

Fachbereich Erziehungswissenschaft und Psychologie
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FABRICATING HUMAN DEVELOPMENT

THE DYNAMICS OF 'ORDERING' AND 'OTHERING'
IN AN EXPERIMENTAL SECONDARY SCHOOL (HAUPTSCHULE)

Dissertation zur Erlangung des akademischen Grades

Doktor der Philosophie (Dr. phil.) vorgelegt von

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To my parents Chrysoula & Jiannis, and to my brothers Manos & Dimitris

*And with respect and solidarity to Aanke, Barbara, Chriss, David, Florian,
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Cover Picture: Composition of M.K.: a collage of two pictures drawn by students, a CV (see p. 152) and a graphic task used by teachers to initiate self-reflection by students (see p. 20).

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Opening

There is movement. There is silence. There is play and desire. There are different grades of intensities, various rhythms of modes, there are waves and vibrations. Subjectivities and objectivities appear, move, circulate; they connect to homogenous but also to heterogeneous entities, they even break connections, they build rhizomes but also stem from them—no order can be foreseen, unlike in the irreversible time model or in a traditional developmental psychological paradigm. There is an ongoing historicity of matter and meaning. And there are connections and conjugations of flow. There are relations out of which difference is generated and relations which eliminate and exclude difference; there are lines of escape. All is 'always already' different (s. Barad, 2006; Deleuze & Guattari, 1980/1987; Deleuze, 1968/1994; DeLanda, 1997).

Intro

Processing Time: the Dynamics of Development as Becoming

*"I don't feel that it is necessary to know exactly what I am.
The main interest in life and work is to become someone
else that you were not in the beginning"¹*

Creating Means for Reflection at School

Extract 1²

1. **W:** Ich habe gerade überlegt, ob wir zum ^Abschluss dieses selbstständigen Projektes
I have just been thinking, whether for the end of this independent project we could find
2. irgendeine (irgendeine) Form finden, wo die sich ^schriftlich noch mal zu ihrem
some way for them to express themselves in writing
3. ^eigenen Prozess äußern (.2). Was wahrscheinlich [ganz offen]
about their individual process (of learning/ development) (.2) Honestly, this probably can't just happen
4. **I:** [Mm]
5. **W:** nicht irgendwie geht.
on its own.
- ...
6. **W:** so'n ^bisschen diesen Prozess mal (...) wahrzunehmen für sich selber. Ich denke,
(so that they) reflect on (...) this process for themselves a little bit. I think,
7. da braucht man ein paar Fragestellungen (...) als Hilfe. (...) Also ich mein, nicht ^jeder
they might need some questions (...) as guideline. Well, I mean, not ^everybody can
8. kann jetzt einfach los: <LO ,Das war gut und mein Problem ist immer das und so'
just start (saying): <LO 'This was good, and my problem is always that and so on'

¹ From an interview with Foucault, s. Foucault et al., 1988, p. 9.

² For coding and transcription see appendix.

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9. **LO**> Also das wär (wäre)
LO> *Of course, that would be*
10. **I:** Mm
11. **W:** ^wunderbar, aber das, denke ich <ist äh> zu viel verlangt.
^fantastic, but, I think it <this is uh> it would be asking too much.
12. **I:** Mm
13. **W:** Aber (...) noch
So (...) once
14. mal so ne (eine) Richtung: das noch mal zu sehen, und äh <ha, ha ,möglichst' (...)
again, a guideline: to look it once more and uh < ha, ha, 'if possible' (...)
15. so das geht nicht ,möglichst'>.
well, it cannot be 'if possible'>.
16. Das eine ist ja die Bewertungsebene (.1) ist auch ^klar. Und das ist klar, das ist jetzt
There is certainly an evaluation level (.1) that is also ^clear. And it is clear, that now it is
17. vorbei (.2).
in the past (.2).
18. Ähm aber, wenn jetzt z.B. #Daniel#, der hat ja vorhin auch gesagt, äh ja er
Errm however, if now #Daniel#, for example, who also said earlier uh, yes, he
19. würde doch wieder eben gern auch ein bisschen mehr so=0 und er ist auch
would actually rather do a little more of this again, and he's
20. selber unzufrieden mit seinem Zeug ...
dissatisfied with his stuff, too ...
21. Das ist ja, (...) also das sind ja verschiedenste Sachen, warum du nicht
there are definitely a lot of different reasons, why you don't
22. weitermachst. Oder warum machst du am Anfang so wenig, dass du nachher nicht
go on. Or why you do so little at the beginning that you afterwards can't rise above it

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23. darüber steigst, oder..., also diesen Prozess noch mal zu ^beleuchten.
or... Well, just to shed light on this process.
24. **I:** (.1) Mm
25. **W:** (.1) Und das würd (würde) ich gerne schriftlich (...) machen.
And I would like to (...) do it in writing.
26. **I:** (.2) Mm
27. **W:** (.2) Und *And*
28. **I:** Mm. Das können wir ein bisschen jetzt
Mm. We could also do it in quite
29. künstlerisch (...) machen, z.B. (.2) ,Male ein Bild, wie (du) dieses freie Lernprojekt
an artistic way (...), like, (.2) 'Draw a picture showing how you have experienced this free-learning
30. erlebt hast und äh (.2). \Oder so was und dann (.2)
project and uh (.2) \Or something like that and then (.2)
31. Fragen dazu (stellen) oder (.2) so. (...) Ich denke es,
ask questions about this (picture) (.2) or something like this (...) I thought of this,
32. **W:** @
33. **I:** (.3) weil dann <werden>, also dann
(.3) because then <they will>, well,
34. kommt eine andere Sprache=e (...) [oder beides]
another language will appear (...) [or both]
35. **W:** Dieses Bild, ich stell mir das (so) vor: ,^(Ein) Bild! Ihr habt sie wohl nicht mehr
This picture, I imagine it like: ' ^ a picture! You're probably all nuts'
36. alle...? <MRC Aber das, was sie kennen, sind (...) die Graphiken MRC>
< MRC but, what do they know, (...) that's graphics MRC >
37. **I:** (...) [Mm]

38. **W:** [und es] gibt vielleicht ein
[and] *there would probably be*
39. paar... #Anton# müsste, wenn er ehrlich ist, sagen: „Bei mir sah die Grafik so
a few... #Anton# would have to say, if he were honest: 'in my case the diagram looks
40. aus“ (.5) Weißt du?
like this' (.5). You know?
41. ...
42. **W:** Also ne (eine) ^Grafik, die
Well, a ^diagram, which
43. **I:** Mm
44. **W:** die Zeit- (...) struktur hat.
has a temporal (...) structure.
- (Extract from teachers' discussion 1/ 07. Sept.)

In the excerpt above, one teacher (W: Wolfgang) talks to me (I) and another teacher (M) about using a diagram meant to help students “perceive the process” of their development during a 15-day-long individual learning project. We learn from this extract that the teacher Wolfgang would like to ask the students questions in order to make them reflect on their own development process. He emphasizes the importance of doing this in a written form and refers to it as giving the students a “direction”. He wants a “diagram which has a temporal structure” (line 33). He also mentions two students, Anton and Daniel, who seem to be examples of difficult cases.

The practice of reflecting on one's school performance and development in general by using graphics, narrations and other mediators is part of the everyday life of the *School for Individual Learning-in-Practice* (name slightly changed). This experimental school is located in one of the big cities of Germany. The students in this school are about 18 years old—some are slightly older or younger. These students have a long history of a failed school career, i.e. they are about 18 but continue to pursue a school education ending with a certificate which is normally obtained by students who are 15 years old (the level of GCSE'S, in Germany: “Hauptschulabschluss” or the best ones “Realschulabschluss”). If all goes well, on finishing the school, the students have a

certificate of the lowest level of education (after primary school) with which they can pursue low paid jobs.

Most of the materials presented in this dissertation come from my one-year long ethnographic field research in this school, which I will analytically present in the following maps. For now I would like to return to the extract presented above. Socio-cultural and cultural-historical approaches to teaching, learning, and development have thoroughly studied how signs and tools simultaneously mediate the communication between teachers and students, adults and children, and one's 'inner speech' to oneself, as well as shaping one's thinking and imagination (Vygotsky, 1931/1997b, 1934/1987). This is exactly how Wolfgang thinks of the diagram as a mediator that will set in motion and one particular way of thinking and expressing oneself and.

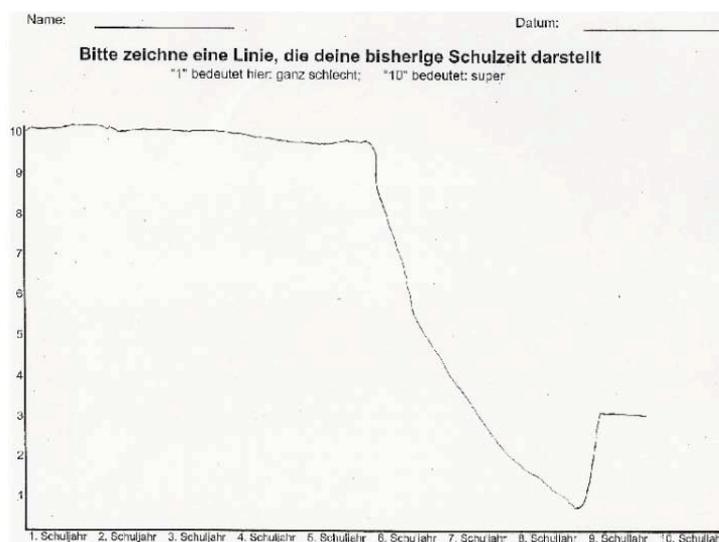
The picture or diagram to which Wolfgang is referring above would *provide an overview of* various student's actions and student and teacher interactions which took place during a two-week educational project. Not the teacher but the student would provide this overview; the student is expected to engage and produce it as well as to reflect on him-/herself. It seems that the student is expected to become actively engaged in the control of him-/herself through the process of understanding him/herself. One's agency is needed for institutional control to be applied and for the established order to be maintained. The mediator that Wolfgang wants to create enables not only thinking and communication—it also implies a particular form of *selfhood* on which one can reflect.

In this context, the focus of reflection is on one's *self* and not one's *social relations*. A self is fabricated which should be improved and developed: students should 'discover their talents', their inner desires, their professional dreams, they should then pursue them. Teachers are thus not supposed to control, they are supposed to support these self-focused students. As we will see more analytically in maps 2 and 3, we cannot avoid drawing a parallel to Foucault's 'technologies of the self' (Foucault et al., 1988) or Rose's 'technologies of freedom' (Rose, 1999) here. It is necessary to move from Vygotsky to Foucault and back in order to understand how mediation in this concrete case enables particular processes of reflection and ways of relating to oneself and to the others, while at the same time rendering others processes impossible.

What is of particular importance here and has not been thoroughly studied so far is the temporality of the ‘self’ and its fabrication by meditative means. It is not accidental that the teacher Wolfgang requires that the diagram used to stimulate student’s reflection should have a particular *temporal structure* in the extract presented above (line 33). Students should ‘witness’ the future, regard it as ‘their’ own and move towards it while reflecting on their past in order to evaluate and improve their achievements. In this way they will experience ‘freedom’. The subjective sphere should be composed with the institutional and in this way attain liberation (Rose, 1999).

Making Diagrams and Fabricating Time

I would like to present here another diagram teachers and students used in the School for Individual Learning-in-Practice (see: Picture 1).



Picture 1:

“Please draw a line which presents your time in school so far. ‘1’ means here very bad; ‘10’ means super” (official school document kept in the official school file of each student)

The diagram presented here is abstract and encompasses the student's complete school past. This diagram has been used by teachers during students' interviewing and counselling and is kept in the official school file of each student. Time is spatialized here as a line connecting the past, the present, and the future (Bergson, 1896/1991). Ongoing interaction and interactivity is translated into a line, the subject is abstracted from everyday life situations and development is decontextualized. In the diagram, one judges one's past as something between "very bad" and "super" and one is positioned as responsible for one's future. In this way, no critique can be directed towards social hierarchies educational settings, or cultural values—change can only be introduced as a purely individual, personal matter.

If we consider this diagram as a mediator in terms of Vygotsky, then we could argue that such diagrams are cultural artifacts that shape one's thinking and imagination (Vygotsky, 1934/1987). With these artifacts, expressed meanings become internalized or appropriated, and what might initially be seen as mediated communication between the teacher and the student later becomes the cornerstone for one's own thinking. If we consider this diagram from the perspective of Foucault, we may also speak about modern practices of self-care, self-reflection, self-control, and self-emancipation (Foucault, 1988; Foucault et al., 2005; Foucault et al., 1988). But how can we theorize the temporal aspects of the diagram, which are essential for its function as a 'technology of the self'? Is there any relation between the temporal structure of the diagram representing one's development and the temporality of development itself? Not only diagrams are used to materialize development in a school—files, reports, registers of absence, CVs, and application letters do too. What kind of development would we have without such cultural artifacts? How is the temporality of development related to the organization of self and subjectivity (Blackman et al., 2008; Rey, 2007; Stetsenko & Arievitch, 2004a), to the relations between adults and children/young people (Christensen & James, 2008), and to the relations between the institutional and the subjective (Papadopoulos, 2005)?

The work presented here elaborates on three interrelated theoretical concepts, those of *mediation* (Serres, 1980/1982; Vygotsky, 1934/1987), *process* (Deleuze, 1968/1994; Deleuze & Guattari, 1980/1987) and *Zone of Proximal Development* (Vygotsky, 1929/2005; Vygotsky, 1930-34/1998, 1934/1987, 1934/1999), exploring time and development at school as material-semiotic

orderings which either (re-)produce or escape given relations of power. It challenges the modern idea that a child or a young person develops in (linear) time and grows up by passing from one developmental stage to the next, and also problematizes the model of two parallel arrows that denote universal time and individual development.

I will explore how human development is *mediated* through documents, diaries, photos, CVs, and other cultural artifacts at the German School for Individual Learning-in-Practice. I argue that all these artifacts or mediators fabricate linear time and development towards a given end—that of being job seeker. Seeking alternatives to this kind of organization of development, the analysis turns to the well-known Freedom Writers project in California and explores the role of collective writing, witnessing and reflection for the education and development of marginalized students. The work presented here does not only studies school practices from a meta-perspective, it also seeks alternatives by making explicit their value positions. It suggests a relational-processual approach to human development which can be seen as an alternative to mainstream developmental-psychological and educational theories.

The leading questions throughout the dissertation are: How can development be conceptualized in relational terms, i.e. as a relation between subjectivities and objectivities? Does ‘development’ involve limitations and control, or is it an expression of movement, imagination, spontaneity, and freedom? How is difference-in-itself generated or excluded? Is development marked by intensity, uncertainty and drama, or does time and development advance in the same way in which a modern train approaches its destination (Latour, 2005b)?

Human Development, Culture, and Societal Change

A great deal of cultural-historical psychological or socio-cultural approaches³ and historical anthropological theory and research⁴ have examined the relations between thinking and culture

³ See Chaiklin, 2001; Dafermos, 2002; Daniels, 2008; Daniels, Cole, & Wertsch, 2007; Engeström, 1987; Fleer, Hedegaard, & Tudge, 2009; Hedegaard, 2001; Hildebrand-Nilshon, Kim, & Papadopoulos, 2002; Kontopodis, Wulf, & Fichtner, under review; Kozulin et al., 2003; Lompscher, 1989; Lompscher & Galperin, 1972; Oers et al., 2008; Stetsenko & Arievitch, in press; Valsiner, 1987; Veresov, 1999.

as well as the development of children and youth in concrete socio-cultural and historical contexts. Concepts such as appropriation, agency, activity, meaning, and semiotic mediation have been central to this kind of theory and research. Most recent works also employ theoretical tools such as the idea of otherness, the notion of subjectivity, and the concept of performativity⁵. According to these cultural-historical approaches, the very ‘nature’ of subjectivity, i.e. psychological processes such as thinking, imagination, or motivation, are constituted through the use of the signs and tools available to a civilization at a particular historical moment. One could also refer to the long tradition of the anthropology of childhood and youth⁶, to recently developed deconstructive and historical approaches in psychology⁷, and to the so-called ‘new’ sociology of childhood and youth⁸. All these approaches question the individualist and universalist understanding of human development in mainstream western epistemologies and situate childhood, development, and psychological and educational practices and knowledge in concrete social, cultural, and historical settings.

A much disputed concept that belongs in this framework of non-mainstream or non-classical approaches to childhood and human development (cf. Robbins & Stetsenko, 2002), carrying revolutionary implications for developmental theory and educational practice (cf. Newman & Holzman, 1993) is the Vygotskian notion of the *Zone of Proximal Development* (Vygotsky, 1929/2005; Vygotsky, 1930-34/1998, 1934/1987, 1934/1999). Chaiklin has reviewed all of Vygotsky’s texts in which this term appears, and puts forward the question of the definition of the term, since Vygotsky himself does not provide it and there is no outline of the theory of the Zone of Proximal Development (Chaiklin, 2003). Chaiklin argues against the various ‘common sense’ interpretations of the Zone of Proximal Development and their implications for educational practice. He is critical of the fact that most post-vygotskian studies cite only this one fragment about the Zone of Proximal Development:

⁴ See Audehm, 2007; Dux, 2000; Gebauer & Kamper, 1989; Gebauer, 1998; Wulf, 1997, 2004; Wulf, Göhlich, & Zirfas, 2001; Wulf & Kamper, 2002; Wulf & Zirfas, 2007.

⁵ Holzman, 2009; Stetsenko & Arieivitch, 2004c; Wulf, 2007; Wulf & Zirfas, 2007.

⁶ See Bluebond-Langner, 1978; Bluebond-Langner & Korbin, 2007; Gutman & Coninck-Smith, 2007; Mead, 1928; Mead, Bateson, & Macgregor, 1951; Mead & Wolfenstein, 1955; Siegel, 2008; Whiting & Whiting, 1975.

⁷ Aries, 2001; Burman, 1994.

⁸ See Behnken, 2009; Christensen & James, 2008; James & Prout, 1990; Liebel, 2004; Prout, 2005; Zeiher & Zeiher, 1994.

“The child is able to copy a series of actions which surpass his or her own capacities, but only within limits. By means of copying, the child is able to perform much better when together with and guided by adults than when left alone, and can do so with understanding and independently. The difference between the level of solved tasks that can be performed with adult guidance and help and the level of independently solved tasks is the zone of proximal development” (Vygotsky, 1978, cited by M. Hedegaard, 2005, pp. 227-8).

The main features of the Zone of Proximal Development which Chaiklin sums up are the following: a) it involves the whole child b) development is concerned with the relationships between psychological functions and not the psychological functions as such c) development takes place as a qualitative change in these relationships d) change is brought about by the child’s actions in the social situation of development—where e) each age period is characterized by a leading activity/contradiction that organizes the child’s actions through which new functions develop (Chaiklin, 2003, p. 50)⁹.

Lave & Wenger differentiate between three main interpretations of the Zone of Proximal Development: 1) the scaffolding 2) the cultural and 3) the societal or collectivist (see Lave & Wenger, 1991, pp. 48-49). The scaffolding interpretation of the Zone of Proximal Development reproduces a mainstream-like understanding of development and subjectivity. ‘Development’ here means development of a single individual and not development of social or societal relations. One could contrast this view with cultural-historically oriented approaches which consider the Zone of Proximal Development as the distance between the knowledge provided by the socio-historical context—usually made accessible through instruction—and the everyday experience of individuals (Davydov, 2008; Davydov & Markova, 1983; Hedegaard, 2005b; Hedegaard & Lompscher, 1999)¹⁰. Other interpretations take an even more societal or collectivist perspective such as the interpretation suggested by Daniels in combination with Bernstein’s sociology (Daniels, 2001, 2006) or the definition by Engeström of the Zone of Proximal Development as “the distance between the everyday actions of individuals and the

⁹ Chaiklin here refers mainly to child development although the concept of the Zone of Proximal Development is valid in regard to all ages.

¹⁰ For a critique of the concept of culture in this approach see Marvakis & Papadopoulos, 2002.

historically new form of the societal activity that can be collectively generated as a solution to the double bind potentially embedded in ... everyday actions” (Engeström, 1987, p. 174)¹¹.

When reviewing the work of all the disciplines mentioned above as well as the different interpretations of the Zone of Proximal Development, it becomes evident that human development can be defined very differently in the context of different theoretical frameworks. ‘Development’ does not necessarily mean the development of a single individual as conceived in the above-presented teacher’s discourse. However, as we will see in the maps 2 and 3 of this dissertation, the understanding of development as the development of a single individual is dominant and has performative effects for the ‘ordering’ of the everyday life of students and teachers at school. Especially in the context of the current transformation of the social security system in Germany and other European countries, this kind of development functions as a *technology of the self*—thus producing non-deviant, self-responsible, and self-controlled individuals (Foucault et al., 1988) and eliminating the chances for broader and more radical societal changes.

Potential Development vs. Virtual Development

Development is not, however, only a concept that concerns individuals or social and societal relations depending on different points of view; it is foremost a *temporal* concept and this is made explicit in the above-presented diagram (Picture 1). As we will see below, different temporal understandings which may underlie the concept of development go together with more or less individualist or collectivist definitions of development.

It is quite well known that the concept of time in mainstream developmental psychology is based on Darwin’s theory of evolution and was introduced by Piaget. The concepts of linear time and of development towards a given end are the cornerstones of modern education and of modernity in general. According to Hess, while Newtonian physics were “in a sense timeless and reversible” (Hess, 1997, pp. 130-131), in the 19th century the concept of irreversible time entered physics through thermodynamics. In this way, in the scientific discourse, time became perceived as

¹¹ The understanding of collectivity or society implied in these approaches could be criticized from the point of view of recently developed approaches in science and technology studies (cf. Latour, 2004, 2005a).

irreversible and symbolically depicted as an arrow¹². This concept has spread to a number of disciplines which conceptualize the world in evolutionary terms (biology, geology, anthropology, sociology, political economy, etc.). Piaget introduced the concept of irreversible time in psychology, which in this way became ‘developmental’¹³. As Perret-Clermont and Lambolz write:

[Piaget...] instituted the so-called ‘genetic’ approach. Inspired by biology, he transposed to psychology the time inherited from natural sciences, reinterpreted the concept of evolution, and imported the concepts of assimilation, accommodation, and equilibration, investing them with an explanatory function (Perret-Clermont & Lambolz, 2005, p. 3)

Based upon the principles of assimilation, accommodation, and equilibration, the concept of development in mainstream psychology implies a linear time that moves toward a given end in which the minimum of possible activity is achieved, as depicted in picture 2.



Picture 2: Linear Model of Time and Development

As a result, the child’s actions and experiences, seen from a developmental-psychological point of view, form a continuum, a meaningful entity. This developmental continuum should lead to a rational universal individual—the conception of man that modern pedagogy is grounded on (Wulf, 2002). The famous science and technology scholar Latour criticizes this understanding of development¹⁴:

¹² Prior to thermodynamics, other domains of human thought such as mythology (e.g. ‘Chronos’) and religion (e.g. Christianity) also envisaged time as irreversible.

¹³ For a review of similar conceptualizations of time in other fields of psychology, see Kontopodis, 2006; Pourkos & Kontopodis, 2005.

¹⁴ For a detailed critique of the concept of time of Piaget, see Gell, 1992.

[Development in Piaget] is the realization ‘in time’ of what was already there *in potentia* (...) [it] unfolds determinations, but nothing really happens, exactly as it is possible to calculate all the positions of the pendulum from its initial position without the actual fall of the pendulum adding any new information (Latour, 2005b, p. 185)

Latour here claims that the past and the future in Piaget are presupposed and that development is conceptualized as an arrow connecting them. In such a paradigm, it is impossible to create a situation with completely new properties—only another way of combining the already known properties is possible.

The theory of evolution and the temporal understanding it implies have been much criticized from the time they appeared until today (Baldwin, 1896, 1897; Bergson, 1907/1998; Ingold, 1986; Peirce, 1958; Sonigo & Stengers, 2003). This critical reception of the concept of evolution has until recently not been reflected in developmental psychology, which seems to take the idea of evolution and its underlying temporal understanding for granted. The notion of time in general has been the focus of long debates in physics, science, philosophy, social sciences, and educational science—but not in psychology¹⁵. The evolution theory also had a strong influence

¹⁵ Einstein’s relativity theory (Einstein, 1905) criticized the existence of time as an independent external variable (t) and the Quantum Theory re-introduced the concept of reversible time in physics (Barad, 2007; Bohr, 1928/1983; Heisenberg, 1927). In philosophy, both the concept of irreversible and reversible time have been strongly criticized (Bergson, 1896/1991; eg. Bergson, 1907/1998; Griffin, 2001; see also: Sandbothe, 1998) and the concept of subjective time has been introduced (Minkowski, 1933/1995). In the social sciences, the objective existence of time has been criticized and time has been considered a socio-cultural phenomenon (Durkheim, 1912/1991; Halbwachs & Alexandre, 1950; Sorokin & Merton, 1937)—not to mention later socio-cultural approaches to time such as those of Pomian (1984) or of Giddens (1991a, 1991b—for an overview of current socio-cultural approaches to time see Kontopodis, 2006). Moreover, the understanding of time by Piaget has been criticized in the classical anthropological work of Gell (Gell, 1992). In educational science, early critical pedagogical approaches criticized the future orientation of educational activities (Korczak, 1929/1971; Schleiermacher & Weniger, 1826/1957) and later critical pedagogical approaches questioned the way time is organized in education in the context of the capitalist economy (e.g. similarities between the production of capital and the learning process, see Geissler, 1985; Mollenhauer, 1981, 1986; Oelkers, 1980). Phenomenological approaches consider the problem of how different subjectivities experience time (e.g. young people as compared to adults, see Lippitz, 1993). Furthermore, ecological approaches explore the way in which the body interacts with its environment so that a sense of time is produced out of a variety of perceived events (Gibson, 1975). As an extension of this understanding, the German school of time-ecology discusses biologic rhythms, individual tempos, and issues of temporal organization in school (Held & Geissler, 1993; Reheis, 2005; Rinderspacher, 2000). However, in mainstream educational approaches time has mostly

on what is usually seen as the alternative to Piagetian developmental psychology, i.e. the approach of Vygotsky¹⁶.

A first critical reading of Darwin's concept of evolution in psychology is found in the late works of Piaget (mainly in Piaget, 1987) and a more radical critique was expressed by Morss in the 90's (Morss, 1990, 1996). Valsiner (1994a) also referred to the problem inherent in the assumption that every developmental theory should be consistent, even though everyday reality is inconsistent. Furthermore, during this time we also find a first theoretical elaboration on different time zones that operate simultaneously and on the relation between time and mediation in an article published by Michael Cole (1995). More recently, Perret-Clermont and colleagues (2005) tried to develop a multidisciplinary perspective on time which goes far beyond the classic work of Piaget (1946/1970), raising a series of epistemological concerns (cf. Valsiner, 1994b, 2001). Furthermore, Engeström criticized the linear understanding of time and the notion of causality and introduced the notion of *mycorrhizae-like activities* which point to different directions towards which cultural historical activity theory could be further developed in the future (Engeström, 2006, p. 30).

What is particularly problematic about the concept of evolution—which is also implied in the diagrams to which the teachers refer to above—is that it presupposes that time is a container or an arrow, that entities exist *in* time and evolve or develop while maintaining at least a few persistent qualities. In such a paradigm, it is impossible to create a situation with completely new properties—only another way of maintaining the already known properties is possible (Stengers,

been considered as an external measurable variable, e.g. time that is used for teaching, time that is required for a given kind of activity, better use of time, etc. (see the overview of Delhaxhe, 1997)¹⁵.

¹⁶ In the Soviet Union, the concept of evolution had gained importance long before Vygotsky, mainly through the work of B. Vagner (1849-1934) who founded the soviet Comparative Zoology. Vagner had a long correspondence with Vygotsky, and, on December 2nd 1928, Vygotsky wrote to him in a letter: "From your books I have learned to think psychologically in the most difficult area of our science. On their basis, I and other psychologists of my specialization have worked on the biological 'worldview' in psychology" (Vygodskaja & Lifanova, 2000, p. 334, translation from German by M.K.). In this context, as we know from the historical research of Dafermos (2002, see also; Vygodskaja & Lifanova, 2000), Vygotsky believed that psychology evolved at a slower pace but still in the same way as other biological sciences and tried to apply the notion of 'evolution' in his approach to psychological development.

1997, p. 66)¹⁷. Such a concept of time, Ansell-Pearson argues, “sees in a new form or quality only a rearrangement of the old and nothing absolutely new” (Ansell-Pearson, 2002, p. 85). From an alternative point of view, one could argue that what evolves or develops is not an entity but a network of relations among entities, which are not defined by themselves but through their relations to other entities—i.e. if a relation changes, then the entities are no longer the same.

The concept of difference-in-itself, which refers to a process of becoming different in relational-processual terms and not to difference *from* another entity in terms of structure or identity, is here of particular importance. The concept of difference-in-itself can be traced back to Marx, who for the first time in the history of modern continental philosophy suggested that the very same thing is at the same time different, in the sense that in one constellation it can have exchange value and in another constellation use value (Marx, 1867; Roth, 2008b). The philosophies that are usually perceived as philosophies of difference are those of Nietzsche (1885/2007; 1882/1974), Whitehead (1929/1978), and Bergson (1896/1991, 1907/1998), and the most elaborated version of this concept is to be found in the works of Deleuze and Guattari (Deleuze, 1968/1994;

¹⁷ Ilya Prigogine and colleagues studied non-linear and non-equilibrium phenomena in physical and chemical processes and argued that the processes governing the emergence of life are not simple and linear, but dialectical, involving sudden leaps where quantity is transformed into quality. In this sense, the concepts of ‘dissipative structures’ and ‘self-organisation’ have been introduced (Glansdorff & Prigogine, 1971; Kondepudi & Prigogine, 1998). The work of Prigogine seemed to revolutionize natural sciences and was awarded the Nobel Prize in 1977. The concept of self-organisation has been extended in the study of the so-called dynamic behaviour of complex neural, biological, and social systems—the most well-known theories here are those of Maturana & Varela (1980) and Luhmann (1987, 1990). These theories have only very recently been deconstructed from the point of view of Science and Technology Studies. The main figure in this discourse is the philosopher Isabelle Stengers. In the early 80’s she co-operated with Prigogine with the intention of developing a ‘complexity theory’ of dynamic systems by bringing together the Deleuzian interpretation of Bergson and the principles of thermodynamics (Prigogine & Stengers, 1983). About fifteen years later, she abandoned this attempt and turned to a more radical position against the concept of irreversible time—this is presented in her late work, which is less known and has not been translated into English yet (Stengers, 1997). As she points out in her work about “le défi de Prigogine”, the concept of self-organisation failed to conceptualise the emergence of difference and novelty. According to Stengers, Prigogine’s theory departs from the concept of irreversible time and evolution instead of calling it into question. In this way it excludes difference and a homogenous world is made out of a ‘messy reality’ (cf. Law, 2004). This fact shares strong implications not only for natural but also for social sciences regarding how divergence is considered and treated.

