all participants (they concern the participant).
- Extensive, large-scale issues (providing space for new ideas and creative solutions).
- Complex (can not be solved by one participant).
- Emerging (mobilising many people intrinsically). (cp. ibid.).

The entire conference is self-organised. For example, there are no extra-breaks, and the entire conference seems like a long "coffee break" due to its informal, casual organisation and dynamism. It generates more organisation and better results by imposing less structure,

leaving open space for the implicit process of structuring. That denoted structuring force is culturally (for example, verbally and performatively) regulated. Similar to a market economy, democracy, the golden rule, an ethic of the other or of neighbourhood, open space connotes no random laissez-faire and absolute randomness as it is the case with antiauthoritarian education. Open space rather functions through providing participatory defined, discursively negotiated framework of basic regulations and commitments. Hence it is possible to speak of open space as the mutually regulated freedom to assure competitive cooperation, (cp. Owen 2004 and cp. chapter 1.8.7).

4.1.9 Bridging Tensions: Utilising Situational Challenges to Instigate Learning

A central aspect of education for sustainable development is the bridging of tensions as they derive from socio-cultural evolutions, particularly regarding society, economy and the environment. Increasingly and rapidly, previous socio-cultural circumstances transform and require the adjustment of human perceptions, comprehension and attitudes. Some examples of such challenges are: the scientific revolution, globalisation, the increasing importance of media, and the global issues, such as environmental degradation, the current economic crisis, poverty and war, etc. (cp. chapter 1.1 and figure 2 for "global issues").

Due to their tempo-spatially complex character, the new feature of these tensions is that they challenge the entire humankind; all people on the planet and future generations. They are "problems without passports" as Kofi Annan puts it (cp. chapter 2.1.4). These challenges do not only affect all people and the ecosystem at the same time, but in many cases (e.g. through genetic modification, atomic energy, carbon emissions) they have effects that reach hundreds or even hundreds of thousands of years into the future, possibly diminishing equal rights and opportunities for future generations. Due to the speed of their emergence and transformation, these challenges require creative responsiveness as can only come from a society that strictly promotes unity in diversity.

The generation of unity as well as the development of socio-cultural diversity and different socio-cultural meanings, individual identities and societal patterns, is achieved through mimetic leaning and throughout life. Mimetic learning involves tensions, as they arise from the approaching of the other, (e.g. the other person, perception, causality, truth, or the "other self"). This is beneficial for the learner, because through the other he can "expand his horizon of possibilities" (cp. Iser 1978). Still, part of mimetic interchange are moments of friction, controversy, ambiguity, conflict and other tensions. Education throughout life and for sustainable development deals with these tensions; they become resources, or "learning materials" to work with in order to foster the learner's "cultural competencies" within a secure, defined, but open space.

There is a long range of perceptions and experiences. For the learner, some are tangible, others are very abstract.

❖ <u>Example:</u>

One's own socio-cultural identity seems relatively more tangible and comprehensible than another person's identity. One's local environmental situation seems more tangible than the abstract consideration of global climate change.

Adequate education (or the educator) functions as a broker, relating the abstract with the tangible, and educating on both levels. This education introduces the learner to the respective issue, confronts him with the problem, assists him in understanding it as a challenge and empowers him to explore and increasingly comprehend hitherto abstract challenges and relate his socio-cultural self-identity and lifestyle to such abstract challenges. That results for example in the ability to think global (space/abstract) and in long terms (time/abstract) and to act local (space/tangible) and immediately (time/tangible).

Education (and thus the educator) encourages and enables the learner to explore abstract challenges, guiding him along the way. Thereby, education for sustainable development aims to generate a critical mass of sovereign protagonists capable of evoking a "macro-shift" (Laszlo 2003) towards sustainability and supporting the "break even of education", or respectively "sustainable break-through" of civilisation.

The body is a great medium for the exploration of the world and the other by tangible means. Performative education, therefore, must accompany the more abstract cognitive capacities of learners (cp. chapter 1.8 and 4.1.4 for "performative learning"). Especially through performances, socio-cultural protagonists can generate, consolidate, communicate and innovate socio-culturally integrated and integrating meanings, fostering unity in diversity. In this sense, performative learning contributes to "communitication"; it facilitates communication with the other so that arrangements and communities emerge.

In order to bridge the gap between the above-mentioned tensions and in order to succeed with education, the learner is supported by, and reciprocally supports, his communities (for example, the neighbourhood of a school) and education contributes through community education to the learners community involvement. The reason is that through community-involvement (community education and development) the learner is activated as a societal protagonist. The community becomes a medium for learners to connect to the local and global aspects of social, economic and environmental contexts. Moreover, through community involvement learners can better participate in shaping these contexts.

❖ <u>Example:</u>

Community can facilitate the comprehension of abstract issues and make them more tangible: If a group of school students explores the work conditions of people in the neighbourhood, e.g. in a local furniture, car or textile industry, they can discover how globalisation affects the products and prices,

how it transforms the qualities of products and how it shapes production patterns. This makes globalisation much more tangible and comprehensible to them.

Community can become a medium for learners to increase outreach of activities: Students may engage in environmental activities, such as cleaning up their neighbourhood and recycling what they find, or for example, using waste to construct sculptures, or as a resource for "upcycling" (Pauli 1998: waste becomes resource for production of something useful). When they talk to representatives or the media about their activities, they can reach out to other people, for example, other schools.

Lifelong education (formal and non-formal), addresses tensions in the context of sustainable development in all learning contexts. For that reason, education for sustainable development assists the learner to identify, explore, comprehend the complex nature and inter-connectedness of the tensions. The comprehension of tensions and their cohesions is a precondition for the development of sustainable responsiveness by means of shaping-competence. The interrelation between two antagonisms can form synergies and added value, as can be observed in the tension between the local and the global. Local inequalities cause serious global problems. Simultaneously, various local solutions represent an immense opportunity for peace, socio-cultural diversity and sustainable development.

Some of the main tensions, depicted in terms of tangibility and abstraction, which education for sustainable development shall address, are emphasised in the following diagram.

Figure 44: Education for Sustainable Development: Bridging Tensions

Tangible	Abstract	Example for Educational Goal/ Approach
Local	Global	This approach aims to explore (e.g. experience and analyse) the controversy of local and global aspects of sustainability. Learners discover, consider, explore and question local, global, and "glocal" aspects of sustainable human development. "Glocal Learning" (cp. Robertson 1992) enlightens the motto "Think global – act local" and not only builds bridges but recreates unity, especially between the northern and southern hemispheres. Learners discover how and why the world is increasingly inter-dependent.
Present/ Short-term	Future/ Long-term	Learners develop understanding of system cohesions and of the impact, which today's technology (such as genetic modification and communication technology), but also consumption and production patterns (may) have on the future. The roles of economy, politics, environment, society, media, science, religion, etc., as well as the role of today's lifestyles in sustainable development shall be reflected upon. Intergenerational commitment, solidarity and responsibility by means of shaping-competence shall be promoted. The motto is "Think long-term, act now".
Physical/ Body	Mental/ Mind	"Cultural – education" focuses implicitly on the learner's body-mind relationship through physical training such as sports and performance arts, such as dance, as well as through the training of cognitive skills. Furthermore, the aim is to critically reflect on this relationship. This regards *for example* the role of body and mind in different religions, or in family and work life. How do the six senses bestow human beings with information about their environment, how do these senses nourish the mind? And what are performative and mental characteristics of socio-cultural meanings and identity patterns? Moreover, education that focuses on this issue explores the way that established mind-sets are generated, consolidated, communicated and innovated performatively. Conversely, how do mind-sets influence the learner's movements, actions and even the learner's health?

Disciplinary	Inter-disciplinary	A new notion of teaching, the teaching for a sustainable future, may show that an interdisciplinary approach is self-evident, coherent, emerging and possible to realise. Instead of being an additional challenge, it will enable necessary synergies between the disciplines. It is a historical-cultural determination that separates the naturally overlapping and inter-depending disciplines, and it should be overcome in order to provide efficient, synergetic innovation and added value.
Self	Other	Learners discover, consider, explore and question, what constitutes one's own and other socio-cultural identities. What are one's differences to the other, what are the similarities? How does the other impact the learner's socio-cultural self and how does the learner affect the other? Another question that learners may pose: What about the other self in me? Education for sustainable development is merely mimetic learning and this connotes the exploration of the limits and opportunities of interplaying with the other? The other is not only the other person, it is also the other truth, perception, meaning, causality, or value. Learner's find out how to deal with the other without assimilating the other, or the self. They learn and reflect on how to create a common sphere, for example, performatively and intellectually. Throughout such processes learners are also confronted with uncomfortable experiences, such as friction and conflict. They learn to accept this and to deal with it. In this context they learn to accept their own mistakes, failure, or difficulties, and to take responsibility for these, learning from these experiences.
Economic Development	Sustainable Development	Education for sustainable development explores the importance of economic development for achieving sustainable development. Economic development should serve humankind and respect the environment. Sustainable development rules out economic "laissez-faire" policies, which is especially important because of the major role the economy plays in globalisation, politics, science and media. Education should, therefore, promote an understanding of the initial, functional meaning of economic development, the meaning to serve humankind. It should empower learners to mobilise a renaissance of politics in order to frame and responsibly control the economic development for the benefit of all. Nevertheless, economy is not to be reduced to a "beast to be tamed". There is a great and intrinsically human creative potential in economic activities. Entrepreneurship education can connect social and environmental values with business. "Sustainability as business case" and the transformation of social and environmental problems into economic solutions are new and promising discoveries to be explored by learners. Entrepreneurship education nurtures creativity, the progression of sovereign identity and thereby it strengthens socio-cultural diversity. Sustaining planetary development means sustaining a viable economy.
Individual	Society	Education for sustainable development reflects this tension explicitly, for example, through intercultural dialogue, reflective thinking and theatre. It promotes the learner's own socio-cultural expression on all levels: experiencing oneself, experiencing oneself in a group and experiencing the group as a whole (this addresses for example group-specific dynamics). Learners explore and discover how they are affected by others, and how they affect others reciprocally; they learn more about the role they play and alternative roles in society. They learn more about their own as well as societal strengths, weaknesses, opportunities and threats. Self-confidence and solidarity are promoted as moral rights and duties. The message is: "as individuals, we all have a more or less significant impact on the local, regional and global levels of society, economy and environment." Learners should become aware of this impact and act offensively; reflecting their individual as well as collective responsibility, duty and opportunity and (learn to) act adequately – that is essential for their own as well as common sake. Education incites sovereign identities as "cultural agents", or culturally competent individuals and societal protagonists.

		Learners discover, consider, explore and question, what constitutes their own and other socio-cultural identities in respect to modernity and tradition. This addresses individuals' historical roots as well as present forms of tradition. Through this reflection it will be easier to comprehend the impact of socio-cultural tradition on identity-progression as well as to understand the complex dynamism of culture as such. Education thereby trains learners to participate in socio-cultural innovation in order to adapt socio-cultural patterns to new challenges. Example: What characterises our modern lifestyles? How are they rooted in traditional meanings and what are new aspects? What can we learn from tradition for modernity? E.g. solidarity, simplicity, respect for the environment. And what has to be overcome? E.g. gender inequalities and other dis-proportionalities.
Modernity	Tradition	

These were only chosen examples of tensions, which occur for learners, when they deal with sustainable development. Further examples are tensions between diversity and unity, chaos and organisation ("cosmos"), competition and cooperation, etc.

Exploring these tensions within an imaginary open space, means not predefining perceptions, but rather exploring various issues, what makes them different and what they have in common. Their contradictions can eventually be dissolved and the tension lowered through such explorative discovery learning.

An open space education for sustainable development allows the learner or the community of learners to explore tensions relevant to them, to differentiate as well as develop the concerning knowledge and to obtain an adequate shaping-competence.

4.2 Applied Education for Sustainable Development Approaches

Education for sustainable development can not be reduced to one mono-causal pedagogical concept. The diversity of socio-cultural perceptions and meanings, geographic (e.g. local and regional) requirements, and historical transformations of human organisation and knowledge do not allow for mono-causality or singularity.

Education for sustainable develop must take different pedagogical shapes, priorities and approaches over time and in different locations, referring to different desires, contextual requirements and expectations. The previous text summarised main lines of education for sustainable development. It examines the necessities and opportunities for regulating human existence and development and it promotes a renaissance of culture, believed to be a medium of arrangement, integration and "Gestaltung", promoting sustainability. Such education for sustainable development is understood as the mobilisation and consequent application of "cultural competencies" in order to fortify human and humane autopoiesis. It strengthens the ability to engage in mimetic interplay and fosters (thereby) sovereign socio-cultural identities capable of arranging with the other by means of competitive cooperation.

However, promoting socio-cultural diversity of (mimetically sovereign) identities on all levels requires education for sustainable development to be heterogeneous itself.

No socio-cultural identity is a singularity, but rather a "swarm of participations" and diverse in itself, promoting unity in diversity, and contributing thereby to autopoietic multi-perspectivity. Just as with such socio-cultural identity, education for sustainable development must also be a diversified and diversifying approach in order to contribute to sustainable development by means of human autopoiesis. This text has considered, summarised and developed standards of education for sustainable development. In practice, however, different interpretations, priorities and variations are not only possible, but necessary, in order to find the most promising approaches and to adjust education to local, "glocal" and global circumstances. Hence, in practice, education for sustainable development must be a cluster (dimension of unity) of varied approaches (dimension of difference and diversity).

Education for sustainable development must be adjusted to specific (e.g. geographic, socio-cultural and historical) contexts, its contents must be diversely composed, and its concept(s) must evolve over time. Furthermore, education for sustainable development connotes the presented features of a global sustainability-ethics and the unfolding of cultural and shaping competencies.

In the following, different educational approaches will be introduced, which in different ways represent education for sustainable development.

Necessarily, these examples do not represent the complete repertoire of education for sustainable development. They rather provide *one possible* notion of the heterogeneity of an applied education for sustainable development, complementing the otherwise rather theoretically abstract discussion in this text.

4.2.1 Life-Situational Approach

The life situational approach aims to help learners with different socio-cultural backgrounds to understand the world they live in. Beyond this understanding (comprehension), it encourages learners to shape their life-realities competently and responsibly.

The resources for learning and education, in this approach, are the manifold questions of learners, their desires and particularly real life-situations, or problems of learners. The approach uses the tangible experiences, questions and challenges of learners as a resource for learning, regardless of whether they occur in the explicit learning process or in the every-day life of the learners.

The acquisition of (content-based and technical) knowledge and (methodological) abilities comes from active participation in real life. Learners take over the role of acting subjects in real life situations, so that the acquisition of knowledge and abilities is bestowed with relevance and meaning.

The challenges for educators are diverse, as real life situations are complex. The practical standards that educators should apply are defined in the "conceptual principles of the real

life-situational approach". This provides orientation for how the pedagogical work should be planned and shaped, so that learners acquire relevant knowledge and abilities in the context of a stimulating learning and living environment.

Thus, according to Preissing, some of the action-oriented principles of the approach are:

- The life situations of learners, the treasure and pool of their experiences and expectations, the desires, perceptions and values, wishes and visions of learning, become a starting point and resource for learning.
- The approach provides access to knowledge and experiences of the other (e.g. the other person, the other school/kindergarten, the neighbour, etc.)
- Youth and elder learners are encouraged to participate in diverse learning experiences together through conjoint action and activities.
- The approach supports learners (i.e. kindergarten/ school students) to actively shape their living conditions within the institutional setting (e.g. of a kindergarten or school). Learners are exposed to common values and norms of every-day life and participate in their generation, consolidation, communication and innovation.
- Learners explore and experience particular learning opportunities, which the other provides. Differences and the diversity of socio-cultural protagonists are used as a resource for learning.
- Families of learners (particularly parents of students) are encouraged to participate in the education and learning processes of learners. Furthermore, the involvement of families in the educational institution and in institutional organisation makes the institution more transparent.
- The approach fosters close relations to the socio-spatial environment, such as the neighbourhood surrounding schools and social, environmental and economic protagonists.
- Pedagogical work follows the four "planning steps of the life-situational approach". Educators and learners collaboratively plan and make records.
- The organisational structure of the institution is shaped according to the approach.

(cp.: Preissing 2003).

The life-situational approach is an ambitious and modern pedagogical concept, which addresses the challenges of living in a time of profound and rapid transformations, controversies, risks, differences and self-responsibility, promoting sustainability. The "Institut für den Situationsansatz" (ISTA, German: institute for life-situational approach) of the International Academy for Innovative Education, Psychology and Economy (INA) gGmbH at the Free University of Berlin develops and disseminates this approach.

The approach fosters project-oriented and discovery-learning, so that learners become researchers, discoverers and intrinsically curious.

Learning takes place in contexts that are meaningful to learners, so that learning itself becomes directly meaningful and relevant for learners. Such learning involves the accessing of real-life situations and fosters "unpredictable" outcomes. Moreover, it fosters the correlation of action and reflection, the responsibility of educators and the participation of learners.

The situation approach holds that people and especially children autonomously learn and create on the basis of their own experiences. According to the life-situational approach, the learner actively and discursively deals with the complexity of his implicit (e.g. emotional) and explicit (e.g. environmental, or institutional) life situations or contexts. The learner overcomes challenges inherent in these situations, not according to moral appeals or general rules provided by educators, but by self-regulation. Thus learners are perceived as autonomous actors in different situations, overcoming social difficulty through complex organisation. The educator merely assists the learner in his process of self-becoming (autopoiesis). Learner and educator become *partners* in a learning process, which is determined through mutuality. Thereby, the situation approach dissolves dominative structures of an intervening education, substituting it with co-operational structures of "intraventional" education, preventing "instructionsism".

Through the utilisation of real-life situations and activity-based, often performative learning, the approach makes complex phenomena more tangible. Mimetic confrontations with the other in "real life" stimulates learners to explore, confirm and appreciate, question, innovate and adapt their own meanings and self-perceptions. The situation-approach provides open space for learning by means of the performative organisation, synthesis and the co-creation of complex reality.

This is accomplished by the "ten room-rules" of the approach. These are rules with architectural relevance and pedagogic evidence. They are recommendations, particularly for pedagogues to use rooms in a way that they incite learning. These rules are:

> "1. Rooms are created by children, 2. Rooms are modifiable, 3. In rooms different things happen simultaneously, 4. Houses and rooms are open, 5. Rooms make different cultures visible, 6. Rooms adapt to people with handicaps, not the other way around, 7. Rooms are environmentally-sound, 8. In rooms can more or less aesthetically arranged, 9. Rooms stimulate all the senses, 10. Rooms contain material that challenges learners." (Zimmer 2000, cp. Preissing 2003).

This approach is only applied in kindergartens and schools. It assists children in accessing phenomena, such as difference, participation, entrepreneurship, exploration, critical

reflection, creation-competence and general creation-"expertise", ethics of neighbourhood and mutuality, etc. in the sustainability context of society, environment and economy.

Creator of the life situational approach, Jürgen Zimmer writes:

> „(…) the pedagogical goal is to enable children of different origins and with different learning-biographies to act autonomously, in solidarity with others and competently in their present and future life-situations. (…). Thus, self-determination? Indeed. But not without social sense. Because an education for solidarity refers to the fact that we are not solitary inhabitants of this world, but that we live in community with others, that we protect those who are weak, that we do not discriminate against others, that we do not kick those who are down, that we do not slander, that we respect fairness, that we love our enemies and strive for reconciliation, that we are peaceful and that we do not lust for dominating power over others. Furthermore, it is not only a matter concerning human beings, but nature as well; its living creatures and its resources, which due to the fundamental degradation of this planet require ultimate protection. Competence means ability, knowledge, and empowerment. Competencies are required in order to be able to act adequately. The educational claim to development and to a holistic world-view is therefore essential to the life-situational approach. The mediation of education takes place in social contexts. Herein lays the primary difference between the life-situational approach and the practice of educational impartation of knowledge, dissected into pieces." (Zimmer 2000: 14,15).

4.1.1 Theatre of the Oppressed: Performative Peace-Education for the Transformation of Oneself and Society

Annotation: This chapter complements particularly the chapters 1.8 "Rituals and performative Learning" and chapter 4.1.4 Implicit Performative Learning and Explicit Performative Education.

The Theatre of the Oppressed is a set of methods, invented by Augusto Boal, who was strongly inspired by Paolo Freire and his "Pedagogy of the Oppressed" (Freire 1970). The Brazilian Boal developed an approach to combine art, self-experiences and politics through performances. Based on ludic, aesthetic and theatrical encounters of people (i.e. processes of mimetic interplay, networking, arranging), his technique offers the possibility to activate communicative and social resources, which are often "oppressed" in every day life. Boal was of the opinion that only the oppressed are able to free the oppressed. His new techniques, practiced in many regions of the world, allowed the idea of transformation and the impetus for change to come from within the target group.

"Oppression" connotes situations and social structures, for example, of inequality, gender issues, racism, poverty and deficiencies in democratic participation in political decision making processes. Article 10 of the International Theatre of the Oppressed Organisation (ITO) Declaration of Principles (2004) states:

> "The *oppressed* are those individuals or groups who are socially, culturally, politically, economically, racially, sexually, or in any other way deprived of their right to *dialogue* or in any way impaired to exercise this right." (ibid.)