Deleuze & Guattari, 1980/1987)¹⁸. The process of creating new relations among entities thus changes their very essences because they become different-in-themselves. What Bergson as well

¹⁸ In order to develop a philosophy of difference, Deleuze drew a connection between a number of continental philosophers who at least partially related themselves to each other: Spinoza, Leibniz, Nietzsche, Bergson, Whitehead and Peirce (Deleuze, 1962/2006, 1968/1994, 1993, 2004; Deleuze & Guattari, 1972/1983, 1980/1987). This link is also followed here, which I regard as particularly fruitful in generating a new concept of time in developmental psychology (For detailed accounts on other approaches in time philosophy see Gimmler, Sandbothe, & Zimmerli, 1997; Kamper, 1987; Kämpfer, 1997; Zimmerli & Sandbothe, 1993). Referring to psychology, one could say that Vygotsky was influenced by the idea of difference-in-itself—an influence that could be traced back to his influence by Marx and Nietzsche as well as by the political theory of Trotsky, which brought together these two philosophies. It can become clear how relations are virtually there but not realized if for example we think of Vygotsky's account on the developmental problems of children with disability as problems that would not exist as such if different culturally-historically developed means of communication were given (Vygotsky, 1924/1993). Vygotsky was, however, also strongly influenced by Hegel (cf. Dafermos, 2002, pp. 35-38). It should be noted here that Vygotsky never explicitly studied time or process and never fully developed his work in general because of his early death. From my point of view, in Vygotsky's theory, both notions of time: one drawing on the theory of evolution and Hegelian Dialectic (the concept of sameness), and the other, the Nietzschean concept of time (postulating difference)—coexist. This noteworthy fact has been largely ignored not only throughout post-vygotskian theory and research but also in the secondary literature on his works. Although Vygotsky was highly influenced by the theory of evolution and Hegel, he also studied Nietzsche and was affiliated with Trotsky. This last influence is made explicit in his various texts, but censored by the ideological machine of the Soviet Union (Dafermos, 2002; Keiler, 2002). Throughout Vygotsky's work, from the very beginning (s. 1925/ 1971, 1927/1997) to the very end (s. extracts presented above, also 1932-34/1998), the tendency to conceptualize time and human development in terms of sameness (i.e. as ordering) appears side by side with the tendency to perceive development in terms of difference (i.e. as othering). As a result, in his writing, there is no radical criticism of the concept of the 'arrow of time' deriving from the theory of evolution and applied in developmental psychology—although what we can find in his works are the tools for such a criticism. To employ a Bakhtinian term, one could say that Vygotsky's work presents 'multi-voicedness' (Wertsch, 1991) or is 'interdiscursive' (Fairclough, 1992). The concept of time in the Hegelian Dialectic was strongly criticized by Deleuze in his work *Difference and Repetition* (Deleuze, 1968/1994). The Dialectic, Deleuze tells us, seems to operate with extreme differences alone, which the Dialectic acknowledges as the motor of history. Formed by two opposite terms, such as being and non-being, the Dialectic operates by synthesizing them into a new third term that preserves and overcomes the earlier opposition (exactly the oxymoron of 'preserving *and* overcoming' is the point criticized and contrasted with the emergence of absolute novelty. Deleuze argues that this is a dead end which makes "identity the sufficient condition for difference to exist and be thought. It is only in relation to the identical, as a function of the identical, that contradiction is the greatest difference. The intoxication and giddiness are feigned, the obscure is already clarified from the outset. Nothing shows this more than the insipid monocentrality of the circles in the Hegelian dialectic" (Deleuze, 1968/1994, p. 263). According to Deleuze, the teleological element in time-theory and the direction of realization are only an illusion of consciousness. In his later work with Guattari,

as Deleuze and Guattari called *becoming* is an intensive process of the realization of virtualities and is not just limited to the actualization of potentialities.¹⁹

According to Bergson, from the viewpoint of theory, there is no difference between the potential and the real. Something is *already given* as ‘potential’ and simply has existence or reality added to it when it is ‘realized’. In this sense the potential is ‘actual’, even if it is not real. Conversely, the virtual is real but not actual (Bergson, 1896/1991)²⁰. As Deleuze argues, the rules of virtuality are no longer resemblance and limitation, but *difference* and *divergence*. The virtual is itself entirely differentiated. In actualizing itself, it does not proceed by limitation or exclusion but rather *creates* its own lines of actualization in positive acts that require ‘a process of invention’ (Ansell-Pearson, 2002, p. 72) that allows it to diverge or differentiate itself from itself. In this manner, the virtual provides a real conceptualization of the new (Deleuze, 1968/1994; Deleuze & Guattari, 1980/1987).

As I will argue in map 6, in this case we cannot speak of time as extensive, i.e. as an a priori existing reality ‘out-there’ or as represented in the diagram of the picture 2; we can only speak of time in terms of intensity, i.e. we can speak of *process* or of *event*. Seen in this perspective, time is not independent of action but is interdependent with it. Time in this sense is a *doing* and there are endless possibilities of how time can be done. The generation of difference-in-itself goes together with what Vygotsky or Nietzsche referred to as *drama*, or what Whitehead, Latour, Deleuze and Guattari called an *event* or a *process of becoming*: after an event, nothing is the same, new relations have replaced the old ones and everything has become different. Seen from this perspective, development is not the development of one’s self but the development of new material-semiotic orderings and of new societal relations, as we will see throughout the dissertation. In this context,

the ‘colourless dialectics of evolution’ is criticized because it excludes heterogeneity and difference: “We no longer believe in a primordial totality that once existed, or in a final totality that awaits us at some future date. We no longer believe in the dull grey outlines of a dreary, colourless dialectics of evolution, aimed at forming a harmonious whole out of heterogeneous bits by rounding off their rough edges. We believe only in totalities that are peripheral” (Deleuze & Guattari, 1980/1987, p. 42).

¹⁹ The term ‘virtuality’ has been much popularized in the context of new media and computer technologies. Maintaining a critical distance from this popular understanding, we use here the concept of virtuality to refer to development as the actualization of virtual relations in terms of the above-mentioned philosophical approaches.

²⁰ Reality is perceived here as being at the same time single but also multiple; i.e. as an assemblage of relations (Deleuze, 1968/1994; Deleuze & Guattari, 1980/1987).

Deleuze & Guattari have introduced the term ‘involution’ or ‘becoming’ as an alternative to the concept of evolution. Involution is creative:

To become is not to progress or regress along a series... becoming is not an evolution, at least not an evolution by descent and filiation (...) Becoming is involutory, involution is creative. To regress is to move in the direction of something less differentiated. But to involve is to form a block that runs its own line ‘between’ the terms in play and beneath assignable relations (Deleuze & Guattari, 1980/1987, p. 238).

Interpreting the *Zone of Proximal Development* from this point of view, one could say that it does not consider the development of a single individual, but the *development of different relations* among not only the psychological functions, as Vygotsky (1934/1987, Ch. 6) wrote, but also among subjectivities and objectivities—however broadly these terms might be defined.²¹ The Zone of Proximal Development in terms of becoming refers to virtual relations and does not refer to the potential development of a child to an adult, for example. From my point of view²², in the psychology of Vygotsky, development is not (only) considered to be an inner progression of states which lead to one another; Vygotsky’s psychology is (also) *processual* and *relational*. The notion of proximity indicates not a following *temporal* phase but the *virtual space* of social relations that are real and can be actualized²³. Proximity understood in this sense is *proximity to the*

²¹ “Subjectivities and objectivities may all be treated in a similar way: as *processes* which produce and arise out of partially connected and endlessly deferred ordering schemes or logics” (Law & Moser, 2003, p. 16, italics mine). Treating objectivities and subjectivities in similar terms brings semiotic and process philosophy together. In both approaches, substances are conceived of relationally. Pickering (1995) comments: “Semiotics, the science of signs, teaches us how to think symmetrically about human and nonhuman agents” (p.12). “The agencies we speak about are semiotic ones, not confined to the rigid categories” traditional thought imposes (p.13). If one thinks in relational terms, then one thinks in processual terms. Already in 1924, the process philosopher Whitehead, while reading some of Peirce’s unpublished manuscripts, was struck by how Peirce had anticipated his own “process” thinking (For a detailed account on Peirce and process metaphysics, see Moore, Robin, & Wiener, 1964). A late version of this discourse is the Actor-Network-Theory (for an overview see Latour, 2005a).

²² My aim here is not to produce any ‘right’ interpretation of Vygotsky’s concept but to develop it from the perspective of process philosophy.

²³ With ‘relational’ I refer to what is called ‘relational materialism’ (Haraway, 1997; Law, 1994; Law & Hassard, 1999; Mol, 1999, 2002), which implies a twofold effort of (a) dealing with the interrelation between semiotic and material phenomena and, as we will see in the next section, (b) considering the performative effects of mediation, treating time not as primary phenomenon but as the outcome of mediated relations between entities. Relational materialism follows the semiotic principle or relationality i.e. that an entity obtains its form and attributes through the relations to

unknown—and not to the known or to the potentially possible, as is the case in the most post-vygotskian approaches. In this sense, the Zone of Proximal Development is defined as the distance between the known and the unknown, and shares parallels with what Deleuze and Guattari defined as *zone of proximity*:

Starting from the forms one has, the subject one is, the organs one has, or the functions one fulfils, becoming is to extract particles between which one establishes the relations of movement and rest, speed and slowness that are closest to what one is becoming and through which one becomes. This is the sense in which becoming is the process of desire. This principle of proximity or approximation is entirely particular and reintroduces no analogy whatsoever. It indicates as rigorously as possible a *zone of proximity* (voisinage) or copresence of a particle, the movement into which any particle that enters the zone is drawn.... Becoming is to emit particles that take on certain relations of movement and rest because they enter a particular zone of proximity. Or, it is to emit particles that enter this zone because they take on these relations (Deleuze & Guattari, 1980/1987, pp. 272-273).

Time and Mediation

One more component is needed here for the above-outlined approach to be accomplished: the concept of *mediation*. Vygotsky introduced the idea that child development is possible only through mediation (Cole, 1995, 1996; Roth, 2007b; Stetsenko, 2004, 2005; Vygotsky, 1930/1978, 1934/1987). After extending Vygotsky's discourse in the direction presented above, it becomes clear that the concept of development does not regard the development of oneself but the development of social relations. But social relations do not exist without mediation, and as we

other entities. It seeks to apply this principle not only on linguistic phenomena but also on materialities (principle of materiality). What is more: it claims that it is only in and through action that relations as such exist (principle of performativity, Law, 1999, p. 4). This focus on materiality and performativity as defined above differentiates this approach from neuroscientific and psychophysical accounts on temporal perception (see Macar, Vidal, & Bonnet, 1996; Meck, 1996; Treisman et al., 1990), but also from narrative or constructionist approaches to time (eg. Brockmeier, 2000, 2003; Derrida, 1972, 1991; Hasenfratz, 2003) and from post-modern relational approaches to human subjectivity and development (Gergen, 1993; Holzman, 2009). For a critique to these approaches see also (Parker, 1998). In contrast to post-modern approaches to time, I do not argue only about difference and divergence, but also about the *repetition* of that which differs from itself. What I regard as a challenge is dealing with repetition and creating novelty out of it. Exactly this should be seen as the aim pursued throughout the present work.

know from semiotics, these relations are always in triad (Andacht & Michel, 2005). What is more: time does not exist without mediation; seen from the perspective outlined above, entities do not exist *in* time but time is *made of* entities that are put together in a particular constellation during action. The diagram of picture 1 presents a nice example of such an ‘entity’ that does not *exist in* time but that *makes* time. Could we argue that different constellations of entities—what we can call different ‘material-semiotic orderings’ (cf. Haraway, 1997; Law, 1994, 2004) go together with different social relations and different times?

The practice of viewing the world in a single temporal linear order that exists prior to and independently of cultural-historical and social practices is deeply rooted in modernity, where developmental psychology also originated. However, what stands behind this idea of a universal order is, according to anthropological approaches, a dominant instance of God (Nietzsche, 1885/2007; Nietzsche, 1895/2004) or the white male European adult (Foucault, 1979, 1982; Wulf, 1997, 2002, 2004, 2006). In contrast to this, recently developed approaches in science and technology studies do not presuppose any given temporal order, but examine *ordering* efforts meant to establish relations between different entities (Latour, 2005b)²⁴. In this frame, time in general and development in particular can only be seen as *orders* which modernity has tried to establish (cf. Walkerdine, 1988; Walkerdine, 1993). When everything is a mess, circuits, conjunctions, thresholds, passages, distributions of intensity, and territories—in other words orders—can emerge through material-semiotic action (Deleuze & Guattari, 1980/1987; Law, 1992, 2004). There is no a priori temporal order. Order is fabricated and emerges out of orderings of materialities and mediations—there is *ordering* or there are *attempts* at ordering (Law, 1994).

Indeed, endless material-semiotic orderings formations have been established in modernity as ways of normalizing human development in school and educational settings (Morss, 1990;

²⁴ Recently developed approaches in the fields of science and technology studies and the feminist studies of technoscience have thoroughly studied the relations between semiotic and material phenomena and have introduced to the social sciences terms such as *enactment*, *process* or *performativity*, which imply a non-modern ontology and a different understanding of time (Brown & Stenner, 2009; Hacking, 1983, 2002; Haraway, 1991, 1997; Stengers, 2008b). With a few exceptions (Perret-Clermont & Lamboloz, 2005; Prout, 1999; Sørensen, 2009) these approaches have not yet found any application in the fields of childhood and youth studies, or in educational and/or developmental psychology, and it is in this direction that this work tries to make a contribution.

Walkerdine, 1993; Wulf, 2002), institutionalizing events (Latour, 1993, 1994), regulating and channeling discursive processes (Foucault, 1972; Scheffer, 2007), ritualizing actions (Wulf & Zirfas, 2004), stabilizing relations (Middleton & Brown, 2005) and organizing time (Heidegger, 1927/2001, 1929/1991) s. also (Geissler, 2004; Kamper, 1987). This endeavor is impossible to realize without objects which ‘slow down’ and ‘stabilize’ everything:

In fact, the object (...) stabilizes our relationships; it slows down the time of our revolutions. For an unstable band of baboons, social changes are flaring up every minute. One could characterize their history as unbound, insanely so. The object, for us, makes our history slow (Serres, 1982/1995, p. 87)

Latour (2005b) contrasts a modern train passenger to a traveler in a jungle to describe how time is fabricated as irreversible and difference or surprise is excluded through modern organization. He suggests that time and space are neither the Newtonian sensoria in which events occur and planets fall along ellipses, nor universal a priori forms (irreversible time); “they are on the contrary, *consequences* of the ways in which bodies relate to one another” (Latour, 2005b). Latour introduces the notion of the “*fabrication of times*”, i.e. the concrete material and relational creation of times, which is interrelated to the fabrication of places and considers irreversible time an output of invisible mediations, orderings, and technologies²⁵:

In a world made of intermediaries [...] there is a time separated from space, an immutable frame to measure displacement and, by definition, no process. In a world made of mediations [...] there are a lot of *times* and places (Latour, 2005b, p. 178).

The “world of intermediaries” of Latour denotes a perfectly organized modern world where the action and mediation needed for holding everything together are invisible. In this world, Latour argues, time is abstract and separated from space and measures displacement, i.e. how long it

²⁵ The discourse on the objectification or fabrication of time draws on the philosophy of Leibniz. Leibniz believed that time and space are a conceptual apparatus describing the interrelations between events. He thought of time as a fundamental part of an abstract conceptual framework, together with space and number, within which we sequence events, quantify their duration, and compare the motions of objects. In this view, time does not refer to any kind of entity that ‘flows’, that objects ‘move through’, or that is a ‘container’ for events (Leibniz, Clarke, & Ariew, 2000). According to Leibniz, time is embodied in the relations between material entities. “But instead of one Space-Time” as in Leibniz, Latour writes, “we will generate as many *spaces* and *times* as there are types of relations” (Latour, 2005b, p. 176, see also: Leibniz, 1714/online).

takes to move an entity along the arrow of time which is unfolding towards sameness. It seems self-evident that time is irreversible and it proves to be a difficult task to argue in favour of the opposite view because mediators are no longer visible—they have become intermediaries, and consequently time cannot be perceived in terms of process, as it has been referred to above. To understand how a mediator becomes invisible, it is helpful to consider the following analysis by Serres of how a “canal disappears into immediacy”²⁶:

Given, two stations and a channel. They exchange messages. If the relation succeeds, it is perfect, optimum, and immediate; it disappears as a relation. If it is there, if it exists, that means it has failed. It is only mediation. Relation is non-relation (...) The channel carries the flow, but it cannot disappear as a channel, and it breaks the flow, more or less. But perfect, successful, optimum communication no longer includes any mediation. And the canal disappears into immediacy (Serres, 1980/1982, p. 79).

If these technologies function they remain invisible. It is only when they fail to function well that the importance which these technologies and mediators have for the fabrication of development and for the exclusion of surprising difference becomes noticeable. The perfect working of fabrications, technologies, economies, pedagogies, etc. has been the main myth of modernity. No matter how well designed everything is to allow time to glide from the past to the present to the future in the same way in which a train moves from one station to another, there ‘always already’ emerges something new, as Nietzsche’s concept of eternal return suggests (Nietzsche, 1885/2007; Nietzsche, 1882/1974). It is impossible to control everything and to exclude the difference. If everything is a process, if there are no substances or entities maintaining persistent qualities (as has been discussed above), if irreversible time, i.e. the arrow leading to sameness, is just fabricated through mediations—then immense work and detailed knowledge is required to keep everything together (Law, 1994). This undertaking, indicated as *ordering*, usually fails. It is exactly the organization which poses limits and constraints that also enables escape from them and it is exactly in this context there are always lines of escape, new relations, new entities—what Deleuze and Guattari describe as ‘deterritorialisation’ (Deleuze & Guattari, 1980/1987).

²⁶ According to Downs & Carlon (2003), Serres’ notion of mediation through objects relies upon Shannon and Weaver’s (1949) information theory and their formulation of identity and difference. According to Shannon and Weaver, identity requires no information, and pure difference cannot detect information. Information requires an environment in which sender and receiver are both identical and different.

Revealing the mediations which mediate or fabricate time and development could lead to imagining radically new individual, collective, and societal developments—an endeavour which can be seen as especially important for the education of girls and young women, or class and ethnic minorities such as those of the School for Individual Learning-in-Practice or of the Freedom Writers project to which this dissertation refers.

Outline of the Dissertation

On the basis of my ethnographic fieldwork at the School for Individual-Learning-in-Practice and the analysis of the Freedom Writers project, in this dissertation I try to propose an understanding of time and human development as material-semiotic ordering. My confrontation with the marginalized subjectivities of these research fields and especially with the controversies of the ‘innovative’ and ‘alternative’ educational approach of the School for Individual Learning-in-Practice (see maps 2-5) led me to more radical theoretical positions than I could imagine at the beginning of the research. The following argumentation is impossible to separate from the research field and is the product of my experiences in this school. At the same time, as already outlined above, my argumentation is inspired by process philosophical approaches (Deleuze, 1962/2006; Deleuze & Guattari, 1980/1987; Semetsky, 2003; Whitehead, 1929/1978), by the work of Vygotsky (Vygotsky, 1931/1997a) and by recent debates in the field of science and technology studies (Latour, 2004; Law, 1994, 2004; Mol, 1999; Sørensen, 2009; Suchman, 2007).

The whole dissertation could be regarded as a series of *maps* which not only represent reality but create new relations, circuits, and connections. Each map is connected to the others, reconstructing the semiotic and material action of the fabrication of development in which students, teachers, and myself participated for one full schoolyear. The dissertation consists of an ‘Opening’, two main parts entitled ‘1st Movement’ and ‘2nd Movement’, and a ‘Finale’. Map 1 introduces my methodology as well as the places where my research took place. It presents a long description of the School for Individual Learning-in-Practice, examining its history, its students and teachers, and their relations as they are enacted in day-to-day life.

The following four maps are devoted to the presentation and interpretation of ethnographical data from the School for Individual-Learning-in-Practice in a big German city, which could be treated as a representative of emerging forms of schooling and institutional organization. For analytical purposes they are divided in two parts called '1st Movement' and '2nd Movement'. Making use of the terminology presented above, we could say that these four maps explore the doing of *potential* development. Through different materials such as interview extracts, extracts from a video recording, school and student documents, and fieldnotes, the cases of two students—a female and a male—as well as the discourse of a male teacher are presented and analyzed.

Valuing transparency, my interpretations are presented parallel to long extracts from my ethnographic material. All extracts from the ethnographic material collected in Germany are given in both their original German version and their English translation—this includes the original versions of students' written document, which are presented without correction. It should be noted here that both the students and I often used the German language in a grammatically incorrect form. This 'common' language which I shared with the students reflects immigrant or sub-cultural backgrounds and cannot, of course, be adequately translated into English. The same comment applies to the dialect of the teachers. All the names used here have been changed, and the pseudonyms indicate the ethnicity of the student/teacher; each pseudonym refers to a particular student/teacher to facilitate tracing his/her action in the different parts of the dissertation.

Analyzing the concept and function of the School for Individual Learning-in-Practice while moving from the micro- to the macro- level of analysis, map 2 explores development as a semiotic ordering and introduces the notion of development as a technology of the self (Foucault et al., 1988). Map 3 explores the performative aspects of this semiotic ordering and focuses on the particular case of Husk, a student of German nationality and Arabic ethnicity. The analysis follows Husk over a longer period of time from the perspective of the teachers and pays attention to the material-semiotic tools (Haraway, 1997), which teachers used in order to 'understand' Husk and develop strategies to deal with him.

Maps 2 and 3 reveal that the way teachers speak about the students as capable of bearing responsibility and changing their behavior involves psychological and pedagogical knowledge and

an understanding of the human subject as universal, rational, and coherent. Teachers think that self-control is a more efficient way of controlling marginalized students than direct control by them. The teachers' discourse, however, creates a singular and dominant order of development while institutionalizing and legitimating this way of development in the school as the only possibility.

While maps 2 and 3 focus on the case of Husk, who was seen as a failure from the perspective of the teachers, maps 4 and 5 focus on another case, that of Samira, who was perceived as a case of success both by teachers and her classmates. Map 4 examines a variety of materialities such as cards of absences, daily reports, the year's plan, student's files, and teachers reports and their relation to how students 'develop in time'. It suggests the term 'mediating' time and development as a point of departure in understanding how a particular kind of time and development is enacted at school by means of material-semiotic mediation.

Map 4 advances this analysis by focusing on what might be called the 'objectification', 'stabilization', and 'institutionalization' of development. It presents how Samira's transition from school to the job market is organized by means of CVs, application letters, and by the interaction between students and teachers. The analysis reveals how time is spatialized, materialized, and ritualized at the School for Individual Learning-in-Practice so that schooling and development are ritualized performances unfolding at the same time. This is the way that the most successful of the formerly excluded students, for whom the School for Individual Learning-in-Practice was designed, enter the current economy and become 'job seekers' (Rose, 1999).

Up to this point, the dissertation investigates the relationship between the fabrication of individual pasts at school and its connection to the future and suggests a critical analysis of the way development is *done* at the School for Individual Learning-in-Practice as linear and towards a given end. The question arises as to whether and how different developments can be enacted. Map 6, which is also part of '2nd Movement', seeks an answer to this question by contrasting the material-semiotic practices of the School for Individual Learning-in-Practice to those developed unpredictably in the context of a well-known school project, that of the 'Freedom Writers' at the Woodrow Wilson High School in Long Beach, California. The history of the project and diary extracts written by female and male students are presented and analyzed. Development of oneself is contrasted to the development of one's social relations. A series of concepts such as the idea of

drama and the notion of the Zone of Proximal Development (Vygotsky) are discussed and written narrations of the Freedom Writers are exemplarily analyzed. Map 6 briefly presents a case-study of what *virtual* development might be.

The dissertation closes with a Finale which summarizes the presented theories and research materials. The Outlook contrasts the concept and performance of development as the realization of potentialities with that of development as the actualization of virtualities. It points to further research and practical-educational directions this work could lead to in the future.

Context and Political Values of the Dissertation

This dissertation is founded on a critical understanding of time, pedagogy, and society—critical in terms of critical social theory, critical psychology, and critical educational approaches (Arendt, 1961/1967; Brown & Stenner, 2009; Dafermos & Marvakis, 2006; Edwards, 1996; Greene, 1988, 1995; Haraway, 1997; Hedegaard & Chaiklin, 2005; Holzkamp, 1993; Marx, 1857-1858/1967, 1867; Negri, 2005; Parker & Spears, 1996; Stetsenko & Arieivitch, in press; Vygotsky, 1934/1994). In this sense, this work is very different from most approaches to youth development and vocational education (Billett, 2008; Burnett, in press, 2008; McIlveen & Patton, 2007; Reinmann, 2006; Stead, 2007), as well as from approaches to time that do not pose any political questions, such as the systemic approach of Luhmann (1987, 1990) which treats action in terms of system equilibrium.

The focus here is on marginalized students and their everyday struggles to survive in the so-called ‘developed economies’. This focus is not accidental. It is well discussed in critical theory how education reproduces the existing distribution of power and wealth and favors white, masculine, middle and upper class people while excluding all others (Bernstein, 1977; Hall & Jefferson, 1976; Walkerdine, 1998; Walkerdine, Lucey, & Melody, 2001). Following these approaches, one could emphasize the contradiction that places like the big German city, where the School for Individual Learning-in-Practice has been established, or the city of Long Beach, where the Freedom Writers’ project took place, are among the richest places of the world, while at the same time these marginalized young students usually become low-paid workers or unemployed for the rest of

their lives—which in some cases implies for women being a housewife, for men engaging in illegal activities, and in some other cases for both genders being homeless or suffering under psychiatric disorders.

My work tries to pursue this discussion further. My argumentation is not only that the wealth of Germany and the USA are dubious in the light of how little the young students benefit from it, but also that a difference is made when these students become witnesses of their suppression, entering into a dialogue with the future and changing the very way society is organized while moving from the outside to the inside. The everyday struggle of the marginalized students (whether marginalized in terms of gender, ethnicity, social class, or all three) to enter *from the outside* of the society *into* it and create space for their existence *in* it, transforms not only the students who might thus be ‘integrated’ or ‘included’: it also transforms the society as a relational whole (Hardt & Negri, 2000)²⁷. The struggle of the ‘outside’ to become ‘inside’ and thus pursue a different future *indeed makes* a difference and changes the ‘inside’ (cf. Epstein, 2007; Haraway, 2008). Stephenson and Papadopoulos introduce the term ‘outside politics’ to speak about day-to-day radical politics which take place when, on the basis of their shared experience, people who are outside enter the inside so that the inside is no longer the same.

Following the theoretical approach outlined in this introduction, one could say that this process is dramatic. The past and the future of the ‘inside’ and the ‘outside’ are then re-written and time is re-done in a different way. As we will see in map 6, it is *in dialogue with* this (virtual) future that a marginalized student witnesses her or his suppression, and it is *in relation to* this different future that the suppression can be witnessed as such.

This might be seen as a process of desire in terms of Spinoza (Spinoza & Curley, 1994), and it is this tension that also fascinated Vygotsky when he wrote about ‘drama’ as well as Benjamin in his

²⁷ It might be that the term ‘society’ here is very abstract and can indicate a political economy, a culture, a very concrete local community, or global social networks. Similarly, one could argue that the ‘outside’ or the ‘margins’ of the society can be very defined very differently in terms of class, ethnicity, color, gender and sexual orientation, age, psychopathology, or geography. It is clear to me that these definitions are relational and do not exist objectively but are enacted in concrete constellations (cf. Brown & Stenner, 2009; Falmagne, 2004). In each case, an ‘outside’ can be defined in relation to an ‘inside’ and vice versa. How exactly the margins might be defined in specific cases is not important here, because the argument presented is more abstract and generalized.

definition of ‘mimesis’ (Benjamin, 2005, 2006; Gebauer & Wulf, 1995; Kontopodis et al., under review; Vygotsky, 1925/1971; Vygotsky, 1929/2005; Vygotsky, 1932-34/1998). It is a tension that takes place between what one is and what one is becoming, and in this sense I speak here of the *Zone of Proximal Development* (cf. Cheyne & Tarulli, 1999; Holzman, 2009; Newman & Holzman, 1993). The philosophy of process, i.e. of change that leads to difference-in-itself and not to sameness, has been the ideological basis for a lot of European and US-American social movements which, since the 1960s have been fighting for diversity and minority rights. Nowadays, this philosophy inspires major critical theorists (e.g. Barad, 2007; Haraway, 1991) and philosophers (De Landa, 1997, 2002; Stengers, 2002).

Although the mainstream understandings of time and development remain dominant concepts, the concept of time as repetition of that which differs from itself carries very promising social and political connotations in the sense of the ‘outside politics’ outlined above. I consider this view to be very important in the current historical moment, when the whole western world is closing its borders to the outside, by strengthening its border policy and trying to maintain the existing distribution of power and wealth by controlling the movement of populations. This politics takes place at the borders of Europe and USA as well as in the ghettos of European and American cities, and the marginalization of the migrant youth is part of this politics as well (Agamben, 1998; Athanasiou, 2007).

These politics oppose the values of freedom presented in this work—freedom of will in terms of Spinoza which goes together with movement, radical novelty and imagination (Kravtsov, 2006; Spinoza & Curley, 1994; Stengers, 2008b; Vygotsky, 1967/2004)²⁸. It is only in this frame that the argumentation presented in the maps to follow can be understood. The “yesterday has not yet been born”—as the poet Mandelstam has written (Mandelstam, 1921/1991, p. 113)²⁹.

²⁸ The approach outlined here does not argue about freedom *from* but *towards* something. Freedom and movement imply the creation of new relations between existing entities and spontaneity is opposed to the directedness of irreversible time to sameness. This notion of freedom not only does not share any parallel at all with (neo-) liberal understandings of economic ‘freedom’ or ‘flexibility’—it rather opposes them.

²⁹ I am very thankful to Anna Stetsenko, who brought this quote to my attention.

Map 1

Contexts and Methodologies

*[W]e should treat discourses as ordering attempts, not orders;
[...]we should explore how they are performed, embodied and
told in different materials; and we should consider the ways
in which they interact, change, or indeed face extinction.³⁰*

The critical analysis presented in this dissertation follows John Law's book, *Organizing Modernity* (Law, 1994), and focuses on the phenomenon of *organizing* and *ordering* in modern education, how new relations come out of old ones, and how a qualitatively different future can emerge out of the past (Bowker, 2005; Deleuze, 1968/1994; Deleuze & Guattari, 1980/1987; Stengers, 2002). My analytical focus on processes and not on structures could be seen as the main difference to other analyses of urban educational projects which also focus on mediation and collective subjectivity (Roth & Tobin, 2002; Roth et al., 2004). According to Law, "orders are never complete. Instead they are more or less precarious and partial accomplishments that may be overturned. They are in short better seen as verbs rather than nouns". What is more: there is no single order but "plural and incomplete processes of social ordering" (Law, 1994, pp. 1-2). By following this approach as well as drawing on a series of other theories and empirical data, in the following maps I will propose an analysis of human development as material-semiotic ordering (Haraway, 1997) and explore the possibilities that such an understanding creates for psychological theory and educational practice.

My dissertation does not aim to analyze or evaluate a concrete school or educational approach; instead, it takes materials from my one-year ethnographic fieldwork as *examples* for the illumination and development of my theoretical argumentation. In his famous book about learning, Holzkamp explains how important the choice of examples is for theory building and takes the example of himself learning to listen to Schoenberg's music as learning that is adequate to contemporary culture (Holzkamp, 1993). Drawing on a quite different approach, that of

³⁰ Law, 1994, p. 95.

critical ethnography, I will refer in the analysis presented in the next maps to examples taken from the everyday life of marginalized students in a German school. Map 6 also refers to examples from a different school project—again not in order to make an empirical comparison but for purposes of theoretical analysis. All the examples to which I will refer in the following maps present current educational practices and carry information about contemporary education. At the same time, the practices to which these examples refer are local and can endlessly vary from each other. Keeping this in mind, I will try below to situate my examples, presenting adequate information about the broader contexts or practices to which these examples refer. I will present all interpretations as transparently as possible, without separating data from interpretation and various parts of interpretation from theory building.

The presented examples, if not otherwise noted, refer to common day-to-day practices and not to exceptional cases. In most cases I could present a different set of examples, e.g. interactions between another student and another teacher, and the theoretical analysis would be the same. In some cases in the following maps, I will also present examples which include information about different or contradictory aspects of heterogeneous practices and make use of them for the further development of my theoretical argumentation. What lies behind these examples is the ethnographical research and qualitative data analysis which is briefly presented below.

My ethnographic methodology belongs to a long tradition of anthropological studies of youth (Bateson & Mead, 1942; Bluebond-Langner & Korbin, 2007; Friebertshäuser, 2003; Levine, 2007) and was also influenced by critical ethnography (Thomas, 1993) as well as by the methodology of case study (Simons, 1980). It is, however, important to emphasize that I use my ethnographic materials as examples for theory building as described above and not for the representation of a particular field—as usually in anthropology. Contrasting these examples with materials taken from the qualitative literature-based analysis of a very different school project and bringing them in relation to theoretical texts written by Vygotsky, Foucault, Latour and others, I have tried to develop what Deleuze and Guattari call ‘maps’. A map does not just *represent* something already existing—neither the one nor the other school reality, nor the ‘proper’ interpretation of classic texts—instead a map creates forms of presence and absence and constructs the research issue by orientation “toward an experimentation of contact with the real” (Deleuze & Guattari, 1980/1987, p. 12). That is, maps can exist on their own without the need for anything outside the map to exist (Deleuze & Guattari, 1980/1987). My analysis treats

theories as metaphors or fluid objects and does not separate the research method from the research results (Holzman, 2009; Robbins, 2001). Moreover, my analysis should not be seen as neutral, but reflects the values of freedom of will and heterogeneity in the sense of Spinoza, Nietzsche and Deleuze & Guatarri and is situated in the current political situation in Germany as well as globally.

Main Research Field: The School for Individual Learning-in-Practice

The School for Individual Learning-in-Practice (name slightly changed for anonymity purposes), where I mainly conducted my research, is an experimental school that combines social work, teaching in the classroom, and vocational education and still exists—however with a few conceptual and organizational modifications. According to official texts, the School for Individual Learning-in-Practice has been set up in one of Germany’s biggest cities specifically for those students who have been “treated unfairly in the context of the normal educational approach”. This indicates that the institution is only meant only for the students who have hitherto been unsuccessful in their school career and have failed, twice or more, to be promoted to the next grade. The students at this school could be seen as marginalized at the extent that they are about 18 years old—some are slightly older or younger—and have a long history of failed educational endeavours, continuing to pursue a school education ending with a certificate which is normally obtained by students who are 15 years old. The process of student selection results in approximately the same number of male and female students, as well as in an equal number of students of German and foreign (mainly Turkish and Arabic) ethnicity.

These students come mainly from lower social classes and subcultures: they have an immigrant background, or have been raised in problematic home environments in which their parents were affected by either alcoholism and/or unemployment. German students are mainly supported by social benefits they receive because of their legal status as children/non-adults. They usually live in small flats or in supervised apartments for young people, which are financed by the state. The male students from immigrant backgrounds often live with their parents and usually have to reconcile their school attendance with work in small family businesses. Because of its population I considered this school to be of particular interest for my research and theoretical questions.

The teachers of the School for Individual Learning-in-Practice belong mainly to the middle class. One of them comes from an immigrant background. However, they perform different subjectivities. They are men and women; broadly speaking, some teachers have a ‘traditional’ middle class family life. On the other hand, other teachers are single and live alone or in collective house projects, some are homosexual or have no ‘traditional’ personal relationships, and some are artists. As can be imagined, I have noticed that this division between teachers can sometimes lead to conflicts³¹. I collaborated with two teachers—representatives of both of these two different ‘categories’. The teachers’ perspective on the relation between youth subjectivities and this institution is depicted in the following excerpt from a newspaper article written by the headmaster of the school. It refers to the connection between practice and learning as well as to the teacher’s acceptance of students and the students’ participation in the functioning of the school:

Extract 1

Der Erfolg liege nicht nur an der Verbindung von Praxis und Lernen. "Wir haben einen engen Bezug zu den Schülern, machen viel Sozialarbeit", sagt Lehrerin #Name#. "Hier akzeptieren Lehrer die Schüler. Es wird diskutiert und gemeinsam nach einer Lösung gesucht", so #Student's Prenomename#. (Newspaper Article)

The success lies not only in the combination of learning with practical application. "We have a close relationship to students and do a lot of social work", says teacher #Name#. "Here, teachers accept the students. We discuss and search for solutions together", says #Student's first name# (Newspaper Article).

Teachers emphasize that the model of Individual Learning-in-Practice is an alternative to traditional classroom education. Although all the teachers claimed that they would not prefer to work in a traditional school, they also wished that they could work with more successful students who would achieve better results. They also often complained about the absence of interest on the part of parents, and politicians in regard to these students.

³¹ A nice example of this is the following observation: while the more ‘conservative’ teacher kept track of every minute a student was late to class, keeping a statistical record of this, the other teacher did not pay attention to time—in fact, so much so that he/she was usually late to classes and appointments him/herself.

The School for Individual Learning-in-Practice is experimental and teachers maintain that students are allowed to do everything they like: students are allowed to use the school time to fulfill “their own interests” and learn individually, independently from the other students and without the presence of teachers. They are allowed to be outside the classroom, even outside the school. There is rarely a classroom activity, so it’s obvious that there is rarely a group of students taking part in a classroom activity. Students are primarily left alone either inside the school establishment or outside it to perform ‘independent’ learning projects. However, students often complain or fail to cooperate with the teachers and a series of issues regarding power and freedom are at stake:

Extract 2

It is Tuesday, 10 am. I am sitting in a school classroom. The teachers have already been here for a while, unlocking the main door to this floor and classroom doors so that students can enter the classroom (all the doors are locked during breaks to avoid damage) and getting everything ready. #Wolfgang#—one of the teachers—takes a plastic bottle and goes to the lavatory to fill it with water. He comes back and waters ‘his’ plant. Students come in. After a moment, I sit in a circle with fourteen students and the two teachers, #Wolfgang# and #Monika#. The teachers do not sit next to each other but among students—the distribution of places is always random. The so-called “Communication Group” meets twice a week between 10 and 11.30 am. The plan for today is long. Wolfgang announces the first activity:

1. **W:** Okay. Wir haben heute verschiedene kleine Themen auf dem Programm (.3)
Okay. Today we have a lot of different topics on the programme (.3)
2. ^#Moritz # ((schaut zu ihm hin und ermahnt ihn, weil dieser abgelenkt ist))
^ #Moritz# ((W. looks at him and reprimands him because Moritz (the student) is not paying attention))
3. **Mor:** Ja ((schaut auf und wendet seine Aufmerksamkeit von nun an W. zu))
Yes ((looks up and concentrates on W. from now on))
4. **W:** Ähm, wir wollen eine relativ ausführliche Praxisplatzrunde machen, d.h. jeder
Errm, we want to have a relatively detailed discussion about the internships, so that everyone
5. erzählt mal `n (ein) bisschen genauer, wie´s (es) am Praxisplatz aussieht, wie´s (es)
tells us a bit more about what it's like at the internship, how they're

6. ihm da geht. (.2)Was so läuft, wie die Doku aussieht, <ob´s (es) da> wie weit die
doing there. (2) How everything is going, <whether there> is a documentation yet and what it looks like,
7. ist. So´n (ein) bisschen ausführlicher <und dann brauchen wir noch...
how far along it is. Just a little bit more detail <and then we also need...

After watching the video many times, I realize that #Wolfgang# is wearing slippers as in all other video-recordings. In stark contrast to this, three of the students have not even taken off their jackets ((it is the same in other video-recordings: not necessarily always the same students, but usually many of them, regardless of their gender and ethnicity, keep their jackets on)). Wolfgang, who, as always, has his cup of tea next to him, suddenly notices that Nina and Huriel are sucking on lollipops and comments:

8. **W:** Gut, und die Lollis bitte sofort weg packen. /Auf der Stelle bitte weg. Hatten wir
All right, and please put the lollipops away immediately./Right now, please. We had
9. eigentlich schon mal vereinbart. ((#N.# und #H.# packen die Lollis langsam
actually already agreed on this. (#N.# and #H.# slowly put the lollipops
10. weg)) Noch ma=l ((M schaut dabei durch die Runde)) #Thomas#, willst du
in their bags)) Aga=ain, ((M. looks all over the round)), #Thomas# do you want to
11. anfangen? Du hast ja eigentlich beim letzten Termin (...) Ja. Du hast ja schon
begin? Actually, you already did last time round (...). Yes, you already
12. ´nen (einen) großen Vortrag gehalten...
gave a great speech (on your project)...

(Summary and transcript of Video-recording and field notes)

Extract 3

I am in the PC-room. The atmosphere is rather cool, because a big window is open. A teacher comes in and comments, "It is rather cool here." Martin, the teacher who had opened the window, comes to me and asks if I feel cold. I answer that I find it easier to work when it is cool. He agrees and comments that it is usually too warm in the school, and that's why one feels tired. After about 20 minutes Martin closes the big window and opens a smaller one. He says to me that this is better. I agree. One student is also present in the room and is doing his homework. Why has nobody asked his opinion?

(Extract from field notes)

Extract 4

I am in the 'Learning Laboratory' (library) and sit at a big table in the middle of the room, reading. One student comes in. He moves to the middle of the room and speaks loudly enough to draw everybody's attention (besides me, there are two teachers present). Coming from the PC room, he turns in the print-out version of a task he has just accomplished. He laughs and looks the teachers directly in the eye—he has fulfilled his task. Then he shakes hands with the teacher and says goodbye to her. It is 13.23—classes end at 14.00. The teacher realizes this and tells the student that he is not allowed to leave yet. A playful debate follows. The student tries to get permission to leave, while the teacher tries to motivate him to try and accomplish another task. The other teacher supports the first one, arguing that the student came late and for this reason he is not allowed to leave earlier. A moment later, when the teachers look another way, the student turns to me and makes a disappointed face...

(Summary of field notes)

The extracts presented here report a selection of usual scenes of the everyday life at the school: in the classroom and in the library. While the first extract depicts a whole class, the second and third scenes refer to students working 'individually' (i.e. not in collaboration with other students but under the supervision of teachers). Although the extracts could be analyzed from various perspectives, I find it particularly important for my analysis to concentrate on the fact that, in all the places presented above, the teachers are 'at home'. They drink tea, wear slippers (the kind of footwear usually found at home), have the keys to the doors, and decide on issues related to the room temperature (as whether to open a window) or the atmosphere in it (a plant in a flowerpot). They are present in the school building earlier than the students, they choose and control the time when students enter and decide how long they are to stay at school, and the teachers also stay there after the students have left. They control all action in this place (e.g. they forbid the students to eat) and order the sequence of activities according to a program which they have previously established (line 1: "Today we have various little topics in the program", line 4: "Errm, we want to ...").

In the School for Learning-in-Practice, there is no place which students themselves administrate, decorate, or are responsible for in any way. It is noteworthy and needs to be stressed again that even during breaks, students go to the first floor of the school and all other rooms are closed and locked. As a result, students 'visit' sites where teachers or mentors are 'at home'. In all the above extracts, teachers not only rule in the school, but they also always work in constellations of at least two, even in situations where only one student is present (extract 3). This is not at all

accidental but reflects a principle of the School for Individual Learning-in-Practice. As stated in the school's official publication:

Extract 5

Heute ist die Anwesenheit und das gemeinsame Auftreten von zwei (in Sonderfällen auch drei) Pädagogen in der Lerngruppe für uns Lehrer (und die Schüler) eine Selbstverständlichkeit und Entlastung—und wahrscheinlich bei unseren Schülern auch gar nicht anders möglich. So werden Konflikte entschärft, so können wir spontan mit kleinen Gruppen einen anderen Raum benutzen, so können wir besser und emphatischer beraten, so können wir den Schülern die Möglichkeit geben, sich an den Pädagogen ihrer Wahl zu wenden. (Publication “10 years #School for Individual-Learning-in-Practice#”).

Both our teachers and our students now view the presence and joint performance of two (in special cases three) pedagogues in learning groups as self-evident—and as a relief. Indeed, with our students no other solution would be possible. This is how we are able to dissipate conflicts and spontaneously decide to work together in smaller groups in different rooms; this is how we can advise the students better and more emphatically and also give students the possibility of turning to the pedagogue of their choice. (Publication “10 years #School for Individual-Learning-in-Practice#”).

The ordering of teachers in pairs is meant to allow students to consult them, but it also has to do with conflict management. It is interesting that these two issues are mentioned together. On the one hand, students should be able to access a teacher of their choice if they need his/her support (e.g. in case of any trouble); on the other hand, the more teachers are present in a given room, the easier it is to maintain surveillance and avoid/prevent conflicts or undesirable behavior (Walkerdine, 1987). To ensure effective supervision and support, the school is designed specifically for the restricted number of 140 students. This is in contrast to other German schools:

Extract 6

Wir dagegen ((bzw. gegen die Entwicklung größerer Schuleinheiten in Deutschland)) haben uns von Anfang an für die kleine überschaubare Schule entschieden (ca. 140

Contrary to this ((i.e. to the development of larger school units in Germany)) from the very beginning we decided to have a small transparent school (ca. 140 students) where

Schüler), in der jeder jeden kennt und in der bestimmte Konflikte, die aus Anonymität und Unüberschaubarkeit entstehen, gar nicht erst aufkommen. Immer wieder wird von unseren Schülern, die oft mit einer ziemlich dicken Schülerakte zu uns kommen, die Friedlichkeit unserer Schule betont.

(Publication „10 years #School for Individual-Learning-in-Practice #”).

everyone knows everyone and where certain conflicts which develop because of anonymity and lack of overview do not even arise. The peacefulness of our school is repeatedly emphasized by our pupils, who often come to us with a rather thick file (Publication „10 years #School for Individual-Learning-in-Practice#”).

As to how the network functions, it must be mentioned that that it is not rigid, i.e. that a student is not obliged to choose one place of supervision/supervisor, instead he/she makes the decision personally and can later move from one place/supervisor to another. In this way, surveillance is distributed and resistance against teachers is turned into a sense of freedom and students' personal engagement. However, the fact that the network is devoted not so much to support as to supervision becomes clear in the following excerpt from this discussion between teachers:

Extract 7

1. **M:** <A(Das Projekt) war auf zwei Ebenen für mich erfolgreich. Wir hatten was zum
<A (*The project) was successful for me on two levels. We had something to offer*
2. Anbieten und wir ham (haben) diesen #Ottos#, genau diesen #Thomassen# und die
and we took from those – #Ottos#, exactly #Thomasses (name in plural)# and (all) those
3. uns da zum Schluss <ziemlich> ziemlich genervt haben, ^völlig den Wind aus `n
who in the end <really> really irritated us, (we) ^completely (took) the wind out of their
4. (den) Segeln genommen. ^Total. Weil kein Segel mehr da war.
sails. ^Totally. Because there were no more sails.
5. **I:** Mm.
6. **M:** Wir ham (haben) gesacht (gesagt): du
We said: 'you can

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7. kannst hinpusten wo du willst. /Puste mal in dein Schiff und nicht in meins, ja?
blow in any direction you want. / But blow at your ship and not at mine, OK?
8. \Bitteschön. Und damit äh war (es) dis (das) für ^mich erst mal als ^Einstieg nach
\ *You're welcome to it. And that's why uh, for ^me it was first of all a change for the better after*
9. diesem ganzen Gernerve, die konsequente Antwort auf dis (das), was davor gelaufen
all this stress, the consequent answer to what happened before.
10. ist. Dis (das) muss man auch noch immer im Kontext [sehen].
You should always see it in context .
11. **W:** [Na ja klar]. Ja ja.
[yes, of course]. Yes, yes.
12. **M:** Dis (das) wissen die so=0
They don't know it li=ke this
13. nicht ... ,mach was de (du) willst,
.... 'Do what you want,
14. **I:** Mm.
15. **M:** aber ^mach was. Streite dich mit wem du willst,
but ^ do something. Pick a fight with whomever you want,
16. aber nicht mit ^mir. Is (das ist) dein Ding'. **A>** Also, diese Verantwortungsgeschichte
*but not with ^ me. It's your business'. **A>** Well, this whole responsibility issue has*
17. war für mich immer das Thema.
always been the (main) thing for me.
18. **I:** Mm.
19. **W:** Mm.

(Extract from teachers' discussion 5/ 17 Dec.)

A personal teacher here uses the metaphor of sailing a ship to refer to a particular individual

learning project, during which students, instead of learning in classroom, were allowed to “blow in every direction they wanted”—but not “at the ships” of personal teachers (line 7). The metaphor indicates that the students are ‘captains’ of themselves and that conflicts with other ‘captains’ should be avoided. The students were allowed to move anywhere in the school building and to design and perform a learning activity of their choice. In this way, it would be the students’ responsibility if they failed. As a result, the personal teachers “completely took the wind out of the (students’) sails” (lines 3-4). Therefore, what the above metaphor illuminates in the end is that students were their own ‘captains’, but there was no wind, so that they would not move their ships against the teachers’ ones.

Another category of adults supervising the students are the mentors. It is an official position defined by an institutional contract, in the same way as in the case of teachers. The contract is signed at the beginning of a student’s internship by the teacher, a given student and the mentor(s), and it states that the task of “the mentor(s) at the place of internship (non-school site)” is to “stimulate the learning process of the student, help and direct him/her in the professional field, while taking responsibility for the supervision of the student during the agreed times and keeping track of his/her presence”. At the sites of internship, where students accomplish their individual learning-in-practice projects, mentors observe and keep tight control over the student’s presence and individual work³². Mentors, do not move to follow the student but are bound to a concrete site, and do not supervise the student anywhere else.

My Access to the School for Individual Learning in-Practice and Interaction with Different Subjectivities

I entered the School for Individual Learning in-Practice as an intern (‘Praktikant’) for school psychology—a very usual position in Germany. As a result, both the teachers and the students were able to attribute a role to me: from their two standpoints I was perceived as somebody in-

³² The School for Individual Learning-in-Practice is unusual and experimental in the sense that students and teachers spend two days per week at school and three days per week outside school, in other institutions/organizations. This outside-school education functions in the context of Individual Learning-in-Practice, which allows students to complete their practical courses/internships, which they select and attend individually.

between. This double role was fantastic for me, and allowed me to participate in the everyday school drama. For the students I was not a teacher while for the teachers I was—especially after the first two months—a colleague. Of course, such a role required the maintenance of secrecy regarding information that teachers or students trusted me with. Starting as an intern for one semester, very soon I was sure I wanted to do my PhD research in this school³³.

Having grown up in Greece and arriving in Germany as a student in my early twenties, I was perceived as *somebody different* by both the teachers and the students—someone they could not easily understand nor classify according to the categories which they already had. This fact enabled me a lot of flexibility and made many relationships possible which would not have functioned in a similar way if I had been either a Greek immigrant living in Germany or a German citizen. I thus had multiple roles: I was a young trainee, i.e. someone who respects the authority of the teachers; I was a psychologist with a knowledge and experience from far away (Greece); I was someone who could practically support students who were of not much interest to anybody in particular; and finally, I was a researcher, i.e. a potential supporter of a school which politicians did not care about. My presence was welcome because of my enthusiastic interest in the issues relating to this particular school and the students, which resulted from rather romantic illusions I had about the school at the beginning: I shared the teachers' discourse. After the first two months, the teachers trusted me completely and regarded me as a colleague. I felt solidarity with them in their difficult work and everyday life in their school, which I shared with them for a year.

Despite having a university degree, I often felt even more insecure than the students of the school—this was due to the fact that I come from a middle-class family and a country with a peripheral role in the European economy (Greece). I felt as someone whose situation is worse than that of a young German person: in Germany I was a guest researcher at the time and in Greece there is no effectively functioning scholarship and research funding system, which was the reason why I was experiencing hard economic problems during the time I was carrying out the research. I was greatly concerned with the possibility of being unemployed for a long time

³³ Of course, the aims of the research, and the fact that it would be published were presented to the students and discussed with them in detail. Students optionally signed contracts with me. There have been different contract formats for all of the different research methodologies (video recording, document analysis, interview, etc.) My research was authorized and supervised by the school authorities.

and living in poverty, considering the deficits of the Greek social security system. My status and attitude were probably the reason why no student was ever aggressive or even angry towards me—a fact which was also appreciated by the teachers, who felt supported in their work. They respected me and allowed me access to all the resources I asked for. The following subjectivities were performed during my interaction with students:

For the (mainly German) *male students showing nonstandard or deviant* behavior—which could involve various forms of violence, consumption of drugs and alcohol, gang participation etc., I was a young man they did not compare themselves to because of my ‘difference’—which sometimes they saw as inferiority compared to their status as German citizens (an example of this obvious inferiority for them would be my pronunciation or the grammatical errors I made while speaking).

For the presently *non-deviant male students* I was an older student who supported them at school and someone they either trusted (partially because of my gender), or someone they were not really interested in.

The *male students of Turkish origin* identified me more with the teachers, although, because of my own Mediterranean origin and deficient linguistic performance, I was not really “one of them (the teachers)”.

For the *young women of Turkish origin* I was not ‘different’ but a ‘stranger’. As both a man and a non-Turkish person, I was a somewhat strange character willing to interview them without the presence of others or to film them, which they regarded as an excessive interest in their appearance. Consequently, these requests were rejected by the majority of these students.

For the *young German women* I presented (because of my age) a potential object of amorous interest they either played with or preferred to avoid. In both cases, my attempts to clarify my role as an apprentice and/or a researcher were rather misunderstood. As a result, I focused more on other subjectivities.

While conducting the school-psychological counseling which I carried out alongside my research as part of my function as a trainee, I was often alone with teachers or students (one-on-one or myself and two collaborating teachers/two students who were friends), although I also participated in a variety of group activities. I followed actants and actors to school, the locations of the students' internships or to semi-public sites like cafés (and sometimes I invited actors there). As I will extensively present below, while being involved in the drama, I tried to expand the limits of my research activity in all possible directions: by participating in different activities, visiting different sites (Multi-sited ethnography, s. Faubion & Marcus, 2009; Nadai & Maeder, 2005), transcending the public and the private, using different research methods and technologies (cf. Denzin, 1978), and by interacting with all the subjectivities of the research field.

As far as my access to different sites and different subjectivities is concerned, I tried to be very sensitive and open in order to approach them in the best possible way. Participation in interviews and video-recordings was optional (a few students, e.g. the girls from Turkish families, did not participate) and every wish of the individual subjects who participated in my research field, regarding my research activities, was taken into consideration with utmost sensitivity. My preferred method was video-recording. If video-recording was not possible, either because the research subjects (students or/and teachers) did not want to be filmed, or I needed to ensure anonymity, I tried to make audio-recordings. If audio-recording would also “destroy” the spontaneity of the situation or make people feel uncomfortable and skeptical towards my role, field notes were my last resort. Specific aspects were explored through semi-structured expert-interviews (Gläser & Laudel, 2004; Meuser & Nagel, 1997).

Ethnographic Research Materials

For a year I participated in the everyday actions of students and teachers at this school following a broader ethnographic approach (Emerson, Fretz, & Shaw, 2003; Marcus, 1986, 1998). I preferred conducting a long-term study in only one school, even in only one class in this school, than producing results which could be ‘generalized’. The research took place during the regular school/internship hours almost every day for one school year. During this time, I searched for

noteworthy incidents and fished them out of the flow of ongoing activity to immediately document them either with video or audio recordings or in my fieldnotes. During my analysis, both in the school and at my workplace (home, university), the following questions were central to my research:

- What kind of problems emerge in the school context and how do students and teachers understand, interpret and handle them?
- What is regarded as unexpected and draws particular attention?
- What causes the expression of intensive emotions e.g. in loudness, irregular activities, long narrations, etc.?

To examine the ‘fabrication’ of development in the School for Individual Learning-in-Practice, I used a variety of methods to document semiotic and material action, emphasizing the ‘connections between the actants’ (Latour, 1987, 2005a) and the interdependencies of semiotic and material action (Haraway, 1997). The focus on materiality, which few STS-oriented ethnographies taking place outside of laboratory settings have already elaborated on (Gutman & Coninck-Smith, 2007; Habib & Wittek, 2007; Kontopodis & Niewöhner, forthcoming, in 2009; Sørensen, 2009; Suchman, 2007), as well as the focus on practice as has been developed by Annemarie Mol (2002) could be seen as particular to my methodology. I documented the circulation and use of all possible sorts of written language employed at the school and collected photocopies of them. The fact that teachers trusted me completely and regarded me as a colleague, as well as my respect for formalities (e.g. anonymity), enabled me access to all school documents. My friendly and trusting relations with the students allowed me access to all documents that they produced. What I also documented was the movement of students and teachers between different places and the construction and ritualized use of these places (e.g. announcements on the notice board on the classroom wall, the arrangement of chairs and other pieces of furniture, the rituals of entering the classroom, etc.). Another aspect on which I regularly focused was the use of technological equipment (mainly PCs but also phones, mobile phones, etc.) and the use of files. In particular settings, I also documented the use of other artifacts, e.g. drawings, films, drinks, clothes, etc.³⁴

³⁴ A critical remark that could be directed at my work is that I depart from a semiotic understanding of phenomena and extend it to materiality—which is a perspective favored by my ethnographical methodology. It remains an open question how to define materiality and how it can be adequately conceptualized in relation to time. This is a current

This is what my material consisted of:

- a. 16 video-recordings of the meetings of the “communication group” (s. Map 3), of a mathematics class (24 hours)³⁵
- b. 11 audio recordings of the teachers’ weekly organizational meetings (about 17 hours)
- c. Field notes of directed observation of 5 and broader observation of 20 students outside the classroom
- d. Communication with the students including: 21 semi-structured, open-ended expert interviews with the students (about 13 hours); pictorial, metaphorical tasks assigned to the students³⁶
- e. Various school documents (e.g. learning materials, internship reports, etc.)
- f. Video-recordings of a variety of activities connected with the Individual Learning-in-Practice projects, in four public spaces where I was a guest (the students’ sites of internships, 10 hours).

Secondary Research Field and Materials: The ‘Freedom Writers’

A few of the examples which I use for the theoretical analysis presented in this dissertation come from another school project, the “Freedom Writers”, which took place at the Woodrow Wilson High School in Long Beach, California. I will talk more about this school project in map 6. What is important here is that my dissertation does not aim to compare the approach followed at the School for Individual Learning-in-Practice with the Freedom Writers project at the Woodrow

debate in science and technology studies (cf. Sørensen, 2009). In my view, a very important materiality which I have completely ignored in my account and research practice is the human body.

³⁵ I did not film from a distanced perspective, but participated with the students in a series of activities and used the camera as a medium in my communication with them (Rouch & Feld, 2003).

³⁶ The methodology that I followed makes use not only of field notes but also of photos, videos and other materials as research tools (Fichtner, Freitas, & Monteiro, 2003; MacDougall, 2006; Wagner-Willi, 2005; Wulf et al., 2001). Following newly developed approaches in youth research, I also tried to combine ethnography with activities where students were explicitly equal participants in constructing the research itself: drawings and filming by the students (cf. Christensen & James, 2008; Matthews, 2007). These materials are not presented here but were part of the analysis and led to the interpretations which are presented in the following maps.

Wilson School. I believe that these educational approaches have been developed in unique ways in particular local contexts so that it is impossible to compare them on the grounds of common principles, values, and methodologies. Moreover, very different people with different motives have been involved in each educational practice so that it would be impossible to 'copy' either the one or the other practice and transmit it to the other context. I will try, however, to refer to some practices performed at the Woodrow Wilson School, California in order to reflect upon the fabrication of development at the School for Individual-Learning-in-Practice from a 'meta-perspective'. For this I will mainly compare the written narrations of young ethnic minority students about their present and future situations, written either as 'daily reports' in the School for Individual Learning-in-Practice or as 'diary sections' in the context of the 'Freedom Writers' project at the Withrow School. The materials from the Freedom-Writers project come from the books the teacher E. Gruwell has published about this project (Gruwell, 1999, 2007a, 2007b) and from a-posteriori research by myself in regard to this project.

Data analysis and interpretation

All discursive materials have been analyzed according to discourse analysis (Fairclough, 1992; Scheffer, 2005), conversation analysis (Seedhouse, 2004) and the documentary method (Bohnsack, 2003; Bohnsack, Nentwig-Gesemann, & Nohl, 2001; Bohnsack, Przyborski, & Schäffer, 2006; Keller, 2005), with their treatment of oral data as discourse which is dynamically performed in concrete settings and situations. The analysis of the circulation of documents, field notes, and video-recordings has been inspired by ethnographic and science and technology studies approaches (Emerson et al., 2003; Jessor, Colby, & Shweder, 1996; Latour, 2005a). I have also tried to analyze how persons participate in different practices following the methodology developed by Huniche (2009). The analysis and interpretation of the ethnographic research material has been developed by the successive realization of progressively linked stages in the following procedure, which unfolded alongside theory building and field research:

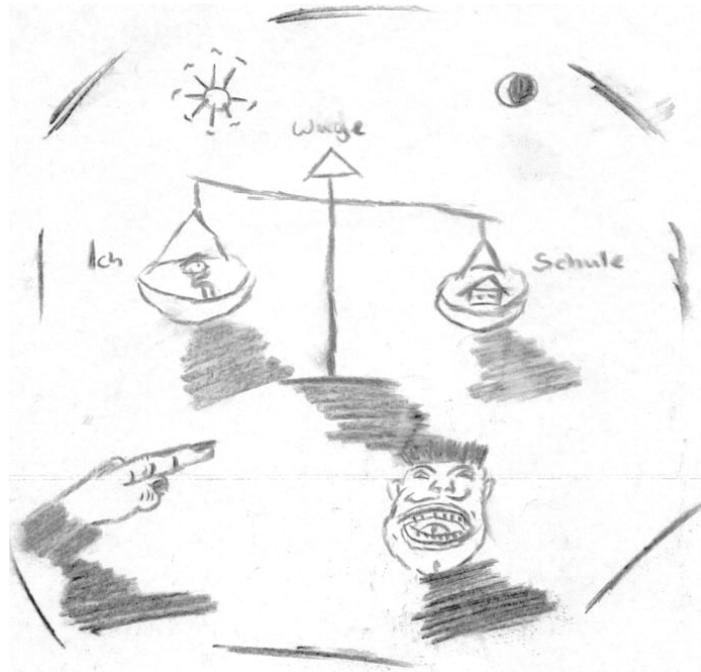
- 1) Separating two kinds of meanings: the meanings assigned by the researcher to a given behavior/belief from the meanings assigned to it by students and teachers. Special attention has been given to the everyday understanding between communicating partners (the students, teachers, myself). This understanding has been divided into two categories: communicative understanding—shared by everyone, and conjunctive

understanding—which is particular to each communication partner and determined by his/her experiences and subjectivities ('documentary method' s. Bohnsack, 2003; Bohnsack et al., 2001; Bohnsack et al., 2006). This aspect was especially important in the analysis of interviews, teachers' discussions and video-recordings.

- 2) Relocation of the original research question—reviewing the initial plans/ proposals
- 3) Mapping and organizing materials in chronological order and recording the most striking aspects
- 4) Searching for (ir-)regularities/patterns
- 5) Writing a summary of what has been found so far, matching pieces together and discovering relations so that a coherent whole emerges before the material is broken down into units
- 6) Paraphrasing and dividing data into the smallest units of information
- 7) Coding (i) the units by situational factors: spatial, temporal, physical dimensions
- 8) Coding (ii): functional, compositional, philosophical, semantic, grammatical, social dimensions
- 9) Categorization: sorting subsequent items into categories (grouping the units) through the methods of a) analytic induction (taxonomic analysis and functional analysis), b) comparison of the different research materials, c) enumeration and typology
- 10) Theorizing: theoretical consolidation, application or synthesis by creating abstract categories and the relations between constructs, individuals, incidents, events, artifacts—creation of (many and different) 'maps' in the material
- 11) Checking material against the data: negative/discrepant case selection
- 12) Obtaining feedback from the field
- 13) Examination and clarification of the situatedness of the research, of my interaction with the different subjectivities performed in the field and of the language(s) used.

I would like also to note here that my confrontation with the marginalized subjectivities of the School for Individual Learning-in-Practice and with the controversies of this 'innovative' and 'alternative' educational approach led me to more radical theoretical positions than I could have imagined at the beginning of the research. The theoretical argumentation following is impossible to separate from the research field and is the product of my experiences in this school.

1st Movement



Student's picture: "Everyone is pointing at the school"³⁷

³⁷ This picture has been drawn by a male student of the School for Individual Learning-in-Practice upon my oral request 'Please draw a picture showing how you experience your everyday life at school'. I have analysed it according to the documentary method of Bohnsack (2001) and used it here as additional material. For the analysis see Kontopodis & Pourkos, 2006.