Augusto Boal's theatre acts on two assumptions:

1. The observers, usually rather passive objects, shall become active protagonists of the performance.
2. The theatre shall not only focus on the past, but also on the present, future and future opportunities.

Central to his approach are the dialogues between trainers or directors and the theatre participants. It is not the director who determines the contents of scenes and theatre pieces, but the participants who determine the themes throughout the acting process. The director therefore does not have the role of an acting director who directs the action, but rather of an acting mediator, who guides the participants throughout the performing of theatre arrangements.

As part of education theory, the "Theatre of the Oppressed" promotes an education that empowers the individual to become what he/she is: a participant in human development. It "opens space" for self-regulated performative learning and for including life-situations into learning processes. These situations (cp. "life-situational approach", chapter 4.2.1) are relevant for the protagonists and thereby for the unfolding of socio-cultural diversity in terms of human multi-perspectivity on shared problems. The techniques of "Theatre of the Oppressed" aim for example to liberate individuals from every day compulsions, they foster the comprehension of one's actions, and they facilitate the uncovering and questioning of societal patterns of oppression. Humankind, for example, is oppressed by outdated socio-cultural meanings and societal patterns, unable to deal with the complexity of global issues and develop sustainably.

Boal argues that traditional theatre is oppressive since spectators usually do not get the sufficient opportunity to express themselves, and that a cooperation between audience (passive "spectators") and (active) protagonists in contrast allows spectators to perform actions that are socially liberating. This method, Boal emphasised, seeks to transform spectators into "spect-actors". His approach, therefore, exemplifies methods of performative learning, active performative development instead of passive and reactive "envelopment", and of shaping contexts and reality. Moreover, it applies mimetic interplay.

Boal was also known to quote Shakespeare's famous play Hamlet, in which the playwright explains (through Hamlet the character) that theatre is like a mirror that reflects our virtues and defects equally. Despite his affinity for the quote, Boal liked to think of theater as a mirror in which one can reach to change reality, to transform it.

The Theatre of the Oppressed has significant relevance for education for sustainable development because:

- As it deals with patterns of social organisation, it must necessarily address social, environmental and economic challenges. Accordingly, article 6 of the ITO Declaration (2004) states for example, that:

  "Every human being is capable of acting: to survive, we necessarily have to produce actions and observe those actions and their effects on the environment."

- It promotes intrinsically human-native "cultural competencies", such as the ability to engage in mimetic arrangement and mimetic learning in order to overcome complex challenges through the promotion of unity in socio-cultural diversity.

- It is a method for detecting and overcoming contingency and it performatively leads to the continuity of a sustainable society.

- It is a low-threshold approach to "intravene" in individual self-identities and patterns of societal organisation. Theatre of the Oppressed is based on performance, which is a human-specific mode of self-organisation. Performances are applicable in any situation and usable by anybody, despite his/her socio-cultural background.

- Theatre is ludic, it empowers the "Homo Ludens" (Huizinga 1939) and celebrates life through particularly lively means. It is therefore an end in itself.

- It promotes the competitive cooperation of participants. It detects differences and similarities, uncovers gaps in organisation and provides techniques for overcoming these discursively. Hence, it is intrinsically communicative; moreover, it is "communiticative" and constitutes agile unity in diversity by means of an ethics of neighbourhood.

Boal's method matches with the cultural-competencies based concept of "education throughout life and for sustainable development" (cp. chapter 4.1.3.), because he uses theatre and hence the typical human modes of performative meaning-making to generate, consolidate, communicate and innovate societal integrity and integration in terms of "communitication" (cp. chapter 1.8.4 and 2.2.2). The audience becomes active, so that the "spect-actors" explore, perform, analyse, shape and transform the reality in which they are living. This fosters shaping-competence in a significant manner.

There are different modes of Theatre of the Oppressed:

Forum-theatre aims to activate the passive observer. According to Boal's theory and experience, individuals who liberate themselves from predetermined social roles (e.g. of a mother, a student, a worker, or manager) and socio-cultural patterns (e.g. of consume or lifestyle patterns) in a theatre context, will be able to behave courageously and autonomously

in everyday life situations. In other words, this performative approach to education promotes comprehension of social phenomena and foster shaping competence (cp. chapter 4.1.2.1) as well as the sovereignty of learners to mimetically deal with the other and with complex social challenges. Referring to pedagogical and therapeutic work, forum theatre is able to incite learning-experiences, socially situational, environmentally contextual, economically relevant, immediate and spontaneous, ludic and complex, sovereign identity-inciting impulses, which a solely cognition-based teaching practice is unable to incite.

Forum theatre samples and re-enacts scenes of social life. Observers can spontaneously enter these model-scenes by exchanging other actors who represent underprivileged, oppressed people. Participating protagonists ponder:

- What would I do in the represented situation?
- How do I feel being in the role I play, how do I experience the others?
  How cn we change the proceeding of a scene with our ideas and actions?

In other words, forum theatre allows for concerted ludic, mimetic and performative situation and gap analyses posing the following questions, which mirror the structure of this text and its chapters:

- Who are we?
- What situation are we in?
- What do we want to achieve?
- How do we achieve these aims?

(Cp. the structuring of this document, cp. "Introduction"). Article 9 of the ITO Declaration (2004) consequently declares that:

> "The Theatre of the Oppressed offers everyone the aesthetic means to analyse their past, in the context of their present, and subsequently to invent their future, without waiting for it." (ibid.).

To enter a scene means to participate in its proceeding. Hence, former observers can alter the proceeding of the scene, so that the participants profit from the multi-perspectivity on the life-situational theatrical scene. Forum theatre techniques promote the innovation of the theatrical scene, and this participative scene-innovation in turn can facilitate the transformation of the actual real social life-situation, which was represented theatrically. Forum theatre, hence, does not only stage, represent and mimic social problems, it also samples and develops reality-alternatives. Theatre facilitates the participatory, narrative and performative implementation of these alternatives. Forum theatre is aesthetic training for prospective action in volatile conflict situations. It enables protagonists to be involved actively, to devolve power, to unfold multi-perspectivity, to facilitate participation, and to mimetically, ludically and performatively deal with the other and with alternatives in order to

overcome stagnating oppression, or contingency. This promotes the continuity of social integration and dignity.

"Legislative Theatre" is one specifically political branch of forum theatre. Theatrically, participants take over the roles of political decision makers, such as senators or mayors and play a problematic situation. According to forum theatre the participants analyse a presented problematic scene discoursively. In a next step they adjust it performatively. That enables them in a visualised, performative, very tangible way to explore solutions to problems. That process help the participants to liberate from oppression, democratise politics from the bottom-up and transform society. Apparently there are objective measures for proof the effectiveness of legislative theatre as it is reported to have changed various laws.

Another method is "**Invisible Theatre**", which Boal developed, inspired by the theatre traditions of the Soviet Union in the 1920s. In public space, such as on the street or in a shopping center, protagonists play socially critical scenes. The observers do not know that the situation is theatrical and they are not elucidated, even after the performance. The aim of this method is to uncover mechanisms of oppression. Observers should be provoked, so that they enter the scene and participate in its proceeding.

Image Theatre is an approach designed to encourage dialogue among Indigenous Nations and Spanish descendants in Colombia, Venezuela, Mexico and other countries through the usage (e.g. communication and critical reflection) of images.

"Rainbow of Desires" is a technique that deconstructs social situations between people. It focuses on the relations for example between parent and child, employer and employee, between lovers and between friends, etc. Using Image Theatre, actors identify and bring to life the various

Figure 45:
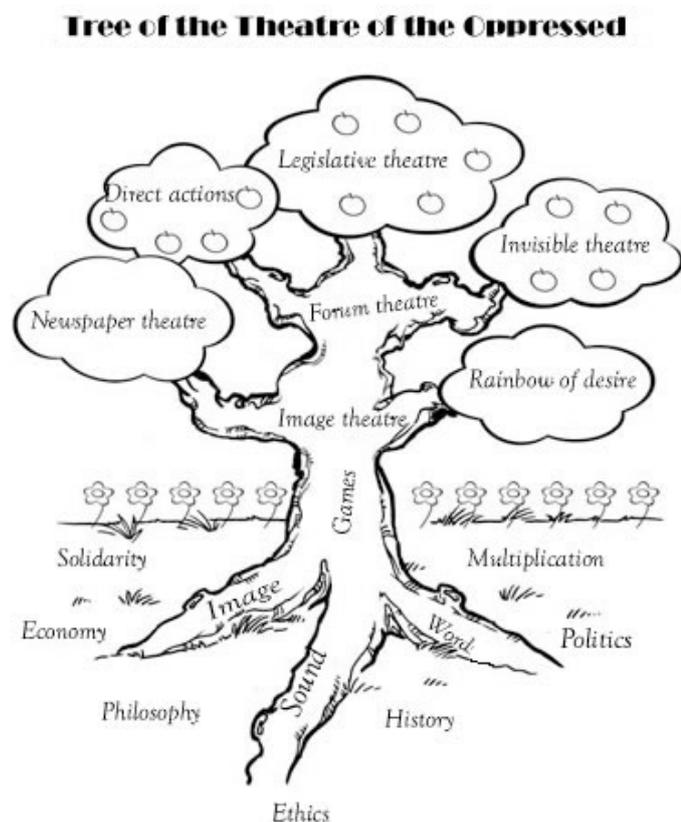
The figure by the International Theatre of the Oppressed Organisation (ITO) depicts the different methods.

Source:
http://www.theatreoftheoppressed.org/en/index.php?nodeID=3

447

conflicting emotions — the fears and desires that are happening inside the characters. The process very quickly goes beyond the individual, displayed story, which only functions to uncover and explore group experiences. This theatre reflects upon – and shapes – the community (or community member) and the "rainbow" of who we are, (cp. "the self is a swarm of its participations" Perkins 1992, and chapter 1.2). Participants learn more about their mimetic abilities and develop their self-identity explicitly in collaboration with others.

As mentioned, the International Theatre of the Oppressed Organisation (ITO 2004) also authored a Declaration of twenty Principles.

Following, some chosen principles from the Declaration are listed:

1. "The basic aim of Theatre of the Oppressed is to humanize Humanity.
2. Theatre of the Oppressed is a system of Exercises, Games and Techniques based on the Essential Theatre, meant to help men and women to develop what they already have inside themselves: theatre.
3. Every human being is theatre!
4. Theatre is defined as the simultaneous existence — in the same space and context — of actors and spectators. Every human being is capable of seeing the situation and seeing him/herself *in* the situation.
5. Essential theatre consists of three elements: Subjective Theatre, Objective Theatre and the Theatrical Language
6. Every human being is capable of acting: to survive, we necessarily have to produce actions and observe those actions and their effects on the environment. To be Human is to be Theatre: the co-existence of the actor and spectator within the same individual. This is the *Subjective Theatre*.
7. When human beings focus on observing an object, a person or a space, renouncing momentarily their capacity and necessity to act, their energy and their desire to act is transferred to that space, person or object, creating a space inside a space: an Aesthetic Space. This is the *Objective Theatre.*
8. All human beings use, in their daily lives, the same language that actors use on the stage: their voices, their bodies, their movements and their expressions; they translate their emotions and desires into the *Theatrical Language*. Theatre of the Oppressed offers everyone the aesthetic means to analyze their past, in the context of their present, and subsequently to invent their future, without waiting for it to happen.
9. Theatre of the Oppressed helps human beings to recover a language they already possess — we learn how to live in society by playing theatre. We learn how to feel by feeling, how to think by thinking and how to act by acting. Theatre of the Oppressed is a *rehearsal for reality*.
10. The *oppressed* are those individuals or groups who are socially, culturally, politically, economically, racially, sexually, or in any other way deprived of their right to *Dialogue* or in any way impaired to exercise this right. *Dialogue* is defined as the ability to freely exchange with others, as a person and as a group, to participate in human society as an equal, to respect differences and to be respected.
11. Theatre of the Oppressed is based upon the principle that all human relationships should be of a dialogic nature: among men and women, races, families, groups and nations, dialogue should prevail. In reality, dialogue has the tendency to become monologue, which creates the relationship *oppressors - oppressed*. Acknowledging this reality, the main principle of Theatre of the Oppressed is to help restore dialogue human relationships.
12. The Theatre of the Oppressed is a worldwide non-violent aesthetic movement, which seeks peace, not passivity.
13. The Theatre of the Oppressed tries to activate people to participate in a humanistic endeavour expressed by its very name: *theatre of, by, and for the oppressed*. It is a system that enables people to act in the fiction of theatre to become protagonists, i.e. acting subjects, of their own lives.
14. Theatre of the Oppressed is neither an ideology nor a political party, neither dogmatic nor coercive, and is respectful of all cultures. It is a method of analysis and a means to develop happier societies. Because of its humanistic and democratic nature, it is widely used all over

the world, in various fields of social activities such as: education, culture, arts, politics, social work, psychotherapy, literacy programs and health. In the annex to this Declaration of Principles, a number of exemplary projects are listed to illustrate the nature and the scope of its use."

(The International Theatre of the Oppressed Organisation 2004) .

In conclusion, it can be said that the Theatre of the Oppressed with its diverse approaches, promotes identity-building, as well as mimetic and shaping competencies. It thereby strengthens individuals, social groups and organisations to converge towards sustainability. A further assessment of these linkages between the Theatre of the Oppressed and education for sustainable development appears to be worthwhile and relevant for educational theory and practice.

4.2.3 Learning by Teaching for Sustainable Development

Learning by teaching (lat.: *docendo discere*) is an approach that calls for pupils and students to prepare and to teach lessons, or parts of lessons. This student-teaching must not be confused with reports, presentations or lectures by students, because students do not only convey a specific content, they additionally choose their own methods and didactics for teaching classmates about the subject. Nor should it be misunderstood as tutoring in terms of peer-to-peer-teaching, where the responsibility of the teaching is not solely in the hands of the tutors. Instead, the teacher incites learning through encouragement and the support of the students who teach. Learning by teaching can be applied to particular working phases or throughout the whole semester and curriculum.

The approach was developed in the 1980s by Jean-Pol Martin, who used it for French language lessons. He substantiated his approach through numerous publications. At the same time, other scientists, such as Udo Kettwig in 1986 and Theodor F. Klassen in 1988, worked on similar ideas. (Kettwig 1986; Klassen 1988). Martin disseminated the method to a network of thousands of teachers. They applied the method, documented their experiences and presented it in teacher trainings.

The task of teaching others responds to the human needs of security (development of self-esteem), social integration and social appreciation as well as to self-articulation and meaning (transcendence).

From a perspective of systemic learning theory, or reform pedagogy, or simply from a didactic point of view, learning by teaching is contrary to traditional instructionism, educational intervention (cp. chapter 4.1.7) frontal teaching or "factory schooling" (cp. chapter 4.1.6 "The Global Education Problem"). In a teacher-centred lesson the receptive acquisition of already lineary organised contents (linearity a priori) dominates. The

predefinition of meaningful content leaves out the openness for learners to discover these or other meanings for themselves, which contributes to the uniformation of the learners identities, so that education promotes formation rather than learning. This approach promotes mono-causality, repetition and memorisation. The hierarchical predetermination of meaning by one teacher prevents a creative diversity of thoughts, comprehensions, meanings and interpretations, questions and desires contributed through different learners. This leads to the homogenisation of mindsets and lifestyles; it forecloses the dignified unfolding of uniqueness. Learning by teaching in turn incites knowledge processing; the generation, consolidation, communication and innovation of specific content-based knowledge, technical skills and methodological competencies. The teacher provides the primary information for the teaching students. The teacher, however, does not prioritise, validate, or "linearise" information. Students have the task of transforming this complex information into comprehensive knowledge through processes of validation, prioritisation, evaluation and analyses, which require intensive communication and cooperation. This cooperation is possible through creative, open-ended, ritualised and performative mimetic interchange and arrangement between all participants, including teachers and students. The involved protagonists work as a network or a community, which fosters their "cultural competencies". Besides content-based knowledge, they acquire the knowledge of how to create, not only to receive, knowledge (Lat.: Linearity a posteriori, cp. „intravention" in chapter 4.1.7, "open space education" in chapter 4.1.8, "multi-perspectivity" in chapter 1.6 and "mimetic learning and autopoiesis" in chapters 1.3 and 1.4.1). In this regard, teacher and students collaboratively decide what the essence of specific information is. Throughout the process performative interactions enable all participants to take individual roles, facilitating the processing of knowledge. Knowledge is then consensual knowledge; it is actively processed and transcendent. Its truth or meaning is not imposed by the teacher and transferred to the students in terms of passive "knowledge" reception. Performance as a major communicative and meaning-making mode is not yet explicitly used to accomplish the approach. The combination of learning by teaching and performative learning would be worthwhile. It would also be fruitful to work with "real life-situations" according to the life-situational approach, in the context of social, environmental and economic, "glocal" challenges.

Before every lesson the teacher prepares bits of information, such as articles, videos, excursions, provision of websites, or the invitation of interviewees to incite a process in which learners critically create knowledge, instead of absorbing alleged information. The students form groups of 2-3 people. Every group receives specific pieces of information, which together cover an overall subject. Each group gets specific tasks; results are presented to

the plenary class. The students enhance their content-based results didactically, i.e. through interesting stimuli, questions, plenary discussions, visualisations, etc. This preparation is part of the core lesson and the teacher supports the different groups by giving advice and suggestions. This approach has proven to be compatible with all school forms, primary and secondary schools, university and vocational training. It seems that adults and teachers often underestimate the didactic ability of students as well as their capacity for self-regulated learning. Crucial for the success of the approach is a successive step-by-step introduction phase and the consequent – continuous – application of the approach. Moreover, it is important not to misunderstand the approach as promoting lessons being taught by students, as this would connote teacher-centred education with the small difference being that students partially replace the teacher.

The teaching students are responsible for assuring that their addressees comprehend the content, i.e. through questions, summary requests, and short partner-work. The teacher must intervene whenever he or she has the impression that the communication is failing or that the motivation techniques that the teaching students chose do not function.

❖ Example:

Learning by teaching is particularly developed in the context of language acquisition. According to Martin (2007), the learning by teaching approach, particularly for foreign languages, is especially attractive because it combines cognitive learning with performance (habitualisation) and verbal communication. The cognitive learning goals are facilitated because students motivate other students to pay attention to the respective subjects. The acquisition of language structures is facilitated by the increased communication of the students (the students speak 75% of the time during a learning by teaching lesson, compared to the 25% during the traditional, teacher-centred lesson, cp. Martin 2007). This leads to the mimicry, or repetition of knowledge (i.e. the structures of the respective language). The communicative component of learning – and being – is promoted because the teaching students speak with a real, not invented, speaking intention; they want to share and impart their knowledge. The learning gains authenticity, which incites even students with extrinsic motivation, to learn a foreign language (French as compulsory, obligatory subject). Furthermore, students with negative foreign language learning experiences can be reintegrated into the collective learning process because the learning by teaching environment incites active and positive processes, which motivate the learner to learning (methodological, technical and contentual knowledge). The principle of activity and negating of passivity resembles the theory and practice of Augusto Boal's "Theatre of the Oppressed". In Germany, for example, there exist learning by teaching toolkits in study-subjects such as foreign languages (i.e. Spanish, Russian, English, French, Latin), but as well for informatics, art education, mathematics, physics, music, religion and sports.

The approach requires concentrated support and training of the teaching students' methodological aptitudes. They must learn to sequence learning contents, to visualise the contents through different media, to activate the group, etc. Self-efficacy and joint responsibility for the valuable time of the lesson facilitate pedagogical success and knowledge accumulation.

The class teacher must learn to recognise the quintessence of every contribution and interrelate the different student's statements. The teacher becomes the moderator, broker or

organiser of collective reflections, without too much intervention but rather "intravention". In this regard the teacher keeps track of the contents of contributions. He/she rather directs the knowledge processing, so that the communication between students proceeds freely, un-interrupted, consequently and thereby, indirectly, result-oriented. Thereby the teacher safeguards an "open space" for the self-regulated unfolding of knowledge, competencies and hence of development. Efficient, active, deliberated and focused communication in terms of dynamic (e.g. fluid, processual), and complex (e.g. stable and comprehensive) arrangement becomes the major feature and competency needed for successful problem solving. This is regarded as a condition for a sustainable mental paradigm change, for an ethics of the other, for a macro shift in human autopoietic organisation, sustainable development and sustainability ethics (cp. chapter 3.2).

As the organiser of collective reflections the teacher must make sure that the whole class, hence all members of the class-community, learn the new contents. Typical for the beginning of such lessons is not to predefine what the student must learn, but to leave it open. Pedagogues rather guide the learners throughout their research and presentations so that lessons can meet national requirements. Hence that learning process itself is participatory, students and teachers do not follow a predetermined "linearity" of the processes and of the learning contents, but develop the respective learning processes and contents in group-specific, self-regulated terms. That means, step by step the class will collectively work on the clarification of yet unknown learning content (non-knowledge or prospective knowledge) in terms of "linearity a posteriori".