Map 2

Development as a Technology of the Self

We simple blind people, simplistic, short-sighted, have not imagined implication, inclusion, fold; we have never known what a tissue is, never noticed or listened to women, never known what a melange might be, and never understood, or even imagined, time.³⁸

A brief description of the School for Individual Learning-in-Practice was presented in the previous map. We saw how the School for Individual Learning-in-Practice is organized and what its main purposes are. We also mentioned the socio-economic status of the students of this school. In this map, I will examine in more detail the school concept and its discourse of responsibility, as reflected in the everyday understandings of teachers and students about the school and themselves. Following the methodology presented in the previous map, I will exemplarily analyze extracts of my discussions with two of the most established teachers of the school, as well as an extract of an interview with the student Felix (pseudonym³⁹) who appropriated the school discourse in the way he spoke about his own past and future. As we will see, this school discourse is situated in broader current socio-political developments and corresponds with a particular understanding of the notion of development. Development seems to be a semiotic ordering which functions as a technology of the self (Foucault et al., 1988) and aims at the incorporation of marginalized students in the current economy.

Speaking about Marginalized Students and Responsibility

Extract 1

1. **W:** Du änderst sie nicht. Und du änderst auch 'nen (einen) Borderliner nicht, dadurch
You don't change them. And you don't change a borderliner by saying:

³⁸ Serres, 1983/ 1991, p. 82.

³⁹ All the names used here have been changed—however, the pseudonyms do indicate the ethnicity of the student/teacher; each name refers to a particular student/teacher to facilitate tracing his/her action in the different parts of the dissertation (see also: Opening).

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2. dass de (du) sagst: ‚Jetzt musst du aber [^]wirklich kommen, sonst schmeiß ich dich
‘But now you [^] really need to show up, otherwise I’ll kick you out’. Then
3. raus’. Dann sagt der, **<HI** ja natürlich komm ich jetzt **HI** **>** \und kommt zweimal
*he says, **<HI** of course I’ll come now **HI**> \and comes twice and then*
4. und kommt dann wieder nicht. Und du stehst wieder da mit deinem Herzblu=ut
doesn’t come anymore. And you’re left there again with all your commitment
5. Hmm
6. **W:** und diesem Ganzen. Statt
and all this. Instead of
7. zu sagen, weißt du: **<L** 50 Stunden, bu=um=m **L****>**, dann schreibt der Computer
*saying, you know: **<L** 50 hours, bo=om=m **L**>, then the computer deletes you*
8. automatisch die Abmeldung. **<A** Pfff (...) [^]weg. Pech gehabt, nä. **A** **>** /Und da muss
*automatically. **<A** Pufff (...) [^]gone. Bad luck, you know? **A**> / and one has to*
9. man selber dann (da)für sorgen, dass das nicht [^]passi=iert. Dann heißt (das), die
then make sure for oneself that this doesn’t [^]happen. This means then, that
10. [^]Verantwortungskarte,
the [^]Responsibility- Card
11. **I:** Hm
12. **W:** die liegt dann nämlich
is placed
13. bei demjenigen, <der da> der da nicht [^]kommt und
with that person, who <who there> who doesn’t come
14. **I:** hmm
15. **W:** nicht bei uns, die immer entscheiden müssen, ‚soll’n wir dich noch behalten oder
and not with us, who must always decide ‘should we still keep you or

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16. nicht??. Also es geht <um>
not?’ Well, what matters,
17. **I:** Hmm
18. **W:** auch um Verantwortung, finde ich. Wer
I think – is also the responsibility .Who
19. hat die Verantwortung dafür?
is responsible for this?
20. **I:** Das ist auch richtig (im Blättern)
And it’s good that way (while leafing through pages)
21. **W:** <Und das finde ich, da
<And I think that
22. gehen wir immer viel so mit ~fahrn...> also ich finde unser System enorm feudalistisch.
we always handle this with so much ~fabrn..., well, I find our system enormously feudalistic.

(Extract from teachers’ discussion 7/ 6. Jan.)

In this extract, taken from a teachers’ discussion, Wolfgang speaks to me about students who are often absent (he refers to them as borderliners) and explains to me his theory about how to change them. He believes that, if the responsibility about school issues lies on the students’ and not on the teachers’ hands, students will feel responsible for their actions and their consequences, and will probably change their behavior; if they do not change and continue being absent, at least the teacher will not have to bear the responsibility for the consequences of their actions.

One can address a series of issues regarding this quote, which presents a usual way in which teachers of the School for Individual Learning-in-Practice were speaking about the school and the students. On a first level of analysis, one can understand that the teachers of the School for Individual Learning-in-Practice are confronted with great difficulties and do not only engage in teaching but in a series of practices in which a social worker, a counselor or a psychologist would usually engage. The way Wolfgang speaks here might be interpreted as a way to deal with the impossibility of fulfilling his role as a teacher in a society which is highly exclusive for the young

students he is supposed to teach. About fifteen years ago, Wolfgang and other teachers were politically active in promoting a new learning method and school model for all the students of Germany. Their political-educational project would have created possibilities inside and outside the school environment for individual learning with an everyday life orientation. However innovative this model was, in the end a school was established that fulfilled the wishes of the municipal educational administration: instead of a school for all students, it was a lower secondary school, accepting students who had been hitherto unsuccessful in their school career by failing, twice or more often, to be promoted to the next grade. Even if these students are successful at the School for Learning-in-Practice, their certificate will not allow them to enter any kind of university program later in their life. A few of these students will have for the opportunity for professional vocational training, but most of them will work in small family businesses, precariously low-paid jobs, or be unemployed. Some women will become hairdressers and others housewives (see also previous map).

The situation of these young people reflects a broader educational and social crisis in Germany (Nolan, 2001) and the entire developed world, a crisis which is manifested by increased failure rates, low social mobility, the failed integration of generations of migrant populations and, last but not least, by school shootings (Pourkos, 2006). The School for Individual Learning-in-Practice in Germany was initially conceived by engaged teachers as a political-educational reform project, but after long bureaucratic processes was turned into a school of excluded students. This has also been the fate of numerous other progressive or radical local educational initiatives in Germany—a fact that manifests the reluctance of political and educational authorities to allow new learning methods and educational models to be developed.

Seen in terms of discourse production (cf. Fairclough, 1992), it is not accidental that in this context teachers do not speak about changing the society. On the grounds of their own experience with the German state this seems unthinkable. Teachers speak about changing the students so that they fit into the given society. They do not speak of the students in general or of the marginalized students of the School for Individual Learning-in-Practice in particular as a collective subjectivity which could indeed bring social change (Stetsenko, 2008) but they speak of the students as individuals which can change themselves.

This way of speaking about the students can be situated in a broader discourse about self-responsibility. The way teachers speak about the student as capable of bearing responsibility and changing his/her behavior involves psychological and pedagogical knowledge and an understanding of the human subject as universal, rational and coherent. This understanding is of course very old and can be traced back in early modern educational and developmental psychological theories (Morss, 1990, 1996; Wulf, 2002). What is quite new, however, is that the boundaries between the institutional and the subjective are sifted so that the institutional control is expected to be performed by the students themselves. In the example, Wolfgang thinks that self-control it is a more efficient way to control marginalized students than direct control by himself and the other teachers. It is expected that the student becomes actively engaged in the control of him-/herself. His/her agency is needed. As Nikolas Rose writes:

[Autonomy is in this way] represented in terms of personal power and the capacity to accept responsibility—not to blame others but to recognize your own collusion in that which prevents you from being yourself and, in doing so, to overcome it and achieve responsible autonomy and personal power. High self-esteem is linked to the power to plan one's life as an orderly enterprise and take responsibility for its course and outcome (Rose, 1999, p. 269).

In the book *Powers of Freedom*, Nikolas Rose (Rose, 1999) describes how at the end of the 20th century society changed from a disciplinary to a control society, as a variety of policies in institutions and society fundamentally modified the way in which conduct is governed⁴⁰:

“In disciplinary societies it was a matter of procession from one disciplinary institution to another—school, barracks, factory...—each seeking to *mould* conduct by inscribing enduring corporeal and behavioural competences, and persisting practices of self-scrutiny and self-constraint into the soul. Control society is one of constant and never-ending *modulation* where the modulation occurs within the flows and transactions between the forces and capacities of the human subject and the practices in which he or she participates. One is always in continuous training, lifelong learning, perpetual

⁴⁰ See also Deleuze's article published in French in *L'autre journal* in 1990 and in English in *October* in 1992: “Indeed, just as the corporation replaces the factory, perpetual training tends to replace the school, and continuous control to replace the examination. Which is the surest way of delivering the school over to the corporation (...) The family, the school, the army, the factory are no longer the distinct analogical spaces that converge towards an owner—state or private power—but coded figures—deformable and transformable—of a single corporation that now has only stockholders” (Deleuze, 1992, pp. 3-4).

assessment, continual incitement to buy, to improve oneself, constant monitoring of health and never-ending risk management.” (Rose, 1999, p. 234)

As a result of new institutional policies, Rose argues, activity has replaced dependency as the welfare system has been reformed to become a ‘workfare’ system—“poverty and many other social ills are cast not in economic terms but as fundamentally subjective conditions” (Rose, 1999, p. 265). In this situation, the school cannot be blamed for the students’ future because one’s individual educational choices are supposed to lead to success or failure. Education and modern adult life seems to be reorganized on the basis of neo-liberal subjectivity (continuous education, learning-in-practice, distance education, individual learning etc.) (Duvall, 2007; Kaindl, 2005; Langemeyer, 2005). As Rose writes, “an unemployed person is understood as a *job seeker*”, (1999, p. 268, italics mine) and we could add to this that a student such as those of the School for Individual Learning-in-Practice is understood as job-seeker-to-be. Here the notion of development is of particular importance.

On the Notion of Development

Extract 2

1. **M:** (.3) Also mein Eindruck ist, \gut das ist vielleicht auch normal, dass jetzt
(.3) Well, my impression is, \okay, this may be normal, that now

2. einfach diese anderen (...) mir auch vielleicht persönlich jetzt einfach so langsam
these others (are) simply (...) are slowly becoming visible to me personally

3. in den Blick geraten mit auch ihren ganzen ungeklärten Entwicklungen oder sonst
with their whole unexplained developments or whatever

4. was. /Und ich weiß nicht so genau, <ob die ^Gruppe, äh, (2.)> \wo die Gruppe
/And I do not know exactly <whether the ^group, uh, (.2)> \ where the group is at the

5. zurzeit so ist. (...)
moment.(...)

(Extract from teachers’ discussion 1/ 07. Sept.)

Extract 3

1. **W:** Und ich denke, da ist auch noch ein Prozess wieder. Also, da sehe ich einen Prozess.

And I think, there is still a process there. I mean, I see a process there.

2. Das sehe ich jetzt gar nicht so negativ, aber insgesamt (...) - #Nantin Nachname#

Now I don't see it as something negative at all (...) but generally - # Nantin surname #

3. kriegt das nicht hin.

isn't managing it.

4. **M:** Nee, die ist irgendwie weg.

No, she's a bit lost.

(Extract from teachers' discussion 1/ 07. Sept.)

In Extract 2, a teacher called Monika uses the words 'unclear developments' to refer to the state of some students she slowly begins to have a 'view' of or an opinion on (in German is the word she uses is Blick, i.e. glance). In Extract 3, Wolfgang uses the word 'process' to refer to something he 'sees there', i.e. in the case of a particular student. He evaluates it "not as something negative at all" (Extract 3, line 2). Then he refers to another student who "does not manage it". Monika agrees. For the time being, I am listening, without making any comments.

By using the words 'development' or 'process' the teachers refer to something that has or has not been clarified or is or is not in progress at the time of the discussion. They 'see' it and evaluate it. They position themselves outside the concrete settings of their interaction with students and view their development as a whole from a distant point of view. What the teachers actually do not know but presuppose (Bohnsack, 2003), is that time and development, in their view, unfold toward a particular final state. This last state is predefined by them and is wished for. The teachers appear to consider the development 'unclear' or say that a student 'does not manage it', if no change toward the state desired by them takes/has taken place. The teachers' everyday understanding or knowledge resembles the understanding of time and development as an arrow, which accounts for their point of view. If they did not envisage time, they would not be able to view what they call development as a whole, abstracted from all kinds of interactions, and so they

Yes, that's right, yes

12. **W:** Das haben ja andere Schulen so nicht. Und dafür musst du den Leuten auch
Other schools aren't like this. And for this, you also have to give people
13. 'n (ein) Stück Zeit ge=eben,
some time,
14. **I:** Das denk' ich auch
I think so, too.
15. **W:** zu sagen, <ähm, phu> ,ja OK, also du
to say, <errm, phu> 'yes, OK, you
16. du hast zwar hier nichts gearbeitet aber...' vielleicht ist in der Zeit, /vielleicht ist bei
haven't really worked here, but...' probably it happens at this point /probably something will happen with
17. ^#Unuhr# jetzt was passiert noch mal, in dem Halbjahr.
^#Unubr# now, in this semester.
18. **I:** Hmm
19. **W:** Dass er sagt ,OK.
That he'll say, 'OK
20. also ^ich will jetzt 'nen (einen) Abschluss;
well, ^I want a diploma now;
21. **I:** Das kann möglich sein, ja
That's possible, yes
22. **W:** und <nicht so=o> nicht
and not, not in ge=eneral,
23. so=o: ,mein Papa will', sondern ,jetzt will ^ich nämlich'
like this: 'my daddy wants it', but 'now ^I want it'
24. **I:** Ja *Yes*
25. **W:** und das könnte `n (ein)
and that could be
26. ^entscheidener Punkt sein. <A Dass der zu Englisch kommt und mitarbeitet, dass der

a decisive point. <A that he comes to (the) English (class) and participates, that he

27. *zu Mathe kommt und mitarbeitet und nicht ^stört, sondern, dass (er es) als 'ne (eine)
comes to Math and participates and ^ does not disturb, but (he) understands it as a*

28. *Chance begreift A>.
chance A>.*

(Extract from teachers' discussion 7, 6. Jan.)

In this extract—presenting a fragment of another teachers' discussion—Wolfgang explains to me 'what they [teachers] are', i.e. how the school functions. For this he uses the metaphor of a hammock. The metaphor clearly reveals that he understands development as something that occurs in a concrete, material context (the school) and requires time: a student 'falls into the hammock, and for some time s/he is carried'. Through the student's self-observation a process of change of orientation unfolds and leads to self-determination ('now it is me, I, who wants this and not, not my dad'). The teacher refers to a 'turning point' at which this change of orientation occurs. Teachers at the School for Individual Learning-in-Practice spoke often about increasing the sense of autonomy of marginalized students as a solution to what could be seen as broader educational and social problems. In this sense, the School for Individual Learning-in-Practice was not primarily perceived as a place for teaching and learning or engaging in various kinds of group activities; the School for Individual Learning-in-Practice aimed foremost at the development of the student's personality.

In this extract, Wolfgang considers students' development in spatial terms. There is a temporal distance between the beginning, when someone falling from the sky is rescued by safely landing in the hammock provided, and the 'turning point' when, presumably, one can walk alone, and not be carried on a kind of floating bed. If one falls from the sky, then difference does not matter. Everything can be treated in the same way. This is exactly how time is conceived in thermodynamics: as a line or a distance similarly valid for all instances. What changes in this time-space (which is, as has been presented in the Opening, *materialized*—in graphics as well as in cards, registers, notes, reports (see maps 4 and 5) is the orientation of the developing student.

What appears to be of particular interest to me is the psychological understanding teachers of the School for Individual Learning-in-Practice have of ‘change’ and of ‘development’ regarding the students. The teacher uses the word “*Umstellungsprozess*” to denote a temporal process, although the word means literally the process of changing of position in space. Space is here understood metaphorically. The change does not occur in *place* but in *time* which is regarded as spatialized. The teacher describes further that the school gives ‘time’ to the students who have failed in other educational settings. Time is understood as a full container (a container filled with it), out of which more or less of it can be taken and given (cf. Lakoff & Johnson, 1999). However, time unfolds forward. The direction given from the family or other non-school contexts turns into another direction: self-determination and, eventually, professional orientation.

Felix speaking about his past and his future

Extract 5

1. **F:** Also ich war ein Problemkind gewesen (.2) ähm (...) ich hab meine Eltern
Well, I was a problem child (.2) erm (...) I stole from my parents,
2. beklaut, äh (...) ich hab (.2) auch Drogen genommen und sonst so was, und das
uh (...) I (.2) also took drugs and so on, and I made
3. Leben meinen Eltern zur ^Hölle gemacht.
my parents' life a ^ hell.
4. **I:** Mm.
5. **F:** (.2) Und damit auch nie irgendwie gezeigt,
(.2) and (I've) never shown
6. dass ich verantwortungsbewusst bin und dass ich selbst für mich verantwortlich
that I am somehow conscious of (my)responsibility and that I am responsible for myself
7. bin und erm, alles richtig mache. /Das kann ich jetzt ändern.
and erm, (that I'll) do everything right./ Now I can change that.
8. **I:** Und was hat die

Fabricating Human Development

And what

9. Veränderung gebracht oder zu dieser Veränderung geführt? Dass [du weißt]
caused this change or led to this change? that [you know]
10. **F:** <[Die Einsicht]>
<[the insight]>
11. **I:** <und> dass du jetzt
<and> *that you want*
12. (was) machen willst oder machst?
to do (something) now or (already do)?
13. **F:** Die Einsicht. Als ich äh, hierher gekommen bin (...)
The insight. When I uh, came here (...)
14. das erste Jahr.
the first year.
15. ((Es ist sehr laut. I. steht auf und schließt die Tür.))
((it is very noisy. I. stands up and closes the door.))
16. **I:** In der Schule meinst du?
To this school you mean?
17. **F:** Ja hier in der #Name der Schule# (.2) da war das sofort
Yes, here at the #name of the school# (.2) it (all) changed immediately.
18. anders. Ich musste mich anders äh, entscheiden, ob ich jetzt nun den Weg des
I had to make decisions differently eh, decide if I wanted (to follow) the way of being the
19. ^grausamen Jungen der Eltern @ sein möchte ,oder ob ich äh nun endlich mal,
parents' terrible boy @ or whether I uh finally
20. anfänge
(can) begin now
21. **I:** Mhm.

- 22.
23. **F:** Erwachsen zu werden. / Und das hab ich jetzt geschafft. [Das war
 to become an adult. / *And now I've managed that.* [*that was*
24. einfach nur]
 actually simple]
25. **I:** [Mm.]
26. **F:** ein ^Umdenken.
 a ^reorientation.

Extract from Interview with #Felix#

This interview between a student and myself, audio-recorded and now transcribed, took place at the School for Individual Learning-in-Practice. Felix is one of the presently non-deviant male students, who perceived me as an older student who supported them at school and someone they trusted (partially because of my gender)—in contrast to other students’ subjectivities, e.g. Turkish women or German deviant students. After I asked him about his future plans, which he described to me in the earlier part of the interview, he started telling me that he has been a ‘problematic child’ for his parents. He described his deviant behavior and mentioned his wish to totally change the *picture* his parents had of him. When I asked him about what caused the change in his behavior he referred to his first year in the school, when an ‘Umdenken’, i.e. a change of thinking, took place. As he said, “it (all) changed immediately” (line 17).

What was enacted during Felix’s narration was not only a particular version of his past but also his future, the future he would like to have. He had decided to try to enter the job market and is looking for training as a caterer. One could say that his development was no longer ‘unclear’; his ‘process’ is almost accomplished (see introduction). From his present point of view, his past appeared to be meaningful in one specific way: this of present self-awareness and self-responsibility for his future. *In* the school, *next* to the teachers, his way of thinking had changed (‘Umdenken’) so that he now *confesses* his past, *blaming* himself for this (Foucault et al., 1988). He was also *proud* of what he has now achieved by himself (line 23). For Felix, development was a kind of temporal order. He performed his past by reflecting on himself, organized his ongoing activity in terms of self-responsibility and thus directed it into a future which he could be proud of. Even if there were discontinuities, divergences, surprises, accidental events in everyday life (Foucault, 1972; Stephenson & Papadopoulos, 2006), even if one always acts in relation to

others, *development*, as it was remembered and imagined in the present, was a line which brought different events and situations together, and enabled Felix to evaluate him-/herself and act on one's own. In this way, a variety of different actions and events was translated into order, which influenced his further actions.

Moreover, development, as presented in Felix's discourse, was leading to a predefined outcome which was valued as good from the point of view of educational institutions (e.g. the school, Felix's family). Felix did not want to be the "parents' terrible boy" any more, he wanted to be an "adult". Speaking in similar terms, both teachers in extracts 2 and 3 used negations and negative words to speak about change in their students ("unclear", "not as something negative at all", "does not manage it"). Normative values regarding the development of students from ethnic minorities have been extensively studied and criticized by cultural-developmental psychologists (Hedegaard, 2003; Hedegaard & Fler, 2009) as well as by sociologists of youth and childhood (Hall & Jefferson, 1976; Hallett & Prout, 2003). Normative values of the developmental-psychological discourse—established by psychologists and adopted by teachers, other practitioners, and, in this case, by re-adapted students—have also been widely criticized in the context of critical approaches to pedagogical and developmental psychology (Burman, 1994; Holzkamp, 1995/1997, 1997).

Broadly speaking, it could be argued that the teachers' beliefs about the 'unclear development' of the students have political implications for the way in which students are classified and treated. In turn, the positioning of students affects with the way in which students perform their past and project their future. 'Development' proves to be, simultaneously, an organizational principle of a student's action, of teachers' and students' interactions and of institutional classification (Bowker & Star, 1999). The school's discourse not only creates an order of development but also institutionalizes and legitimizes the way of development at school—which can be seen as the realization of only one possibility (Deleuze & Guattari, 1980/1987). The formerly excluded students, for whom the School for Individual Learning-in-Practice was designed, should actively enter the current economy. In this situation citizenship should be *actively* purchased:

"citizenship is not primarily realized in a relation with the state nor in a uniform public sphere, but through *active engagement* in a diversified and dispersed variety of private, corporate and quasi-corporate practices, of which working and shopping are paradigmatic" (Rose, 1999, p. 246, italics mine)

In this context, development appears to be a semiotic ordering bringing these particular students together with the teachers and organizing their action and interaction. Above, we have examined the interrelation between the students' and teachers' positioning at school and their respective discourse. The analysis of discursive research material of teachers' discussions and interviews with students proves the developmental discourse to be interrelated to teachers' and students' positioning in the school; the developmental discourse orders ongoing interaction and enables students and teachers to perform the past and the future in a way which corresponds with dominant values and state social/educational policies. By translating a variety of events into a line moving from the past to the future as well as by materializing this line as diagrams and other material-semiotic objects, development becomes a technology of the self of (late) modernity which implies power relations and supports the maintenance of the modern order.

What is particularly interesting is that in the everyday knowledge of both students and teachers, development is understood as something that begins at some point in the past, continues till the present and should unfold to reach its target in the future. Felix narrates his development as a line, as an arrow of time, which leads to 'now' when this process can be accomplished and he can prove that he is finally reliable (cf. Brockmeier, 2000). He speaks about the exact point at which his thinking changed—the point at which he started attending this school.

Outlook

The experimental School for Individual Learning-in-Practice seems to be a 'new-age' institution that aims at the 'activation' of students so that they enter the job market. As already described, the students in this school are about 18 years old—some are slightly older or younger. These students have a long history of failed school career, i.e. they are about 18 but continue to pursue a school education ending with a certificate which is normally obtained by students who are 15 years old. In this situation, the main aim of "Individual Learning-in-Practice" is to enable these students to find employment after finishing the school, so that they can be 'independent', which according to Rose would mean incorporated into the society. This is managed through what Rose calls the 'powers of freedom' (Rose, 1999). The subjective sphere should be sifted with the institutional and in this way attain *liberation*. For this purpose, a self is fabricated which can be

liberated: students should ‘discover’ their talents, their inner desires, their professional dreams and pursue them. In other words, they should ‘witness’ the future, regard it as ‘their’ own and move towards it while reflecting on their past in order to evaluate and improve their achievements. In this way they will experience ‘freedom’ (s. Rose, 1999).

Foucault referred to such orderings as the formation of identity and the fabrication of self at school as ‘technologies of the self’ (Foucault et al., 1988). The technologies of the self are the specific practices by which subjects constitute themselves as subjects within and through systems of power, and which often seem to be either ‘natural’ or imposed from above. They shape the self as a center of action, reflection and control and have a genealogy in very old western practices such as the writing of diaries or the Christian style confession. The technologies of the self involve not only a particular kind of discourse but also a series of tools and material orderings such as diaries, timetables and calendars, furniture and architecture (cf. Kontopodis & Niewöhner, forthcoming, in 2009). In a series of works, Foucault as well as Rose have presented how these technologies of the self relate to the modern science of psychology as well as to the organization of life in modern societies. The term ‘government’ used by Foucault could be employed to refer to the school practices we refer to here:

[B]y government Foucault meant not so much the political or administrative structures of the modern state as ‘the way in which the conduct of individuals or of groups might be directed: the government of children, of souls, of communities, of families, of the sick.... To govern, in this sense, is to structure the possible field of action of others (Burchell, Gordon, & Miller, 1991, p. 221; cited by Smart, 1992).

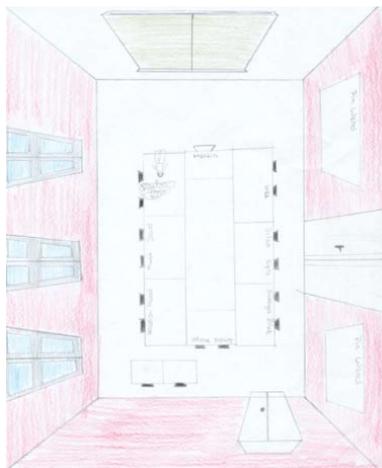
One of the aims of this dissertation is to account for the possibility of very different temporal orderings and developments. However, before discussing the alternatives to development as perceived by the teachers and some of the students of the School for Individual Learning-in-Practice, we will examine the performative aspects of the discourse of development and responsibility. In terms of performativity theory, every kind of action could be considered not only as discursive but also as performative (Middleton & Brown, 2005; s. also Scheffer, 2006; Wulf et al., 2001). The next map will examine the performative aspects of the technologies of the self presented above and focus on a different student case—a case of ‘failure’ as seen from the perspective of the teachers.

Map 3

Communicating human development: the Interactional Organization of the Self and of (Non-) Development

In the previous map we examined how institutional control at the School for Individual Learning-in-Practice has changed, lessening direct control from teachers and increasing the expectations that the student will be responsible for his/her development. We analyzed the way teachers speak about self-responsibility, change, and development, as well as the discourse of Felix, a student who described a turning point in his development which caused him to become responsible for himself. In this map I will analyze everyday school practices in more detail, examining how the responsible self described in the previous map is enacted by means of material-semiotic action. With this in mind I will follow an actor, i.e. a particular student named Husk, from the perspective of his main teacher, Wolfgang⁴¹. I will discuss the concept of the universal rational human being that lies behind the everyday understandings of teachers and examine how this concept is enacted in practice and interrelated to the concept of development

Reviewing Husk's Development in the Communication Group



Picture 1: School classroom

(Student's Picture)

The information presented here comes mainly from a video-recording. I had already been as an ethnographer at the School for Individual Learning-in-Practice for five months and my presence was self-evident to everybody. In the video many students, two teachers, #Monika# and #Wolfgang#, and myself all sit in a circle in the classroom, as presented in Picture 1. We are in the so-called “Communication Group”, where teachers and students regularly meet on Monday and Tuesday for an hour and a

⁴¹ The “main teachers” of the School for Individual Learning-in-Practice are responsible for a group of about twelve students who they supervise during the whole school time.

half. This is the main class activity and takes place throughout the school year. It is here that students meet their ‘personal teachers’, i.e. the teachers who evaluate and organize their performance at school. It is also the only opportunity for the students of the School for Individual Learning-in-Practice to physically meet all of their classmates in one place. No lesson is performed in this context, but the ‘Praxisplatzrunde’, i.e. a round of reports on the Individual Learning-in-Practice projects⁴², takes place. Students take turns to talk about their activities during the week and then leave the classroom to engage in secondary activities in other classrooms. They then leave the school to come back after six days. The ‘round’ is a highly ritualized performance:

Extract 1

1. **W:** Okay. Joh (Ja). #Husk#?

(continuing extract of Video-recording)

Just like everybody else, Husk is asked here to report on his progress in his internship (called ‘Individual Learning-in-Practice Project’) during the last week. The process of reporting is well known to everybody and Wolfgang, the teacher we referred to in the previous map, only needs to mention Husk’s name for Husk to begin reporting about his internship. The teachers and school authorities conceptualize this activity as an exchange of experiences, ideas and even knowledge between the students—as its very name, “Communication Group”, indicates. However, as we will see, students are not expected to reflect about their experiences or about their relations to other subjectivities and their social positioning (cf. Haug, 1992; Stephenson & Papadopoulos, 2006), but to report and reflect about themselves. Usually the students do not ask each other direct questions. The only participants who usually show their interest in communication are the teachers, who sit silently, listen carefully to the reports and maintain eye contact with the student reporting. Sitting in a circle and reporting according to sitting order is a kind of ‘panopticum’ which, at the same time, positions the teachers among the students and not above or in front of them; this is an important material ordering which goes together with the notion of ‘communication group’, the phrase teachers and students use when referring to this meeting (cf. Foucault, 1979).

⁴² The exact translation would be “a round about the places of (learning in) practice (projects)”.

The material-semiotic ordering is similar to that of interrogation and defense; the one responsible for all actions and their consequences is one's self. And the person who is eventually expected to bring about change in one's behavior is again one's self. Teachers are not supposed to punish the students who do not perform the expected behavior. They are also not supposed to organize any kind of collective transformative activity with the students (Stetsenko, 2008; Vianna & Stetsenko, 2006). However, teachers should confront the students with the very real consequences of their actions, in this way applying disciplinary power in the sense of Foucault (Foucault, 1982). The implicit understanding that lies behind this communication is that of the student responsible for his/her self. This understanding is not only performed in the form of the teachers' questions, it is also materialized in the whole setting. The same classroom is always used for this Communication Group—it 'belongs' to them. On one wall there are shelves with the personal files of the students and on another one there are cork notice boards with drawings, tasks, and announcements. During this 'round', absence cards are also controlled and written reports are submitted. In this constellation teachers engage in doing bureaucracy perceiving one's self as responsible for one's actions. Seen from this perspective, quite a lot of the students' spontaneous actions, which might be based on affects and emotional states as diverse as fear, hesitation, concern, lust, enthusiasm for a non-school activity, or will to resist the teacher's authority, are all interpreted by the teachers as *decisions* of the students, for which they must take responsibility. The teacher and the student perform very asymmetrical positions: the one is the *interrogator* and the other one is the *interrogated*. Information that would be presented in a very different way in the context of another discourse (e.g. in a narration to friends) is here translated in the discourse of defense and some aspects become very significant (details of what happened) and others do not have any significance at all (details of why this happened). Teachers try to understand the students as coherent subjects who have a stable and continuous behavior. There is no space in the school for a student to perform multiple behaviors. Change is conceived in linear developmental terms as either progress or regression, but spontaneous or ongoing change of behavior in different ways is usually conceived as pathological. Analogies can be drawn here to work, civic life, or medical and psychiatric contexts which in western societies go together with coherent rational subjectivities and exclude spontaneity, multiplicity, and becoming (Deleuze & Guattari, 1980/1987; Martin, 2007).

Husk is of German nationality and Arabic ethnicity and is 17 years old. He has already successfully accomplished one year at the School for Individual Learning-in-Practice and is now at his second and last year. If he succeeds in accomplishing this year, he will receive the lowest certificate of secondary education in Germany (Hauptschulabschluss). As a student of the School for Individual Learning-in-Practice, Husk is supposed to be at school two days a week and outside the school at his chosen place of internship three days a week. He is supposed to write a long report about this internship which is called his 'individual learning project' under the guidance of his main teacher, Wolfgang. The internship and the written work are equivalents for the series of classes and exams that Husk would have had at a normal German school. Here, Husk is supposed to report about the progress of the internship and his individual learning project:

2. **Hu:** Also mein Praktikum war im Computerladen. Da gab's dann
So, my internship was in a computer store. Then there was

3. so'n (ein) Problem, deswegen musste ich ja, – ich bin abgemeldet. Aber wie gesagt...
a problem, that's why I had to, – I'm unregistered (out). But as I said already...