Martin draws a parallel between a classroom-community and neuronal networks. Neuronal networks interact with other networks and produce knowledge by establishing more effective connections. (Neuronal) networks arrange and hence continuously generate, consolidate, communicate and innovate complex and stable, contextualised and therefore adjusted, innovative, relevant patterns. Hence, these new networks have a higher emergency level, or respectively the are more complex (cp. chapter 1.4 and 1.5) than former network constellations; they learn, develop and regulate themselves through interchanging, cross-arranging processes.

According to Martin (Martin 2007), teachers must assure that learners communicate continuously and that they create subject-related and simultaneously, cohesive bonds by "communiticative" means. As mentioned the teacher has the task of mediating the processing of consensus knowledge; knowledge which is created through manifold contribution of learners and which is created through their negotiation upon – and critical questioning of – the characteristics of that knowledge. Such collective knowledge generation,

consolidation, communication and innovation can be best facilitated in the context of small research projects and by means of "discovery learning".

Learning by teaching sensitises learners for "communitication" processes because the class-community develops throughout the learning process. This collective, (learning-) community-based rather than teacher-centred learning process, moderation of discourse and mimetic arrangement potentiate problem-solving processes. Through learning by teaching protagonists acquire ludically mimetic networking-competence. Jean-Pol Martin subdivides the learning by teaching concept, the requirements for teachers and outcomes for learners into the following attributes:

- "The awareness that an individual is a bearer of resources
- The awareness that it is desirable to augment one's resources in order to increase one's attractiveness for the group
- The awareness that one can augment his/her resources through communication
- The awareness that communication arises when one knows something, which the other doesn't know
- The awareness that the communication and transmission of knowledge increases one's own knowledge
- The ability to recognize the potentials of other group members, to access these potentials and make them useful for the group
- The ability to start communication within the group and to maintain this communication
- The ability to incite and guide the transformation of information into knowledge within a group
- The ability to search for relevant external resources for the group
- The ability to recognize the willingness to act and to mobilise it
- The ability to communicate with other people and to maintain this communication."
(Martin 2007).

There is a certain parallel between 1.) the process of knowledge generation, consolidation, communication and innovation 2.) learning by teaching lessons and 3.) the creation of an Internet encyclopaedia, such as Wikipedia. The fact that students who are not experts present a learning subject incites the scrutinising attention of classmates. This prompts all involved learners, including the teacher, to participate in the enhancement of yet inchoate, rudimental knowledge. The achieved knowledge is of multi-facetted character, or respectively versatile. The participatory and therefore consensual generation, consolidation, communication and innovation of knowledge has a greater potential for developing complex and relevant (sustainable) knowledge, compared to teacher-centred teaching approaches.

In contrast to teacher-centred educational approaches, learning by teaching promotes "multi-perspectivity" or collective intelligence, and a certain self-regulation capacity of class- and school-networks, or In-groups (cp. chapter 3.1.3 for "global In-group").

Comparing this approach to an internet-encyclopaedia, one of the parallels is that members are willing to contribute their knowledge and work critically on texts; hence they participate because they do not assume that authors necessarily know more than they do themselves.

It is through the "scientific equalisation" of all users (everyone in the group has per se equal value, contributing to the collective, not person- or individual-centred creation of scientific knowledge) that a great quantity of existing knowledge is contributed to the internet-encyclopaedia. This new manner of knowledge-making signifies a paradigmatic change from an information society in which science relies only on experts, to a knowledge society, which is characterised by the collective and participatory making of knowledge by all and for all. Learning by teaching is an approach to enable such participatory knowledge creation.

Delegating the tasks of the teacher to students leads to a noticeable activation of cognitive, explorative, communicative and social-integrative abilities.

Most teachers seem not to use the approach comprehensively in all lessons, but rather in intervals or only in classes where the approach shows immediate and effective results. This reduces the chances of positive outcomes, but contributes nevertheless to education for sustainable development.

Advantages of the approach are for example:

- Intensive compiling of subject related knowledge; the students are more active compared to traditional teaching
- Promotion of self-regulated learning and key-qualifications, such as the ability to work in teams, to present, and moderate, the comprehension of complex information, self confidence and reliability

Some of the disadvantages are:

- Significant investment of time for introducing the approach
- Significant investment of time for preparations and presentations from teachers and students compared to teacher-centred lessons/ frontal teaching.
- The risk of monotony in the case that the teacher fails to provide didactical impulses
- Difficulty for the teacher to measure, compare, grade and validate students' efforts

Education for sustainable development requires holistic approaches: the focus on social, environmental and economic system cohesions, which must be discovered and explored by the learner on the one hand and the need for basic didactic principles, which combine functional learning with ludically mimetic learning as a means for dignified, enjoyable life on the other. Learning by teaching provides the ludically mimetic open space framework for exploring the meaning of sustainable development. Moreover, it allows for self-regulated "communitication" or for mimetic arrangement with the other in terms of "cultural competencies". Handing over the direction of learning from the teacher to the students incites the students to explore and discover "global thinking, local actions", so that the teacher must

not intervene and indoctrinate students concerning sustainability challenges and meanings, he/she can rather "intravene" (cp. chapter 4.1.7) the learning process. The teacher guides students throughout their particular, collective and personal sustainable developments. This approach enables the learning community to process interdisciplinary social, economic and ecological input that comes from students, teaching students and/or the teacher.

4.2.4 The Earth Charter

The UNESCO Section on Education for Sustainable Development describes the Earth Charter as follows:

> "The Earth Charter is the outcome of an extensive process of worldwide consultation and dialogue with civil society, under the leadership of some of the most distinguished figures of the international community, including former president Mikhail Gorbachev and Maurice Strong, and is now undoubtedly one of the most powerful instruments for promoting the changes in our ways of life which must take place irrespective of any differences that may exist between us and which are driven principally by the imperative need to conserve life on earth." (Section on Education for Sustainable Development 2006).

The Earth Charter sets forth a global ethics, involving fundamental values and principles governing sustainable ways of living. It builds upon and extends the ethical vision in the Rio declarations and Agenda 21, and includes the fundamental values and principles articulated in the United Nations Millenium Declaration (2000-2015) as well as in the United Nations Decade for Education for Sustainable Development (2005-2014). The initiative's partnership project "Educating for Sustainable Living" is using the Earth Charter as a framework to develop new curricula and educational materials for the understanding and promotion of sustainability. The initiative is also working with its partners to train community development leaders to use the Earth Charter as an educational tool for working toward a more just, sustainable and peaceful world.

The Earth Charter aims to contribute to a culture of peace. It was invented as a basic tool to raise consciousness (environmental, social, and economic problems), to call for action through partnership building between civil society, businesses and governments and to facilitate the application of values through the guiding principles.

The Earth Charter outlines the following educational principles:
1. The need for open, participatory and inclusive education processes
2. The need for some common resources and materials
3. Experiential learning
4. Transdisciplinarity
5. Core educational themes found in the Earth Charter are:
   o Critical challenges and choices
   o Universal responsibility
   o Differentiated responsibility
   o Interdependence of social, economic and environmental domains
   o The community of life
   o Partnerships

       o Peace and non-violence
       o Ecological Integrity (Earth Charter 2006/2000).

The Earth Charter is a comprehensive guideline or framework that aims to stimulate education for sustainable development initiatives, interlink heterogeneous educational attempts and to provide a principle orientation, making the meaning of sustainability more tangible. This takes place in formal settings, such as universities and other forms of higher education, elementary and secondary schools, and in non-formal settings, such as communities, businesses and local governments, (cp. Earth Charter 2006/2000).

The Earth Charter Initiative (name of the coordinating organisation) provides numerous toolkits in many languages, such as a teacher guidebooks and good practice examples for education.

4.2.5 Democratic Education

The UNESCO Commission on Education and Development states:

> "Progress in management sciences and cybernetics, as well as in education and the spread of information, radically changes fundamental aspects of democratic practice and leads people to claim a greater say in public life.
> This means that democratic education must become a preparation for the real exercise of democracy. Education in democracy can no longer be separated from the practice of politics. It must equip citizens with a solid grounding in socio-economic matters and sharpen their judgement. It must encourage commitment and vigorous action in all spheres of individual concern and endeavour – politics, public affairs, trade-union activities, social and cultural life – and help them to retain their own free will, to make authentic personal choices. It must teach everyone to fight against the abuse of propaganda, against the omnipresent messages and temptations of mass communication media, against the risk of estrangement and even of 'anti-education', which those media may bring." (Faure 1972: 102).

Democratic schools take this as a model, promoting democratic education through the application of democracy, justice, freedom and responsibility.

In society pupils are merely "passive objects" of democracy, they do not, or only insignificantly participate in shaping the school community and school life. In contrast, democratic schools are *direct* micro-democracies, because they are democratically organised. In these schools, pupils are subjects of democracy; they pro-actively regulate their learning community by co-creation, participation, organisation innovation and discourse. Similarly to the situation approach, educators and learners build an inclusive community. They collaboratively achieve the collective goals of social and individual empowerment and development in dignity and peace.

The Summerhill School, an example of a democratic school, functions explicitly as a community. The pupils are involved in that they identify with this community and participate in it by their free choice. (cp. http://www.summerhillschool.co.uk/)

The Sudbury Valley School, another example, is built on the understanding that the concept of school can no longer be constructed with the relicts of an old system that aims to

transform farmers into factory workers. The motto of this school is rather that due to the knowledge society, in which protagonists create and apply knowledge, contrasting to the information society in which protagonists only memorise what is said to be knowledge, pupils must be empowered to engage in autonomous self-regulation through self-regulated learning. (cp. http://www.sudval.org/)

A democratic school is understood as a social place to internalise, train and perform tolerance and co-habitation, and which promotes the development of the personality. This democratic dimension interlinks with attributes, such as stamina, assiduity, desire, motivation, identification, etc.

Democratic schools often reject the notion of handing out certificates and grades with the argumentation that it is central to education to assist pupils in their self-becoming. School is successful if the participants feel well and are able to orient themselves in society. Society must educate people to be pro-active, democratic citizens. Such approach moves pedagogy into the centre stage of education in order to generate content and knowledge. Thus, democratic education requires teacher trainings, which equip pedagogues with pedagogical competencies. The aim is to prevent a "bulimia of knowledge": the learner's insertion of knowledge and the subsequent deliberation of this knowledge. (For contents of this chapter cp. Free University 2005).

Examples of democratic practice in schools are student parliaments as well as guardian angel programmes, where elected, elder students take care of and support a defined group of younger students. These two approaches are also part of the School for Life concept.

4.2.6 The School for Life Concept and Models

The School for Life concept was developed by Prof. em. Dr. Jürgen Zimmer. The concept combines a unique architectural design for a boarding school with child-centered learning through innovative pedagogy. There are two established pilot Schools for Life in Thailand, and other Schools for Life are being formed.

The first School for Life was founded in 2003 and is located in the mountains of Doi Saket, which is located about 30 kilometers north of Chiang Mai in northern Thailand. One hundred and forty children with disadvantaged backgrounds have found a new home there (cp. www.school-for-life.de)

The second school is the Beluga School for Life. The Beluga School for Life is a learning village-community with about 240 inhabitants in the south of Thailand, in the province of Phang-nga. The UNESCO associated School is an active supporter of the Earth Charter and is home to 150 Thai children from unfortunate backgrounds, including tsunami survivors, children from poor families and children without emotional and health security. (cp. www.beluga-schoolforlife.de).

Part of the concept is that Schools for Life develop own, specific implementations and interpretations of that concept. This makes contextual adaptation possible and allows, or even requires participation of all involved to shape and identify with the school.

In both Schools for Life children live together with mentors in small family houses or larger community accommodations. Moreover, the "families" are embedded in neighborly and village-like structures. In this social context the children find opportunities to play and to develop responsibility for the community. The project also comprises a nursery, a kindergarten, primary as well as secondary school and vocational education.

The School for Life pedagogy is participatory and concentrates on discovery learning, community education and education for innovative eco-social entrepreneurship. Furthermore, School for Life applies the life-situational approach (see above).

The goal of sustainable development shapes the school's educational concept. Following the Earth Charter guidelines for education, the children are to learn and live in a socially competent, environmentally responsible and entrepreneurially active fashion. Children must be able to develop creatively and discover for themselves what sustainability means. Therefore, school lessons take place not only within the usual limits of the classroom and the specific subject, but are enriched by so-called "learning centers", by interdisciplinary and project-based learning. Instead of just thematic elements in the curriculum, these learning centers are actual architectural facilities. Following, the various learning centers are listed, the mentioned details accord to the Beluga School for Life.

- Center for Cultural Heritage and Development – with an amphitheater, a tsunami museum, a pavilion of religions and buildings for music, dance and art;
- Center for Organic Farming – with cultivated areas on the large school grounds (7ha) and a farm (4ha) for livestock, fruit and vegetables;
- Center for Body & Soul – with a small building complex for massages, yoga and spa treatments as well as a soccer and a basketball/volleyball field;
- Center for International Communication – with two buildings for computer and language classes;
- Center for Culture Sensitive Tourism – with 18 Guest pavilions, swimming pool and restaurant; and
- Center for Nutrition & Health – with a canteen and a professional restaurant kitchen.

The learning centers are run by specialists and aim to generate income according to Buddhist economics and sufficiency economy in order to reduce operating costs. For example, 100% of the culture-sensitive tourism proceeds from overnight stays, meals and

activities directly benefit the project. The children learn by "looking over the shoulders" of the employees, as well as through participation in numerous daily workshops. There is no "as-if" education, but exclusively practical learning experiences.

The children get up in the early morning and after morning sports, time for shower and preparation, they have breakfast. The school day starts with the daily school opening ceremony. School-based lessons continue until noon when there is a one-hour lunch-break. From 1-2 p.m. schooling continues, inside or outside the classroom, while the afternoon is used for project-based learning. In each of the centers of learning several afternoon projects are offered to the children. Each child chooses at the beginning of the semester what he/she wants to do in the afternoon, from a list of about 25 different projects. The great number of projects available means that there are usually only 6-12 children in one project. Examples of such projects are: children's shop (a shop from children for children and others), organic farming, fish farming, environmental science, recycling, Thai traditional dance, contemporary dance, art, sports, volleyball, basketball, Thai boxing, yoga and massage, bakery, guesthouse management, software and hardware introduction, cooking, campus design, and career development. Saturday is a day for more extensive projects, such as "local wisdom", where the children discover and learn more about traditional knowledge, mostly from elders (intangible heritage), or they can "be a little guide", a project which encourages children to find out more about their roots and – as entrepreneurs – accompany foreign guests to places, such as their home villages, take them on fishing trips or to an inter-cultural, multi-lingual lunch.

These experiences involve child-based "discovery learning" and a strong focus on entrepreneurship education in order to prevent the children from being trapped in a vicious cycle of poverty as adults.

In the afternoons, the children have small, ritual meetings to make plans or discuss problems in the group. The children find space and time for leisure mostly in the afternoons and evenings. However, if a child is unconcentrated during a lesson or project, teachers are flexible about children pulling themselves out for some time. Ritual, such as mornings sports, school opening ceremony, meetings, and also particular songs and meal habits provide structure and support common sense.

Elected "Guardian Angels" care for younger protégés and a children's parliament regulates the students' community internally and participates in decision making.

It is highly significant that the project provides a team of mentors who function as parents for the children. Their number is even greater than the number of teachers. That ratio facilitates the child-care. Above everything else, the Schools for Life safeguard the children's right to happiness, hence the educational concept and practice of School for Life constitutes sustainability at present (learning as a means in itself/sufficient education) and the

comprehensive concept fosters sustainable development in future (learning as a means to shape social, environmental and economic contexts/efficient education).

4.2.7 The ZERI Education Initiative

Zero Emissions Research & Initiatives Foundation (ZERI) is a global network of creative minds seeking solutions to global challenges. Its general vision is to view waste as a resource and seek solutions by using nature's design principles as inspiration. The foundation was launched in 1994 at the United Nations University in Japan, as a network of scientists who are committed to finding innovative solutions to the pressing problems concerning sustainability. Today it implements numerous, mostly industrial projects which all have sustainable effects on the society, environment and the economy. ZERI works together with governments, global as well as regional NGOs, scientists and educators.

Gunter Pauli, founder and director of ZERI and member of the Club of Rome, wrote different fairy tales for children. These stories aim to inspire children to think critical and understand how life functions. A teacher-toolit was developed as well, to help teachers to integrate them into their work with the children. All of the 36 stories emphasise the capacity to invent, co-create and implement sustainable development: They are tools to help achieve the simultaneous capacitation of protagonists for eco-literacy, emotional intelligence, arts and academic knowledge, as those are the fundamental elements of ZERI's vision of a change in consciousness and a global ethic.

The booklets are translated in up to thirty languages and are designed to be socio-culturally sensitive and adaptable. They show, for example, active men and women, people of different races, northern and southern fruits, animals, architecture, etc., so that at least six fairy tales will always fit in the local context of a country or region.

Pauli writes:

> "The world that we – as parents – have created is not capable of responding to the basic needs of billions, even in simple terms like water, food, shelter, health care, energy and jobs. (…) Through the eyes of a child, the "right" path for the future looks substantially different from the world (and the educational system) that we, as adults, have wrought. Can fairy tales help such a child build a new reality? Ask a child.
> Education can be about 'reaching out', not 'teaching', 'exposing' not 'imposing'. This is easier said than done, but if we expect our children to grow beyond us, to enjoy life with soul, and to share responsibility for that new world which we are jointly capable of shaping, then we have to put systems in place to achieve these expectations." (Pauli 2005a).

ZERI's educational initiative proposes that children, adolescents and young adults learn science easier, if they have a profound understanding of the functioning of life as such. At the same time, they develop their emotional intelligence, which permits them to better understand themselves, and to learn how to relate to others, as well as developing artistic expression as a communication system, which goes beyond the capacity of words.

Moreover, the initiative incites the capacity to put all of these aspects together, to generate new perspectives, ideas and concepts, interrelating them into one context: the eco-system.

As a principle system Pauli declares that education must be based on systems thinking: open, flexible, evolving and always improving.

According to Bruner, narration is the sequencing of chaotic impression, the transformation of random impressions into meaning. He states that narrations:

> "represent and abide a sequenced order, so that events and situations are 'linearised' through a process of standardisation." (Bruner 1997: 90, 91).

Moreover, narrations require, but also incite "a notion of the canonical as well as of the variation of the canonical", (ibid.). A story is "reaching out" instead of "teaching", it is not imposing, but exposing the learner to its content and proceeding, because it "requires the perspective of *a* narrator: A story can not (…) be 'without voice'.", (ibid.). Thus a story is an assumption, a suggestion, perception or recommendation, which due to and *through* its subjective (and *a-universal*) character profoundly affects our identity-building. Bruner states:

> "One of the most prevalent and powerful modes of discourse in human communication is the narration." (ibid.).

Narration is a mental performance; it transcends the possible and the impossible, the imaginable and the unimaginable, the abstract and the tangible, reality and utopia. This agrees with Bruner's thesis, that "there is a 'compulsion' to construct stories", (ibid.). Stories appear to be major forces in the creation of socio-cultural identity, particularly for children. Hence, Bruner mentions that especially children are "compelled" to engage in narration.

Thus, stories can indeed be used as educational catalysts to access the implicit power of culture for autopoiesis in terms of sustainability. The ZERI education initiative is affiliated with this narrative learning process. It promotes children's learning experiences and increased outreach, and complements other education approaches.

Pauli writes:

> "Fairy tales can be written in such a fashion as to promote questions, as opposed to just delivering answers. It is a curious but historically understandable feature of our current learning systems that questions take a back seat to answers and yet, it is clear that our society's path forward requires the ability of students - at any age - to continually ask questions. In elementary school science we learn "the answer" (…). What if material (annotation: with educational potential) was presented so that students instead wondered (annotation: how things are possible)? This could lead students to a series of questions that would open up new worlds of inquiry. We can only imagine where such students would eventually take our world. (…). (Annotation: The aim is to) expose the student to systems thinking - without ever speaking the term out loud." (Pauli 2005b).

Making the argument that fairy tales are complementary to systems thinking approaches, Pauli refers to a modern concept of education for sustainable development.

Pauli states:

> "If children, the adolescents and adults that they will become, are to truly learn to think, design, create, and dream in systems, then they must be exposed at an early age to systems thinking.

> The complexity of systems thinking must grow over time in the child's long-term memory. As this ongoing development of systems thinking in the child's long-term memory combines with the emotional richness of learning through fairy tales, a synergy of learning is created. (…). The child can begin to see, dream, envision, and eventually design in systems. And, when a student has an intuitive grasp of the big picture, then the learning of the specific tools, concepts, and principles involved become far more real and appealing to the student. When students start with a story that integrates ethics, economics, biology, and mathematics, they will be drawn to learn those disciplines that are today often dismissed by students as boring or irrelevant. And as stand-alone subjects, they often *are* irrelevant as well." (Pauli 2005c).