(continuing extract of Video-recording)

Husk uses past tense and says that his internship was in a computer store. He refers to a problem that he was confronted with, but at the same time, avoids giving more information saying that anyway he quit this internship. He speaks fast and does not specifying the nature of this problem and does not provide any information about who was responsible for this problem. The importance of this narrated event is major: no longer being a trainee indicates an unexcused absence. If a student does not have a internship position, i.e. no Individual Learning-in-Practice project, s/he cannot be considered a student of this school⁴³.

The question which Husk clearly wants to avoid is this: are you responsible for the problem which resulted in being absent from the internship site? The situation is well known and the teacher reacts immediately:

⁴³ If a student, for some reason, loses one job training position and does not immediately secure another one, s/he is expelled from school because of absence, since the students of this school are over 16 years old, i.e. past the age of compulsory education.

4. **W:** Moment mal, wo gab's (es) 'n (ein) Problem?

Hang on a second, what was the problem?

(continuing extract of video-recording)

The teacher tries here to obtain more information about what happened 'out there', at the place of the internship of the student.

5. **Hu:**

Also, ich soll ja wieder hingehen und ihn

Well, I should go back there and ask him,

6. fragen, aber ich glaub ich such mir gleich 'n (ein) neuen Platz, \weil (.2), ihr wisst
but I think I'll (just) look for a new place straight away, \because (.2), you know why

7. ja warum und... ((er wird von mehreren Schülern aufgefordert zu erzählen, weigert
and... ((several students ask him to say more – but he refuses)).

8. sich aber)).

(continuing extract of video-recording)

Husk now continues concealing information and says that he should go to his trainer and ask him what the problem was. But, he says, he prefers to look immediately for a new internship instead of going back to the old one. Reading between the lines, the teacher can understand here that—at one point and of his own accord—Husk quit the internship, not even resigning from it in an official way (which is even worse than if he had cancelled his registration as he tried to pretend in the previous sequence).

Husk is now in danger of being expelled. The other students make fun of him and try to get him to narrate more—although they do not ask him for this directly. Husk claims that they know why and what the problem is and avoids giving more details. While one student is reporting about her/his work, the rest of the class pays attention only occasionally. Students interact with the person sitting next to them, and sometimes tease the reporting person, or make comments about her/his failures. Teachers pose questions, make notes and decide when each report is to end. The teacher challenges Husk's argumentation here, saying that, as far as he knows, there was no problem caused by the trainer, i.e. the problem must have been caused by the student Husk:

9. **W:** Na ja, ich hab das <so> nicht so verstanden. Also, bei ihm ((dem Besitzer des
Well, I didn't <really> understand it like that. Because there wasn't problem with him

10. Computerladens und Mentor von Husk)) war's (es) kein Problem.
((the owner of the computer store and Husk's mentor)).

(continuing extract of video-recording)

Husk avoids giving any answer to this and speaks in detail about his next internship:

11. **Hu:** Also ich such mir einfach 'n (ein) neuen Praktikumsplatz. Ich weiß auch
So I'll just look for a new place of internship. I already know

12. schon wo ich das mache.
where I'll do it.

13. **W:** Nämlich?
Namely?

14. **Hu:** In einem Restaurant in #Name der Bezirk#
In a restaurant in #name of the city region#

(continuing extract of video-recording)

To escape the growing pressure, Husk starts speaking about future actions which would compensate for his failure. Wolfgang notes down what Husk has just said about his new internship. Now he turns to other issues which he wants to evaluate: the written tasks concerning Husk's former internship, which he still should submit:

15. **W:** Restaurant in #Name der Bezirk#, ja Okay. Und weiter?
A restaurant in #name of the city region#, yes, Okay. And then?

The phrase „und weiter?“ („and then?“), meaning “how does your report continue?“) is enough for Husk to understand what he should now report on two more actions related to his practical learning project:

16. **Hu:** Ja und Dings da. Meine selbständige Aufgabe war

Yes and so on. My individual task was, well,

17. es ja ein Computer so zu erklären, wie der so funktioniert.
to describe a computer, how it functions.

((#Otto# setzt sich währenddessen mit seinem Stuhl hinter #Felix# und wird daraufhin mehrfach ermahnt sich wieder neben ihm in den Kreis an den Tisch zu setzen. Dieser Aufforderung kommt er erst nach einer Weile nach)).

((meanwhile, #Otto# puts his chair behind #Felix# and sits down; he is told several times to seat himself once again next to () in the circle around the table. He only obeys after a while)).

(continuing extract of video-recording)

18. **W:** So, deine selbständige Aufgabe war (einen) Computer zu erklären.
So your individual task was to describe a computer.

19. **Hu:**

Zu erklären wie der
To explain how it

20. funktioniert.
functions.

21. **W:** Bauteile und
Its parts and

22. **Hu:** Also, halt so 'n (ein) Querschnitt.
Yeah, just a cross-section/general idea.

(continuing extract of video-recording)

Husk says what the task ought to have been—but not whether he has fulfilled it or is in the process of accomplishing it. As it turns out, he has done nothing at all about it, but, as he puts it, he “can always do” the task.

23. **W:** Kommt da was?
Well, will we get it?

24. **Hu:** Kann ich immer
I can always

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25. noch machen eigentlich.
get around to it.

26. **W:** Wann?
When?

27. **Hu:** ((#Husk# zieht die Schultern hoch))
((#Husk# sbrugs))

28. **W:** Bist du bereit?
Are you ready?

29. **Hu:** Nicht ganz.
Not quite.

(continuing extract of video-recording)

It is interesting to see how vague and indirect Husk's answers are—yet he does not succeed in concealing anything.

30. **W:** Dann mach dich mal bereit und schreib mal was dazu, auch ein paar Zeilen, dass
Then get yourself ready and also write a few lines, so that

31. man sieht, dass du auch, dass du dich damit auseinander gesetzt hast.
one can see that you too, that you've dealt with this (issue).

32. **Hu:** ((nickt)). ((*nods*)).

(continuing extract of video-recording)

The teacher's exertion of control is over and has been successful: the whole truth has been uncovered. The drama is coming to an end. Husk has failed the internship and has not completed any written task so far. The teacher explains his demands: Husk must write at least a few lines, to prove that he has done something. The demands are not very high. The teacher does not pursue the matter any further, because as we explained in the previous map the educational ideology of this school is that the students should take responsibility for their decisions and actions and if they fail they are to blame. Husk might be one of the many students who are dismissed or who finish the school with the lowest grade—but this is, so to say, 'his

problem'. The teachers do not try to genuinely change anything, they just maintain their image of composure and indifference and exert their powerful role. The atmosphere is thus relaxed: neither is the teacher angry nor is Husk feeling ashamed. 'Everything is in order': the student's action is recorded and documented, so that clear decisions can be taken in the future—for which the teachers will not be responsible. As the situation continues to unfold, it turns into a comedy. The teacher asks about the documentation of the internship (i.e. all daily and weekly reports, personal reflections and other materials)—which Husk certainly does not have:

33. **W:** Und dokumäßig? Ist da was zu erwarten?

And what about the documentation? Are we to expect anything from you?

Husk's answer is his last attempt at performing a role which does not belong to him:

34. **Hu:** (Die) Doku ist eigentlich auch schon fertig aber es

The docu is actually already finished but I

35. liegt nicht bei mir. ((Alle anderen lachen und reden durcheinander))

don't have it at home. ((all other students laugh and talk to one another))

36. **W:** Wo ist sie denn?

Where is it then?

37. **Hu:** Es (sie) liegt bei #Peter#, an seinem PC.

It's at #Peter's#, on his PC.

38. **W:** Aha. Na ja, also die ist beschaffbar oder was?

Aha. Well, can you get it or not?

39. **Hu:** Ja ja. Die ist beschaffbar.

Yes, yes. I can get it.

40. **W:** Ach, die ist bei ^#Peter#. Der hat da ja auch ein Praktikum

Ab, it's at ^#Peter's#. Of course, he had an

41. gemacht, ne?

internship there too, didn't he?

42. **Hu:** ~Das stimmt.

~*That's right.*

(continuing extract of video-recording)

The teacher knows everything. Husk has failed at everything and admitted it. The space is official and the events occurring or the statements produced here are binding. Now there is just space for irony and jokes left:

43. **W:** Das ist ja praktisch, ne?
That's practical, isn't it?
44. **Hu:** Es ist aber nicht dasselbe.
But it's not the same (documentation).
45. **W:** Wir werden das
Then we will
46. mal vergleichen ((Alle reden wieder durcheinander und lachen)).
compare them ((Again all students talk with each other and laugh)).
47. **Hu:** Kein Problem.
No problem.
48. **W:** Ja, Okay.
49. Doku bei #Peter# -/ja klasse ((notiert es auf seinem Block)) (.3). Doku kommt?
The documentation is at Peter's - /right, super (writes it down on his notepad). (.3) The docu's coming?
50. **Hu:** ((nickt)) Okay, jo (ja) also...
((nods)) Okay, well, yes...

(extract of video-recording)

One could comment on the communication presented above in quite a lot of ways. The question I will focus on is what information is missing. The teacher posed a series of questions and took a series of notes, all as part of an evaluation of Husk's school participation and performance. But was Husk in fact the center of action, as presented above, or were there different actions which were taking place involving various actors and actants? Even if Husk quit the internship, why did this happen? What happened at the place of the internship, as well as in other, possibly interrelated, places? If we think of the expression 'lost in translation', then one

could say that the action that took place ‘out-there’ was translated into an oral report to the teacher ‘in-here’, i.e. in the communication group, but a lot went lost. The word *translation* is here of particular importance. In the sense of Michel Serres (Serres, 1980/1982, 1983/ 1991) and of the so-called ‘Sociology of Translation’ (Callon, 1980, 1999; Latour, 1996, 2005a; Law, 1997; Law & Hassard, 1999), translation does not mean the equation of two or more semiotic units with each other but it implies the *transformation* of something into something else when it moves from one context to another. In this sense, translation is the *generation of new* semiotic relations. The new semiotic ordering is that of Husk as a self-responsible student who failed to perform self-control. Past is stabilized here and future is performed. Out of what might have been many interactions with various actors and actants, the interrogation and defense process enacted Husk as the stable and coherent center of all action. Husk is not seen here as a member of various communities of practice (Dreier, 2008; Huniche, 2009) with conflicting interests and motives (Hedegaard, 2001, 2003), nor is the experience of Husk an issue for group reflection leading to the empowerment or emancipation of Husk and the other students (Haug, 1992; Stephenson & Papadopoulos, 2006). Moreover, only humans were presented as agents and the participation of actants in the reported action remained invisible (Latour, 2004, see also below). We could say that a politics of neo-liberal subjectivity is performed here, which fits well with the discourse of responsibility and with the technologies of the self presented in the previous map.

Notes, Memos, and Development

The technologies of the self (Foucault et al., 1988) are not limited to sitting in a circle in the communication group. A very important material-semiotic aspect of the teacher-student interaction presented above is that the teacher translates the narration of the student into written notes while the student speaks. Teachers of the School for Individual Learning-in-Practice usually take notes in various everyday contexts. These notes can be considered as primary. Teachers use these notes during internal meetings with colleagues—without any students present—to discuss the actions of students. What is interesting is that they also take notes during these discussions; these notes can be seen as secondary. The first kind of notes translate the teacher’s communication/ interaction with a particular student into written speech. The secondary notes translate and objectify the first ones. On a third level, the teacher alone in

his/her office or at home further translates the secondary notes by putting them together to create a memo on a particular student whom s/he is responsible for. I use the term ‘translation’ here to indicate that information is not just ‘transported’ but condensed, generalized, individualized, and modified so that it can be used in further settings for different purposes. An important element of this translation is the fact that, while notes concern various students at the same time, memos are individualized. Communicative action is thus objectified, ordered, and materialized.

In this context, a term used by actor-network theory is the “actant”. While “actors” are normally understood as conscious beings, actants comprise all sorts of autonomous figures which make up our world (both terms are, however, occasionally used interchangeably). They can denote anything endowed with the ability to act, including people and material objects: statements, inscriptions (anything written), technical artifacts, entities being studied, concepts, organizations, professions, money, etc. (Callon, 1991; Habib & Wittek, 2007; Latour, 1999; Law, 1986, 1992, pp. 381–384).

Extract 2 presents a memo about #Husk# summarizing various notes kept on different occasions, including the notes that Wolfgang kept during the meeting of the Communication Group presented above. It was attached to a warning of dismissal due to absence which was sent to Husk’s parents on the same day and is kept in the official file on Husk’s educational performance.

Extract 2

Husk

Since the middle of November has had no place of internship. Does not look for a new one. Comes to classes irregularly. Warning of dismissal. (Actually, already wanted to leave himself; Mama against it). 12 days (of absence). (transl. from a small handwritten memo by M.K.)

Past is here performed and objectified. What is more, it is condensed: the statements written down result from large amount of translation concluding large amount of interaction with the student and discussions with colleagues. The memo written by Husk’s personal teacher is short

but powerful. It brings together events of long duration by translating them into short phrases that a meaningful whole. Events are turned into facts.

It needs to be pointed out that it is not the absence of Husk itself that matters: what matters much more is its interpretation in relation to the facts noted. For the interpretation of an absence a student profile is needed. The missing person, to whom the sentences refer and who is also the self-evident grammatical subject of all the verbs written is Husk, who becomes reconstructed as a unity in time. An additional note in parentheses is added: “(Actually, already wanted to leave himself; Mama against it)”. Action is here remembered and institutionalized in terms of individual history. Although detailed information is missing, we could, in fact, imagine the student’s future (dismissal/failure) following the student’s past.

The question posed here is who, what and where is ‘Husk’? Is he a closed entity defined from the point of view of God or of the white European adult man (Wulf, 2004, 2006), or does he exist as such *in relation to* other entities? Is he a subject developed in time or should subjectivity be perceived in terms of geography (Nigel, 2008; Pile, 2008)? Even if we go back to Vygotsky’s account of the psyche we will find a relational-processual definition:

The child ... develops new links, new relationships between functions, relationships that were not present in the original links between his functions (Vygotsky, 1930/1997, p. 96).

In the process of development, and in the historical development of behavior in particular, it is not so much the functions which change (these we mistakenly studied before). Their structure and the system of their development remain the same. What is changed and modified are rather the relationships, the links between the functions. New constellations emerge which were unknown in the preceding stage. That is why intra-functional change is often not essential in the transition from one stage to another. It is inter-functional changes, the changes of inter-functional connections and the inter-functional structure which matter. The development of such new flexible relationships between functions we will call a *psychological system*, giving it all the content that is usually attached to this, unfortunately, too broad concept (Vygotsky, 1930/1997, p. 92).

Vygotsky here speaks about the development of new links and new relationships and not about the development of an enduring substance-like self. Moreover, he views the emergence of a qualitative difference as an outcome of development. Vygotsky is no longer arguing in terms of *being*—instead, he is speaking in terms of *becoming*, i.e. in terms of the philosophy of Nietzsche

(Nietzsche, 1885/2007; Nietzsche, 1882/1974). Vygotsky foreshadows Deleuze, who later wrote on Nietzsche: “the subject of the eternal return is not the same but the different, not the similar but the dissimilar, not the one but the many...” (Deleuze, 1968/1994, p. 126). Development in terms of becoming refers to processes (Semetsky, 2003). There is no a priori being which develops in (irreversible) time because entities are defined in terms of their relations to other entities. From a process-philosophical point of view (Deleuze & Guattari, 1980/1987; Nietzsche, 1885/2007; Whitehead, 1929/1978), if we define an entity or a substance in terms of its relations to other entities, if a relation changes, the entity-substance is no longer the same—a new substance emerges, in Nietzsche’s words: ‘it returns back but is different’ (Nietzsche, 1885/2007; Nietzsche, 1882/1974). If there are no enduring substances sustaining persistent qualities, there is no sequence of the past, the present and the future. Substances are conceived of as processes (in plural) and not as entities which maintain persistent qualities in the course of linear time. According to Whitehead:

The simple notion of an enduring substance sustaining persistent qualities, either essentially or accidentally, expresses a useful abstract for many purposes of life. But whenever we try to use it as a fundamental statement of the nature of things, it proves itself mistaken. It arose from a mistake and has never succeeded in any of its applications (Whitehead, 1929/1978, p. 79, cited by Latour, 1994).

In Deleuze’s collective work with Guattari (Deleuze & Guattari, 1980/1987), this idea turns into a critique of the subject as a persisting substance and of subjectivity as a closed system. It is not a subject that *becomes*, but a system of relations that is *becoming* and a subject emerges as a result. From this point of view, one could not speak about Husk as a responsible-self *in itself* but only *in relation to* the teachers, laws, documents, etc. which participate in the *doing* of a responsible self which is also a doing of the past, the present and the future of this self as linearly interconnected. Development can be done in very different ways.

The concepts of linear temporality and evolution which underlie developmental psychological theories and teachers’ everyday understandings have been much criticized by the process-philosophical approaches of the late 19th and early 20th centuries. Implicitly or explicitly taking a critical distance from modern natural-scientific understandings of time (such as thermodynamics and, later, relativity theory) and continental substance philosophies (for example Plato, Aristotle, St. Augustine, Descartes, or Spinoza), scholars in different contexts and disciplines tried to

establish new epistemologies and relational-processual ways of conceptualizing the endless possibilities of organizing matter and subjectivity. One could think in this respect of Whitehead's process philosophy (Whitehead, 1929/1978), Peircian semiotics (Pape, 1988; Peirce, 1958), Bergson's concept of virtuality (Bergson, 1896/1991), Bakhtin's notion of voice (Bakhtin, 1968; Bakhtin, 1973) or Tarde's theory of invention, imitation, and opposition (Tarde, 1897/1999) (for secondary literature on each of these authors see: Ansell-Pearson, 2002; Koutroufinis, 2007; Latour, 2005a; Stengers, 2002, 2008a; Uslucan, 2004; Wertsch, 1991). In various ancient or non-western philosophies, the world has been viewed in processual terms⁴⁴, i.e. it has been perceived as richer, more diverse and much more unpredictable than the concept of irreversible time and development that modern science would lead one to believe.

From the teacher's point of view, however, the student's actions form a continuum, a meaningful entity. The role of mediators such as notes and memos is crucial here, as well as the various material-semiotic practices such as the regular meeting of the Communication Group. The continuous flow of information is expected to reconstruct a 'whole'. The conviction is that if the process of informing functions flawlessly, a personal teacher can 'understand' the student completely.

Informing and Tarrying

Informing proves to be a primary practice in the School for Individual Learning-in-Practice and it is indispensable for its functioning. It seems also to be a central part of the neoliberal politics we referred to in the previous maps (cf. Rose, 1999; Stephenson & Papadopoulos, 2006). It is important to note here that most teachers of the School for Individual Learning-in-Practice are personal teachers, i.e. tutors responsible for a group of about 18-20 students for the entire school year. These personal teachers supervise all the activities of a particular student. The ritualized weekly meetings of the Communication Group, the linearity in the notes and memos which a teacher keeps to remember and solidify (make permanent and certain) the student's future tasks and obligations, the fabrication of a past time-space through daily and weekly reports which every

⁴⁴ Early versions of the so-called 'process philosophy' can be found in Heraclitus or in Buddhist writers. Late continental versions come from Whitehead, Bergson, Nietzsche, Deleuze and Guattari, Stengers, etc.

student must write and present whenever requested, and the teacher’s connection to mentors, social workers and family members—all these elements create incessant control, unifying school and non-school sites and enabling the personal teacher’s omnipresence. In this context, the personal teacher continuously develops a highly individualized image of a particular student. The school consists of various institutionalized and official, but also personalized and informal social networks. In fact, it can be seen as an individualized and personalized composition of informer networks, sharing both formal and informal information.

This ordering goes together with the idea of a self that can look back on his/her past and forward to his/her future. Students, however, often do not cooperate in providing teachers with information about their feelings, future thoughts, past events, or other private issues. They share only very practical pieces of information related to facts about their school-related life. Below, we see how Husk answered a long questionnaire with open question,s which was designed as a medium to support students in reflecting about their performance in the past semester as well as as a medium to facilitate student-teacher communication. This questionnaire was given to students three weeks after the meeting of the Communication Group discussed above and more or less at the same period the note of absence was written. Husk’s first answer to the question, “What has been achieved so far?”, was: “Was bei mir positiv ist ist das ich weiss was ich will” (original spelling preserved; transl. “What is positive in my case is that I know what I want”). The answer to all further questions is “no” or “to some extent”. To the question about his ‘Documentation’, also asked orally in the ‘round’ presented above, Husk answered: “I don’t have

anything more to do” (in German: “Ich hab da nichts mehr zu tun”). The last question about ideas for the main task in his Individual Learning-in-Practice project is crossed out.

Husk cannot be accused of not answering, i.e. of not applying himself to any self-reflection. He did read all the questions and

The image shows two pages of a handwritten questionnaire. The left page is titled "Das Praxisprojekt - Assessment der Lernprozesse sowie von Aufgaben / Lernsituationen" and contains questions about the student's experience and satisfaction. The right page is titled "Bilanzierung - Dokumentation des Praxiserwartungen" and contains questions about documentation and future expectations. Handwritten answers are visible in blue ink.

Picture 2: Self-reflection task of Husk

answered them. However, *no* information can be gathered from his answers: we do not know if indeed there is something positive in his case, as he states at the beginning; neither do we find out what he wants—if the claim that he knows what he wants is true. What is more, there seems to be no problem, he does not need any help, any counseling; the teachers do not need to care about him. Here Husk plays with and breaks the institutional order. He knows the given institutional terms them and rejects them. Moving out of the institutional order, denying to pose and expose aims, refusing to reflect on professional orientation can be seen as a “move beyond the self”—what Stephenson and Papadopoulos denote as *tarrying*:

Hence, tarrying entails the dissolution of the reflexive subject. Tarrying involves a mode of being which is inextricable from others, from the situation—a move beyond the self. The dissolution of the subject releases experience, enabling the permeation of experience with the world. Tarrying is intentionless and targetless: it has no object (Stephenson & Papadopoulos, 2006, p. 203).

From my point of view, it is not accidental that the students of Turkish or other non-German ethnicities, especially males, completely refused to share their private discourses with the German male teachers—which is a fact that led in part to their school’s failure. The teachers could not deal with this situation. If students refuse to change themselves and deny self-development, teachers have no role to fulfill. The refusal of students from immigrant backgrounds to enter the teachers’ discourse and the institutional order was often interpreted by the teachers as “emptiness” and related to an “authoritative family structure”, as we can see in the next extract which refers to another male student of Turkish ethnicity:

Extract 3

1. **W:** Könnte auch sein, dass er eine autoritäre Struktur hat (.2) und dass er, wenn da
It could also be that he has (had) an authoritarian structure (.2) and that he, if there is
2. nicht jemand ist, der ihn dazu zwingt, dazu überhaupt keine Notwendigkeit sieht.
nobody who forces him to do something, (that he) sees no necessity at all (to do something).
3. **I:** Mm
4. **W:** Also, wenn Papa sagt: „Jetzt wird das und das gemacht“, dann würd er das sehr
So, if his dad says: ‘now you will do this and that’, then he would very likely

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5. wohl tun.
do it.
6. **I:** (...) Mm
7. **W:** Weißt du?
You know?
8. **I:** Mm
9. **W:** Aber <wenn das (...) wenn das immer>
But, < if (...) if always >
10. Wenn jemand sagt: „Was interessiert dich? Und verfolge das“, dann ist das für den
If someone says: 'what are you interested in? Follow that', then for him this is
11. so wie ähm (.2): ‚Wenn du Lust hast, kannst auch nach Hause gehen‘. Also so, das
similar to (saying) erm (.2): 'if you are not in the mood, you can also just go home'. Well, in this

hört keiner.
may nobody listens to you (is obedient).
12. **I:** Ja *Yes*
13. **M:** Mm
14. **W:** <(...) Wenn, wenn>
< (...) if, if >
15. **I:** Ja *Yes*
16. **W:** Dann kannst du auch aus
then you can also look
17. dem Fenster gucken, oder (.2) man kann dann auch sagen: ‚Ich hab die Wolken
out of the window, or (.2) one can also say then: 'I looked at the clouds
18. angeguckt und mich in...“. Der erzählt dir das auch wieder mit einer
and in... ' : He will tell you this with such a ((seriousness))... <HI I always
19. ((Ernsthaftigkeit))... <HI „Ich guck immer aus dem Fenster und denk: Mann, wie

look out of the window and think: wow, where do the clouds come from?' HI>

20. entstehen die Wolken?“ HI> Und der wird dir eine halbe Stunde `nen (einen)
And then he will give you a ^ speech for half an hour, on everything he has thought
21. ^Vortrag halten, was er sich alles zu Wolken überlegt hat, in einer völligen Ernsthaft
about clouds, completely seriously, and meanwhile nothing is happening
22. (Ernsthaftigkeit), und im Kopf wird ^nichts passieren. (.2) Zum Beispiel. Also so
23. mal weiter fantasiert.
^ in his head. (.2) For example. Well, and so he is always fantasizing.

(Extract from teachers' discussion 1/ 07. Sept.)

It is particularly interesting that the teacher speaks using psychological categories and interpretations about the student as a non-responsible or not-yet-responsible-enough self, although what the teacher is actually referring to is the picture he had created of the student by means of his notes and memos as well as through the blank spaces in questionnaires that the student refuses to fill in or the lack of answers to the teacher's oral questions. What is the institution's last chance to impose its order? In the classroom of the Communication Group, while other students and I were present, Wolfgang said very loudly and angrily to Husk and to the other Turkish student, whom he referred to in the extract 3, that their logic is unacceptable and either there is a change 'now' or 'never':

Extract 4

“Let's make an agreement: I will quickly send the next ((i.e. last)) letter to your parents, if you do not change. (...) I am not pleased with your behavior. You don't work; you seem to see the school as a coffee bar. I want to work here only with the people that work and who want to stay here. The same goes for # Turkish male name# and #Turkish male name#. I do not accept the logic: 'I will become another person if... sth happens'. <FF Either now, or never! FF>. That is the story I wanted to tell you. I thought that I would not need to give such a lecture in the ^10th grade”.

(Field notes KG13 03.01.05, translated from German by M.K.)

Reviewing Husk's development in the Educational Report

Husk did not, however, change his behavior, continued not coming at school, and never wrote nor submitted any documentation. This is all described in the educational school report, which is an official document written in the form of a letter from the teacher to the student and given to Husk at the end of the semester together with his grades:

Extract 5

Lieber #Husk#, das vergangene Halbjahr wurde von dir sehr zögerlich und unentschieden begonnen. Deinen Praxisplatz hast du Mitte September in # Praktikumsplatz #. Du fühltest dich sehr wohl dort, deine Kollegen und dein Chef waren mit dir sehr zufrieden. Du warst ein zuverlässiger und fleißiger Mitarbeiter, sowohl in #Arbeitsbereich 1# und in #Arbeitsbereich 2#. Es wird über einen Ausbildungsplatz für dich nachgedacht.	Dear # Husk #, the past semester began very slowly for you and you were undecided about it. You began your internship in the middle of September at # place of internship #. You felt very comfortable there; your colleagues and your boss were very pleased with you. You were a reliable and hard-working co-worker, both in the #working domain A# and in the #working domain B#. A place of professional training may be offered to you (literally: professional training for you has been thought about).
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This report speaks about Husk's past, presenting the very beginning ("slowly"/ "undecided") and then a later period (since "September") which is indicated by highly positive aspects ("comfortable", "very pleased", "hard working", etc.). The various events which happened in the given period and in the context to which the report refers have already been translated into the teachers' arguments and notes, and here are further mediated and translated into a few utterances in the past tense (in original German; "began", "felt", "were" etc.). Through the narrative ("beginning", "September") and material structure of the report (the first paragraph, followed by the second, etc.) events are composed in a sequence. Let us now see how the Report proceeds:

Continuing Extract 5

Eine Dokumentation wurde von dir nicht vorgelegt. Deine selbständige Aufgabe sollte die Herstellung eines kleinen türkischen Gerichtes	Your Documentation has not been submitted. Your independent task was to prepare a small Turkish meal for your group of learning in the
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sein, welches du in der Cafeteria für die Lerngruppe zubereiten wolltest. Du hast zum entsprechenden Abgabetermin und auch später nichts vorgelegt. [...]

In English hast du selten am Unterricht teilgenommen. Wenn du mitgearbeitet hast, bist du auch zu einem Ergebnis gekommen. [...] Leider reicht das noch nicht zu einem positiven Ergebnis.

In Mathematik [...]hast Du den Unterricht nur sechsmal besucht, nicht gearbeitet, aber häufig gestört. Ein Lernzuwachs konnte nicht festgestellt werden. [...]

[...]

Deine Motivation, das Angebot der #Name der Schule# für deine Entwicklung zu nutzen scheint mir kaum noch vorhanden zu sein.

Cafeteria. You did not submit anything either by the given deadline or later. [...]

You attended the English class only rarely. When you worked with the class you achieved some results. [...] Unfortunately, this is not enough for a positive result. [48]

In mathematics [...] you attended the class only six times; you did not work but disturbed the class frequently. No learning development was able to be ascertained. [...] [

[...]

Your motivation to take advantage of the offer of the #name of the school# to help in your development appears to be non-existent.

In this part of the report, further events which appear to have happened after the ones presented above are mediated and translated into negations (“have not”, “did not”, “is not”, etc.). Then there is a paragraph in the present tense: “Your motivation ... appears to be...”. Therefore, not only are past events presented in a sequence, they also lead to a statement about the student’s present situation. The Report continues: [81]

Continuing Extract 5

<p>Lieber #Husk#, wenn du deine Anstrengungen in der Schule nicht erheblich steigerst, ist ein erfolgreicher Abschluss am Ende des Schuljahres nicht möglich. [53]</p>	<p>Dear # Husk #, if you do not considerably increase your efforts at school, a successful conclusion at the end of the school year will not be possible. [54]</p>
<p>Ich bitte dich, eine Entscheidung zu treffen, ob du noch Schüler dieser Schule sein möchtest. [55]</p>	<p>I ask you to decide whether you still want to be a student of this school. [56]</p>
<p>Ich halte es für notwendig, dass du dich sofort um einen Ausbildungsplatz kümmerst, du kannst die Zeit in der # Name der Schule#</p>	<p>I find it necessary that you immediately look for a place for your vocational training; you are welcome to use the time in the #name of the school# for this purpose. [58]</p>

dafür gern nutzen. [57]	
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In the final part of the Report, we now encounter a conditional sentence referring to the future: “if you do not..., will not...”, as well as two performative speech acts: a request and a command. The report is ended here. To sum up the whole document: the utterances in the past tense have been set in a sequence leading to a statement in the present tense and finally to pieces of advice, threats, and warnings. As events are mediated and translated, the past, the present, and the future emerge and are connected in a linear way so that time is fabricated as an arrow. The school report leads to a clear conclusion about the student’s future orientation towards occupational activities.

This ambiguous “laisser-faire” mentality of the teachers goes together with severe consequences for students who do not control themselves. These consequences begin with low grades, continuing with total school failure—which is the case for Husk—and eventually unemployment and marginalization in general. Husk is a typical case of a student who does not fulfill the expectations of being a rational and coherent student. The teachers hope that he will grasp his last chance and become a rational and coherent self-controlled job-seeker—even if he failed to obtain a secondary school certificate. (Rose, 1999, see also previous map).