Moreover, the initiative promotes the presented, democratic community approach; the teacher as mentor, not as an authority controlling the learner:

Pauli explains:

> "In this new model of learning the role of the teacher must evolve from the traditional "giver of knowledge" to that of facilitator, enzyme of learning, catalyst - that is the role of mentor. Mentors can help eliminate obstacles and they can ask the questions that help a student develop. The student needs to know that mentors - a group that evolves over time - are there when the student needs them. This new role of the teacher will result in a student's self assessment, improved self confidence and an enhanced sense of self potential." (Pauli 2005d).

ZERI's vision is to empower children to reach their potential, a potential that is beyond our imagination.

4.2.8 Summary

Various approaches to education for sustainable development can be used in different settings, for example, youth-exchanges, artistic/performative education, (e.g. theatre, music, dance, and sports projects), ecumenical gatherings, such as at the "Community of Brothers of Taizé", the "World Social Forum", Agenda21 initiatives (e.g. the German "Transfer21" initiative), the Project GERM, (Groupe des Études et des Recherches sur les Mondialisations: A project to make the diverse aspects of globalisation more tangible), the shortly presented Canadian initiative "Cultivating Peace in the 21st Century" (see chapter 4.1.8 "Open Space Education"/ Anderson 2002) and "Shikshantar": the "People's Institute for Rethinking Education and Development", whose director Manish Jain states:

> "It is becoming increasingly clear that our ability to face the challenges of the 21st century will depend on our capacity to learn and unlearn - as individuals, as communities, as societies. It is also becoming clear that the 19th century model of factory-schooling is not only dysfunctional but is also destructive against the vast diversity of processes, knowledge systems and contexts in which human learning and growth takes place. There is an emerging discussion around the world about the need to develop/connect different kinds of spaces and opportunities to nurture a fuller range of human potentials and human relationships." (Jain 2000).

There exists a huge diversity of educational initiatives, approaches and pilot projects, which may complement, stimulate and innovate each other. Their potential lays in their systematic collaboration and organised relation within networks. In this context the German UNESCO Commission made an extraordinary effort to identify, communicate with and connect more than 1000 different initiatives for education for sustainable development within the country (cp. www.bne-portal.de).

Conclusion

Education is imperative for achieving sustainable development, and sustainable development in turn is imperative for humankind to generate and maintain integration and dignified living. Humankind is not defencelessly at the mercy of destiny, or dominated by a vis major. It is not directed by development, but instead directs development. Human development does not only affect humankind, it is manmade. Human sustainable development connotes the social, environmental and economic integration of mankind and as such it is must continuously be recreated. Human development can actually be thought of as being synonymous with sustainable development, because if development is not sustainable then it is not really development, but rather stagnation, inertia, or "envelopment".

Folk psychology and implicit socialisation are forms of education and learning that make it possible for the protagonist and learner to participate in social life. As such they are pre-conditions for the ability to shape and participate in human sustainable development.

However, humankind's autopoietic potential is greater than that implicit ability of which every human bestows natively: Formal education is key to the explicit, thus intentional mobilisation and increasing of the otherwise implicit "cultural competencies" of socio-cultural protagonists. In the context of the pressing global issues that we face, the formal mobilisation of "cultural competencies" and particularly of shaping competence (de Haan 2002, 2007) is not only an option, but also an obligation if we wish to provide adequate education. Of central concern is that conventional "education" often contributes to the oppression of "cultural competencies", such as creativity, mimetic interplay with the other and performative learning. These "Hidden Dimensions of Education" (Wulf 2006) and the human "treasure within" (Delors 1998) must be involved in educational philosophies, policies, concepts and practices in order to mobilise the ability to deal with complexity and hence increase the human autopoietic, sustainable performance. Such education seems to be constructivist in the sense that it increases the efficiency of learners to shape their development. Indeed, such education is a means to sustainable development. Sustainable development in turn promotes human dignified existence in terms of existential security and personal happiness in the present. Consequently education for sustainable development is both, a means to sustainable development and also a sustainable end in itself. Hence, it does not only promote sustainable development but is also sustainable in itself. Such learning is enjoyable; it addresses the Homo ludens, safeguards the learner's right to happiness and provides secured open space for mimetic discovery learning (Prof. Jürgen Zimmer and his School for Life approach, cp. Zimmer 2007 and chapter 4.2.6, as well as the life-situational approach, cp. Zimmer 2000, Preissing 2003, cp. chapter 4.2.1). Learners must not be told what

sustainability means. They can (be helped to) uncover what it may mean to others and discover what sustainability could mean for themselves. Education for sustainable development appeals to the learner's liveliness, encourages the learner to be tolerant and see things from different perspectives, explores the learner's limits and talents, explores conventions and eventually promotes their "creative destruction" (Marx, Engels 1848: 226; Schumpeter 1989), explores the other, including the "other self" and supports the learner to cope with friction and conflicts, and to accept and eventually learn from mistakes.

In this regard, education for sustainable development makes a virtue out of the necessary: ludic, creative and especially mimetic learning "celebrate" human being, so that it is a end in itself (sufficiency). *Thereby* education achieves to strengthen human "cultural competencies", which in turn contribute to shape human development sustainably (efficiency).

Indeed, education which aims to promote sustainable development must not reinvent, or respectively (uni)form the human being but rather strengthen the attributes and competencies which make the human being human(e). Since the human being is determined by its cultural agility an education is required that promotes, incites and empowers "cultural competencies", ensuring sovereign socio-cultural identities, which provide uniqueness (dimension of diversity) and which unify with others (dimension of unity).

Consequently the text analysed what these attributes and competencies could be. Particularly the approach of "learning throughout life and for sustainable development" presented in the text aimed to examine, how such educational and culture anthropologic findings are pedagogically implementable.

Figure 46 sumarises the role and operational mode of education for sustainable development, activating an autopoietic, possibly sustainable feed back loop. It uncovers the connection between culture, diversity, education and mimetic learning for sustainable development.

Figure 46:
Mimetic learning for Sustainable Development as Autopoietic Feed Back Loop

Explanation:

1. Green Loop
Humankind (A) is defined through its cultural attributes (B). With the support of cultural competencies (B) humankind adjusts to and shapes its social, environmental and economic living contexts (C). The transformation of these contexts (C) often evokes new challenges (D), such as global issues. These challenges (D) directly concern the integrity and dignity of its inventors (A) forcing humankind to (re)generate sustainable integrity.

2. Orange Loop
In order to (re)generate integrity by means of sustainability, humankind (A) must mobilise its cultural regulation competencies (B). Those cultural competencies (B) can be explicitly strengthened through "education throughout life and for sustainable development" (E). Formal education (E) "for life" (Zimmer 2007) is stimulated best if it holistically involves the "hidden dimensions of education" (Wulf 2006) (F), promoting "shaping competencies" (de Haan 2002, 2007). Such humane education (F) sustains the human socio-culturally diverse network (A) and mobilises human cultural autopoietic capacity (B).

465

A. Subject: The "wise human" (Lat. Homo sapiens) is characterised through its cultural "making", which it expresses in socio-culturally diverse ways. This accords to the principle of "unity (of humankind) in diversity" and "all same – all unique".

B. Principles of Operation: Human beings operate culturally. Hence, humans are natively cultural competent to operate mimetic interchange and arrangement with the other in terms of networking, creativity and the mutual making of meaning, self-identity and patterns of societal organisation. This is facilitated through the usage of cultural techniques, e.g. narration, cognition, ritualization and performance - enabling the learner's cultural competence to deal with differences and access multi-perspectivity on complex challenges.

C. Gain in Power: Mimetically, self and other expand their "horizons of the possible", reciprocally increasing their ability to shape the social, economic and environmental context.

D. Transformed context: The gain in power impacts on the human context. But this causes new social, environmental and economic challenges, which require the innovation of socio-cultural meanings, identities & societal organisation patterns.

E. Mobilizing Education: Implicit, mimetic learning generally mobilises human-native cultural competencies to regulate socio-cultural meanings, identities and societal organisation patterns. Explicit, formal education for sustainable development increases these competencies of learners, so that they can better shape their contexts and overcome complex challenges. Such education strengthens the attributes and competencies, which make the human being human(e), hence which constitute sustainability (sufficiency) and which develop sustainability (efficiency) in the same time.

F. Educational "Intravention": Education strengthens what makes the human being human(e), instead of intervening in, and (uni)forming learners socio-cultural identities. That means, it supports learners to increase cultural competencies (B.). These empower protagonists to 1) develop sovereign identities through mimetic interchange with others, 2) make critical situation analyses, considering environmental and social integration and economic integrity 3) discover together with others which sustainability is required to overcome challenges, 4) implement these meanings ludically and passionately.

Is sustainable development really possible? The challenge of sustainable development gained attention, since global issues emerged, or respectively since mankind became aware of global issues. Accordingly, the central question is not whether sustainable development is possible. Since humankind caused these global challenges, it stands to reason that humankind also contains the potential to shape them. This text therefore has concentrated on the examination of *what* sustainable development could be like and *how* to implement sustainable development for the sake of humankind and the ecosystem upon which it depends.

Numerous statistics draw frightening pictures of the current state of development, whether they concern the state of the environment, of economic globalisation or social living standards.

The situation may be dramatic, but that does not change the fact that human potential is immense, and indeed capable of responding to human needs.

Not long ago it was impossible to imagine the invention of the computer, the Internet and mobile phones. Today, these technologies are common in many parts of the world. But also the growth of the population increases in ways that could not be imagined only one hundred years ago, and the discovery of climate change is relatively new as well. These examples illustrate that things can change very quickly, bringing dramatic changes, regardless of whether these changes are perceived as being positive or negative. In any case, humankind's "treasure within" (Delors 1998), i.e. the socio-cultural unity in diversity and human "cultural competencies", generally provide all that is necessary to develop sustainably. Why then have the numerous global challenges appeared, making up the contemporary crisis of global inequality (dimension of space) and possibly long-lasting imbalance (dimension of time)? "cultural competencies", as well as socio-cultural unity in diversity, are theoretical phenomena – and potentials. So far humankind has been able to afford a certain naiveté, not using its maximum potential for comprehensive, cohesive and participatory socio-cultural meaning-making and self-regulation. In times of increasing (tempo-spatially complex) challenges, the explicit activation of human "cultural competencies" is required in order to overcome global issues and safeguard, as much as possible, meaningful life in the present and in the future. This also answers the question: How can we do better? The answer: Through formal education, which activates the human cultural potential for autopoiesis and mimetic learning for sustainable development.

The text has examined the human cultural capacity for mimetic learning from and with the other, multi-perspectivity, "cooperative intelligence" (Dewey 1937) and autopoiesis, based on mutuality and networking and facilitated through "cultural competencies", which characterise the Homo Sapiens, the wise human (Chapter I). A subject constitutes, but it is also constituted through, its

context. Accordingly the text has analysed the current situation and state of human development, typified by increasingly rapid and profound transformations of time and space, of socio-cultural meanings, identities and societal organisation patterns. These transformations, or respectively the current inability of humankind to deal with differences and complexity, resulted in global issues, challenging present and future generations, as well as the ecosystem, and causing global and inter-generational interdependences (chapter II).

Knowing more of the cultural human being (chapter I) and knowing more of its living-context (chapter II) makes it possible to assess gaps in human organisation at present and requirements for future human sustainable development. The text has explored which features of a global ethics could prevent ethnocentrism and promote ethical, meaningful and thus sustainable unity in socio-cultural diversity. Analysing human cultural organisation, but as well studying the historically established "golden rule", the text found that reciprocity is indeed an essential criteria for global ethical behaviour – and for (education for) sustainable development (chapter III).

Moreover, education, when it fosters inherently human "cultural competencies" through mimetic learning, mobilises autopoietic capacity and which is already an end in itself. Such education promotes the creative Homo ludens, able to ludically deal with difference and complexity, and to accept and eventually learn from failure. The concept of "education throughout life for sustainable development" provides educational, pedagogic measures to inspire and inform educational planning and practice. Breaking this down, different educational approaches and models are presented, exemplifying diversely how education can incite learners to face complex challenges – or simply to be (chapter IV).

Due to its anthropological derivation this text searched for a basis for a globally relevant and justified (although not singular, but heterogeneous and hence to be supplemented) set of criteria for education for sustainable development. With the concept of "cultural competencies" the text aimed to uncover the linkages between the theory of mimetic learning (Wulf 1992, 2005 et al.) and the concept of shaping competence (de Haan 2002, 2007). The text equips the theory of mimetic learning with pedagogical feasibility, particularly in the context of "education throughout life and for sustainable development" and performative learning. Moreover, the text validates the concept of shaping competence and provides it with anthropological legitimacy, trying to prevent it from the reproach of ethnocentrism and proving its relatively global relevance and contribution to the philosophy, concepts, policies and practices of education for sustainable development.

In the historically rather young tradition of interdisciplinary approaches, the text analysed the human capacity to reinforce human responsiveness to global and local challenges in terms of autopoiesis, multi-perspectivity and "cultural competencies". However, it remains one humble contribution to education for sustainable development.

Literature

Adams, W.M. (2006). "The Future of Sustainability: Re-thinking Environment and Development in the Twenty-first Century." Report of the IUCN Renowned Thinkers Meeting, 29–31 January, 2006. URL (Jan 2011):
http://cmsdata.iucn.org/downloads/iucn_future_of_sustanability.pdf

Adorno, Theodor W. (1969). Stichworte. Kritische Modelle 2: Erziehung nach Auschwitz. Frankfurt M., Suhrkamp.

Agacinski, S.; Derrida, J.; Kofman, S. et al. (1972). Mimésis des Articulations. Paris, Flammarion.

Ahrenhövel, Mark (2000). Globales Regieren – Neubeschreibungen der Demokratie in der Weltgesellschaft. Frankfurt M./New York, Campus.

Albrow, Martin (1990). Introduction. In: Martin Albrow und Elizabeth King (Eds.). Globalization, Knowledge and Society, p. 3-13. London, Sage.

Albrow, M. (1998). Auf dem Weg in eine globale Gesellschaft? In: Beck, Ulrich (Eds.). Perspektiven der Weltgesellschaft, 411-434. Frankfurt M., Suhrkamp.

Allport, Gordon W. (1937). Personality: A Psychological Interpretation. New York, Henry Holt and Company.

Anderson, Benedict (1983). Imagined Communities – Reflections on the Origin and Spread of Nationalism. London, Verso.

Anderson, Suzanne (2002). Cultivating Peace in the 21st Century. Toronto, Classroom Connections.

Apel, Karl-Otto (1973). Das Apriori der Kommunikationsgemeinschaft und die Grundlagen der Ethik – Zum Problem einer rationalen Begründung der Ethik im Zeitalter der Wissenschaft. In: Apel, Karl-Otto (1973). Transformation der Philosophie. Frankfurt a. M., Suhrkamp. Vol. 2, p. 358-435.

Apel, Karl-Otto (1999). Globalisierung und das Problem der Begründung einer universalen Ethik. In: Kuschel, Pinzani, Zillinger. Ein Ethos für Eine Welt? Globalisierung als ethische Herausforderung. Frankfurt am Main/New York, Campus.

Apel, Karl-Otto (1988). Diskurs und Verantwortung - Das Problem des Übergangs zur postkonventionellen Moral. Frankfurt am Main, Suhrkamp.

Appadurai, Arjun (1998). Globale Landschaften. In: Beck, Ulrich (Eds). Perspektiven der Weltgesellschaft. Frankfurt M., Suhrkamp.

Appadurai, Arjun (1999). Modernity at Large: Cultural Dimensions of Globalization. In: Public Worlds, Vol. 1. Minneapolis, University of Minnesota Press

Appadurai, Arjun (2005). Disjuncture and Difference in the Global Cultural Economy. In: Inda, Jonathan Xavier; Rosaldo, Renato (Eds.) (2005). The Anthropology of Globalisation – a Reader. Victoria, Blackwell Publishing

Aswani, Alaa al (2009). Ihr seid doch unser Vorbild. URL 20.07.2009: http://www.spiegel.de/spiegel/0,1518,637268,00.html

Aswani, Alaa al (2007). "Imarat Ya'qubian" (German: Der Jakubijan-Bau). Lenos Verlag, Basel.

Audehm, Kathrin, Zirfas, Jörg (2001). Familie als Ritueller Lebensraum. In: Wulf, Christoph, et al. (Eds.) (2001). Das Soziale als Ritual – Zur Performativen Bildung von Gemeinschaften. Opladen, Leske + Budrich.

Auernheimer, Georg (2003). Einführung in die Interkulturelle Pädagogik. Darmstadt, Wissenschaftliche Buchgesellschaft.

Bagehot, Walter (1872/1971). Die Englische Verfassung. Neuwied/Berlin, Luchterhand.

Baker, R. Wallace (2003). Private Sector Partnerships. Paris, UNESCO Publishing.

Baker, John (Apr. 20, 2008). Origins of "Blog" and "Blogger". In: American Dialect Society Mailing List. URL: http://listserv.linguistlist.org/cgi-bin/wa?A2=ind0804C&L=ADS-L&P=R16795&I=-3

Barber, Benjamin R. (1996). Jihad vs. McWorld – How Globalism and Tribalism Are Reshaping the World. New York, Ballantine Books. URL (Jan 2011): http://www.theatlantic.com/magazine/archive/1992/03/jihad-vs-mcworld/3882/ Bateson, Gregory (1985). Ökologie des Geistes. Frankfurt M., Suhrkamp.

Bauer, Arnold J. (2001). Goods, Power, History. Latin America ́s Material Culture. Cambridge, Cambridge University Press.

Beck, U (1997). Was ist Globalisierung -Irrtümer des Globalismus - Antworten auf Globalisierung. Frankfurt am Main, Suhrkamp.

Beare, Hedley (1991). The Womb and the Cocoon: Some Observations on Parenting and Schooling. New Horizons in Education, vol. 85.

Bednorz, P. and Schuster M. (2002). Implizites Lernen. In: Einführung in die Lernspsychologie. Munich, Basel, UTB/ Ernst Reinhardt Verlag.

Beck, Ulrich (Ed.) (1986). Risikogesellschaft – Auf dem Weg in eine andere Moderne. Frankfurt am Main, Suhrkamp. English Version: Beck, U. (1992). Risk Society. London, Sage.

Beck, Ulrich (1994). Riskante Freiheiten – Individualisierung in modernen Gesellschaften. Frankfurt am Main, Suhrkamp.

Beck, Ulrich (1999). What is Globalization? Cambridge, Polity Press.

Bell, Catherine (1992). Ritual Theory, Ritual Practice. New York/ Oxford, Oxford University
Press.

Bernstein, Richard (1992). The Rescue of Pragmatism. In: Social Research, vol. 59, p. 813-
840. New School for Social Research. URL (Feb 2011):
http://www.ualberta.ca/~rmorrow/Resources/Bernstein-resurgence-pragma.pdf

Bertalanffy, Ludwig von (1968). General Systems Theory. New York, Braziller.

Bhabha, Homi (1994). The Location of Culture. London, Taylor & Francis Books Ltd 2004
Edition.

Bhave, V. (1996). The Intimate and the Ultimate. In: M. Hern (Ed.). Deschooling Our Lives –
The Intimate and the Ultimate. Stony Creek, CT, New Society Publishers.

Black, M. (Eds) (1999). Basic Education: A Vision for the 21st Century, Summary. Report of
the ninth Innocenti Global Seminar. UNICEF International Child Development Centre 25
October-3 November 1998. Florence, UNICEF.

Blewitt, J. (2008). Understanding Sustainable Development. London: Earthscan.

Bloom, Howard (1995). The Lucifer Principle: A Scientific Expedition into the Forces of
History. New York, Atlantic Monthly Press.

Bok, Sissela (2002). Common Values. University of Missouri Press.

Brandt, Willy (1981). Das Überleben sichern: Der Brandt- Report. Bericht der Nord- Süd-
Kommission. Ullstein. English Version: Report of the Independent Commission on
International Development Issues (1980). Cambridge Mass, MIT Press.

Bread for the World (2011). Hunger Facts International. URL (Jan 2011):
http://www.bread.org/learn/hunger-basics/hunger-facts-international.html

Breidenbach, Joana (2004). Global, Regional, Lokal – Neue Identitäten im globalem
Zeitalter. In: Hanika, Karin; Wagner, Bernd (Eds.) (2004). Kulturelle Globalisierung und
Regionale Identität – Beiträge zum kulturpolitischen Diskurs. Bonn, Kulturpolitische
Gesellschaft e.V.

Brinkmann, Ralf D.; Stapf, Kurt H. (2005). Innere Kündigung. C.H.Beck Verlag. Cp. URL:
http://www.dradio.de/dlf/sendungen/campus/ (Jan 11, 2006).

Brockmann, D; Hufnagel, L.; Geisel, T. (Okt. 19, 2004). Forecast and control of epidemics in a
globalized world PNAS. Vol. 101, p.15124-15129. URL (Mar 2011):
http://www.eurekalert.org/staticrel.php?view=mpg101804ge

Bruner, Jerome (1997). Sinn, Kultur und Ich-Identität- zur Kulturpsychologie des Sinns.
Heidelberg, Carl-Auer-Systeme Verlag und Verl.-Buchhandlung. Original Version:
Bruner, Jermoe (1990). Acts of Meaning. Cambridge MA, Harvard University Press.

Brundtland, Harlem (1987). Our Common Future. Report by the World Commission on Environment and Development. New York, Oxford University Press.

Buber, Martin (1995). Ich und Du. Stuttgart, Reclam.

Burke, Peter, (2000). Kultureller Austausch. Frankfurt am Main, Suhrkamp.

Burckhardt, Jacob von (1905/1982). Über das Studium der Geschichte. München, Beck.

Bygrave, W.D. (Ed.) (1994). The Entrepreneurial Process. In: The Portable MBA in Entrepreneurship. Frankfurt am Main.

Canetti, Elias (1960). Masse und Macht. Hamburg, Claasen.

Cannon, Walter (1932). The Wisdom of the Body. New York, Norton 1939 rev. ed.

Campbell, Jack (Ed.) (2001). Creating our Common Future – Educating for Unity in Diversity. Paris, UNESCO Publishing and Berghahn Books.

Casson, Mark (Ed.) (1990), Entrepreneurship, Vermont/USA.

Casson, Mark (1982). The Entrepreneur – An Economic Theory. Oxford, Martin Robertson.

Casson, Mark and Godely, Andrew (Eds.) (2000). Cultural Factors in Economic Growth. Springer.

Castells, M. (1996). The Rise of the Networked Society. Oxford, Blackwell.

Capra, Fritjof (Ed.) (1996). The Web of Life – A New Scientific Understanding of Living Systems. New York, Anchor Books.

Capra, Fritjof (2000). The Tao of Physics. 3rd revised Edition. Orig. 1975. Boston/O. W. Barth Bei Scherz.

Care International (May 2009). In Search of Shelter - Mapping the Effects of Climate Change on Human Migration and Displacement. URL (Jan 2011): http://www.preventionweb.net/english/professional/publications/v.php?id=9870

Center for Integrative Environmental Research (2007). The U.S. Economic Impacts of Climate Change and the Costs of Inaction Report 2007 – A Review and Assessment by the Center for Integrative Environmental Research (CIER). Maryland, University of Maryland, Center for Integrative Environmental Research. URL: http://www.cier.umd.edu/climateadaptation/

Chalmers University of Technology; Bergsten, Helen; et al (2006). Chalmers Annual Report. 2006, p. 31. Göteborg: Chalmers University of Technology Foundation.

Changeux, J.-P. (2002). L'homme de vérité. Paris, Odile Jacob

Charlot, Bernard (2002). Demokratische Bildung für eine Solidarische Welt – Solidarische Bildung für eine Demokratische Welt. In: Wulf, Christoph and Merkel, Christine (Eds.). Globalisierung als Herausforderung der Erziehung – Theorien, Grundlagen, Fallstudien. Münster, Waxmann.

Clarke, J. and Hall, St. et al. (1981). Subkulturen, Kulturen, Klasse. In his: Jugendkultur als Widerstand. Second Edition. Frankfurt am Main.

CNNmoney (01.08.2005). Auto Deaths Decline. URL: (Jan 2011): http://money.cnn.com/2005/08/01/Autos/nhtsa_death_stats/

Crane, Andrew and Matten, Dirk (2004). Business Ethics. New York, Oxford University Press.

Cuéllar, Javier Pérez de ; et al. (1998). Our creative Diversity. Report of the World Commission on Culture and Development. Paris, UNESCO Publishing.

Dahrendorf, Ralf (1977). Homo Sociologicus. 15th Edition. Westdeutscher Verlag. Opladen.

Dahrendorf, Ralf (1992). Der Moderne Soziale Konflikt. Stuttgart, DVA.

Dambeck, Holger (12.03.2007). Schwarmexperiment – Menschen sind auch nur Fische URL: http://www.spiegel.de/wissenschaft/natur/0,1518,471179,00.html

Delors, Jaques (1998). Learning, the Treasure Within. Report to UNESCO of the International Commission on Education for the Twenty-first Century. Paris, UNESCO Publishing.

Derrida, Jacques (1976). Signatur Ereignis Kontext. In: Randgänge der Philosophie. p. 124-155. Frankfurt M./Berlin/Wien, Ullstein.

Devarajan,S.; Fisher, A. C. (1981). Hotelling's "Economics of Exhaustible Resources": Fifty Years Later. In: Journal of Economic Literature, Vol. 19(1): 65-73. American Economic Association.

Dewey, John (April 3, 1937). Democracy and Educational Administration. In: School and. Society, XLV.

Dewey, John (1938). Traditional vs. Progressive Education. In his: Experience and Education. New York, Collier Books.

Dickstein, Morris (Eds.) (1998). The Revival of Pragmatism. New Essays on Social Throught, Law and Culture. Duke University Press.

Diggins, John P. (1994). The Promise of Pragmatism – Modernism and the Crisis of Knowledge and Authority. Chicago, University of Chicago Press

Dilthey, Wilhelm (1867 – 1910). Die Philosophie des Lebens. Nohl, Herman and Gadamer, H. G. (Eds.) (1946). Heppenheim an der Bergstrasse.

Dilthey, Wilhem (1891/ 1893). Aufsätze zur Philosophie. Marquardt, Marion (Ed.) Berlin, Union Verlag 1986 Edition.

Dohman, Thomas; Falk, Armin; Huffmann, David; Sunde, Uwe (2006). Homo Reciprocans: Survey Evidence on Prevalence, Behavior and Success. Discussion Paper No. 2205. Bonn, Institute for the Study of Labor URL (Mar 2011): http://ftp.iza.org/dp2205.pdf

Douglas, Mary (1993). Ritual, Tabu und Körpersymbolik. Sozialanthropologische Studien in Industriegesellschaft und Stammeskultur. Franfurt a. M., Suhrkamp.

Douglas, Mary (1998). Reinheit und Gefährdung. Eine Studie zu Vorstellungen von Verunreinigung und Tabu. Frankfurt a. M., Suhrkamp.

Dubiel, Helmut (1997). Unversönlichkeit und Demokratie. In: Heidmeyer, Wilhelm (Eds.) Was halt die Gesellschaft zusammen? p. 425-444. Frankfurt M., Suhrkamp.

Dunning, B. (2006). "Sustainable Sustainability." Skeptoid. URL (Feb 2011): http://skeptoid.com/episodes/4005

Durkheim, Emile (1961). The elementary Forms of the religious life. New York: Collier Books. German Version: Durkheim, Émile (1912/1981). Die elementaren Formen des religiösen Lebens. Frankfurt a. M., Suhrkamp.

Earth Charter Commission (2000). The Earth Charter. URL: http://www.earthcharter.org/files/charter/charter.pdf Educational Initiative (2006) cp. http://www.earthcharter.org/innerpg.cfm?id_page=29 and: http://www.earthcharter.org/innerpg.cfm?id_menu=22

Eblinghaus, H., A. Stickler (Eds.) (1996). Nachhaltigkeit und Macht – Zur Kritik von Sustainable Development. Frankfurt a. Main, Econsense.

Ehrenfels, Christian von (1890). Über Gestaltungsqualitäten. Second Edition in Weinhandl 1960.

Elgin, Duane (1991). Creating a Sustainable Future. ReVision, Vol.14 no.2 pp.77-79.

Elias, N. (1991). Wandlungen der Wir-Ich Balance. In: Die Gesellschaft der Individuen. Frankfurt am Main.

Elias, Norbert [1987] (2001). Die Gesellschaft der Individuen. Suhrkamp, Frankfurt am Main.

Erdmann, J.W.; Burow, O.-A. (1993) 8. Bildung in der Informationsgesellschaft: Von der Massenerziehung zur Pädagogik der dritten Welle. URL (Feb 2011): http://www.oase.udk-berlin.de/~erdmann/pub/pdf/Dok203h.pdf

Erdmann, Johannes Werner (2001). Kunst lernen - Vom Lernen einer Kultur zu einer Kultur des Lernens. URL (Mar 2011): http://www.oase.udk-berlin.de/~erdmann/pub/pdf/310. http://www.oase.udk-berlin.de/~erdmann/pub/pdf/310.pdfpdf

Erdmann, Johannes Werner / Rückriem, Georg (2009). Lernkultur oder Lernkulturen – was ist neu an der 'Kultur des Lernens'? Von einer modernisierungstheoretischen zu einer ‚transformationstheoretischen' Sicht. In: International Cultural-historical Human Sciences hrsg. von Hartmut Giest und Georg Rückriem. Vol. 28. Berlin. Lehmanns Media. URL (Mar 2011): http://www.oase.udk-berlin.de/~erdmann/pub/pdf/Erdmann_RueckriemLernkultur_Prep22062009.pdf

Esser, Hartmut (1980). Aspekte der Wanderungssoziologie - Assimilation und Integration von Wanderern, ethnischen Gruppen und Minderheiten - Eine handlungstheoretische Analyse. Darmstadt and Neuwied.

Faure, Edgar (1972). Learning to Be - The World of Education, Today and Tomorrow. International Commission an the Development of Education. Paris, UNESCO Publishing.

Falbel. A. (1996). Learning? Yes, of Course. Education? No Thanks. In: M. Hern (Ed.). Deschooling Our Lives. Stony Creek CT, New Society Publishers.

Faltin Günter (1998). Das Netz weiter werfen - Für eine neue Kultur unternehmerischen Handelns. In: Faltin, Günter, Zimmer, Jürgen; Ripsas, Sven (Eds.). Entrepreneurship – Wie aus Ideen Unternehmen werden. München, C.H. Beck Verlag.

Faltin, Günter (Oct. 2000). Unternehmer der Zukunft. In: du- Die Zeitschrift der Kultur, vol. 709.

Faltin, Günter (2001). Creating a Culture of Innovative Entrepreneurship. In: Journal of International Business and Economy, Vol. 2, no. 1, (p.123-140). San Francisco.

Faltin, Günter (2008). Kopf schlägt Kapital – Die ganz andere Art, ein Unternehmen zu gründen – Von der Lust, ein Entrepreneur zu sein. Munich, Hanser.

FBI 2008. Report on Terrorism. National Counterterrorism Center. URL (Jan. 2011): http://www.fbi.gov/stats-services/publications/terror_08.pdf

Fien, John (2001). Educating for a Sustainable Future. In: Campbell, Jack (Ed.). Creating our Common Future – Educating for Unity in Diversity. Paris, UNESCO Publishing/ Berghahn Books.

Fiebig, Johannes (Ed.) (2001). Abschied vom Egokult – Die neue soziale Offenheit. Krumwisch, Königsfurt

Figueroa, Dimas (1989). Paulo Freire. Hamburg, Junius Verlag.

Fischer, Ernst Peter (2005a). Warum es keine Weltformel gibt. Spiegel Online, September 20,URL: http://www.spiegel.de/wissenschaft/mensch/0,1518,375489, 00.html. Hannover, Heise Zeitschriften Verlag.

Fischer, Ernst Peter (2005b). Einstein trifft Picasso und geht mit ihm ins Kino. Oder die Erfindung der Moderne. München, Piper Verlag.

Flechsig, Karl-Heinz (2002). Kulturelle Identität als Lernproblem. In: Wulf, Christoph and Merkel, Christine (Eds.). Globalisierung als Herausforderung der Erziehung – Theorien, Grundlagen, Fallstudien. Münster, Waxmann.

Flew, Antony (Eds.) (1979). A Dictionary of Philosophy. p. 134ff. London: Pan Books in association with The MacMillan Press.

Flew, Terry (2008). New Media: an Introduction. Melbourne, Oxford University Press.

Flood, Robert (2001). The Relationship of Systems Thinking to Action Research. In: Reason, P. and Bradbury H. (Eds.). Handbook of action research: Participative practice and inquiry. London, Sage Publications.

Follet, Mary Parker (1918). The New State Group Organization the Solution of Popular Government. Green, Longmanns.

Fox, Elliot and Urwick, Lyndall (1973). Dynamic Administration - The Collected Papers of Mary Parker Follet. London.

Free University of Berlin (Okt. 2005). Fußnoten. Student-magazine of the FU Berlin. See also: Website of International Democratic Education Conference 2005, http://de.idec2005.org/, and the International Democratic Education Network, www.idenetwork.org

Freire, Paulo (1970). Pedagogy of the Oppressed. New York, Continuum.

Freire, Paulo (1974). Erziehung als Praxis der Freiheit. Stuttgart/Berlin, Kreuz Verlag 1990 Edition.

Freire, Paulo (1975). Acción Cultural para la Libertad. Buenos Aires.

Friedman, Jonathan (1994). Cultural Identity and Global Process. London, Sage Publications.

Fukuyama, Francis (1992). The End of History and the Last Man. Free Press.

Garaudy, Roger (1977). Plädoyer für einen Dialog der Zivilisationen. Wien.

Garrison, J. (1997). Dewey and Eros – Wisdom and the Desire in the Art of Teaching. New York Teachers College/Columbia University.

Geertz, Clifford(1983). Dichte Beschreibung – Beiträge zum Verstehen kultureller Systeme. Frankfurt am Main. English Version: Geertz, Clifford (1973). Thick Description: Toward an Interpretive Theory of Culture. In his: The Interpretation of Cultures. New York, Basic Books.

Geertz, Clifford (1973). The Interpretation of Cultures: Selected Essays. p.49. New York, Basic Books.

Geerz, Clifford; (1992). Kulturbegriff und Menschenbild. In: Geertz, Clifford; Minkmar, Nils; Burke, Peter; Ginzburg, Carlo; Habermas, Rebekka (Eds.) (1992). Das Schwein des Häuptlings. Berlin, Wagenbach.

Gelb, Michael J. (2004). Das Leonardo Prinzip. Econ Paperback.

Gennep, Arnold van (1986). Übergangsriten. Frankfurt M./ New York, Campus.

GEO (10/2003). Der Placebo-Effekt - Wie der Geist den Körper heilt. Hamburg, Gruner & Jahr.

George, Uwe (Sept. 9, 2001). Interview. Berlin, Tagesspiegel, p. W1.

Giddens, Anthony (2001). Globalisierung. In: Anthony Giddens: Entfesselte Welt. Wie die Globalisierung unser Leben verändert. p. 17-32. Frankfurt am Main: Suhrkamp.

Grant, Carl A. (Ed.) (1992). Research on Multicultural Education – From the Margins to the Mainstream. London/Washington D.C., Falmer Press.

Göhlich, Michael; Wagener-Willi, Monika (2001). Rituelle Übergänge im Schulalltag. In: Wulf, Christoph (Eds.) (2001). Das Soziale als Ritual – Zur Performativen Bildung von Gemeinschaften. P. 37-114. Opladen, Leske + Budrich.

Goethe, Johann Wolfgang von (1784). An Knebel - 17.11.1784. In: Schad, Wolfgang (1999). Goetheanistische Naturwissenschaft. Vol.4, Anthropologie. Stuttgart, Freies Geistesleben.

Goodman, N. (1973). Ways of Worldmaking. Indianapolis, Hackett Publishing Company Goudie A.

(2005). The Human Impact on the Natural Environment. 6th ed. Oxford, Blackwell Publishing.

Haan, Gerhard de (1996). Sustainable Development im Kontext pädagogischer Umbrüche und Werturteile – Eine Skizze. Working Group Environmental Education. Berlin, Verein zur Förderung der Ökologie im Bildungsbereich.

Haan, Gerhard de; Hamm-Brücher, Hildegard; Reichel, Norbert (Eds.) (2000). Bildung ohne Systemzwänge – Innovationen und Reformen. Neuwied, Herrmann Luchterhand Verlag.

Haan, Gerhard de; Harenberg, D. (1999). Bildung für eine nachhaltige Entwicklung. Bund-Länder- Kommission für Bildungsplanung und Forschungsförderung. Materialien zur Bildungsplanung und zur Forschungsförderung. Vol. 72. Bonn.

Haan, Gerhard de (2002). Die Kernthemen der Bildung für eine nachhaltige Entwicklung. In: Zeitschrift für internationale Bildungsforschung und Entwicklungspädagogik, Y. 25, Vol. 1: 13-20.

Haan, Gerhard de; Seitz, K. (2001). Kriterien für die Umsetzung eines internationalen Bildungsauftrages. Bildung für eine nachhaltige Entwicklung (Part 1 and 2) In: Zeitschrift „21" – Das Leben gestalten lernen. Vol. 1 and 2.

Haan, Gerhard de (2002). Was ist Bildung für Nachhaltigkeit? In: Brickwedde, Fritz; Peters, Ulrike (2002). Umweltkommunikation. Vom Wissen zum Handeln, p. 259-267. Berlin, Erich Schmidt Verlag.

Haan, Gerhard de, et al. (2007): "Guide: Education for Sustainable Development at Secondary Level – Justification, competences, learning opportunities". Transfer-21. Berlin, Free University of Berlin, Transfer-21 Programme.

Haber, Wolfgang (1995). Das Nachhaltigkeitsprinzip als ökologisches Konzept. In: Fritz; Huber; Levi (Eds.) (1995). Nachhaltigkeit in naturwissenschaftlicher und sozialwissenschaftlicher Perspektive. Karl Heinz Beckurts- Stiftung/Wissenschaftliche Verlagsgesellschaft.

Habermas, Jürgen (1981). Theorie des kommunikativen Handelns. Vol 2. Suhrkamp Verlag, Frankfurt.

Habermas, Jürgen (1983): Moralbewußtsein und kommunikatives Handeln. Frankfurt am Main, Suhrkamp 2001 Edition.

Habermas, Jürgen (1984a). The Theory of Communicative Action. Volume 1: Reason and the Rationalization of Society. Boston, Beacon Press.

Habermas, Jürgen (1987b). The Theory of Communicative Action. Volume 2: Lifeworld and System: A Critique of Functionalist Reason. Boston, Beacon Press.

Habermas, Jürgen (1991). Erläuterungen zur Diskursethik. Frankfurt am Main, Suhrkamp.

Habermas, J. (1999). Die Einbeziehung des Anderen. Studien zur politischen Theorie. Frankfurt am Main, Suhrkamp.

Hall, Stuart (1994). Rassismus und Kulturelle Identität. Ausgewählte Schriften 2. Hamburg, Argument Edition 2002.

Hamel, Garry (2007). The Future of Management. Boston, Harvard Business School Press.

Hannerz, Ulf (1992). Cultural Complexity: Studies in the Social Organization of. Meaning . New York, University of Columbia Press.

Hannerz, Ulf (1997). Flows, Boundaries and Hybrids: Keywords in Transnational Anthropology.http://www.transcomm.ox.ac.uk/working%20papers/hannerz.pdf

Hardi P.; Zdan T. (1997). Assessing sustainable development: principles in practice. International Institute for Sustainable Development. Winnipeg.

Harper, Douglas (2001). Online Etymology Dictionary URL (Mar. 2011): http://www.etymonline.com/index.php?term=culture

Hartwick, John M. (1977). Intergenerational Equity and the Investment of Rents from Exhaustible Resources. p. 972-974. American Economic Review.

Hauff, Volker (Eds.) (1987). Unsere gemeinsame Zukunft. Der Brundtland-Bericht der Weltkommission für Umwelt und Entwicklung. Greven, Eggenkamp.

Hausschild, Thomas (1999). Neue Weltordnung, globale Zivilgesellschaft und die ewige Wiederkehr der rituellen Vernunft. In: Kuschel, Karl-Josef; Pinzani, Alessandro; Zillinger, Martin (Eds). Ein Ethos für Eine Welt? Globalisierung als Ethische Herausforderung. Frankfurt am Main/New York, Campus.

Hawking, Stephen W. (1995). Eine kurze Geschichte der Zeit – Die Suche nach der Urkraft des Universums. Hamburg, Rowohlt. Original version: Hawking, Stephen W. (1988). A Brief History of Time: From the Big Bang to Black Holes. New York, Bantam Books.

Hegel, G.W.F. (1809). Gymnasialrede vom 29.09.1809 über die Bedingungen der theoretischen Bildung. In: Löwith, K. and Riedel, M. (Eds.) (1968). Vol 1. Frankfurt am Main.

Heisenberg, Werner Karl (1971). Physics and Beyond : Encounters and Conversation. New York: Harper & Row.

Held, D.; McGrew, A.; Goldblatt, D.; Perraton, J. (1999). Global Transformations - politics, economics and culture, Cambridge: Polity Press.

Hentschel, Ulrike (1999). Was soll das Theater? Der Beitrag von Spiel und Theater zu einer intermedialen ästhetischen Bildung. In: BDK-Mitteilungen (1999). Vol. 3, p.18 – 21.

Heuser, Uwe Jean and Randow, Gero von (2001). Reformwerkstatt - Verändern als Lebensweise. Dtv.

Hilgenkamp, K. (2005). Environmental Health: Ecological Perspectives. London, Jones & Bartlett.