The Failure of the Technologies of the Self

The students’ oral reports as well as the teachers’ notes, memos, and later reports all refer to concrete subjects, fabricating a given person’s past, objectifying and assessing it and demanding the subject’s agency in order for an ‘Umstellungsprozess’ to take place. In this context, the agency of the subject is needed and a series of technologies of the self (Foucault) or technologies of control (Rose) are used to stabilize the self as the center of ongoing action. Students, however, are not rational, modern, universal subjects of control, and it is overall very difficult for late modern education to organize subjectivity in the form of a flexible, self-dependent, responsible individuality (see Papadopoulos, 2003). Developmental theories and practices are particular ways

for doing development by means of ordering, temporal organization, normalization, standardization, and stabilization. Endless translations and mediations are needed and must work successfully, so that development is fabricated as teachers presuppose it to be: “Order is made gradually through a series of transformations of disorder linked one to another” (Brown, 2002, p. 13). Teachers of the School for Individual Learning-in-Practice did not know how to deal with the students who, for a variety of reasons, unpredictably failed in their school performance as Husk did. Students on their part often defined the school as “an integration school for hopeless people” and reacted with irony to the contradiction between the teacher’s discourse about success and responsibility and their low prospects in the job market:

Extract 6

Once, during the break, an English-speaking person asked the students who were smoking in the street in front of the school if their school was a School for Integration. Ronald (pseudonym), a German student who often speaks English for fun, answered ironically in what he meant to be a joke for everybody listening: *“yeab <it is> an Integration-school for hopeless people”* (Extract from field notes translated from German by M.K., the italicized quote being originally in English)

One could comment here that the failure of a student like Husk is not a failure of himself, but a failure of the technologies of the self. What from my perspective is not a failure of the students but an expected failure of the ‘technologies of the self’ is exemplarily illustrated in my fieldnotes from a meeting I had with Monika, another teacher, late in the school year:

Extract 7

It is Thursday, shortly before 11.00. I have an appointment with Monika (pseudonym), the teacher, somewhere in the city and rather far away from the school. The last time we met was two days ago at school. Now we should be at the Hairdresser’s, where one of the students is doing her internship, at 11.00. We still have some time:

I: How is it going? (translation from German: MK)

M: I was at school—frustrating. Nantin didn’t come yesterday and I have just met her therapist. What’s more, Anton doesn’t want to continue his internship with # Name of Company # anymore.

Monika is speaking fast, she is almost out of breath. I listen carefully. We both realize it is time to enter the Hairdresser’s...

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Half an hour later we sit in a café and take some extra time to share information about the students and reflect on it. It is my 9th month in the field and Monika needs my opinion on a variety of issues she has to face, and I need information from her to carry out the case studies for my research. I feel impressed by how everything unfolds and soon begin to understand and share the anxiety and interest that Monika experiences: I put myself in her position. All at once I learn—just as she did—the following:

1) *Anton* does not want to continue his internship, a highly attractive one from our point of view, because, as he says, “he feels unwelcome”.

2) *Jasmin* has been ill, and so her meeting with Monika, her personal teacher whom she has not seen for a long time, has been cancelled (again).

3) *Daniel* has written something on a school wall (i.e. the wall must now be re-painted) and the headmaster of the school is angry. This tension and pending punishment could lead to Daniel’s truancy from school in the days to come.

4) What is more, Monika was supposed to meet *Nantin* and her therapist. However, Nantin did not turn up again. Through the discussion with the therapist, Monika found out that Nantin concealed from her the fact that she (Nantin) had had contact with her parents. Monika feels unsure how she should handle all this, and refers to Nantin’s behavior as “something between tactics and illness”.

I listen carefully and feel concerned. I make suggestions and comments. Because of my reaction, the atmosphere between Monika and me becomes more trustful. Monika feels comfortable enough to share with me the most problematic and most private news:

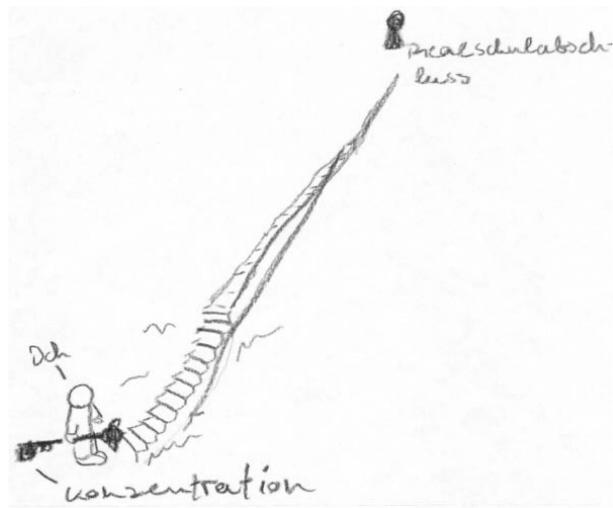
5) *Ronald* (another student) had a relationship with another student of the school and the girl is now pregnant. Monika is shocked, speaks fast, looks me directly in eye and then pauses for a moment. We both remain silent, reflecting on the seriousness of the whole situation and expecting some relief from each other and wishing it might all be turn out all right. After Monika’s narration, we try together to somehow put everything in order, and decide about her next steps, considering what would be best for each of the students mentioned, taking into account all the information we have on him/her...

Field notes 2b, 28th of April, 11:35

The extract presented above condenses the everyday life of teachers (and mine) at the school: uncertainty, responsibility, care, engagement, drama. Students are absent, ill, pregnant,

unsatisfied, feel underestimated, prefer to live on the streets rather than be supervised by parents or youth services, and certainly are *not* developing as the institution would want them to, i.e. obtaining certificates and applying for jobs. The everyday lives of students are unpredictable, belong to subcultures, face social and economic problems and have a different system of values from that of the teachers—especially expressed when they develop strategies that allow them to escape the communicative practices of the teachers' control. All this usually implies failing school, given the particular way the school institution envisages students as adult, self-responsible, and self-sufficient job-seekers-to-be. The construction of failure usually goes together with the construction of success, and is defined in relation to it (DePalma, 2008). In the next two maps we will examine a case defined as successful—that of Samira, a female student of Turkish ethnicity. We will then explore a series of material-semiotic practices that create the conditions for both failure and success as defined in the School for Individual Learning-in-Practice. This analysis will be finalized in map 6, where we will examine a series of possibilities for collective action that goes beyond the linear self-developmental logic of 'either success or failure'.

2nd Movement



Student's picture: "Towards the School-certificate"⁴⁵

⁴⁵ This picture has been drawn by a male student of the School for Individual Learning-in-Practice upon my oral request 'Please draw a picture showing how you experience your everyday life at school'. I have analysed it according to the documentary method of Bohnsack (2001) and used it here as additional material. For the analysis see Kontopodis & Pourkos, 2006.

Map 4

Materializing Time and Institutionalizing Human Development

In the previous maps we examined how development is organized through a series of practices at the School for Individual Learning-in-Practice, such as the interrogation of students by the teachers in the Communication Group or the teachers' writing of memos, notes, and reports on the students. We regarded these practices as technologies of control based on the ideas of autonomy and self-responsibility. We also argued that there is not a self itself, as usually perceived by psychological theories or teachers' everyday understandings, but the self is enacted, stabilized, organized, and fabricated through material-semiotic interaction. Based on the principles of relational-processual approaches, we argued that there is no development of a self or of a subject—there is a set of relations which changes and there is a *process*—but not a *development* of an enduring substance maintaining any persistent qualities. From such a point of view, it is impossible to first separate the social/institutional temporalities and the personal/individual ones and then interrelate them, because it is the same kind of material-semiotic interaction that fabricates both what could be seen as school time and as personal development. In the following two maps, I will examine their interconnectedness and explore a series of mediators and their participation in doing time and development. Extending the analysis of the teacher's notes and reports of the previous map, I will present ethnographic material which I collected over the course of the school year about a particular female student, and analyze how her 'development' was organized as a material-semiotic ordering. The analysis will reveal that the temporality of development is *done*—and is not *given*.

The female student we will refer to, Samira, is a working class young woman of Turkish ethnicity and German nationality. She has not had a successful school career, and this is the reason she is a student of the School for Individual Learning-in-Practice. In comparison to the other students of the School for Individual Learning-in-Practice, her school performance at this school has been high for the past year. Her case is quite different from the case of Husk we discussed in the previous map in the sense that she is rarely absent and she is overall 'self-responsible' in the way

teachers expect a student to be. One could say that her case presents a successful application of the technologies of the self, which we described in the previous map. Samira also presents a different case than Husk because of her female gender. The feminist psychologist Walkerdine as well as recent approaches which regard gender as multiplicity have extensively analyzed how gender, ethnicity, and social class are expressed in social expectations about education and career, thereby affecting girls' and young women's performance (Linstead & Pullen, 2006; Walkerdine, 1988, 1990, 1997, 1998; Walkerdine, Lucey, & Melody, 2001).

While Husk is expected by his family to work and become financially independent, Samira is expected to marry and become a housewife, possibly maintaining a low-paid part-time job. Teachers, however, motivate her to accomplish a professional training in order to later be able to work and become financially independent. Samira is in-between these contexts which reflect very different values of what a good life is, similar to a series of cases of children from migrant families described by Hedegaard (2005a, 2009; see also: Hedegaard & Chaiklin, 2005).

The Year's Plan: Organizing School Time and Personal Development

Samira is not only a female subjectivity and a member of various communities of practice. She is simultaneously an *adult-to-be* and is now 17 years old, although she attends a school at the level a 15-year old student would usually attend. As we will see below, this ordering is mediated, stabilized, and given a direction by a series of tools such as her personal school file, calendars, and other technologies of the self. These technologies not only enact the self-responsible subject as a particular mode of organization of subjectivity as we discussed in the previous map; these technologies also fabricate particular temporalities which go together with the idea of autonomy and responsibility. In her article 'Beyond Developmentalism?', the critical developmental psychologist Walkerdine argues that development, conceived as progressive evolution, is a 'central trope in modern narratives of the individual' (Walkerdine, 1993, p. 455). Walkerdine describes how the concept of development itself universalizes the European and masculine such that 'peripheral subjects are rendered pathological and abnormal'. Samira may be seen as such a subjectivity.

To begin with, one could say that the tool which participated the most in the fabrication of Samira's temporalities of development was the school year's plan (see Picture 1).

Picture 1: Year's Plan

Tag	Datum	Uhrzeit	Veranstaltung	Verantwortliche/r	Bemerkungen
Jahresplanung für das Schuljahr 2004/05					
2. Halbjahr					
	31.01-11.02.05		Einführungsphase		
Mi.	02.02.05	14.00-16.00	Team	N.N.	
Di.	08.02.05	17.00-19.00	Elternsprechtag	alle Kolleg.	Einldg: L-Vertr. GEV
Mi.	09.02.05		kein Team		
			WP-Wahl		
		11.00-13.00	erw. SL-Team		
Di.	15.02.05		Brandschutzübung		
Mi.	16.02.05	14.00-16.00	Fb.-K. WP-/Fachunterricht		
Do.	17.02.05		Brandschutzübung		
Mi.	23.02.05	14.00-16.00	Team arbeitstg.		
Fr.	25.02.05		Praxisplatzlisten		an PrPl.-Koord.
Mi.	02.03.05	14.00-16.00	Team arbeitstg.		
Fr.	04.03.05		Halbjahreskonzepte - "Arbeitspläne"		an SL
Mi.	09.03.05	9.00-16.00	pädagogischer Tag		Thema:
Mi.	16.03.05	14.00-16.00	Team		
Di.	22.03.05	16.00	3. Schulkonferenz		
		18.30	MV Förderverein		
	23.03.-02.04.05		Osterferien		
Beginn der regelmäßigen Schülerinfos mittwochs um 16.00 Uhr mit Ausnahme des Mittwochs vor Himmelfahrt, parallel dazu Aufnahmegespräche, vor den Sommerferien verstärkt.					
Mi.	06.04.05	14.00-16.00	Fb.-K. PrPr./KomG./FUP		
	11.04.-15.04.05		Beratungswoche		"Bl. Briefe", WP-W.
Mi.	13.04.05	14.00-16.00	Team		
		19.00/19.30	GEV/Elternversammlg.		Themenbezogen
Mo.	18.04.05		4. WP-Phase beginnt		
Mi.	20.04.05	11.00-16.00	Tag der offenen Tür		
Mi.	27.04.05	14.00-16.00	Team		
	01.05.-16.05.03	?????	Türkei Gegenbesuch		
Di.	03.05.05 (30.5.)		Vergleichsarbeit		Mathematik

Tag	Datum	Uhrzeit	Veranstaltung	Verantwortliche/r	Bemerkungen
Mi.	04.05.05	14.00-16.00	kein Team		
		11.00-13.00	erw. SL-Team	SL / gewählte Vertr.	
Fr.	06.05.05		unterrichtsfrei		
Di.	10.05.05 (1.6.)		Vergleichsarbeit		Deutsch
Mi.	11.05.05	14.00-16.00	Fb.-K. Sozialpäd./LW		
Di.	12.05.05 (3.6.)		Vergleichsarbeit		Englisch
Fr.	13.05.05		Abgabe selbst. Aufg.		
	17.05. - 18.05.05		Pfingstferien		
	19.05. - 20.05.05		AZVO-Tage		unter Vorbehalt
Di.	24.05.05	9.00-16.00	Studententag		
Mi.	25.05.05	16.00	3. Gesamtkonferenz		
Mi.	25.05.05		Bewerbungsschluss		Schüleraufnahme
Mi.	01.06.05	9.00-14.00	Fb.-K. Verw./Contr./Eva		Schuljahresorg.
Fr.	03.06.05		Abgabe d. Dokument		
Mo.	06.06.05		Punkte/Kommentare		
Di.	07.06.05	16.00	4. Schulkonferenz		
	07.06.-10.06.05		Vergleichsarbeiten		mdl. Prüf. Engl.
Mi.	08.06.05		Schreibtage		
Do.	09.06.05		Wandertag		grup.-Übergr.-nd
Do.	09.06.05	ab 14.00	Versetzungskonferenz		Anwesenheitspflicht
Mo.	13.06.05		Abgabe der BB		Korrektur im Tea
Di.	14.06.05		Wandertag		grup.-Übergr.-nd
Mi.	15.06.05	14.00-16.00	Team		Ferlensicherung
Do.	16.06.05		Abgabe der BB		SL z. Unterschrift
Mo.	20.06.05		letzte Korrekt. BB		
			Stichtag Fehlzeiten		
Mo.	20.06.05		"DEADLINE" BB		Büro kopiert
Di.	21.06.05		Abschlussfeier		Verabsch. 10. Kl
Mi.	22.06.05		Ausgab. BB/Zeugnisse		
			arschl. Kolleg. Frühstü		
Do.	23.06.05		Aufnahmegespräche		
Fr.	24.06.05		Aufnahmegespräche		
	22.06.-06.08.05		zentrale Ablage Sommerferien	alle Kolleg.	Kl-Büch., DokLe
	01.08.05		Antragsfrist Teilzeit	Interess. Kolleg.	2. HJ., Sj. 05/06

Picture 1 presents a fragment of the *year's plan*. It is a plan of the dates at which individual or collective school activities should start or end, e.g. the writing of documentation about the Learning in Practice. The year's plan is an official mediator, designed according to explicit and implicit rules of the educational system (Daniels, 2006). It is distributed to all teachers of the school, and its implementation is controlled by central educational authorities. Time should be 'followed' in accordance with the plan; consequently, schooling should 'proceed', and students should 'progress'. The temporality of the year's plan is enacted in the following dialogue between the teacher Monika and Samira, which took place a little bit before the end of the first semester of the second school year:

Extract 1

1. **M:** /Die Doku Samira? Wie sieht die Doku aus, hast du alles zusammen? Bist du

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/The documentation, Samira? How's it going? Do you have everything

2. dir klar, dass es bald soweit ist, Abgabetermin?
in order? Do you realize that the deadline is coming up?

3. **N:** ~Ja. Yes.

4. **M:** Hast du's (es) im Griff?
Will you manage it?

5. **N:** ((nickt/nods))

6. **M:** Gut.
Good.

7. **W:** /Sehr gut.
/Very good.

(Transcript of video-recording, Communication Group/ 29th of November).

What becomes visible here is that the teacher not only teaches, she also coordinates the unfolding of action in time—and assesses students by using this as a criterion. The temporalization of educational processes is a common subject studied in anthropological educational research. Chevallard has demonstrated, through historical analysis, how the contemporary organization of education and learning is based on time and how it proceeds sequentially, and argues that 'le maître est un chronomètre' (Chevallard, 1986; Chevallard & Mercier, 1987, cf. Bilstein, Miller-Kipp, & Wulf, 1999). Let us now have a closer look at the overview of the year's plan of the School for Learning-in-Practice:

- a) Beginning: two-week interdisciplinary learning projects
- b) about 4 weeks: beginning of the Learning-in-Practice-Projects/writing of daily reports
- c) Counseling Week
- d) about 4 weeks: Continuation: Learning-in-Practice-Projects/preparing documentation about the Learning-in-Practice-Project
- e) Presentation of the Learning-in-Practice-Projects in class
- f) Submission of the documentation to be assessed
- g) End of the Learning-in-Practice-Projects/ Assessment of Results
- h) Celebration – Holidays

This plan is repeated twice (two school semesters). The last assessment marks the end of schooling. It becomes visible that not only does the plan measure and split time, it also has some ‘inner logic’ of a linear augmentation of the learning activities. The time which the year’s plan encompasses seems to be quantified, continuous, and teleological: at this school, there is always a next step to follow; one activity leads to the next.

What is very important regarding the year’s plan is that the student’s development should coincide with it. Everyday practices such as talking with the students about their plans and the repeated ceremonies and rituals, as well as reports and other technologies which we will examine in the following all *translate* the time ritualized at school into personal development—thus stabilizing, directing, and normalizing it. As a result, development and schooling are synchronous so that the development unfolds in the given school time of four semesters (two years). On the basis of the year’s plan, a series of material-semiotic tools are arranged in such a way that time and development is given a direction so the marginalized students of the School for Individual Learning-in-Practice can enter the job market. One of these tools deserves particular attention: the card of absences.

The Card of Absences: Spatializing Time

The students of the experimental school for “Individual Learning-in-Practice” are physically separated and distant from their teachers for most of the school time. For three days a week the teachers cannot be present at the sites of internships, where students must work on their individual Learning-in-Practice projects. The school is, however, performed as the centre of the organization of students’ development. Even though external mentors are there and supervise the students, the school still needs to observe the students’ action outside the school establishment, as well as internally evaluate, control, and direct it. A materiality used in this context which mediates the presence of teachers during their absence and traces the students’ movement is the so-called ‘card of absences’ (s. Picture 2).

The card of absences creates a continuous temporal space which can be measured and controlled. A variety of everyday life events, activities, and experiences is translated on it into spaces coded

by numbers (e.g. 8.00-12.00) or labels (e.g. Wednesday). An empty space on the card indicates ‘absence’, i.e. not participating in an activity, while a filled-in card indicates ‘presence’. A past “time-space” (in German: “Zeitraum”) is fabricated in this way. Samira, like the other students, is obliged to confirm the fact that she has indeed been present at the site outside school (out of the

Name: _____			
Anwesenheit am Praxislernprojekt für den Monat: bitte Datum und Uhrzeit eintragen:			
Mittwoch	Donnerstag	Freitag	Gegenzeichnen
22.10.03	23.10.03	24.10.03	_____
29.10.03	30.10.03	31.10.03	_____
		_____	_____

Falls diese Karte gefunden wird, bitten wir um Rücksendung an obige Adresse.

Picture 2: card of absences of Samira

teacher’s reach) at a given time. The fabricated temporal space is valid when certified by the signature of a second person who was a witness (“Gegenzeichnen”) to the student’s presence. Samira is responsible for keeping her card, filling it in, and having it signed by an adult in charge of the non-school site. The card translates action and fabricates a past

which becomes visible. It resembles a card that real employees are obliged to use. As a result, the teacher, who was not an eye-witness, can, in a way, witness and control the presence or, more accurately, the *absence* of the student. What is really interesting about this card is that it ‘travels’ between sites of internship and school signifying the students’ motion, and is controlled by two institutes whose approval the student seeks. ‘Long-distance control’ is thus enabled (Law, 1986, 2002)—which quite a lot of students did not necessarily approve of, but which functioned without any resistance in the case of Samira.

Enacting Pasts and Objectifying Action

The function of the school, however, required more than the control of students’ presence or absence, or of the frequency and regularity of their learning. Controlling Samira’s *presence* at the right time and place was of primary importance but not enough; the teacher also needed to witness her *performance*—by maintaining the right form of presence and intervening in it. To enable this, Samira, like all students, was supposed to write daily or weekly reports for her personal teacher on her activities carried out during the teacher’s absence. An example of these reports is presented here:

Extract 2

Tagesbericht vom 18.02.2005

Am dritten Tag habe ich eigentlich nichts besonderes gemacht. Ich war wie immer um 9.45 Uhr dort. Ich habe sofort die Handtücher gefaltet, als nächstes habe ich... Um 10.00 Uhr kam der erste Kunde, er hatte einen Hund dabei, der die ganze Zeit bellte und nervte. In der Zeit habe ich die Lockenwickler abgemacht, die ich gestern eingedreht hatte: Es sah richtig gut aus. Also kurzgesagt war ich auf mich stolz, die Locken sahen richtig toll und sauber aus bis in die Spitzen. #Mike# fand das auch! ... Das mit der Frisur hat nicht so gut geklappt, aber zum Glück kam eine Kundin, bei ihr sollte Maria dasselbe tun. Ich habe von Anfang bis Ende richtig beobachtet. Und Mittwoch probiere ich es noch einmal.

Daily report of 18.02.2005

On the third day I actually did nothing special. As always, I was there at 9.45. I immediately folded the towels, then I ... At 10.00 o'clock the first customer came—he had a dog with him which barked and got on our nerves the whole time. In the meantime I took off the curlers (off the doll head), which I'd put on yesterday: it looked really good. In short, I was proud of myself, the curls looked really great and well-done right to the roots. #Mike# said so too!... With the haircut it didn't work so well, but fortunately a customer came, and #Anna# was to do the same for her. I observed attentively from the beginning till the end. And on Wednesday I am going to try this again.

(Daily Report of #Samira#, Copy of Original Document⁴⁶)

Samira documents here in writing the tasks she was engaged in as well as their evaluation by the adults working at the place of her Learning-in-Practice project at a hairdresser's. It is the third day of her internship; the narration starts at 9.45 a.m., then moves to 10.00 a.m., etc. A continuous temporal past space is fabricated here—just as in the other materialities presented above. Throughout the report, everyday life events are *objectified* into sentences written in the (German) past tense and put in a sequence, producing continuity. Last but not least, in the German construction “Ich habe + Partizip Perfect + *from the beginning till the end*” exactly this continuous temporal space is summed up and a connection to future events is made (“And on Wednesday, I am going to try this again.”). Throughout the narration, the student is given an agentive position. The student writes and the teacher can read the sentences into which events

⁴⁶ The original spelling and format in German of all the extracts presented here have been preserved.

are translated. Through the fabrication of this temporal past space the teacher can witness and evaluate the performance of the student at the place of the Learning-in-Practice—however, only from the perspective of the student. The teacher becomes a witness—more so than through the absence cards. The daily and weekly reports mediate the teachers' presence at non-school sites. What is highly important here is that the private becomes exposed. Students not only report on what they did, they also report their feelings. Reports are written in a form resembling personal diaries, but they are addressed to teachers and follow the teachers' instructions.

Students in the School for Individual Learning-in-Practice were expected to write daily or weekly reports on their activities. These reports served two purposes: first, they mediated the teachers' presence at non-school sites and facilitated the teachers' supervision. Secondly, they were supposed to support the students' own self-reflection about their past as well as support them in developing an orientation for the future. This is explicitly manifested in another report written by another female student of Turkish ethnicity and entitled: 'My last day at the hairdresser salon #name#'¹ (translated from German by M.K.):

Extract 3

I decided not to continue my internship at the Hairdresser's #name#. There were a lot of reasons why I wanted to change my internship: for example, because it was located too far away—I wanted a site of internship that is close to where I live. (Another reason was that) it was not for me, the hairdresser's is simply not my world. I had the impression that I was like a cleaner. They gave me only cleaning tasks ... I am now completing my internship in the Cafeteria and it is a lot of fun. I hope that I can also orientate myself for my future (Daily Report of #Huriet#, translated from German by MK).

The student here narrates an unsuccessful internship that she broke off. She refers both to her personal feelings in regard to the internship and to rather objective aspects of it such as its location. The student uses informal language ('was not my world', 'a lot of fun') and tries to apologize to the teacher, at whom the report is directed. The past to which the report refers has meaning only seen from the perspective of the present and in regard to the context of its production. Reading the report, we cannot know what (has) happened exactly, but only what the student is writing to the teacher. What is hereby forgotten is the richness and probably the ambiguity of the student's ongoing and dispersed experience (Stephenson & Papadopoulos, 2006), which might have also been related to exclusion, lack of respect, and other negative

experiences often complained about by marginalized young subjectivities (Hansen & Jarvis, 2000). What is concealed in the above-mentioned examples is that Samira and Huriet are somewhere ‘in-here’, e.g. in the classroom, and regard what is happening ‘out-there’ at the places of their vocational training. They remember and forget past events (Middleton & Brown, 2005) translate ongoing action as well as emotional and sensual qualities into a meaningful whole, and witness an either ‘successful’ or ‘unsuccessful’ future. Different narrations would have enacted different pasts as well as different futures, because the report *mediates* the relation between the past, the present, and the future. Seen from a relational point of view, time is not ‘out-there’ (in this case the place of internship) but is the result of the mediation between the ‘out there’ and the ‘in here’ (in this case the classroom).

The narration of an unsuccessful internship presented above concludes by informing us about the present and expressing the student’s concern about her future professional orientation: ‘I am now completing my internship in the Cafeteria and it is a lot of fun. I hope that I can also orientate myself for my future’. It seems that the report not only enacts a past, it also mediates or fabricates the relation between this past and a concrete version of the future. While recalling a particular version of the past, the future is witnessed, and it is through the enactment of the past that the future is enacted.

Referring to both reports presented above, one could say that mediation has two interrelated aspects: a) it is semiotic and b) it is material. ‘Semiotic’ indicates that the relation between the past and the present includes meaning. It is a signifying relation between signs. Pickering (1995) comments: “Semiotics, the science of signs, teaches us how to think symmetrically about human and non-human agents (...). The agencies we speak about are semiotic ones, not confined to the rigid categories’ traditional thought imposes” (Pickering, 1995, pp. 12-13). The students are expected to report on what they did, but also to express their feelings and share them with the teachers. The reports are written in a form resembling a personal diary but are addressed to the teacher and should fulfill the institutional norms. In this sense the report brings together self-reflection and school discourse (Fairclough, 1992), autobiographical memory (Brockmeier, 1999) and institutional or organisational memory (Middleton & Edwards, 1990). Not only pasts, but also presents and futures are performed and interrelated here. Middleton et. al. have emphasized how the past and the future are *performed* in the course of the same act:

At the same time, remembering also involves a concern for the future significance of recalling a particular version of the past (...) Remembering involves a simultaneous distribution of possible pasts and potential futures in the course of the same act. In this way the past is transformed into an event that carries with it a range of determinations for how the future might unfold (Middleton, Brown, & Lightfoot, 2001, p. 126).

As becomes clear in the work of Middleton et. al., what is very important aside from the semiotic dimensions is that the report also has a material presence. The semiotic relation between the past and the present is also material, i.e. materialized or objectified (Haraway, 1997). The report shapes both the individual memory of the student and the institutional memory of the school. Teachers and students can access this piece of information from very different contexts for various purposes. The report will be used in further communication between the students and teachers and is maintained as a written documentation for purposes of evaluation. In all these different contexts, it is the report that carries memory rather than the teachers/ students themselves (Middleton et al., 2001). The report can thus be understood as an actant-mediator that fabricates a particular past which is enacted each time the report is read, referred to, or used in the present.

Directing Development through Counseling

While the use of cards of absences and written reports organizes the student's development on a daily basis, establishing a continuity from one day to the next, other material-semiotic practices are responsible for directing the student towards choosing a profession and becoming a job-seeker. It has been a standard procedure at the School for Individual Learning-in-Practice that, in supervising their students, personal teachers initiate communicative actions (interventions) with their students in order to direct them towards a choice of profession. These interventions correspond with the results of the evaluation of students and are meant to prepare them for entering the job market. The different aspects of these interventions—so-called 'counselings'—are summarized in a school official publication:

Extract 4

Counseling is the ‘Alpha and Omega’ at #name of the school#. It usually exceeds normal scholastic counseling, especially when the interests and everyday life of the young people are involved and it deals with constructively handling (behavioral) problems. ((...)) ‘Who am I?’ and ‘Who would I like to be?’ are important questions and the ‘adjustment of the real and ideal self’ is a central goal (s. Self-identity). Besides directive forms of counseling, the non-directive form is particularly important in (social) pedagogical *counseling*: it assumes that young people are capable of reflexivity, rationality, intentionality and meaning-orientation, knowledge-ability, emotionality, the ability to verbalize and to communicate, as well as the ability to act and be autonomous. The young person is seen as an acting being, i.e. his/her behavior is also based on goal orientation, planning, decision and meaningfulness, about which he can give information, as long as he is aware of the contents of his mental processes...

(Extract from: The ABC of the #School for Individual Learning-in-Practice#, translated from German by MK).

‘Counseling’ at the School for Individual Learning-in-Practice takes place continuously in informal forms and once, in the middle of the school semester, as an official event. The meeting of the student and the teacher here is intimate and it was the only context to which I did not have access during my ethnographical research. It is impressive here how teachers in their official accounts make such explicit use of the discourse of self-identity and responsibility, uncritically adopting psychological categories as well as techniques—what we described as technologies of the self in the sense of Foucault (Foucault et al., 1988) in the previous maps. As we can read above, exactly what this counseling aims at is fabricating a self and activating it (Rose, 1999). What is not revealed in the official school publication is the direction toward which the self should be activated and the values transmitted. Counseling is not only based on discursive interaction but employs a variety of tools which participate in *doing* a normalized student’s development towards entering the job market:

Extract 5

Protocol of the Counseling Discussion on Individual Learning Plans and on Evaluation of the current Results of Learning

Pedagogue (Teacher): #Name of the Teacher#

Date: # Date#

Student: # Samira #

Materials: OK

Signature: (of both Personal Teachers)

File: OK (very orderly)

0. General Discussion on the way of Learning at the #Name of the School# and at the Place for Individual Learning-in-Practice

She has made the decision to take on professional training as a hairdresser.

An appointment with her mother is to be organized.

#Name of the Teacher# will speak with the future employer about a contract for professional training.

((originally written in hand)).

((continues with ten more categories on the overall school performance, altogether 4 A4 pages))

(Extract from Protocol, translated from German by MK, original format preserved).

The protocol presented above is a valuable source of information—both for the teachers and for the investigation pursued here. At first, a present is enacted: at the beginning all the present actors (student and teachers) and actants (materials the student brought with) are mentioned. The student comes and is obliged to bring with him/her his/her reports, absence cards and personal files. Their presence is certified through the signatures of the authorities, i.e. the personal teachers. Teachers also bring their notes and memos (see previous map). In the protocol presented above of the Samira’s counseling, we read that all actants were present (absence cards, reports, written tasks, teachers’ memos, students’ files, etc.) and indeed they were “very orderly” (translated from German by MK). Through the employed materialities, different sites and spaces become connected. Samira has only formulated her purposes in the course of what might be seen as mainly discursive interaction. The protocol, however, translates this discursive interaction into something non-discursive:

A discursive utterance becomes non-discursive when it is treated not as a linguistic production, but as a material artifact that is to be placed and ordered within an existing network of related materials and equipment (Middleton et al., 2001, p. 129).

We can thus say that the counseling discourse is not only mediated through materialities such as the notes or the reports, but is also materialized in new objects (the protocol) which are also produced in order to actualize further connections. The unofficial notes and official protocols, as the one presented above, continue their ‘journey’. They become mobile and enter the internal institutional space of the teachers’ meetings. There, teachers will exchange views, add new information on ongoing processes and decide the next form of feedback which they should give to a student or to the whole group. New materialities will further be produced and further counseling will take place.

What is also interesting is that this material-semiotic interaction is translocal. Different sites (i.e. different fabricated places) are involved which could be divided into private spaces or internal public spaces: students respond to the questionnaires alone in the learning laboratory or outside the school, they write their reports at home or accomplish various tasks related to reflection silently and individually in the classrooms near the main one—these would be private spaces. Alternatively, they are individually consulted by the teacher in an internal public space. In similar spaces, teachers and other institutional representatives meet without the students. All these sites are interconnected via mobile materialities. The mobile materialities are present even where some actors (either students or teachers) are absent. They open up the private space for access by the (internal) public, so that the discourse formation unfolding in the private is controlled through this public. Through this materialization, the interaction taking place at different sites (private, internal public, public spaces) becomes a whole that is controlled by the school and has a common focus: the students’ school performance and professional interests.