Höffe, Otfried (1999). Eine Föderale Weltrepublik. In: Kuschel, Karl-Josef; Pinzani, Alessandro; Zillinger, Martin (Eds) (1999). Ein Ethos für Eine Welt? Globalisierung als Ethische Herausforderung. Frankfurt am Main/New York, Campus.

Holling, C. S. (2000). "Theories for Sustainable Futures" Conservation Ecology 4(2): 7. The Resilience Alliance. URL (Jan 2011): http://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/3042/csholling.pdf?sequence=1

Holzbrecher, Alfred (1997). Wahrnehmung des Anderen. Zur Didaktik interkulturellen Lernens. Opladen, Leske + Budrich Verlag.

Horx, Mathias (2001). Smart Capitalism – Das Ende der Ausbeutung. Frankfurt am Main, Eichborn.

Howes, David (1996). Cross-Cultural Consumption. Global Market, Local Realities. London/New York, Routledge.

Huber; Levi (Eds.). Nachhaltigkeit in Naturwissenschaftlicher und Sozialwissenschaftlicher Perspektive. Stuttgart, S. Hirzel/Edition Universitas.

Hughes, Phillip. (2000). A shared challenge, a shared response. Australia.

Huizinga, Johan (1939). Homo Ludens – Vom Ursprung der Kultur im Spiel. Hamburg, Rowohlt 1994 Edition.

Humboldt, Wilhelm von (1836). Über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluß auf die Entwicklung des Menschengeschlechts (1830-1835). Marixverlag 2003 Edition.

Humphrey, Caroline; Laidlaw, James (1994). The Archetypical Actions of Ritual. A Theory of Ritual Illustrated by the Jain Rite of Worship. Oxford: Clarendon Press.

Humphrey, Caroline; Laidlaw, James (2006). Action. In: Theorizing Rituals: Vol. I: Issues, Topics, Approaches, Concepts. Jens Kreinath, Jan Snoek, Michael Stausberg (Eds.) Numen Book Series: Studies in the History of Religions. Leiden, Brill.

Huntington, Samuel P. (1993). The Clash of Civilisations?, In: Foreign Affairs. Council on Forreign Relations, Tampa. URL: http://www.foreignaffairs.com/articles/48950/samuel-p-huntington/the-clash-of-civilisations)

Huntington, Samuel P. (1998) The Clash of Civilisations and the Remaking of World Order. New York, Simon & Schuster.

Inglehart, Ronald (1977). The Silent Revolution. Princeton, Princeton University Press.

Ingram, John Kells (1888). A History of Political Economy. In: Science (Apr. 27, 1888). Vol 11, no. 273, ff. 204. New York, Macmillan.

InterAction Council (1997). A Universal Declaration of Human Responsibilities. URL: http://www.interactioncouncil.org/

International Theatre of the Oppressed Organisation (2004). Declaration of Principles. URL (Mar 2011): http://www.theatreoftheoppressed.org/en/index.php?nodeID=23

Iser, Wolfgang (1978). The Act of Reading – A Theory of Aesthetic Response. Baltimore, John Hopkins University Press.

IUCN, UNEP, WWF (1980). "World Conservation Strategy". Gland, Switzerland.

IUCN, WWF, UNEP (1991). Caring for the Earth: A Strategy for Sustainable Living. Earthscan Publications.

Jackson, Philip (1968). Life in Classrooms. New York, Holt, Rinehart & Winston.

James, William (1983). The Principle of Psychology. Cambridge MA: Harvard University Press.

Jain, Manish and Jain, Shilpa (Eds.) (2000). Unfolding Learning Societies: Challenges and Opportunities. Udaipur, India, Shikshantar Publishing. Cp.: URL: http://www.swaraj.org/shikshantar/ls_discussion.html

Jain, Manish (1997). Towards Open Learning Communities: One Vision Under Construction. UNESCO Learning Without Frontiers Programme. Paris, UNESCO Publishing. URL: http://www.unesco.org/education/educprog/lwf/doc/cies97.html

Jenkins, H. (2006). Fans, Bloggers and Gamers – Exploring Participatory Culture. New York, New York University Press.

Jennings, Theodore W. (1982). On Ritual Knowledge. The Journal of Religion, vol. 62, no 2, p. 113 (111-127).

Jennings, Theodore W. (1987). Ritual Studies and Liturgical Theology - An Invitation to Dialogue. P. 35-56. Journal of Ritual Studies I.

Jensen, B.B. and Schnack, K. (1997). The Action Competence Approach in Environmental Education. In: Environmental Education Research, Vol. 3, no. 2.

Kasch, V.; Leffler, U.; Schmitz, P.; Tetzlaff, R. (1985). Multis und Menschenrechte in der Dritten Welt. Bornheim-Merten.

Kant, Immanuel (1790). Critique of Judgement., Indianapolis Ind. Second Edition in: Hackett 1987.

Kant, Immanuel (1785). Groundwork of the Metaphysics of Morals. In: Gregor, Mary (1998). Kant: Groundwork of the Metaphysics of Morals. Cambridge Texts in the History of Philosophy. Cambridge UK, Cambridge University Press.

Kant, Immanuel (1803). Über die Pädagogik. In: Weischedel, Wilhelm (Ed.) (1956). Immanuel Kant Werke in zehn Bänden. Vol. 10. Darmstadt.

Kawasaki, Guy (1998). Gesetze für Revolutionäre – Das kapitalistische Manifest für die neuen Spielregeln im Markt. Düsseldorf, Econ Verlag.

Kettwig, Udo (1986). Lernen durch Lehren, ein Plädoyer für lehrendes Lernen. In: Die deutsche Schule, Vol. 4 1986, p. 474-485.

Keupp, Heiner and Höfer, R. (Eds.) (1997). Identitätsarbeit Heute. Frankfurt/Main, Suhrkamp.

Keupp, Heiner (1997). Ermutigung zum aufrechten Gang. Tübingen

Klassen, Theodor F. (1988). Lernen durch Lehren, das Beispiel der Jenaplanschule Ulmbach. Zeitschrift Pädagogik. Vol 11 1988, p. 26–29.

Kleinsteuber, Hans J. (2004). Weltkulturen zwischen Glokalität und Transkulturalität. In: Hanika, Karin; Wagner, Bernd (Eds.) (2004). Kulturelle Globalisierung und Regionale Identität – Beiträge zum kulturpolitischen Diskurs. Bonn, Kulturpolitische Gesellschaft e.V.

Koffka, Kurt (1935). Principles of Gestalt psychology. New York, Harcourt, Brace, & World.

Koller, Hans-Christoph (1999). Bildung und Widerstreit. München, Fink.

Konersman, Ralf (1996). Kulturphilosophie. Leipzig, Reclam.

Kraidy, Marwan M. (2005). Hybridity: or the cultural logic of globalization. Philadelphia: Temple.

Küng, Hans (1990). Projekt Weltethos. München, Pieper.

Küng, Hans (2001). Weltpolitik und Weltethos – Status Quo und Perspektiven. Wiener Vorlesungen. Wien, Picus.

Küng, Hans (04/1997). Towards a Global Ethics. Paris, UNESCO Publishing.

Kuschel, Karl-Josef; Pinzani, Alessandro; Zillinger, Martin (Eds) (1999). Ein Ethos für Eine Welt? Globalisierung als Ethische Herausforderung. Frankfurt am Main/New York, Campus.

Laszlo, Ervin (2003). Macroshift. Frankfurt am Main, Insel Verlag.

Levinas, Emmanuel (1954). The Ego and the Totality. In: Collected Philosophical Papers. Den Haag, 1987 Edition.

Levi-Strauss, Claude (1963). Structural Anthropology. New York, Basic Books.

L.F.B. Dubbledam et al. (1994). Development, Culture and Education. International Yearbook of Education. Lausanne, UNESCO/ Presses Centrales S.A.

Leander, Brigitta (Ed.) (1994). Rethinking Development - World Decade for Cultural Development (1988 – 1997). Paris, UNESCO Publishing.

Le Ker, Heike (24. September 2009). Kampf gegen Aids. URL: http://www.spiegel.de/wissenschaft/medizin/0,1518,650998,00.html

Lewin, Roger (1988). In the Age of Mankind. Washington D.C., Smithsonian Books.

Long, B. de (2000). Cornucopia – The Pace of Economic Growth in the Twentieth Century. Working Paper 7602. Cambridge, MA: National Bureau of Economic Research.

Luhmann, Niklas (1984). Soziale Systeme. Frankfurt M., Suhrkamp.

Luhmann, Niklas (1990). The Autopoiesis of Social Systems. In his: Essays on Self-Reference. New York, Columbia University Press.

Luhmann, Niklas (1995). Die Kunst der Gesellschaft. Frankfurt am Main, Suhrkamp. English Version: (2000) Art as a Social System. Trans. Knodt, Eva M.. Stanford, CA, Stanford University Press.

Luhmann, Niklas (1997). Die Gesellschaft der Gesellschaft. Frankfurt M., Suhrkamp.

Lyotard, Jean-Francois (1984). Le Different. (Orig.), Paris, Editions de Minuit. German Version: Der Widerstreit. Second Edition 1989, Fink.

Mai, Joachim (2007) Schwarmintelligenz – Gemeinsam sind wir klüger URL: http://karrierebibel.de/schwarmintelligenz-warum-gruppen-intelligenter-sind/

Maletzke, Gerhard (1996). Interkulturelle Kommunikation – zur Interaktion zwischen Menschen verschiedener Kulturen. Opladen, Westdeutscher Verlag.

Mandelbrot, Benoit (1983). The fractal Geometry of Nature. New York, Freeman, first French Edition published in 1975.

Maranhhão, Tullio (1999). Reine Ethik und Universelle Praktiken. In: Kuschel, Karl-Josef; Pinzani, Alessandro; Zillinger, Martin (Eds). Ein Ethos für Eine Welt? Globalisierung als Ethische Herausforderung. Frankfurt am Main/New York, Campus.

Marcuse, Herbert (1964). Der eindimensionalen Mensch - die Ideologie der fortgeschrittenen Industriegesellschaft. Dtv, 2004 Edition. English Version: Marcuse, Herbert (1992). One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society. Beacon Press.

Matei, Sorin Adam (2005). Globalisation and heterogenisation: Cultural and civilisational clustering in telecommunicative space In: Telemantics and Informantics, Vol. 23, p. 316-331. Indiana, Purdue University. URL (Jan 2011): http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V1H-4H8830Y-2&_user=29441&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000003858&_versi on=1&_urlVersion=0&_userid=29441&md5=843ad0142503eae7e56302406b447f47

Maturana, Humberto (1970). Biology of Cognition. Reprinted 1980 in Maturana and Valera.

Maturana, Humberto and Varela, Francisco (1980a). Autopoiesis and Cognition. Holland, D. Reidel, Dordrecht.

Maturana, Humberto and Varela, Francisco (1980b). Autopoiesis: The Organization of the Living. Chile, Editorial University Santiago.

Maturana, Humberto and Varela, Francisco (1987). The Tree of Knwoledge.Boston, Shambhala.

Matsui, Takafumi (Sept. 2004). Interview with Takafumi Matsui. A comparative planetologist, Matsui examines the impact humans have had on our planet. In: Asia Pacific Perspectives, Japan +. Tokyo.

Margulis, Lynn and Sagan, Dorion (1986). Microcosmos. New York, Summit.

Marshall, J.D.; Toffel, M.W. (2005). Framing the Elusive Concept of Sustainability: A Sustainability Hierarchy. In: Environmental & Scientific Technology 39(3): p. 673–682. American Chemical Society.

Martin, Jean-Pol (2007): Wissen gemeinsam konstruieren: weltweit. In: Lernen und Lehren – Zeitschrfit für Schule und Innovation in Baden-Württemberg. Vol. 33(1), p.29. Villingen-Schwenningen, Neckar-Verlag.

Marx, Karl; Engels, Friedrich (2002) [1848]. The Communist Manifesto. Moore, Samuel (trans. 1888). Harmondsworth, UK: Penguin. p. 226.

McKeown, R. (2002). The ESD Toolkit 2.0. Web-published document. URL: www.esdtoolkit.org

Meadows, Donella H.; Club of Rome; et al (Eds.) (1972). The Limits to growth; a report for the Club of Rome's project on the predicament of mankind. New York, Universe Books.

Mediaandglobalization (2008). Homogenisation, Heterogenisation. URL (06.18.2008): http://mediaandglobalization.blogspot.com/2008/06/lecture-2-homogenization.html

Milbrath, Lester (1996). Envisioning a Sustainable Society. In : Slaughter, R. (1996). New Thinking for a New Millenium.London, Routledge.

Miller, Peter (07.2007). Swarms. National Geographic. URL: http://ngm.nationalgeographic.com/print/2007/07/swarms/miller-text

Moghaddam, F., et al. (1993). Social Psychology in Cross Cultural Perspectives. New York, W.H. Freeman and Company.

Münch, Richard (1998). Globale Dynamik, lokale Lebenswelten - Der schwierige Weg in die Weltgesellschaft. Frankfurt/M, Suhrkamp.

Naess, Arne, Rothenberg, D. (Ed., trans.) (1989). Ecology, Community and Lifestyle. Outline of an Ecosophy. Cambridge, Cambridge University Press.

Nagel, Thomas (1986). The View from Nowhere. New York, Oxford University Press.

National Institute for Educational Policy Research (2004). Educational Innovation for Sustainable Development. Tokyo, NIER Publishing.

Nomura, Yoshiko (Ed.) (2002). The Return to Wisdom. Tokyo/ Staffordshire, Trentham.

Nordström, Kjell A. and Ridderstrale, Jonas (2000). Funky Business . Wie kluge Köpfe das Kapital zum Tanzen bringen. Financial Times Prentice Hall.

Nuscheler, Franz (1996). Lern- und Arbeitsbuch Entwicklungspolitik. Bonn, Dietz

Nyerere, Julius (1967). Education for Self-Reliance. In Nyerere, Julius (1968). Ujamaa: Essays on Socialism. Oxford, Oxford University Press.

Oberg, Kalvero (1960). Cultural shock: Adjustment to new cultural environments. Practical Anthropology, Vol. 7: 170-179.

OECD (2010). What is Sustainable Development? URL (Dec 2010): http://www.oecd.org/countrieslist/0,3351,en_2649_37425_1_1_1_1_37425,00.html

OECD (2005). The Definition and Selection of Key Competencies. Executive Summary. URL: http://www.oecd.org/dataoecd/47/61/35070367.pdf

Owen, Harrisson (2004). Raum für den Frieden – The Practice of Peace. Westkreuz-Verlag.

Parliament of the World's Religions (1993). Declaration toward a Global Ethic. URL: http://www.weltethos.org/dat_eng/index3_e.htm

Pauli, Gunter (1998). Upcycling. Pößnek, Bertelsmann Verlag.

Pauli, Gunter (2005). ZERI – Education Initiative.

    (2005a). URL: http://www.zeri.org/initiative/basicconcerns.htm

    (2005b). URL: http://www.zeri.org/initiative/questions.htm

    (2005c). URL: http://www.zeri.org/initiative/learningin.htm

    (2005d). URL: http://www.zeri.org/initiative/teachers.htm

Pearce, D.; Barbier, E.; Markandya, A. (2000). Sustainable Development Economics and Environment in the Third World. London: Earthscan.

Peirce, Charles Sanders (1960). Collected Papers of Charles Sanders Peirce. Vol. 2. Cambridge M.A., Harvard University Press.

Perkins, David (1992). Smart Schools - Better Thinking and Learning for Every Child. Classrooms: The Role of Distributed Intelligence. New York, The Free Press.

Pezzey (1997). Sustainability constraints versus 'optimality' versus intertemporal concern, and axioms versus data". Land Economics.

Phillips, Gene D. (2001). Stanley Kubrick: Interviews. University Press of Mississippi.

Picht, Georg (1969). Mut zur Utopie – Die großen Zukunftsaufgaben. München, R. Piper & Co. Verlag.

Pieterse, Jan Nederveen (2004). Globalization and Culture: Global Mélange. Oxford, Rowman & Littlefield.

Pór, G. (1995) Liberating the Innovation Value of Communities of Practice, in Community Building: Renewing Spirit and Learning in Business, New Leaders Press, San Francisco.

Porter, Paige (1997). Knowledge, Skills and Compassion. In: Australian Educational Researcher, Vol. 24, no.1.

Preissing, Christa (Ed) (2003). Qualität im Situationsansatz, Qualitätskriterien und Materialien für die Qualitätsentwicklung in Kindertageseinrichtungen. Weinheim, Beltz-Verlag.

Prengel, Annedore (1993/95). Pädagogik der Vielfalt - Verschiedenheit und Gleichberechtigung in Interkultureller, Feministischer und Integrativer Pädagogik. Opladen. Cp. (2000). URL: http://www.xenos-nuernberg.de/Veranstaltungen/Vielfalt_Schule_Toleranz/Tagungsdokumentation_08_Nov_02/Referat_von_Annedore_Prengel/referat_von_annedore_prengel.html

Prengel, Annedore (2002). Ohne Angst verschieden sein? – Mehrperspektivische Anerkennung von Schulleistungen in einer Pädagogik der Vielfalt. In: Hafeneger, Benno; Henkenborg, Peter; Scherr, Albert (Eds.). Pädagogik der Anerkennung. Grundlagen, Konzepte, Praxisfelder. Wochenschau Verlag.

Purpleslink Blogspot (Nov 2008). URL:
   http://www.purpleslinky.com/Humor/Food/Nine-Mcdonalds-Products-That-Actually-
   Flopped.333133

Putz, Ulrike (2009) Regimeopfer Neda Agha-Soltan - Propagandaschlacht um die Heldin des
   neuen Iran. URL (June 23 2009):
   http://www.spiegel.de/politik/ausland/0,1518,632047,00.html

Radermacher, Franz-Josef (2002). Balance oder Zerstörung. Wien, Ökosoziales Forum
   Europa. English Version: Radermacher, Franz-Josef (2004). Eco-Social Market
   Economy as the Key to Global Sustainable Development. Wien, Ökosoziales Forum
   Europa.

Radermacher, Franz-Josef (Jan. 26, 2006). WEF: Globalisierung der Ökosozialen
   Marktwirtschaft als neuer globaler Ordnungsrahmen? URL:
   http://www.epo.de/index.php?option=com_content&task=view&id=1358&Itemid=34

Rath, Claus-Dieter (1997). Nahrung. In: Wulf, Christoph (Eds.) (1997). Vom Menschen.
   Handbuch Historische Anthropologie. p. 243-256. Weinheim/Basel, Deltz

Rau, Johannes (1999). Opening Speech as President of Germany. In: Ziegler, Uli (Sept. 05,
   2003). Eine vorläufige Bilanz seiner Amtszeit. Deutschlandradio.
   URL: http://www.dradio.de/dlf/sendungen/hintergrundpolitik/124783/

Rawls, John (1971). A Theory of Justice. Cambridhe Ma, Belknap Press of Harvard
   University Press.

Reich, Karsten (1996). Systemisch Konstruktivistische Pädagogik. Berlin, Kriftel, Neuwied.

Report of the Intergovernmental Conference on Cultural Policies for Development (1998).
   The Power of Culture. Stockholm, UNESCO Publishing.

Report of the UN-Commission on Global Governance (Ed.) (1994). Our Global
   Neighbourhood.
   chapter 1. URL: http://web.archive.org/web/20011222021819/www.cgg.ch/chap1.html
   chapter 2. URL: http://web.archive.org/web/20011222022715/www.cgg.ch/chap2.html

Report of the International Commission on Peace and Food (Ed.) (1994). Uncommon
   Opportunities – An Agenda for Peace and Equitable Development. London , Zed
   Books.

Ricoeur, Paul (1992). The Self as Another. Trans. Blamey Kathleen. Chicago, University of
   Chicago Press. German Version: Ricoeur, Paul. Das Selbst als ein Anderer. Fink 2005
   Edition.

Rieger, Elmar and Leibfried, Stephan (2004). Kultur versus Globalisierung. Frankfurt am
   Main, Suhrkamp.

Rimbaud, Arthur. Letter to Paul Demeny (15 May 1871). In: Oft the Visionary (1871). In: Jeancolas, Claude (1997). Les lettres manuscrites de Rimbaud. Paris, Textuel.

Ritzer, George (1995): Die McDonaldisierung der Gesellschaft. Frankfurt a.M.

Robertson, Roland (1992). Globalization – Social Theory and Global Culture. London, (2000) Sage Publications.

Robertson, Roland (1995). Globalization. In: Mike Featherstone et al. (Eds.). Global Modernities, p.8. London, Sage.

Rorty, Richard (1979). Philosophy and the Mirror of Nature. Princeton, Princeton University Press.

Rorty, Richard (1982). Consequences of Pragmatism: Essays, 1972-1980. Minneapolis, University of Minnesota Press.

Rorty, Richard (1989). Kontingenz, Ironie und Solidarität, Frankfurt, Suhrkamp.

Rorty, Richard (1994). Hoffnung statt Erkenntnis. Eine Einführung in die pragmatische Philosophie. Wien, Passagen Verlag.

Rorty, Richard (1999). Philosophy and Social Hope. Virginia, Penguin Books.