Answering Questionnaires: From the Past to the Future

Although it shaped institutional memory, the protocol presented above did not carry meaning and functionality itself, but only *in relation to* other actants, i.e. other documents. One of the actants that went together with the protocol which was attributed particular importance in the

school were various questionnaires that aimed at stimulating and directing the students' self-reflection processes. One of these questionnaires consisted of questions such as: 'Have you been reliable?' 'Have you made your own proposals of tasks?' 'Have your proposals been accepted?' 'Have you cooperated with dedication and pleasure?' 'Have you found the work meaningful?', etc. All of these questions were to be answered by checking a box next to the right answer: 'Yes to some extent no' and were followed by six semi-open questions on success, absences, and the written documentation of the vocational education project. Samira usually answered these questions in the expected way. However, she did not fully complete another questionnaire, although enough time was provided:

Extract 6

Bitte vervollständigen Sie folgende Sätze:

Please complete the following sentences:

Veränderungen finde ich - ist ~~die tiefere~~ ein anderes Wert für das Leben.

Changes are – it is ~~the deepest~~ a different value in life.

Arbeit bedeutet für mich – Befriedigung zu finden in meinem Tun

Work means for me - to find satisfaction in what I do.

Bewerbung ist – ein Schritt in die Welt, der über innere Hürden geht.

Applying for a job is – a step into the world, which goes beyond inner hurdles.

Realität ist – die Kontrollinstanz eigener Wünschvorstellungen

Reality is – the control of one's own wishes

Ziele – sind dazu da, auf sie zuzugehen.

Goals – are there to go towards them.

Der Arbeitsmarkt ist

The job market is

Sicherheit ist

Security is

Ein Ausbildungsplatz ist

A place for vocational education is

Zukunft ist

Future is

Geld zu verdienen

To earn money

Meine schlimmste Befürchtung ist

My worst fear is

Meine Chance sehe ich in

I see my chance in

((Not fully completed))

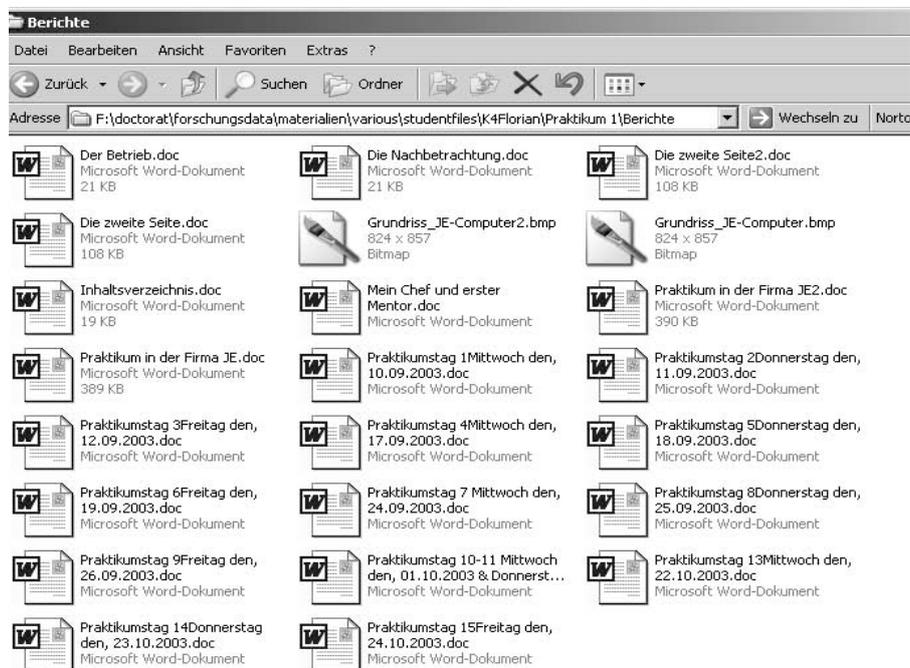
(Copy of Original School Document filled in by hand by #Samira#, original orthography has been preserved, the format has been slightly contracted).

Such questionnaires were supposed to be filled in according to the teachers' oral instructions and the answers were afterwards discussed in the classroom. To ensure quiet and calm time for their reflection, students were allowed to move to other school rooms, as Samira did. Pedagogy here did not only respect privacy or individuality; it constructed and exposed it. By completing the questionnaire, the student was supposed to reflect on his/her past. A self to whom all sentences refer was objectified in the questionnaire. Students were supposed to finish the sentences chosen by the teachers, and thus reflect on the *suggested* issues. A semiotic order was thus imposed and the discourse performance was controlled.

The performance of past and future was mediated through this questionnaire. It was more official than the reports described above and required that concrete information was submitted according to an implicit classification system (Bowker & Star, 1999). Out of the complex fluidity and variety of events and situations, a student was supposed to select particular aspects and 'forget' others (Middleton & Brown, 2005), combine different actions to create a whole, and answer a restricted list of closed questions concerning skills important for the job market. Every actant here provided his/her/its own information: the student did not have everything 'in the mind' and the questionnaire itself did not provide all information requested. The questionnaire not only enabled, it also *ordered* the process of remembering and forgetting in a sequence of questions and choices. In this way, the questionnaire supported the *ordering* of everyday action (Law, 1994). The mediated message was clear: "work and money is important, the job market at the moment is bad; as a result 'I' should realize where my chances lie and grasp any opportunities that come my way in order to enter the job market". According to Bateson, one could say that the semiotic order implied in the questionnaire has the following double-bind structure: the future of the students is dark because of their education and social position. However, they should be satisfied with this and try their best anyway (Bateson, 1972/ 2000, pp. 271-278; Bateson & Bateson, 1987; Engeström, 1987; Fichtner, 1996b). What was excluded from the imposed semiotic order was that the future could be fundamentally different than what it was imagined from the perspective of the present.

The Long-lasting Continuity of Files

While reports or questionnaires were used situationally to enact and mediate the relation between a particular past and a particular future, another mediator lasted much longer: the student's personal files. Each student of the School for Individual Learning-in-Practice maintained *two files: a paper one and a computer one*. The paper files were stored on shelves in the classroom of the student's Communication Group. The computer file was stored in the computer network of the school and was accessible from different school rooms. It contained all the texts written by the student and all the information he or she had collected since the beginning of the 9th grade. There is a slight difference between the computer personal file and the other files: with the computer file, all data could be completely changed, combined, re-combined, and *transformed*; everything is always *'in progress'*. Picture 3 depicts a fragment of such a file, where dated documents written by the student during one school semester are in sequential order. The documents written in the previous semesters were arranged in the same way. Why is it important to have everything dated?



Picture 3: Student's PC file

Here time is spatialized. Documents are dated and arranged in chronological order so that a temporal order is created. The student is supposed to maintain his/her file by updating it regularly. Dated documents are kept together, so that it is always clearly visible if a document of a particular date is missing and should be supplied. There is always a next step to follow; one activity leads to the next. The further the schooling proceeds, the more convergent the discourse formation. Experience is being filtered and possibilities are reduced; long descriptions on past events become increasingly dense and different voices are excluded so that a restricted number of statements come into view in the end, according to which the student's professional choice is decided (Kontopodis, 2007a). The relation between the past, the present and the future is mediated and enacted so that time is quantified, continuous, and teleological.

By the end of the school year, the students were supposed to make important decisions about their lives, and plan their futures. They could choose, then, among a few already-known possibilities in the knowledge that that the broader socio-material aspects of their lives would remain in the future as they were in the present (i.e. high risk of unemployment, reduced social security funds, low social positioning). The students made use of their files to write CVs and application letters, they portrayed and advertised themselves by narrating their past, they applied for various vocational trainings or low-paid jobs. This process was embodied in the student's file(s) and its results were materialized in the resulting school certifications, CVs, and application letters. In this way, students not only witnessed their future from the perspective of their past career in educational institutions: this future also became the present, as we will see in the following map.

Time, Development and Mediation

In the process of working on his theory, Vygotsky shifted the focus of his attentions from the relationship between a child and an abstract sign to the communication between a child and another human and the mediators enabling this communication (Keiler, 2002). Vygotsky's concept of mediation could be seen as a cornerstone of this theory and has been much discussed in socio-cultural and cultural-historical psychology (Cole, 1995; Lompscher, 1996; Pourkos, 1997; Stetsenko & Arieivitch, 2004a; Vygotsky, 1931/1997b, 1934/1987; Wertsch, 1991). Papadopoulos

regards the emphasis of Vygotsky on mediation as an anti-modern orientation, and focuses on the strong political implications of the relations between notions of subjectivity, mediation, context, and ‘performance’⁴⁷ in Vygotsky’s work (Papadopoulos, 1999). However, mediators were not thoroughly examined either by Vygotsky or by other psychologists of his time. Vygotsky himself admitted in 1931 that no psychologist of his time—including himself—had deciphered the notion of tool in regard to psychological processes such as memory and thinking:

The indeterminate, vague meaning that is usually connected with figurative use of the word tool actually does not lighten the task of the researcher interested in the real and not the picturesque aspect that exists between behavior and its auxiliary devices. Moreover, such designations obscure the road for research. Not a single researcher has yet deciphered the real meaning of such metaphors. Must we think of thinking or memory as analogous to external activity or do devices play a certain role as a fulcrum giving support and help to the mental process? What does this support consist of? What, in general, does it mean to be a means of thinking or memory? We find no answers to these questions among psychologists who willingly use these vague expressions. Even more vague is the idea of those who understand such expressions in a literal sense. (Vygotsky, 1931/1997b, p. 61).

Vygotsky introduced the idea that child development is possible only through mediation. However, he was quite unsure about the difference between signs and tools. Moreover, in the ideological frame of modernist epistemology, he did not reflect on how his own mediations and tools—or, in more contemporary terms, material-semiotic practices—could be related to *doing* development. Development as we know it from mainstream psychological theory and day-to-day school institutional practices is only one way of how the material world and relations of meaning can be enacted or transformed. I believe that it is a mistake to conceptualize time as an objective reality existing ‘out there’, without revealing the ways in which the past, the present and the future—as well as the relations between them—are produced ‘in here’ during the involvement with different materials and tools. Pasts and futures are *performed* during material-semiotic action and can be performed or enacted in various ways, which in turn has implications for action itself.

As we know from semiotics (Pape, 1988), a relation requires a triad: teachers, students, and mediators. This relation fabricates development as a particular mode of organization of

⁴⁷ I use this contemporary term to summarize an aspect of Vygotsky’s approach (for details see Papadopoulos, 1999, p. 322).

subjectivity. The role of mediators is crucial here—if we refer to examples from this map we immediately think of the year’s plan, the cards of absences, the daily report, questionnaires for planning the future, protocols of counseling sessions. Different mediators lead to different temporal and spatial orderings, different organizations of subjectivity and different developments. The analysis presented above shows that the mediators (Vygotsky), the ‘actants’ (Latour), and the ‘jokers’ (Serres), participate in determining what is considered and how. Although the relation between the student’s past, present, and future is *mediated*, mediators in the above-presented cases function more as *intermediaries*, i.e. their mediation is not visible. As Latour writes: ‘in a world made of intermediaries [...] there is a time separated from space, an immutable frame to measure displacement and, by definition, no process’ (Latour, 2005b, p. 178).

A lot ‘thirds’ have been designed in modernity in order to objectify, regulate, channel, institutionalize, in short to *fabricate* development in terms of sameness, i.e. in order to exclude difference. While everything ‘always already differs from itself’ (Barad, 2007), modern institutions work continuously to exclude difference, to limit diversity, and to control development (Audehm & Velten, 2007). As a result, the past, the present, and the future appear to be qualitatively *identical* to each other (Stengers, 1997). Considering, for example, the assumed stability of the broader social situation, it is believed that students should be prepared to live and work in a future society that will be similar to the present. In the next map, we will explore some more of these actants such as application letters, certificates, and CVs, examining more closely how the material-semiotic practices in which these actants were involved shaped the way students thought about their pasts and their futures.

Map 5

Ordering and Stabilizing Human Development

The word *ordering* indicates that a lot of work and action is required in order for development to be fabricated so that existing relations are maintained (see also map 1). Development is not a priori linear and teleological. In the previous map, we analyzed the function of a series of mediators such as the year's plan, the card of absences, the student's reports, and the student's computer and paper files. They all fabricated time and development by creating a linear connection between a student's past, present, and future oriented towards entry into the job market. Buildings, documents, reports, memos, files, and other materialities, as well as communicative action, supervision practices, discursive formations, and the teachers' and students' agency are all needed for development to unfold as 'planned'—which was the case with Samira, the female student of Turkish ethnicity to whom most of the materials presented in the previous map referred.

In the following analysis, we will examine the last months of Samira's schooling and the way she indeed entered the job market, thus being considered one of the most successful students of the School for Individual Learning-in-Practice. We will, however, critically distance ourselves from the school discourse, examining how options were posed to Samira as dichotomies such as 'either now or never' or 'hairdresser or housewife', encouraging her to act in a specific way, as a self-responsible subject. Following the relational-processual approach outlined so far, we will also pay particular attention to the role mediators played in objectifying and stabilizing the development of Samira and on how much work was required for this mediation, which excluded different possibilities to act, to remain invisible.

Economists say: *'Now!—before it is too late'*

So far we have explored how a series of material-semiotic practices such as writing reports, following the year's plan, answering questionnaires and protocolling counseling sessions spatialize time and organize student development towards being job seekers. In the following, we will explore more closely what took place at the School for Individual Learning-in-Practice in the last

part of the school year—just before the students graduated. *Doing* time and development took a particular form after the month of April, and this became very visible in the case of Samira. It all started with an intervention initiated by the Ministry for Social Affairs and performed by a teacher of the School for Individual Learning-in-Practice who specialized in professional orientation:

Extract 1

The end of the school year is approaching, which also means that students will find out whether they have earned the school certificate or not—in either case they will no longer hold the status of a student. During a general school conference a specially educated teacher, who has recently concluded a further training, informs the other teachers about the new laws concerning the transitory status of their students, about new educational institutions, and the (problematic) social/economical situation of the city at the moment.

Two weeks later, this teacher, #Esther#, visits the Communication Group, where an information meeting is taking the place of the regular group discussion. All students already know Esther, although she does not teach or supervise this particular class. I sit quietly with the students and personal teachers and listen to her. The points of her speech are:

1. Students who finish this school are “just regular unemployed adults”. They will no longer receive child benefits from the state; they must either enter another educational institution, or contact the ministry of social affaires and apply for social security benefits for unemployed persons.
2. Because of new legal regulations, their parents will also no longer receive any money from the state covering the part of the rent amounting to the cost of accommodation for their child/children. The students will have to seek a different form of financial help from the state, Social Security benefits or unemployment benefits, and will have to pay their part of the rent, otherwise the family will not be able to afford the rent and the students will have to move out, their parents maybe even facing eviction.
3. There are about 30.000 unemployed young people between the ages 18 and 25 “out there”.

During a special meeting, a specially qualified teacher of the School for Individual Learning-in-Practice informed the students about their situation after they graduated from this school. However, the teacher not only informed but also commented on the situation, delineating it as an emergency. Accordingly, the students were supposed to act—quickly—to prevent economical trouble. As already discussed in map 2, the situation which she referred to has been analyzed in depth by Nikolas Rose, mainly with regard to the English social security system. Rose argues that

activity has replaced dependency as the welfare system has been reformed to a ‘workfare’ system, and many social phenomena are considered not in economic terms but as subjective-psychological conditions (Rose, 1999). This change here was portrayed as especially affecting young people for whom the new legal regulations denied all forms of social security—including medical insurance and rent benefit. Consequently, the students should be *activated*, accepting *responsibility* and managing on their own, *independently* of their families/parents. This was what they should do ‘*now*’:

Continuing Extract 1

Esther interprets the three points which she discusses in the following way:

1. “It is better to search for a job quickly now (when you still have the possibility to choose), than later (when you will be forced to grasp the first opportunity that presents itself).
2. After finishing school, the students will have the following possibilities of earning the living:
 - a. by doing voluntary social work for a year in the civil service (in Germany this can be an alternative to military service) or a similar program.
 - b. by entering another school (of a similar level as the present one, as their certificate does not enable higher education⁴⁸). This choice is problematic: the problem is that the students—as Esther tells them—are 18 years old, so they are no longer obliged to attend school, which also means that no schools are obliged to “take” them.
 - c. by applying for and being accepted for professional training (an “Ausbildung”, again for low-skilled and low-paid jobs matching their school certification). Esther advises the students that this option would probably work best, especially in combination with moving to another part of the country where there are more industries. Statistics say that there are 40% of all job-training positions are in the free market, while the other 60% are to be found in “virtual companies” set up by the government especially for educational purposes. (Virtual companies were started because there were fewer places of professional education on the free market than young people living in Germany who belonged to this educational category)).
3. Students should apply both for a professional education (choice c) and for the lower of the educational possibilities (choice b) so as to ensure the “automatic” prolongation of their

⁴⁸ The German names of these institutions are: Oberschule, Berufsschule, Modulare Qualifizierungsmaßnahme, Berufsvorbereitende Qualifizierungsbausteine, Berufsqualifizierende Lehrgang. All these names indicate professional qualification. They differ in their duration, subsequent opportunities and salary, amount of class-attendance, and level of cooperation with the free- economy and/or state organizations.

student/non-adult status and their means of living. If they do not act immediately they will face poverty.

4. New working conditions and professions are emerging that require a high level of education and specialization. For example, cleaners who are hired by big cleaning companies associated with housing estate companies are required to know how to use different chemical substances, and various devices. Therefore, nowadays there are special educational institutions that provide such a training.

(Extract from Fieldnotes/ Communication Group)

What this socio-political and economical system compels students to do is to actively apply for jobs and professional trainings organized by free market institutions and enter the job market *immediately*, as soon as the chance arises. The alternative option is state-run professional education in various forms. Knowledge and certificates, which students should pursue rather than being inert and careless about their future, are required even for the most low-paid jobs. These fieldnotes from Esther's speech are of primary importance, as it becomes clear how the youth subjectivities I am concerned with are perceived in economical/socio-political terms. There is no reflection about exclusion, suppression or poverty. Although these youth subjectivities are the cheap and flexible working class, the teacher does not view them from a sociological perspective, instead she sees them individually as '*job-seekers*' (Rose, 1999). The wider economical and socio-political context of the technologies of the self discussed in the maps 2 and 3 manifests itself here.

Continuing Extract 1

During Esther's speech, only Anton and Samira listen carefully, Felix is playing around and laughing with other students, Franz falls asleep and Thomas goes out to the restroom.

Esther continues, emphasizing that there is intense competition, and says loudly: "it does not automatically go on after this!" Moreover, she adds, the most important things in this situation are the students' personal/social contacts—which they were supposed to develop during their Individual Learning-in-Practice Projects. In other words, they are encouraged to engage in networking.

The speech is over and questions follow. Anton asks a question about the year of voluntary social work, and the teacher Monika asks what happens if one has neither goals nor plans. Esther answers that one then becomes unemployed and as such will be later be obliged to follow a low education or

accept a part-time job-position not of one's own choice in order to continue receiving social benefits. Daniel comments: I will remain a student as long as possible.

During the discussion one more piece of information is revealed: military service is paid better than civil service, and child benefits (which students now receive) are higher than unemployment benefits ((So time is not working to their advantage. They are in a kind of bubble about to burst)).

(Extract from Fieldnotes/ Communication Group)

Esther's act at this specific time near the end of the schoolyear can be considered an intervention. All information led to a single and clear conclusion that was formulated by the teacher and not derived out of a discussion with the students. The information concerns their 'next year'. It is April and in June they will no longer be students. What then?

Developing into an Adult

What the state of a job-seeker implies is a particular orientation toward the future which influences one's activity in the present. This orientation is not directed towards future social change but towards the next steps the individual must take to further his/her professional career. In this context, young people are not considered to be agents of broader social change (Wyn & White, 2000) but quite the opposite: it is expected that by grasping opportunities here and there the young people will fit the status quo. For this to happen, the students of the School for Individual Learning-in-Practice must develop into adults and this being-an-adult should replace all characteristics related to being young or adolescent. Development is here conceived in linear terms in a very similar way to Piaget's psychology. As criticized by Vygotsky in 1934:

Piaget represents the child's mental development as a process in which *the characteristics of the child's thought gradually die out*. For Piaget, the child's mental development consists of the gradual replacement of the unique qualities and characteristics of the child's thought by the more powerful thought of the adult. ((...)) With age, the characteristics of the child's thought begin to disappear. They are replaced in one domain after another and ultimately disappear entirely. The developmental process is not represented as the continual emergence of new characteristics of thought, of higher, more complex, and more developed forms of thought on the foundations of more elementary and primary forms of thinking. Rather, development is portrayed as a process through which one form of thought is

gradually and continuously being forced out by another. The socialization of thought is viewed as an external, mechanical process in which the characteristics of the child's thought are forced out. In this sense, development is comparable to a process in which one liquid—forced into a vessel from the outside—replaces another that had previously filled the vessel [...]. Development is reduced to the dying out of the characteristics of the child's thinking (Vygotsky, 1934/1987, p. 175).

Vygotsky's criticism of Piaget refers to child development but could easily be extended to the young students to whom this work refers. Vygotsky criticizes Piaget for portraying development as the gradual death of the child's characteristics while pre-existing forms of adult thought establish themselves in child's thought without any transformation to take place. We have already referred in the book opening to a similar critique of the theory of Piaget by Latour⁴⁹. From my point of view, psychological knowledge is not external to the everyday practices which create the self. Instead, it actively participates in the making of the self as such. Becoming an adult by having the child's characteristics 'die out', as conceptualized by Piaget and criticized by Vygotsky, was mediated at the School for Individual Learning-in-Practice by a series of mediators, as already analyzed in the previous maps. It was also manifested in a very explicit way in the following draft of a CV a student made after Esther's presentation:

Extract 2

German (original)

Persönliche Stärken:	-teamfähig, ebenso selbstständig -Verständnis für Arbeitsabläufe, Organisation, Planung -flexibel, gute Auffassungsgabe [1]
Hobbys:	-Schwimmen und Fitness, -Computer [2]
Berufswunsch:	-???????????????? [3]
Stadt, Datum:	#Stadt#, #Datum# [4]

⁴⁹ For a broader discussion of the differences and similarities of the approaches of Vygotsky and Latour, see Fox, 2000; Mietinen, 1999.

English (M.K.)

Personal Strengths: - works well in a team, but also independent
 - Understanding of work processes, organization, planning
 - flexible, good comprehension [1]

Hobbies: - swimming and fitness
 - computer [2]

preferable career: -???????????????? [3]

Place, Date: #city#, #date# [4]

This draft was made by a student under the teacher's guidance and saved in his computer file where it could undergo modifications and be finalized in the coming weeks. What is of particular interest here is that under the entry "preferable career" (part 3), the student typed a line of question marks in boldface, thus materializing the being-in-process or the becoming-a-self-responsible adult as discussed above. Discourse formation has not been accomplished yet. The student is now supposed to further reflect "on his individual process" (of development) in order to discover his desired profession and make decisions about the future. Exactly this process is materialized in the CV.

Samira is about to Make Decisions for her Future

A quite similar process took place at the case of Samira, the student of Turkish ethnicity we referred to above. As we have already seen in the previous map, Samira's announcement that she wanted to become a hairdresser was objectified and formalized in the counseling protocol of April 29, 2004. For her, becoming a hairdresser, perhaps even a famous one, would be the alternative to being a housewife for the rest of her life:

Extract 3

1. **I:** Und wie erlebst du Erfolg oder warum ist Erfolg für dich wichtig?

Fabricating Human Development

And how do you experience success or why is success important to you?

2. **S:** /Ich will einfach nicht, dass mein Leben langweilig wird.
/I just don't want my life to become boring.
3. **I:** Mm
4. **S:** <CR Also, keine Ahnung, was soll ich ~erzählen, ähm (2.) Ich will nicht einfach
< CR *well, I don't know, what am I supposed to ~say, erm (.2) I just don't want to sit*
5. wie andere ^Türken, oder so, zu Hause sitzen und Hausfrau werden. Ich will auch
at home and become a housewife, like other ^Turks,. I also want
6. mal Berufsleben haben – ein ^erfolgreiches Berufsleben haben und Friseurin ist
to have a career – a ^successful professional life, and although hairdresser is
7. zwar nicht immer so ein erfolgreicher Beruf aber, wenn man es wirklich schafft,
not always such a successful occupation, but, if one really manages it
8. dann kann man wirklich eine gute Friseurin werden, ^Meister z. B. ^Meistertitel
then one can become a really good hairdresser, ^Master e.g. ^ the master title/prize or
9. oder so Meisterprüfung und so, keine Ahnung. **CR** >
a mastery examination and such, I don't know. CR >
10. **I:** Mhm
11. **S:** \Ich will nicht so eine Hausfrau
\I don't want to become a
12. werden
housewife like that.
13. **I:** Mhm Mhm mm (...) und wie fühlst du dich, mit welchen Gefühle(n) ist
Mhm Mhm mm (...) and how do you feel, what feelings are
14. Erfolg verbunden?
connected with success?
15. **S:** Also <wenn ich darüber> wenn ich darüber (nach-)denke, /dann fühle

Well, <when I> when I think about it, I think, / then I feel

16. ich mich wieder so ^wohl.
so ^good again.
17. **I:** Mhm
18. **S:** Ich werde glücklich, wenn ich darüber so was denke
I get happy, when I think about something like that
19. **I:** Mhm
20. **S:** Ich stelle mich (mir) vor so, keine Ahnung, ich werd' erfolgreich oder ich bin
I imagine, I don't know, that I become successful or that I am good at
21. gut in mein (meinem) Beruf und so=o.
my job and so=o on
22. **I:** Mhm Mm
23. **S:** Da fühle ich mich einfach ^wohl.
Then I just feel^ good.

(Extract from Interview with #Samira#, 08. April)

The above interview took place in the middle of the final school semester. I am rather passive and ask only clarification questions. Samira has already told me that success is important for her, and I then ask her why and what it mean for her. In response, she says that becoming a renowned hairdresser is the alternative she dreams of to becoming a housewife. One could say that Samira performs the subjectivity of a young Turkish woman and sees her emancipation in her future professional activity⁵⁰. Samira does not, however, feel ready to leave school and undertake a professional training at a hairdresser's:

Extract 4

1. **S:** äh, manchmal habe ich das Gefühl irgendwie

⁵⁰ The question arises as to whether in Samira's case becoming a hairdresser and thereby thinking along the same lines as her educational institution indeed expresses freedom the realization of an unrestricted imagination.

Fabricating Human Development

uh, sometimes I feel somehow

2. (...) ich ^schaff das nicht, oder so was – keine Ahnung.
(...) that I won't be able to manage it, or something – I don't know.
3. **I:** Mhm
4. **S:** Was, wenn ich irgendwas nicht schaffe, oder so
Like, when I don't manage to do something, and so on,
5. was, dann rede ich mit meiner Schwester darüber,
then I talk with my sister about it,
6. **I:** [Mm]
7. **S:** [und] manchmal mit meiner Mutter,
[*and*] *sometimes with my mother,*
8. aber mehr mit meiner Schwester, und
but more with my sister, and
9. **I:** [Mm]
10. **S:** [sie sagt] mir dann es einfach: ,wenn du das willst,
then she [just tells] me: 'if you want it,
11. schaffst du das auch. Jeder schafft es'.
you'll manage it, too. Everybody manages it'.
12. **I:** Mhm
13. **S:** Sie ^erklärt es mir.
She ^explains it to me.
14. **I:** Mhm
15. **S:** Sie ^zeigt mir, dass
She ^shows me that
16. ich stark genug bin [dafür].

Fabricating Human Development

I am strong enough [for it].

17. **I:** [Mhm] Hast du dafür ein Beispiel zur Erklärung?
[Mhm] *can you give me an example?*
18. **S:** Manchmal bin ich voll schlecht gelaunt oder so, keine Ahnung, oder abends
Sometimes I'm in a really bad mood or whatever, I don't know, or in the evening when
19. wenn ich schlafe, oder so was, dann denke ich richtig intensiv darübe=er nach.
I'm (supposed to be) sleeping, or similar, then I think really intensely about thi=is.
20. **I:** Worüber? *About what?*
21. **S:** Über meine Zukunft und so weite=er.
About my future and so on
22. **I:** Mhm
23. **S:** Und danach, ähm, (2.) habe ich einfach das Gefühl <ich ^schaffe (es) oder>
And afterwards, erm, (2.) I just have the feeling < I ^ can manage it or >
24. manchmal beim Praktikumsplatz, ich ^schaffe es einfach manchmal nicht mit dem
sometimes at the internship, I just ^can't manage it at all sometimes with
25. Frisieren oder so was, wenn sie mir was ganz Neues zeigen, dann denke ich: ,Okay
cutting hair or something, if they show me something entirely new, then I think, 'Okay
26. wenn ich (es jetzt) nicht ^schaffe, wie kann ich dann (es) später ^schaffen, oder so was.
if I don't ^get this (now) how can I ^manage (everything) later , and so on.
27. **I:** Mhm
28. **S:** Und dann <ähm, Dings> merkt meine Mentorin sofort,
And then <erm> my Mentor notices (it) immediately,
29. **I:** [Mm]
30. **S:** [dass] ich mich so unsicher
[that] *I feel so insecure*

31. fühle dann sagt sie mir ‚mit einer Übung wirst du (es) sowieso nicht schaffen, du
and then she says to me 'with just one try you won't get it anyway, you must
32. musst das mehrmals machen' und so, und ‚du ^hast du ein Händchen dafür! Also,
do it several times' things like that, and 'you ^have a hand for this!' So, you will
33. du wirst das schaffen wenn du das willst.' (2.) Sie sagen es mir immer ^wieder.
manage it, if you want to' (2.) They tell me this ^ again and again.

(Extract from Interview with #Samira#, 08. April)

Samira says that she is very concerned about her future and experiences insecurity because of it. She talks a lot about her sister and mother as well as to her trainer (mentor), and explains how important it is for her that they all tell her that if she really wants to become a hairdresser then she will manage it. She is, however, unsure about whether she will manage to become a hairdresser. She repeats in various forms the phrase 'I can manage' (ich schaffe), putting all responsibility on *herself* and following the institutional everyday understandings of self, will, autonomy and responsibility (s. previous maps). Samira projects her self into a future which is seen from the point of view of the present and can assume two variants: a successful or an unsuccessful one. According to her understanding, what the future will be like depends on her—which is the reason why she feels insecure and needs the support of others who ensure her that she will manage everything.

Soon after our conversation, Samira decided to apply for a further school year at a secondary education centre for cosmetology, where she would spend the next school year and receive professional training as well as a slightly higher school certificate. In this way she could also postpone important decisions for a year. Here we can see her application:

Extract 5

#Name, Surname#

#Address, Telephon#

OSZ Körperpflege (Friseurbereich);

#Address#

#City# 16.11.04

Bewerbung um einen Schulplatz

Application for a place at your school

Sehr geehrte Damen und Herren,

To Whom it May Concern,

Ich besuche zur Zeit die Stadt-als-Schule, die ich im Juni 2005 voraussichtlich mit einem erweiterten Hauptschulabschluss verlassen werde.

At the moment I am a pupil at the "Stadt-als-Schule", where I am expected to complete my expanded "Hauptschulabschluss" in June 2005.

Nach dem Schulabschluss möchte ich die einjährige Berufsfachschule am OSZ-Körperpflege besuchen, um den Realschulabschluss zu erreichen.

After graduation, I would like to take part in the one-year vocational training with OSZ-Cosmetology in order to complete the "Realschulabschluss".

Ich habe bereits Praktika in den Bereichen Friseurfachkunde und Zahnpflege absolviert.

I have already completed internships in hairdressing and dental hygiene.