Rosaldo, Michelle (1984). Toward an Anthropology of Self and Feeling". In: Shweder, Richard A. and LeVine, Robert (Eds.) (1984). Cambridge, Cambridge University Press.

Rouanet, Sérgio Paulo (2001). The End of Culture and the Last Book. In: Portella, Eduardo (Ed.). The Book: A World Transformed. Paris, UNESCO Publishing.

Rousseau, Jean-Jacques (1762). Émile ou De l'éducation. (1961 Edition). Paris, Garnier.

Sachs, Wolfgang (Ed.) (1993). Im Westen wie auf Erden - Ein polemisches Handbuch zur Entwicklungspolitik. Reinbek bei Hamburg, Rowohlt, 1993.

Said, Edward (1994). Kultur und Imperialismus – Einbildungskraft und Politik im Zeitalter der Macht. Frankfurt am Main, Fischer.

Samuelsson, Ingrid Pramling; Kaga, Yoshie (2008). The Contribution of Early Childhood Education to Sustainable Development. Paris, UNESCO Publishing.

Scarry, Elaine (1985). The Body in Pain: The making an Unmaking of the World. New York, Oxford University Press.

Schäfer, Alfred; Wimmer, Michael (Eds.) (1998). Rituale und Ritualisierungen. Opladen, Leske + Buderich.

Schauer, Thomas (2000). Lifestyles, Future Technologies and Sustainable Development. Ulm, Research Institute for Applied Knowledge Processing – FAW.

Schauer, Thomas (2002). Perspektiven für die biologische und kulturelle Diversität in einer globalisierten Informationsgesellschaft. Universitätsverlag Ulm.

Schiffauer, Werner (1997). Fremde in der Stadt – Zehn Essays über Kultur und Differenz.

Frankfurt am Main, Suhrkamp.

Schilbrack, Kevin (2004). Thinking Through Rituals. New York, Routledge

Schiller, Friedrich (1795).Über die ästhetische Erziehung des Menschen. Ditzingen, Reclam
2000 Edition.

Schmidt, Helmut (Ed.) (1998). Allgemeine Erklärung der Menschenpflichten – Ein
Vorschlag. München, Pieper.

Scholte, Jan-Aart (2000). Globalization – A critical introduction. London, Palgrave.

Schuler, Douglas (2001). Cultivating Society's Civic Intelligence: Patterns for a New 'World
Brain'. In: Journal of Society, Information and Communication 4:2, p. 157 – 181. London,
Routledge.

Schuler, Douglas (2007). Civic Intelligence and the Public Sphere. In: Tovey, Collective
Intelligence: Creating a Prosperous World at Peace. Earth Intelligence Network, Oakton,
Virginia.

Schumpeter, Joseph A. (1989). Essays: On Entrepreneurs, Innovations, Business Cycles,
and the Evolution of Capitalism. Transaction Publishers.

Section on Education for Sustainable Development, UNESCO (2002). Education for
Sustainability, from Rio to Johannesburg: Lessons Learned from a Decade of
Commitment. Paris.

Section on Education for Sustainable Development, UNESCO (2006). The UN Decade for
Education for Sustainable Development (2005-2014) – Background. URL:
http://portal.unesco.org/education/en/ev.php-
URL_ID=23279&URL_DO=DO_TOPIC&URL_SECTION=201.html.
Cp. URL: http://portal.unesco.org/education/en/ev.php-
URL_ID=23292&URL_DO=DO_TOPIC&URL_SECTION=201.html

Section on Education for Sustainable Development, UNESCO (2006). The Earth Charter and
Sustainable Development. URL: http://portal.unesco.org/education/en/ev.php-
URL_ID=23927&URL_DO=DO_TOPIC&URL_SECTION=201.html

Security Technology News (2011). Pirate Attacks On The Increase. URL:
http://www.security-technologynews.com/news/pirate-attacks-on-the-increase.html

Senghaas, Dieter (1994). Wohin drifted die Welt? Über die Zukunft friedlicher Koexistenz.
Second Edition. Frankfurt am Main, Suhrkamp.

Sheldrake, Rupert (Ed.); McKenna, Terence; Abraham, Ralph (2002). Denken am Rande
des Undenkbaren. München, Piper Verlag

Shikshantar: The Peoples Institute for Rethinking Education and Development (2000). Some
     Aspects of the Culture of Schooling. URL:
     http://www.swaraj.org/shikshantar/cultureofschooling.html

Slaughter, Steven (1991). Futures concepts and powerful ideas. Futures Study Centre,
     Melbourne.

Simmel, Georg (1972). On Individuality and Social Forms. Ed. by Levine, Donald. Chicago:
     University of Chicago Press.

Singer, Peter (1989). All Animals Are Equal. In: Regan, tom; Singer, Peter (1989). Animal
     Rights and Human Obligations, p.148-162. New Jersey. URL (Jan 2011):
     http://www.webster.edu/~corbetre/philosophy/animals/singer-text.html

Singer, W. (2001). Der Beobachter im Gehirn. Frankfurt/M, Suhrkamp.

Soeffner, Hans-Georg (1989). Auslegung des Alltags – Der Alltag der Auslegung. Frankfurt.

Spiegel, Der (18.11.2009). Schwarmintelligenz.URL:
     http://www.spiegel.de/wissenschaft/weltall/0,1518,661972,00.html

Sprondel, W. and Grathoff, R. (Eds.) (1979). Die Idee des Alltags in den
     Sozialwissenschaften. Stuttgart.

Stehr, Nico (1999). Wissensgesellschaften – oder die Zerbrechlichkeit moderner
     Gesellschaften. In: Konrad, W. and Schumm, W. (Eds.). Wissen und Arbeit. Neue
     Konturen von Wissensarbeit. Münster (p. 13-23).

Stehr, Nico (2001). The Fragility of Modern Societies: Knowledge and Risk in the
     Information Age. Sage Publications.

Sterling, Stephen (2004). Linking Thinking: Unit 1, Education and Learning, an Introduction.
     WWF Scotland. Perthshire.

Stiftung Entwicklung und Frieden (1991a). Globale Trends. Frankfurt am Main.

Stiftung Entwicklung und Frieden (Ed.) (1991b). Gemeinsame Verantwortung in den 1990er
     Jahren – Bericht der Stockholm Initiative zu globaler Sicherheit und Weltordnung.
     Second Edition. Bonn. (With contributions from Willy Brandt, Gro Harlem Brundtland,
     Fernando Henrique Cardoso, Ingvar Carlsson, Thabo Mbeki and Maurice Strong).

Surowiecki, James (2004). The Wisdom of Crowds – why the many are smarter than the few
     and how collective wisdom shapes business, economies, societies and nations. New
     York, Doubleday.

Stenou, Katérina et al. (2002). Cultural Diversity Series No.1. Universal Declaration on
     Cultural Diversity. Paris, UNESCO Publishing.

Stenou, Katérina (2003). Série Diversité Culturelle No.2. Déclaration universelle de
     l'UNESCO sur la Diversité Culturelle. Paris, UNESCO Publishing.

Stubenrauch et al. (2010). Juleica – Next Klima, Praxisbuch zur klimafreundlichen Jugendarbeit. Landesjugendring Niedersachsen e.V., BWH GmbH.

Sullivan, W.M.; Kymlicka, Will (2007). The Globalization of Ethics – Religious and Secular Perspectives. Cambridge, Cambridge University Press.

Tan, Chun-I; Finkelstein, Jerry; deTar, Carleton (1985). A Passion for Physics. Singapore, World Scientific.

Taussig, M. (1993). Mimesis and Alterity. New York, Routledge

Thiemann, F. (Ed.) (1980). Konturen des Alltäglichen. Interpretationen zum Unterricht. Scriptor.

Tervooren, Anja (2001). Pausenspiele als performative Kinderkultur. In: Wulf, Christoph (Eds.) (2001). Das Soziale als Ritual – Zur Performativen Bildung von Gemeinschaften. P. 37-114. Opladen, Leske + Budrich.

Thomas, Alexander (2003). Kulturvergleichende Psychologie. Göttingen, Hofgrefe Vlg.

Thomas, Alexander (1985). Interkultureller Austausch als interkulturelles Handeln. Saarbrücken.

Thomas, W. I. and Thomas, D.S. (1928). The child in America: Behaviour problems and programs. P. 571 – 572. New York, Knopf.

Thurn, H.P. (1980). Grundrisse einer Anthropologie des Alltagslebens, Stuttgart.

Tilbury, Daniela and Wortman, David (2004). Engaging People in Sustainability. IUCN Commission on Education and Communication. Gland/Cambridge, IUCN Publishing.

Timmons, J. (1994). New Venture Creation – Entrepreneurship in the 1990s. 4th Edition. Boston.

Tomlinson, J. (1999) Globalization and Culture. Cambridge, Polity Press.

Touraine, Alain (1986). Krise und Wandel des sozialen Denkens. In: Berger, Johannes (Eds.). Die Moderne – Kontinuitäten und Zäsuren, Sonderband der „sozialen Welt". P. 15-39.

Transfer-21 Programme (2008). Gestaltungskompetenz. URL (Mar 2011): http://www.transfer-21.de/index.php?p=222

Turner, Victor (1964). Betwixt and Between: The Liminal Period in Rites de Passage. In: Spiro, Melford E. (Eds.) (1964). Symposium on New Approaches to the Study of Religion,; Seattle, American Ethnological Society.

Turner, Victor (1989). Vom Ritual zum Theater – Vom Ernst des Menschlichen Spiels. p. 174. Frankfurt/New York, Campus

Turner, Victor (2000). Das Ritual. Struktur und Anti-Struktur, Frankfurt am Main/New York, Campus.

Uexküll, Jacob von (Dec. 18, 2005). Interview. Deutschlandfunk, URL:

http://www.dradio.de/dlf/

UNECE (2005). UNECE Strategy for Education for Sustainable Development. URL:
http://www.unece.org/env/documents/2005/cep/ac.13/cep.ac.13.2005.3.rev.1.e.pdf

UNESCO (1945). Constitution of the United Nations Educational, Scientific and Cultural
Organisation. URL: http://portal.unesco.org/en/ev.phpRL_ID=15244&URL_DO=
DO_TOPIC&URL_SECTION=201.html

UNESCO (1990). World Declaration on Education for All – Meeting Basic Learning Needs.
Paris, UNESCO Publishing. URL (Jan 2011): http://www.unesco.org/education/wef/en-
conf/Jomtien%20Declaration%20eng.shtm

UNESCO (1998). Action Plan on Cultural Policies for Development, adopted in by the
Intergovernmental Conference on Cultural Policies for Development. Stockholm, Sweden, 2
April 1998. http://www.unesco.org/cpp/uk/declarations/cultural.pdf

UNESCO (2000). The Dakar Framework for Action – Education for All – Meeting Our
Collective Commitments. Paris, UNESCO Publishing. URL (Jan 2011):
http://unesdoc.unesco.org/images/0012/001211/121147e.pdf

UNESCO (2001). Sustainable Development: an Evolving Concept. URL (Feb 2011):
http://portal.unesco.org/education/en/files/30363/11035294683brief_Concept_of_ESD.pdf/brie
f%2BConcept%2Bof%2BESD.pdf

UNESCO (2005). UNESCO Convention on the Protection and Promotion of the Diversity of
Cultural Expressions. URL: http://unesdoc.unesco.org/images/0014/001429/142919e.pdf

UNESCO (2006). Cultural Diversity in the Era of Globalization.
URL: http://portal.unesco.org/culture/en/ev.php-
URL_ID=11605&URL_DO=DO_TOPIC&URL_SECTION=201.html

UNESCO (2009). Bonn Declaration. World Conference on Education for Sustainable
Development. Bonn. URL (Jan 2011): http://www.esd-world-conference-
2009.org/fileadmin/download/ESD2009_BonnDeclaration080409.pdf

UNESCO-EPD (1997). Educating for a Sustainable Future - A transdisciplinary Vision for
Concerted Action. Background Paper, International Conference on Environment and Society:
Education and Public Awareness for Sustainability, Thassaloniki, December 8-12. Paris,
UNESCO Publishing.

United Nations (1945). Charta of the United Nations: We the Peoples of the United Nations –
United for a better World. URL: http://www.un.org/aboutun/charter/index.html

United Nations (1948). Universal Declaration of Human Rights. URL:
http://www.un.org/Overview/rights.html

United Nations (1992). Agenda 21 Earth Summit - United Nations Program of Action from

Rio. United Nations Publications

United Nations (2000). 55/2. United Nations Millennium Declaration - Resolution adopted by
the General Assembly. URL (Jan 2011):
http://www.un.org/millennium/declaration/ares552e.htm

United Nations (2002). Johannesbrug Declaration on Health and Sustainable Development.
Report of the World Summit on Sustainable Development. Johannesburg, South Africa, 26
August- 4 September 2002. United Nations Publications. Cp. URL:
http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POI_PD.htm

United Nations (2000). Millennium Development Declaration. URL:
http://www.un.org/millennium/declaration/ares552e.pdf , see also Millennium
Development Goals Website: http://www.un.org/millenniumgoals/

Urry, John (1999). Sociology beyond Societies. London, Routledge:

Varela, Francisco ; Thompson, Eva ; Rosch, Eleanor (1991). The Embodied Mind.
Cambridge Mass., MIT Press.

Wackernagel, M. and W. Rees. (1996). Our Ecological Footprint – Reducing Human Impact
on the Earth. Gabriola Island/BC, New Society Publishers.

Wagner, Wolfgang (1999). Kulturschock Deutschland – Der zweite Blick. Hamburg,
Rotbuch.

Wagner, Wolf (2007). Wie funktioniert Politik?, Munich, dtv.

Walzer, Michael (1983). Thick and Thin – Moral Arguments at Home and Abroad. NewYork.

Watzlawick, P. (1984). The Invented Reality – How do we know what we believe we know?
New York, Norton.

Weber, Max. [1924] (1978). Economy and Society, ed. by Roth, Guenther; Wittich, Claus.
Berkeley: University of California Press.

Weizsäcker, E.U. von; Lovins, A.B.; Lovins, L.H. (1997). Factor Four: Doubling Wealth,
Halving Resource Use. London, Earthscan. German Version: (1995) Faktor Vier:
Doppelter Wohlstand – halbierter Naturverbrauch.

Weizsäcker, Ernst Ulrich von (Feb. 25, 2004). Folgen der Globalisierung abmildern.
Frankfurter Rundschau. URL: http://www.frankfurter-rundschau.de/
uebersicht/alle_dossiers/politik_ausland/grenzen_der_Globalisierung/?ent=393740

Wernicke, Christian (Mar. 21, 1997). Schluss mit der doppelten Moral – Ein ZEIT Gespräch
mit Sole Woyinka. Die ZEIT, (p.14).

Weller, Ch. (1995). Was wird aus der Deutschen Entwicklungspolitik? In: APuZ, Vol. 29/95:
11-19. Bundeszentrale für Politische Bildung.

WHO (2009a). URL (Jan 2011). Tobacco. www.who.int/topics/tobacco/qa/en/

WHO (2009b). Emergencies: global and local impact – World Health Day 2009: Background. URL (Jan 2011) www.who.int/entity/world-health-day/2009/emergencies_impact/en/

WHO (2009c). ULR (Jan 2011): Initiative for Vaccine Research. Parasitic Diseases. http://www.who.int/features/factfiles/malaria/en/index.html

WHO 2009d). URL (Jan 2011): http://www.who.int/vaccine_research/diseases/soa_parasitic/en/index4.html

Wiener, Norbert (1948). Cybernetics. Cambridge, Mass., MIT Press 1961 Edition.

Wichterich, Christa (1998). Die globalisierte Frau – Berichte aus der Zukunft der Ungleichheit. Reinbek bei Hamburg, Rowohlth

Wikipedia, (Feb. 16th 2011). Homo ludens. URL: http://de.wikipedia.org/wiki/Homo_ludens

Wilensky, U.; Reynolds, C. Brunel, Nicolas (2003). Flocking Birds in MGS. URL (Mai 2007): http://www.ibisc.univ-evry.fr/~mgs/ImageGallery/EXEMPLES/FlockingBird/index.html

Willke, Helmut (2004). Die Drei Quellen des Systemischen Denkens. In his: Einführung in das systemische Wissensmanagement. Heidelberg, Carl-Auer Systeme Verlag.

Wirth, T. (Nov 1995). Politikstil der Zukunft. In: Die Macht der Mutigen. Spiegel Spezial, p.8. Hamburg, Spiegel Verlag.

World Conference of Religions for Peace (1970) The Kyoto Declaration of the First World Assembly. URL: http://www.wcrp.org/RforP/ASSEMBLIES/KYOTO.html, cp. URL: http://www.weltethos.org/dat_eng/index3_e.htm

Wulf, Christoph (Ed.) (1974). Handbook on Peace Education. Frankfurt am Main/ Oslo, International Peace Research Association (Education Committee).

Wulf, Christoph; Gebauer, Gunter (1992). Mimesis: Kultur – Kunst – Gesellschaft. Reinbek. Rowohlt Taschenbuch Verlag.

Wulf, Christoph; Gebauer, Gunter (1998). Spiel, Ritual, Geste: Mimetisches Handeln in der Sozialen Welt. Reinbek, Rowohlt Taschenbuch Verlag.

Wulf, Christoph (1999). Zeit und Ritual. In: Bilstein, Johannes; Miller-Kipp, Gisela; Wulf, Christoph (Eds.) (1999). Transformationen der Zeit. Erziehungswissenschaftliche Studien zur Chronotopologie, p.112-122. Weinheim, Dt. Studien Verlag.

Wulf, Chr. and Liebau, E. ; Miller-Kipp, G. (Eds.) (1999). Metamorphosen des Raums. Erziehungswissenschaftliche Forschungen zur Chronotopologie. Weinheim.

Wulf, Christoph, et al. (Eds.) (2001). Das Soziale als Ritual – Zur Performativen Bildung von Gemeinschaften. Opladen, Leske + Budrich.

Wulf, Christoph (2001a). Einführung in die Anthropologie der Erziehung. Weinheim und Basel, Beltz Verlag.

Wulf, Christoph and Merkel, Christine (Eds.) (2002). Globalisierung als Herausforderung der

Erziehung – Theorien, Grundlagen, Fallstudien. Münster, Waxmann.

Wulf, Christoph; Gebauer, Gunter (2003). Mimetische Weltzugänge. Stuttgart, Kohlhammer

Wulf, Christoph and Qvarsell, Birgitta (Eds.) (2003). Culture and Education. Berlin, Waxmann.

Wulf, Christoph and Gebauer, Gunter (2004). Jeux, rituels, gestes - Les fondements mimétiques de l'action sociale, Paris, Anthropos.

Wulf, Christoph, et al. (Eds.) (2004a). Bildung im Ritual – Schule, Familie, Jugend, Medien. Wiesbaden, VS Verlag für Sozialwissenschaften

Wulf, Christoph (2005). Kulturelle Vielfalt und Alterität. In: UNESCO heute, Nb. 1. Eds. Deutsche UNESCO-Kommission e.V., Bonn.

Wulf, Christoph (2005a). Zur Genese des Sozialen – Mimesis, Performativität, Ritual. Bielefeld, Transcript Verlag.

Wulf, Christoph; Werler, Tobias (Eds.) (2006). Hidden Dimensions of Education: Rhetoric, Rituals, and Anthropolgy. In: European Studies in Education vol. 23. Münster/New York/München/Berlin, Waxmann Verlag GmbH

Wulf, Chr.; Bilstein, J.; Miller-Kipp, G. (Eds.) (1999). Transformationen der Zeit. Weinheim.

Yépez, Fedrico and Carcelén, Ximena (Eds.) (2004). Learning Wisdom and the Good Way to Live. Amawtay Wasi Cross-Cultural University/ UNESCO. Quito/Ecuador, Imprenta Mariscal.

Zapatero, Rodríguez (2004). Inaugural Address to the World Forum of Cultures – Barcelona 2004. In: Ziolkowski, Gregor (May 9, 2004). Der kulturelle Mittelpunkt der Welt Das "Welt-Forum der Kulturen - Barcelona 2004. Deutschland Radio. URL: http://www.dradio.de/dlr/sendungen/fazit/262701/

Ziegler, Warren (1987). Designing and Facilitating Projects and Workshops in Futures-Invention. Futures-Invention Associates. Colorado, Boulder.

Zimmer, Jürgen; Faltin, Günter; Ripsas, Sven (1999). Entrepreneurship - Wie aus Ideen Unternehmen werden. München.

Zimmer, Jürgen; Faltin, Günter (1996). Reichtum von unten – Die neuen Chancen der Kleinen. Berlin, Aufbau Taschenbuch Verlag.

Zimmer, Jürgen (2000). Das kleine Handbuch zum Situationsansatzes. Weinheim and Basel, Beltz Verlag.

Zirfas, Jörg (2003). Morals, Education and Culture. In: Wulf, Christoph and Qvarsell, Birgitta (Eds.). Culture and Education. Berlin, Waxmann.

Zimmer, Jürgen (2007). The Green School for Life Concept. Yet unpublished. Chiang Mai/ Bali.

Appendix I   Zusammenfassung (Summary in German Language)

Bildung wird in der öffentlichen Diskussion häufig als Schlüssel zur Reduktion von Armut gehandelt. Sie sei Mittel im Kampf gegen Klimawandel und fördere dabei ökonomische Entwicklung ebenso Generationen-, wie Gendergerechtigkeit. Doch sind derartige Formeln tatsächlich zutreffend?

Die Frage ist nur zu beantworten, wenn geklärt wird, was für eine "Bildung" in qualitativer Hinsicht gemeint ist. Im Rahmen des „Bildung für Alle" Programmes der UNESCO (2000) und der UN-Millennium Entwicklungsziele (United Nations 2000, Artikel 2 und 3) beispielsweise, soll Bildungsqualität oft mit institutionellen Vorkehrungen und strukturellen Maßnahmen gefördert werden, die in erster Linie einen Zugang zu Bildung ermöglichen sollen. So viel Potential dieses Vorgehen haben mag, so dürfte es mit der weiterhin unzulänglichen Definition von Bildung auch weiterhin schwer fallen, zur Verwirklichung der oben genannten Ziele tatsächlich beizutragen.

An dieser Stelle zeigt sich die Bedeutung des durchaus weit gefassten, pädagogischen Konzeptes einer Bildung für nachhaltige Entwicklung, die der Text untersucht. Sie hat zum Ziel, den Lernenden in die Lage zu versetzen, sein Selbstverständnis, seine Überzeugungen und in dem Zuge seine soziale, ökologische und ökonomische Umwelt zusammen mit anderen zu erkunden und zu gestalten. Lernende sollen dabei begleitet werden, ihr Denken und Handeln im globalen Zusammenhang zu begreifen und Auswirkungen auf künftige Generationen abzuschätzen.

Diese Darstellung von Bildung mindert jedoch nicht den scheinbar imperativen Leistungsanspruch, als ein „Schlüssel für..." und „Bildung für..." funktional zu sein. Als gesellschaftliches Medium scheint sie diesen Leistungsanspruch allzu häufig an den Lernenden weiterzugeben, z.B. durch antiquierte, die Vielfalt der Lernenden „uniformierende" Unterrichtsmethoden und vergleichende Lernerfolgsbemessung. Der Lernende gilt demnach als zu belehrendes und zu formendes Objekt, das erst durch die Akkumulation von (abfragbarem) Wissen zum gesellschaftlichen Subjekt zu werden scheint. Ist die Bildung reines Mittel zum Zweck zukünftiger Entwicklung, so wird der Lernende zwar möglicherweise zum vermeintlich gemeinnützig verantwortlichen *Bürger* herangezogen, jedoch nicht unbedingt als der *Mensch,* der er schon ist, wahrgenommen und gefördert. Was aber, wenn nicht die Entfaltung des Menschen in seiner Einzigartigkeit und menschlichen Eigenheit im Vordergrund steht? Sollte dies zu ermöglichen denn nicht intrinsischer Zweck von Bürgertum, Gemeinschaft und schließlich auch von nachhaltiger Entwicklung sein?

Die Entfaltung des Einzelnen ist gleichbedeutend mit der Ausprägung seiner (durchaus dynamischen und heterogenen) Identität, die nach Habermas ein „Akt der Integration" ist (Habermas 1981), bzw. „ein Schwarm ihrer Partizipationen" (Perkins 1992). Der abstrakte, oft kritisierte Begriff der „Identität" gewinnt an eben dieser Stelle Kontur: Denn sie ist ein

gemeinschaftlicher, reziprok-mimetischer Akt des „Homo Soziologicus" (Dahrendorf 1977), bzw. des „Homo Reciprocans" (Dohman/Falk/Huffmann/Sunde 2006) und gerade nicht homogen. Mimetisches Arrangement (zwischen Selbst und dem subjektivierten „Anderen") bedarf der Differenz zwischen den Protagonisten und vollzieht *gleichzeitig* deren Verbundenheit im Sinne von „Einheit in der Vielfalt " (Engl.: „Unity in Diversity") bzw. von „kohärenter Heterogenität".

Das mimetische Arrangement mit dem jeweils Anderen „erweitert den Horizont der Möglichkeiten" (Iser 1978) aller Beteiligten. Dies wiederum trägt zu einer „Multi-Perspektivität" von Gemeinschaften und letztlich vom Menschen im globalen Dorf mit komplexen Problemen bei. „Multi-Perspektivität" ist die mimetisch erzeugte Fähigkeit, aus unterschiedlichen Perspektiven auf gemeinsame Probleme zu schauen und dadurch die Handlungsspielräume und Entwicklungsalter-nativen zu vervielfachen. Dieser Pool sozio-kultureller vielfältiger Entwicklungsalternativen ist Ressource wiederum mimetischer Aushandlungsprozesse zur Erzeugung von Bedeutung. Diese Bedeutung ist Grundlage für die Kreation und ggf. Innovation von bedeutsamen sozio-kulturellen Identitäten und Mustern gesellschaftlicher Organisation, sowie deren sozialer, ökonomischer und ökologischer Integrität. Mimetisches Lernen, also das Arrangieren mit dem Anderen ist seinerseits nicht nur Mittel zum Zweck menschlicher – und mit erhöhter Wahrscheinlichkeit nachhaltiger – Entwicklung im Sinne von oben genannter Effizienz und Leistungsbezogenheit, sondern ebenso Ausdruck und konstitutives Merkmal von Nachhaltigkeit, im Sinne von Suffizienz.

Die vorliegende Arbeit untersucht die These, dass eine Bildung, die „den Menschen zum Menschen hin erziehen" möchte (cp. Rousseau 1762), fördern sollte, was den Menschen zum Menschen macht.

Eine Bildung für nachhaltige Entwicklung ist nicht die „instruktionistische Indoktrinierung" von „a priori" vorgefertigten Nachhaltigkeitswerten bzw. Informationen, die der Lerner memorisieren soll. Vielmehr stärkt sie die Fähigkeiten bzw. das praktische Wissen von Lernenden, mimetisch mit anderen Menschen Bedeutungen auszuhandeln, um möglichst „bedeutungsvolle" Existenz und „sinnvolle" Entwicklung zu gewährleisten. Sie bringt den Lernenden durch mimetisch-ludische Lernprozesse in sozial, ökologisch und ökonomisch relevanten Situationen auf die Spur, Nachhaltigkeit – „a posteriori" – für sich selbst zu entdecken. Formale Bildung für nachhaltige Entwicklung greift in dem Sinne die kulturtypischen Merkmale des Menschen, seine „kulturellen Kompetenzen" auf und versucht sie gezielt zu mobilisieren, bzw. zu fördern. Sie ist daher ein pädagogisches Konzept, welches das Recht des Lernenden auf Glück („Happiness") und Würde, Einzigartigkeit (Andersartigkeit) und Integration (Gemeinsamkeit) fördert, indem es diese in der pädagogischen Praxis bereits realisiert. Gleichzeitig schafft sie die Vorbedingungen für und begleitet Lernende durch nachhaltige Entwicklung. Eine solche mimetische Bildung ist ebenso

Mittel wie Zweck nachhaltiger Entwicklung. Durch Bildung für nachhaltige Entwicklung werden Lernende idealerweise befähigt („empowered"), sich in komplexen Transformationsprozessen, wie sie von mimetischem Lernerfahrungen mit dem unbekannten Anderen, aber auch durch Globalisierung und technologische Veränderungen hervorgerufen werden, zu orientieren. Das heißt, sie lernen zu fragen und möglicherweise zu beantworten: Wer bin ich? In welcher Situation befinde ich mich? Wo will ich hin, welchen Bedarf habe ich? Und wie erreiche ich mein Ziel?

Konsequenterweise ist der Text nach eben diesem Frage-Schema strukturiert. Im ersten Kapitel wird der Frage nachgegangen, was den Menschen zum Menschen macht und wie Menschen die eigene Selbstwerdung in mimetischen Arrangements mit dem Anderen regulieren bzw. gestalten. Das zweite Kapitel untersucht die Situation, also den sozialen, ökologischen und ökonomischen Status quo, um daraus auf den Bedarf zu schließen, auf den menschliche Entwicklung nachhaltig reagieren soll. Das dritte Kapitel konzentriert sich auf die Suche nach möglichst übergreifenden Leitbildern und untersucht Chancen sowie Schwächen des heterogenen Konzeptes nachhaltiger Entwicklung. Das vierte Kapitel erörtert, welche Fähigkeiten des Menschen (Kapitel 1) auf welche situativen Herausforderungen angewandt werden müssen (Kapitel 2), um eine nachhaltige Entwicklung (Kapitel 3) zu ermöglichen. Insbesondere konzentriert sich das vierte Kapitel auf die pädagogischen Schlüsse, die sich aus Erkenntnissen über die ureigene kulturelle Konstitution des Menschen und über die menschliche Fähigkeit kultureller Poiesis durch die Erzeugung sozio-kultureller Vielfalt ergeben. Anhand von Beispielen angewandter Bildung für nachhaltige Entwicklung wird gezeigt, wie die kulturell-mimetischen Kompetenzen von Lernenden explizit, also formal gefördert werden können.

Kapitel 1 definiert Kultur als autopoietisches Organisationsprinzip bzw. Modus menschlicher Entwicklung und konstitutives Merkmal (vgl. Geerz 1992) des Menschen. Der Homo Sapiens (Lat: der "weise Mensch") schöpft seine Fähigkeit, sich auf komplexe Weise zu organisieren, sich in kontingenten Situationen Orientierung zu verschaffen und sich durch die Bewältigung komplexer Herausforderungen selbst zu regulieren, aus seiner „kulturellen Kompetenz". Mit anderen Worten ist der Mensch in der Lage, sich durch den Gebrauch „kultureller Techniken", wie Sprache, Narration, Performativität, aber auch Fähigkeiten wie Kreativität und Kognition mit dem Anderen unter Beibehalt seiner und des anderen Einzigartigkeit zu arrangieren. Die spezifischen Sprachen, Narrationen, Rituale usw. sind wiederum Muster und Ausdruck von Kultur im gesellschaftlichen – sozialen - Kontext. Daraus ergibt sich eine Unterscheidung zwischen Kultur als human-poietisches Konstitutiv und Sozio-Kulturalität als Muster („Pattern") und Ausdruck kultureller Partikularismen. „Kulturell kompetent" sind sozio-kulturelle Protagonisten, die in mimetischen Prozessen u.a. durch den Gebrauch „kultureller Techniken" kollektive und relativ kohärente Heterogenität ("unity in

diversity") ausbilden. Das bedeutet, „kulturell kompetente" Protagonisten sind souverän, durch Kooperation mit Anderen Bedeutungen zu kreieren, zu erhalten oder zu innovieren. Sie sind in der Lage, sich auf ludisch-kreative Weise selbst zu regulieren und zusammen Entwicklung mit dem Anderen so zu gestalten, die sich in sozialer Integration, ökonomischer Kohärenz und ökologischer Integrität niederschlägt.

Die Chance, dem transformierenden sozialen, ökologischen und ökonomischen Kontext angemessene – nachhaltige – Bedeutungen, sozio-kulturelle Identitäten und Muster gesellschaftlicher Organisation auszuhandeln und dann zu entwickeln, steigt in dem Maße, wie es unterschiedliche Perspektiven auf geteilte Probleme und damit unterschiedliche „Entwicklungsalternativen" gibt. Und diese Chance steigt in dem Maße, wie die sozio-kulturelle Vielfalt, also Heterogenität bewahrt und gefördert wird, also in dem Maße, wie sozio-kulturelle Protagonisten tatsächlich – im Sinne von „Einheit in der Vielfalt" – in der Lage sind, sich mit dem Anderen zu arrangieren, ohne sich zu assimilieren, oder den Anderen zu diskriminieren. Mimetisches Lernen (vgl. Wulf 1998/2003) ist daher nicht nur Selbstzweck (konstitutiv), sondern ebenfalls Mittel zum Zweck der Aushandlung und Entwicklung von Nachhaltigkeit (regulativ).

Kapitel 2 beleuchtet den sozialen, ökonomischen und ökologischen Kontext und schlussfolgert daraus den Bedarf, dem sich sozio-kulturelle Identitäten, Muster gesellschaftlicher Organisation (z.B. Institutionen oder Werte) stellen müssen. Dieser Kontext ist gezeichnet von Problemen wie Armut, Bevölkerungswachstum, Klimawandel und beschleunigter Transformation des Kontextes menschlicher Entwicklung. Diese Probleme basieren auf bisherigen, etablierten sozio-kulturellen Bedeutungen und decken auf, dass diese Bedeutungen gegenwärtigen Herausforderungen nicht gewachsen scheinen.

Die Weltprobleme verbinden nicht nur alle Menschen auf der Erde. Dies bezeichnet die globale, also räumliche Dimension von Problemen. Sie bringen uns auch in die Situation, über die Geschicke und Möglichkeitsspielräume zukünftiger Generationen zu entscheiden. Dies bezeichnet die zeitliche Dimension von Problemen. Die sich daraus ergebende Herausforderung ist demnach weniger die der rein räumlichen Globalisierung, als vielmehr die Transformationen des bisherigen Raum-Zeit-Kontinuums sowie sozio-kultureller Umwälzungen (vgl. Appadurai 1999) im Sinne einer „Mondialisierung". Diese bezeichnet die Intensivierung und gleichzeitige Beschleunigung der Transformationen von „Welten" (Franz.: „le monde", die Welt) der Wahrnehmung von Zeit (Gegenwart/Zukunft) und Raum (lokal/global), von dem Selbst und dem Anderen, von Individuum und Gesellschaft, von Kosmos und Chaos, Kontinuität und Kontingenz, sowie Wissen und Nichtwissen. In dieser „Mondialisierung" ist der Andere omni-präsent, was die Emergenz bzw. Sichtbarkeit sozio-kultureller Vielfalt bewirkt (Libau/Miller-Kipp/Wulf 1999, Wulf 2002:). Die

Möglichkeit, Nachhaltigkeit zu entwickeln, steigt und fällt mit der Fähigkeit, den Anderen in dieser Situation nicht als Bedrohung, sondern als potentielle Ergänzung des Selbst und als Chance für ein sich entwickelndes, integrierendes neues Selbst zu verstehen. Anders gesagt ist sozio-kulturelle Vielfalt nicht Störfaktor kohärenter Gesellschaftsgestaltung und sie ist nicht nur Ziel von nachhaltiger Entwicklung, sondern ist deren Medium. Um ihr Potential zu „Multi-Perspektivität" und prinzipiell kultureller Poiesis zu erschließen, bedarf es sozio-kultureller Protagonisten, die dem Anderen Stand halten können und sich nur in dem Maße kompetitiv verhalten, wie sie ein kooperatives System, nicht *absolut*, sondern *relativ* friedlich aufrechterhalten.

Kapitel 3 schließt an diese These an, indem es unterschiedliche Ethikkonzepte betrachtet, die miteinander gemeinsam haben, dass sie keine Bedeutungen vorwegnehmen, also doktrinär sind, sondern die Vorbedingungen schaffen, situative Bedeutung mit dem Anderen auszuhandeln. Beispiele sind eine Ethik des Anderen, eine Ethik der Nachbarschaft und Diskursethik (Habermas 1981/1991) sowie der Weltethos (Küng 1990). In dem Zusammenhang stellt der Text die Frage, inwiefern derartige Ethik mit Anspruch an globale und langfristige Relevanz ethnozentristisch sein könnte. Besonders die Betrachtung der sogenannten Goldenen Regel „Behandle andere so, wie du von ihnen behandelt werden willst", scheint die Ethik-Konzepte zu legitimieren, bzw. historisch und religiös zu fundieren. Zudem spiegelt sich der reduzierte Universalitätsanspruch im Prinzip des „Einheit in der Vielfalt", also einer dynamischen „Ethik der Ethiken", bzw. einer Ethik der sozio-kulturellen Vielfalt wieder. Nachhaltigkeit kann daher als Ethik der Nachhaltigkeiten verstanden werden. Der Text geht davon aus, dass nachhaltige Entwicklung auf "unserer kreativen Vielfalt" (Cuéllar/UNESCO 1998) basiert und "unseren verborgenen Reichtum" (Delors/UNESCO 1998) mobilisiert, um gemäß den "Grenzen des Wachstums" (Donella/ Club of Rome 1972) "Unsere gemeinsame Zukunft" (Brundtland/UNO 1987) zu schützen und zu zelebrieren.

Kapitel 4 bezieht sich auf Kapitel 1 und geht davon aus, dass der Mensch über „kulturelle Kompetenzen" verfügt, also über die Kompetenzen, mimetische Arrangements mit dem Anderen einzugehen und dadurch „den Horizont der Möglichkeiten" zu erweitern, mit Differenz umzugehen und komplexe Herausforderungen zu bewältigen. Kapitel 2 zeigte, dass dies in Zeiten globaler und langfristiger Probleme zwingend erforderlich ist. Das Konzept „kultureller Kompetenz" ist der Versuch, ein kultur-anthropologisches Äquivalent zum ausdifferenzierten Konzept der Gestaltungskompetenz (de Haan 2002/2007) zu entwickeln, um dieses in eine für nachhaltige Entwicklung relevante globale und langfristige Dimension zu überführen, bzw. (kultur-anthropologisch) zu argumentieren und evtl. zu legitimieren. Beide Konzepte haben u.a. gemeinsam, dass die kreative Fähigkeit des Lernenden formal gefördert werden soll, bestehende Bedeutungen aus der Perspektive des Anderen zu betrachten, zu erkunden, zu bestätigen oder

gegebenenfalls kreativ zu zerstören (Marx, Engels 1848: 226, Schumpeter 1989), um einen mentalen und faktischen Paradigmenwandel zu begünstigen. Bildung für nachhaltige Entwicklung konstituiert und reguliert Nachhaltigkeit, sie ist suffizient und effizient. Dazu bedarf es jedoch pädagogischer Rahmenbedingungen, die im Text analysiert werden. Im Rahmen der UN-Dekade zu Bildung für nachhaltige Entwicklung 2005-2014 wurde Delors 4-Säulen-Modell eines vom Leben inspirierten Lernens („learning throughout life") aufgegriffen. Es bringt Bildung für nachhaltige Entwicklung in einen Zusammenhang mit Lernen, Wissen zu erwerben, Lernen zu Handeln, Lernen für das Leben sowie Lernen zusammenzuleben. Später wurde dies noch um ein Lernen, sich und andere zu transformieren, ergänzt. Im Text werden diese fünf Säulen mit den drei in der Agenda 21 (UN 1992) definierten Dimensionen nachhaltiger Entwicklung, nämlich Soziales, Umwelt und Ökonomie in Verbindung gebracht. So kann Soziales besonders durch Friedenserziehung, Community Education und soziales Lernen gefördert werden. Das Thema Umwelt wird durch Umweltbildung erfahrbar und Ökonomie lernen Lernende am besten durch Entrepreneurship-Erziehung kennen. Aus dem Zusammenschluss der beiden Konzepte entwickelt der Text 15 Kriterien für eine „Lebensnahe Bildung für Nachhaltige Entwicklung", die abschließend mit Umsetzungsbeispielen versehen werden.

Der Homo Sapiens, der „weise Mensch", verschafft sich durch „kulturelle Techniken" Überblick über und Einfluss auf komplexe Situationen, ebenso, wie der Homo Erectus dies durch den aufrechten Gang tut. Jedoch ist die vermeintliche Gegenüberstellung von Körper und Kultur unnatürlich. Tatsächlich ist die „kulturelle Kompetenz" des Menschen performativ durchwirkt. Performativ arrangiert er sich mit anderen, handelt Bedeutungen aus, etabliert und kommuniziert sie, und performativ transformiert er Bedeutungen bei Bedarf. Der Text behandelt aus diesem Grund ausführlich die Hintergründe performativen Lernens und ritualisierter Liminalität, also die Fähigkeit von Akteuren, das Unbekannte mit Hilfe von „Rites de Passage" (vgl. Turner 1964, van Gennep 1986) zu erkunden. „Kulturelle Kompetenzen" formal fördernd, greift Bildung für nachhaltige Entwicklung explizit „die verborgenen Dimensionen von Bildung" (Wulf/Werler 2006) auf.

In einem Praxisteil zeigt der Text, wie die hermeneutisch gewonnen Erkenntnisse anhand von pädagogischen Konzepten in der Praxis angewandt werden können. Als übergreifendes Konzept ist hier der Situationsansatz zu nennen, der Lebenssituationen von Lernenden als Ressource eines Lernens für das Leben nutzt (Zimmer 2000, Preissing 2003). Das Konzept und Modelle von Schools for Life (Zimmer 2007) zeigen, wie dies institutionell umgesetzt werden kann. Andere pädagogische Ansätze, wie das Theater der Unterdrückten, oder Lernen durch Lehren sowie Demokratische Erziehung zeigen auf, wie anwendbar, aber auch wie heterogen Bildung für nachhaltige Entwicklung sein kann und sollte.