Mit freundlichen Grüßen

Sincerely,

(Application Letter of #Samira#)

In her application letter, Samira wrote that after the end of her present school she would like to attend the one-year vocational training at a secondary educational center for Cosmetology in order to complete 'Realschulabschluss' (a slightly higher certificate than the one she is completing now, which however still does not enable access to university education). The context was official and public. It was an application letter, written at school with the help of the teachers and saved in her personal file in the school computers. While it was Samira who signed the letter, it was the school that submitted it with her accompanying CV and official documents, and this is exactly the combination of institutional and the subjective levels of control to which we referred in the previous map (cf. Papadopoulos, 2005). The acceptance of her application would mean one more year of education and a one-year postponement of her entrance into the professional adult life. As Samira stated in the interview, she would like to become a hairdresser later, but now this school would be her preference:

Extract 6

1. **I:** Was willst du später machen, oder was sind deine Interessen?
What do you want to do later, or what are your interests?

2. **S:** Später will ich Friseurin werden (...) ich will <aufs jetzt hier> nach der
Later I'd like to be a hairdresser (...) I want <now here> after

3. Schule werde ich aufs (in eine) Friseurschule gehen.
this school I want to go to a school for hairdressers.

4. **I:** Mhm

5. **S:** Erst in der (die) Schule gehen und
First of all go to this school and

6. danach mit der Ausbildung anfangen und ja was ich noch will so (...) na ja
then start the vocational training and what I also want (...) well

(Extract from Interview with #Samira#, 08. April)

The semiotic order of ‘either now or never’, which was imposed upon the everyday practices of teachers and students and was materialized in CVs, classroom visits to job-centers, and the inter-institutional communication between the school teachers and the trainers of the students during their Individual Learning-in-Practice projects was actually in stark contrast to Samira’s decision to postpone any decision for a year. Samira, however, changed her mind and two weeks after she applied for admission to the specialist school, one of her friends excused her for being absent and announced in class that she would remain at the hairdresser’s as a trainee—even though she had expressed doubts about pursuing this career earlier:

Extract 7

The ‘round’ begins. #Huriet#—a student of Turkish ethnicity, #Samira’s# friend—attracts our attention: May I announce something? #Samira# has been accepted for professional training at the place of her internship. She asked for this and was immediately accepted. A round of applause follows, although Samira is not present. Monika comments that Samira was self-confident enough to ask. And then she turns to the class and asks: who also wants a place of professional training?

#Huriyet#: I do, of course.

#Thomas#: do you have one?

#Friedrich# and #Franz#: we want it, too.

As we could read here, Samira articulated her decision to pursue immediate professional training and she “was self-confident enough to ask” about it and was rewarded, as the teacher noticed. Her request was accepted and her expression of interest in becoming a hairdresser turned into a binding statement. Samira *now* had a place of professional training, and would not attend any specialist school. What had happened, and how and why did Samira apply for this professional training at this particular point and not later?

Extract 8

((#Monika# and I visit #Samira# at the site of her Individual Learning-in-Practice Project, a hairdresser’s))

It is Thursday about 11 a.m.. I have an appointment with #Monika#, a teacher, somewhere in the city and rather far away from the school. The last time we met was two days ago at school. Now we should be at the hairdresser’s, where one of the students works, at 11 a.m.. We still have some time:

I: How is it going? (Wie geht’s?)

M: I was at school – frustrating (Ich war in der Schule – frustrierend). Nantin didn’t come yesterday and I just met with her therapist. What’s more, Anton doesn’t want to continue his internship in # Name of Company # any more.

Monika is speaking fast, she is almost out of breath. I listen carefully...

... We both realize it is time to enter the hairdresser’s. We enter and Monika greets and introduces me: “Here is Michalis ... almost our third colleague” ((third because Monika always works with another teacher—#Wolfgang#)). I notice five people engaged in various tasks—one of them is #Samira#, our student ((the changed name indicates Turkish ethnicity)).

She comes to us smiling but avoids direct eye contact—I would say she seems rather uncertain about how we will judge her performance. We have now entered ‘her world’. #Samira# takes our jackets and points out the other employees working there. She offers us coffee or water.

#Monika# asks her if she is satisfied, what is new, etc. #Samira# informs us quickly that she has consistently been praised for her work; as a result, the owner is thinking about offering her a place

for professional training although this would involve a bit of bureaucratic trouble; she admits that it is too early for her; she does not know if she wants to do this and she would prefer to continue specialized education for one year and obtain her “Realschulabschluss” (a secondary school certificate that is higher than the one she is pursuing now). She would like to complete a professional training at a hairdresser’s, but later. Then she explains that she must immediately engage herself in a task demanding about one and a half hours, so she has to leave us. We are asked if we could wait a little to meet the owner of the hairdresser’s ...

Although everybody is very busy, they are all interested in speaking with us. A male hairdresser immediately expresses his very positive impression about Samira: “#Samira# has such a hand!”

The owner, an overweight woman of about 50 who does not appear as elegant as her employees, comes to us. She is dressed simply and speaks in a very simple way and is rather warm towards us. Just like everyone working there, she is of an immigrant background but of a different ethnicity than Samira. Monika and me—without Samira, the student—are invited to a tiny room at the back. After we manage to find a place for all three of us to sit, the discussion begins.

The owner of the hairdresser’s expresses her very positive opinions. She compares Samira with a young woman who is a long-term trainee there: Samira is never late and comes exactly at 9.45, while the trainee comes at 10.05. She also stays longer if the work requires her presence. The owner is impressed, because whenever she explains or shows something to Samira, she understands it at once, unlike the long-term trainee. The owner adds that she and her colleagues need their apprentices to become independent and able to work, they don’t let them just “stand by and look”. Samira prepares everything perfectly and thinks in advance about what the hairdresser may need, while the trainee wastes materials by making mistakes. The owner also says something very important, that because of Samira’s extremely good performance she is better than the trainee and could be offered a place for professional training, too. Both the hairdresser and the personal teacher then discuss the fact that Samira wants to follow formal state schooling for another year, at a special educational centre where she can complete the “Realschulabschluss” (a secondary school certificate, see above) and learn specialized knowledge in chemistry, etc. in order to be prepared for a professional training at the hairdresser’s.

Monika explains that while there is “development” in Samira, it has not lasted long enough—which is the reason why Samira still needs more time to enter adult life and is not ready to quit school. Both Monika and the owner agree that how Samira thinks “is a pity”, since the hairdresser claims that she would accept her for professional training, if Samira would wish it, because she is really good. I ask the hairdresser what she understands as ‘development’ and how she would imagine it in the case of Samira. She takes my question seriously and tries to formulate her answer [...]

The discussion slowly turns to the tasks Samira has yet to accomplish in the context of her Individual Learning-in-Practice before the end of the school semester... after approximately 25 minutes the owner of the hairdresser's has her next appointment, i.e. it is time for us to go. Entering the main room we see Samira working. We should not interrupt her, so we just say goodbye to everybody and leave. Monika and I decide to go for a coffee, although she has further school duties to take care of.

(Field notes 2a, 28th of April, 11:35,
written in English by MK)

In the above excerpts from my field notes, I follow the teacher Monika to a non-school site. The scene takes place in a hair salon where Samira is working on her Individual Learning-in-Practice project. I am there for the first time, and for this reason I do not carry out any interviews or make any kind of recording—I just participate.

Teachers of the School for Individual Learning-in-Practice move outside the school establishment and engage in such meetings regularly, at least every two weeks. These meetings connect teachers with mentors, therapists, parents, other teachers, etc. so that a continuous flow of information about the student is made possible. This kind of communication can be seen as inter-institutional. The connections between personal teachers and other teachers/adults working with/supervising the student expand the territory of the teachers' control and "unlimit" the time of supervision. Our visit to the hairdresser's was announced in advance—all the hairdressers had been waiting for it and knew what it implicated. It was the second time a teacher had come for a visit. An internal institutional semi-public space is created for the discussion between teacher and mentor and is materialized in the small room at the back, where the adults' discussion about the (absent) student took place.

As we read above, when nobody else was within earshot, Samira expressed her thoughts to her personal teacher (I was also present). She said that she would like to complete a *'professional training at a hairdresser's'*. The first time that Samira had said this was on April 29, 2004, i.e. two school semesters earlier, according to the protocol of the counseling session which we discussed in the previous map. It was a strange coincidence that I then visited her at her internship exactly one year after this date, but it is not a coincidence that we visited her at a hairdresser's and that she repeated the same wish. The first such utterance was made to an internal public, as Samira

consulted her personal teacher (a different one), during her second semester at the School for Individual Learning-in-Practice. Now she is finishing the fourth. A year ago, she also completed an Individual Learning-in-Practice project at a hairdresser's. At that time, the first utterance was materialized in the protocol presented in map 4. The protocol was semi-official; the utterance at that time was not binding; neither was it binding at the time of our visit. After the first utterance, Samira was engaged in different activities, she also undertook an internship in a Kindergarten⁵¹. And now Samira said she would prefer to continue specialized schooling for one year and obtain her "Realschulabschluss". She admitted that it is too *early* for her to start a professional training now, as she had also explained to me in the interview some weeks ago.

The owner of the hairdresser's seemed to be very interested in Samira and wanted to know a lot about her. Two issues were here articulated: a) 'professional training at the hairdresser's' and b) 'specialized school'. What was at stake was Samira's next year. The word '*development*', was used by the teacher to refer to something that 'is there... but it has not lasted long enough yet'—which was why it would be some time before Samira could leave any school context and enter the adult life. Here development was conceived of as a process unfolding in a linear time. It can be said that it 'had not lasted long enough yet', i.e. it was still incomplete. What would happen, if Samira's development was already accomplished? Both adults presumed that in this case Samira would wish to be accepted for professional training at the hairdresser's, which, in fact, she presently had doubts about.

This talk between the teacher Monika and the hairdresser was not definite in any regard. No statements were expressed here but an implicit agreement was met from both sides on two levels: a) Samira's performance was good as seen from the perspective of the teacher and it is also good as seen from the perspective of the hairdresser-trainer. This meant that Samira deserved being supported in all regards and seen from the perspective of the teacher and the hairdresser-trainer she would be considered as enough 'developed' for undergoing a job-training if she would consider herself to be.

⁵¹ According to the conclusion of the documentation of Samira's internship in a Kindergarten: Alles im allem war dieses Praktikum sehr Lehrreich. Es hat sehr viel spaß gemacht und es ist für jeden zu empfehlen. Meinen Berufswunsch als Friseurin hat dieses Praktikum jedoch nicht verändert./ All in all, this internship ((in the kindergarten)) was very instructive. I had a lot of fun there and would recommend it to anyone. However, this internship has not changed my wish to become a hairdresser.

b) Both parts would wish that Samira was determined to begin the hairdresser's training immediately—following the 'either now or never' logic which we discussed at the beginning of this map. It was clear that Samira should have made the decision by herself for such a training to be successful. In the remaining school time, however, the teacher as well as the hairdresser-trainer would speak with Samira and support her in making the decision to begin professional training as a hairdresser 'now'.

Indeed, what followed this meeting was a series of less formal interactions between Samira and Monika, as well as between Samira and the hairdresser-trainer and other hairdressers working at the salon. All of the adults were very supportive in the sense that they all expressed to Samira their strong belief that she would manage to become a good hairdresser and that she should not dismiss such a chance by postponing it, because it was uncertain whether the same possibility would emerge a year later. What was not discussed, however, was whether becoming a hairdresser was a good choice for Samira and what radically different alternatives there could be. Samira could at any time have realized that the implicit contradiction, confronting her, 'either housewife or hairdresser' was false, because there were so many more possibilities which escaped this dual logic. The imposed semiotic order 'now or never' also relied on the understanding of a society that would not change in the future as well as on the illusion of an individualized opportunism, that although unemployment rates were high for students like Samira, she would be an exception and enter the job market in a successful way.

A lot of work and mediation was needed up until that very last moment when Samira expressed in a formal way her decision to begin professional training immediately, for these counter-discursive aspects to be eliminated, so that the 'now or never' discourse remained meaningful as such and Samira performed the step from being a student into being a trainee and working at a hairdresser's. The utterance '*professional training at a hairdresser's*', which had a history of its own, as we saw above, finally became a binding statement. The link between the school and the job market/tertiary vocational education is actualized only if the student performs the discourse of his/her professional identity. The success and the meaning of the whole schooling, of all the processes taking place in the school, depend on this last link between the school and the job market. This link is performed by the student together with all the actants described above. However, even when Samira's wish for professional training at a hairdresser's had been made

binding, development still needed to be objectified and stabilized, and further mediators were used for this.

Materializing Change in Educational Reports

A lot of attention in recent anthropological-educational research has been given to rituals (Audehm, 2007; Gebauer & Wulf, 2003; Wulf & Zirfas, 2004, 2007). What have not yet been investigated, however, are the material-semiotic tools which objectify, stabilize, and institutionalize development by participating in or accompanying various school rituals. The ‘success’ of Samira in entering the job market, or at least in performing the first step to entering it, was celebrated in her absence in an informal way when it was announced by a classmate of hers at the meeting of the Communication Group as presented above. A more formal ritual took place at the end of the school year, in which Samira was congratulated by the teachers and was given the following educational report:

Extract 9

Liebe #Samira#, ich gratuliere dir zum erweiterten Hauptschulabschluss! Im zweiten Halbjahr konntest du noch einmal all deine Fähigkeiten zeigen. Imponierend fand ich insbesondere dein Talent, Aufgaben sehr strukturiert anzupacken.

Bei der Wahl des Praxisplatzes hast du einen Volltreffer gelandet. Von Woche zu Woche fühltest du dich in dem Friseursalon in #name of district# mehr zu Hause ((s. page 199)) und nahmst neue Herausforderungen an. Dein handwerkliches Geschick, deine freundliche und dezente Art im Umgang mit den Kunden und dein Blick für Ordnung waren ausschlaggebende Faktoren dafür, dass die Mitarbeiter dir gerne verantwortliche Aufgaben überließen - und dass sie voll des Lobes für deine Arbeit waren.

Dear #Samira#, congratulations on your graduation! In this second semester you were once again able to demonstrate all of your abilities. What I found particularly impressive is your talent for tackling the things you need to do in such an organized way.

Your choice of internship was a perfect match. As weeks went by you felt more and more at home in the hairdresser’s salon in the #name of district# ((s. page 199)) and took on new challenges. Your talent in crafts, your friendly and discrete way of handling the customers and your eye for cleanliness were the decisive factors which allowed your co-workers to gladly entrust you with responsible tasks—and be full of

praise for your work.

So war es dir selbstverständlich, vor Feierabend einen Blick auf den Terminkalender zu werfen und für den ersten Kunden des Folgetages die notwendigen Utensilien zurecht zu legen. Du wusstest, bei welchen Kunden du assistieren solltest, wenn es um aufwendige Aufträge wie Haarverdichtung ging, alltägliche Dinge wie das Waschen der Haare und die Mithilfe beim Haarwickeln, der Maniküre oder dem Färben von Strähnen hast du routiniert und aufmerksam ausgeführt.

((7 similar paragraphs))

For example, it was self-evident for you to take a glance at the appointment calendar and to prepare, before the end of the workday, the items necessary for the first customer of the next day. You knew which customers you needed to assist with and you did everything competently and attentively, whether it concerned complex orders such as hair extensions or everyday things like hair-washing and the assistance with curling, manicures or highlighting.

((7 similar paragraphs))

Liebe Samira, was wünsche ich dir? Einen zweiten herzlichen Glückwunsch, denn du hast es geschafft, einen Ausbildungsplatz zu bekommen, in deinem Traumberuf und in dem Friseurladen, in dem du schon jetzt ein- und ausgehst, als sei es dein Arbeitsplatz und dein Zuhause! In der Zusammenarbeit mit dir habe ich deine Zuverlässigkeit genossen, und ich habe von dir gelernt: zum Beispiel, wie gut es ist, sich ganz und gar auf eine Tätigkeit konzentrieren und Störfaktoren völlig ausschalten zu können. Viel Glück und viel Spaß in der Ausbildung!

Dear Samira, what more can I wish for you? Congratulations again for finding this place of professional training in your dream job, and at the hairdresser's salon where you already walk in and out as though it was both your job and your home! In working with you I enjoyed your reliability, and I also learned from you, for example, how good it is to concentrate completely on what you're doing and block out things that distract you. Good luck and enjoy your vocational training!

Samira's development was 'objectified' here. The term 'to objectify' is used to indicate the translation of something vague (ongoing interaction and intra-activity in everyday life) into something visible in a way which is accepted as objective; the term also indicates embodying a vague idea in a materiality, e.g. a document (Middleton & Brown, 2005; Middleton et al., 2001). The personal teacher signing the report called the position of a hairdresser Samira's "dream job". Not only the students' but also the teachers' writing is produced according to a certain

matrix. One's 'dreams' are usually private. The material-semiotic orderings of the school (self-reflection, reports written as diary entries, personalized relations to teachers, etc.) go together with the production and expression of utterances related to one's private wishes and dreams. If a student articulates the utterance that a given profession is his/her desired one, this event becomes institutionalized and the preference/wish is stabilized, so as not to be further adapted or subject to change. In this context, the utterance is publically celebrated, thus becoming a goal to which a student has a binding obligation. The 'dream' is objectified into a public document (tangible and available for counseling and comparison with a later state of affairs), which embodies but at the same time conceals the material-semiotic history of this utterance and translates it into something belonging to one's self, which one's self realizes and should therefore further pursue. Thus this reified dream has a double status: it is both private (as a dream and as a unique document possessed by and devoted to one individual student) and public (the document is public, as is the dream after being articulated). The materialization of the utterance in a school official document stabilizes the development of professional identity fabricated in all the already discussed contexts and orderings of the educational institution of the School for Individual Learning in Practice.

It is exactly through such objectifications that the material-semiotic practices which unfold in different sites such as the classroom, the counseling room, or the internal space where Monika and the hairdresser-trainer met are interconnected. The more the schooling proceeds, the more convergent the student's development is; the processes of discourse formation (reports, questionnaires, counseling) are highly selective and reductive: experience is filtered time and again and possibilities are reduced; fragmented descriptions become increasingly dense and continuous (Application Letters, CVs, Educational Reports) and different voices are excluded so that a restricted number of statements come into view in the end. An utterance articulated at some stage of the whole process is turned into a statement which could not emerge as such without the fabrication of time which creates an end and attributes gravity to the 'last' Educational Report, i.e. to the student's last decision. A variety of events happening in the student's life and discursive events taking place at school are now translated into a few statements. In this way the time of development is fabricated as linear time leading from the past to a given future and the process which is central to the operation of the School for Learning in Practice is finalized: the Educational Report, together with CVs and application letters, flows into the job market and enters further discursive practices (e.g. a job interview). While rituals

attribute vividness and dynamics to the process of schooling, creating intensities such as the closing ceremonies in which students are congratulated, materialities stabilize this process and ensure its direction, its ending.

Samira, a formerly excluded student of the type for whom the School for Individual Learning-in-Practice was designed, thus entered the current economy. This was managed through what Rose calls the ‘powers of freedom’ as described in map 2. Development as fabricated in the School for Individual Learning-in-Practice implies the creation of a neo-liberal self that, independently of his/her gender and socio-cultural background and perspectives, reflects upon his/her past in order to ‘discover her/his talent’ and become orientated towards a profession and enter the job market without any critical reflection or resistance (Kaindl, 2005). A variety of discursive and non-discursive practices enable, support, and stabilize this ‘development’. What must be remembered, however, is that, in the highly selective and hierarchical German educational system, Samira like all other students of this school graduates as a “Hauptschülerin”—in other words, the state and the economical order will give her access only to the lowest positions for vocational training or work, which in this concrete case is a hairdresser.

Doing Time and Development

Concluding this map, I would like to outline a more theoretical perspective about time and development. There is a difference between what is *potential* and might be *actualized* and what is *virtual* and might be *realized*. Virtual would be the development of new relations and the emergence of new possibilities which were not given before. Denying the notion of a profession which fulfills the self and instead discussing the contribution to a better or different society by means of one’s professional activity is an example of what the development of virtualities could be. Criticizing the very way the job market and market-economy is organized and developing a transformative activist stance (Stetsenko, 2008; Stetsenko & Arievidt, 2004b) would be another form of the development of virtualities—not of potentialities.

Above I analyzed a series of developments which, in the case of Samira, were enacted in a particular way in the context of a specific temporal order. One could say that by means of

material-semiotic interaction, time here was *done* in a particular way. Moreover, moving beyond the question of whether these developments were co-produced by the teachers and other involved adults or rather expressed ‘inner’ or ‘intra-psychological’ changes within Samira, one could also say that development was *done* in a particular way. Reports, memos, protocols, CVs, and other material-semiotic tools—‘maps’ or ‘images’ according to Deleuze & Guattari—belong to time but do not represent time. However, their mediation remains invisible, so that the past appears to lead linearly and automatically into the future. Multiple pasts and futures, i.e. ‘virtual realities’, are thus excluded. What happens as a result is, according to Latour, a ‘fabrication’ of time (Latour, 2005b).

My argument here is that time does not exist as a container in which development takes place. Both time and development are co-fabricated, entangled, and processed together in a way that *doing* development is *doing* time and vice-versa. Following the so-called ‘practice turn’ (Schatzki, Knorr-Cetina, & Savigny, 2001) or ‘performative turn’ (Wulf, 2004) one could argue that it is only *in practice* that it becomes clear how material-semiotic relations are enacted and how these can be analyzed, questioned, evaluated or even transformed. Similar to doing things with words (Austin, 1975), doing class, doing disability (Moser, 2006), doing gender (Butler, 1993), one can also speak of *doing* time and development.

Time and development do not unfold automatically. Instead, they both require a lot of work in order to ensure that particular relations are enacted and others are not. The enactment of particular relations at a concrete moment has consequences for the enactments of relations to follow. Each time particular relations are made possible, others are made impossible and this has consequences for following actions and interactions. The development of Samira could be described as an enactment of particular relations at the expense of other relations. From a critical point of view, we could say that development in this case meant actualization of particular possible relations but not the realization of virtual relations.

The notion of *doing* emphasizes that development could have been done in very different ways and the development that took place as presented above was just one possibility among many. While speaking of different developments, I do not just refer to the final result—whether Samira applied for the one or the other training position and when. Following the philosophy of Bergson (1896/1991) and of Deleuze & Guattari (1980/1987), one could say that all the

possibilities: attending a further school year, getting professional training, or becoming a housewife, had already been potentially there and only one of them was actualized.

From a relational-materialist point of view, such a development did not take place in this particular case because through a series of material-semiotic practices, time at the School for Individual Learning-in-Practice was spatialized and development was organized in a teleological way by means of a series of technologies of the self. In this constellation, just before the students would escape the school's institutional control, time was enacted on an 'either now or never' basis so that students would immediately enter the next controlling institution: that of the job market and vocational training. In the case of Samira, this development was very quickly stabilized by means of written documents and class rituals so that it could not be made reversible. A series of social and politic-economical issues were discussed only in terms of psychological categories: Samira was or was not yet ready, was or was not confident enough, etc. While everybody narrated time as a process of individual development, of decision-making and of taking risks, time was on the other hand organized on a very material level by means of plans, reports, protocols, notes, and memos. And while everybody narrated the development of Samira from being a student towards being a trainee and later a job seeker as something that happened 'in' her, continuity was established between the school and the job-training institution by the school teacher who visited Samira many times at the hairdresser's where she was accomplishing her training, as well as by a series of documents which circulated between the school and the hairdresser's such as reports, photos, and cards of absence. In this way, a smooth space became striated (Deleuze & Guattari, 1980/1987), i.e. organized and ordered. The teachers' developmental-psychological discourse not only created an order of development, it also institutionalized and legitimated this way of development in the school in the actualization possibility that was already given, anyway (Deleuze & Guattari, 1980/1987). The question that should be asked here is whether different developments are possible and if yes, how? The next map will examine the possibilities for radically different doings of development and elaborate on a series of concepts such as difference-in-itself, mediation, and development as societal change.

Map 6

Contrasting the School for Individual Learning-in-Practice with the Freedom Writers' Project

“The connections developed between people can fundamentally alter those involved, without necessarily making each ‘more like’ the other”⁵²

In the previous four maps we examined a series of material-semiotic practices and analyzed the doing of time and of development at the School for Individual Learning-in-Practice. Focusing on cases such as those of Husk or of Samira, we presented the way development at this school is enacted as the realization of given possibilities (either integration into the job market or not). The question arose as to what a very different development could be. In this chapter I will present an example of a very different doing of development than that of the School for Individual Learning-in-Practice and analyze its different aspects: unpredictability, drama and emotions, material-semiotic interaction and the enactment of history, reflection, development and societal change. The example to which this map will refer is that of the *Freedom Writers'* project⁵³.

The analysis of the material-semiotic practices of this project will complement the theoretical argumentation presented in the previous maps. I will suggest here that there is no past, no

⁵² Stephenson & Papadopoulos, 2006, p. 107.

⁵³ One could also refer here to other examples of radical educational interventions such as the ones presented in my edited book *Children, Culture and Emerging Educational Challenges: A Dialogue with Latin America* (Kontopodis, 2009c). The reasons I choose to present the example of the Freedom Writers here are twofold: first, the population of the Woodrow Wilson High School in Long Beach, California is pretty similar to the population of the School for Individual Learning-in-Practice (students from ethnic minorities and from low socio-economical backgrounds), and secondly, reflection and writing also played a very central role in that project but were used in very different ways than in the German school examined in the previous chapters. The students who participated in the Woodrow Wilson High School shared quite a lot of similarities with the students of the School for Individual Learning-in-Practice, which I referred to above: different ethnic backgrounds, social exclusion, minor economic and cultural resources, family-related problems, similar ages, and a low educational level. Many of the students of both schools had engaged in violent activities (both males and females). However, the students of the School for Individual Learning-in-Practice were much less often confronted with shootings and murder than the students of the Woodrow Wilson High School in Long Beach.

present, and no future as such; the relation between the past, the present, and the future as well as development itself is *done* through mediation. Revealing the mediations which fabricate development can lead to imagining radically new individual, collective, and societal developments—an endeavour which is especially important in regards to diversity in education (Cole, 1998).

The Dramatic Becoming of the Freedom Writers' Project

The Freedom Writer's project gradually evolved in a single class led by student-teacher Erin Gruwell (his subject was English), who had been assigned the lowest-performing students of the Woodrow Wilson High School in Long Beach, California, USA. He led this group from 1994 till 1998, although they were only later called the 'Freedom Writers'. This innovative project emerged in a situation of institutional deficits and educational as well as broader social problems in Long Beach, California (cf. Houck, Cohn, & Cohn, 2004), which had been expressed in an outbreak of interracial gang warfare there. In the following, I will briefly describe the 'becoming' of this project, which was not in any way planned in advance but had been the result of a long process of confrontation, sharing, and understanding between the teacher Erin Gruwell, the students, the school director and other actors.

I would like to highlight here that the development of this project as a whole as well as of the relations between the students and the teachers was unpredictable, because unpredictability is an important aspect of doing time and development differently, which all this work is about. One could say that the development of the Freedom Writers was unpredictable as well as *dramatic* in the sense of Vygotsky (Vygotsky, 1925/1971; Vygotsky, 1929/2005; Vygotsky, 1934/1999). Emphasizing the influence of theatre on Vygotsky, Veresov interprets Vygotsky's work as psychology in terms of 'drama' (Veresov, 1999; Veresov, 2004). He uses the term 'emotionally colored experience' to refer to the notion of development in Vygotsky as a process which is dynamic and lived. In the Zone of Proximal Development, as Veresov argues, 'dramatic events' occur and contradictory aspects collide—crisis and conflict arise and thus development emerges. There is no way of predicting or foreseeing the outcome of these dramatic events. After a

dramatic process, nothing is as it was (Veresov, 2004; Veresov, 2005). Such a dramatic developmental process, which elicited surprising difference and did not just unfold as potentiality i.e. as a simple passage of time (Latour, 2005b) gradually took place with the Freedom Writers in Long Beach.

The whole thing started with a mediator, in this case a drawing, which could be seen as a *joker* in the sense of Serres:

I have given the name *joker*, or blank domino, to a sort of neutral or, rather, multivalent element, undetermined by itself, that can take on any value, identity or determination, depending on the surrounding system that it finds itself inserted in. I can say that the joker is a king, a jack, a queen, or any number (Serres, 1983/ 1991, p. 93).

A few months into the school year, one of Erin Gruwell's students passed a note depicting an African American classmate with extremely large lips. This drawing, however, did not fulfill its expected function, which was to discriminate African American students. The teacher Gruwell got hold of the paper and became infuriated, telling her students the thick-lipped cartoon was like the propaganda the Nazis used during the Holocaust. A student then asked her, "What's the Holocaust?" In that instant, a radically innovative educational practice began which is very difficult to adequately present in a few lines. As Gruwell recalls, "I immediately decided to throw out my meticulously planned lessons and make tolerance the core of my curriculum" (Gruwell, 1999, p. 3).

Gruwell took the students to see *Schindler's List*, an American film drama from 1993 directed by Steven Spielberg and based on the historical novel *Schindler's Ark* by Thomas Keneally. The film is about Oskar Schindler, a German businessman who saved the lives of more than a thousand Polish Jewish refugees during the Holocaust by employing them in his factories. Gruwell also invited elderly survivors of the Holocaust as guest speakers to her class. She then had the students read books written by and about other young people in times of war, such as Anna Frank's *The Diary of a Young Girl* (cf. Lee, 2006), Zlata Filipovic's *A Child's Life in Sarajevo*, and Elie Wiesel's *Night*. Like Anne Frank, Zlata, when she was only 11 years old spent her days couped up in a room (of an apartment), often never seeing daylight and lived through constant bombings—not to mention severe food and water shortages. "My students saw that these other kids, living in

real wars, had picked up pens, chronicled their pain, and made their story immortal”, Gruwell comments (Anonymous, 2002, online).

Later on, at her initiative, students began to write diaries about their everyday lives, following the examples of these other young people. The diaries were discussed in the classroom and gave rise to a series of discussions on racial segregation, appearance and discrimination, domestic violence, misogyny, dyslexia and attention deficit disorder, homosexuality, sexual abuse, harassment, abortion, and the loss of friends and family members in shootings. At a later point, the students made a field trip to the Museum of Tolerance, a multimedia museum in Los Angeles, California, designed to examine racism and prejudice in the United States and the world with a strong focus on the history of the Holocaust.

Gradually, Gruwell and the students realized the importance of sharing their work with a larger audience. Students increasingly felt the need to publicize their voice. Between 1994 and 1998, the so-called ‘Freedom Writers’ garnered a great deal of media coverage, including appearances on Prime Time Live, The View, and Good Morning America. In 1997, students’ diaries were ordered thematically and chronologically and delivered as an unpublished manuscript to Richard Riley, the U.S. Secretary of Education. At the same time, the activities of Gruwell’s class caused negative reactions from the school director and conservative colleagues—a fact that reinforced the group identity of the students.

The students soon came face-to-face with Zlata Filipovic, whom we mentioned above, and Miep Gies, who gave shelter to Anne Frank. Erin Gruwell and the students persuaded Zlata to fly to Long Beach, California and visit them at Woodrow Wilson High School. In 1998, the Freedom Writers received the Spirit of Anne Frank Award for their commitment to combatting discrimination, racism, and bias-related violence. That same year, 150 Freedom Writers „walked across a graduation stage to claim their high school diplomas, a feat few people had thought possible“ (Gruwell, 2007b, p. 244).

A year later, the diaries were published by the teacher Erin Gruwell under the title *The Freedom Writers Diary* (Gruwell, 1999). “Through poignant student entries and Erin’s narrative text, the book chronicles their ‘eye-opening, spirit-raising odyssey against intolerance and

misunderstanding”⁵⁴. *The Freedom Writers Diary* soon became very popular, even leading to a commercial film production with Hilary Swank directed by Richard LaGravenese (LaGravenese, 2006). It was followed by two other publications by Erin Gruwell: *Teach with your heart* and *The Freedom Writers Diary Teacher's Guide* (Gruwell, 2007a, 2007b)

Since then, many of the Freedom Writers have graduated with college degrees, some having earned master's degrees or Ph.D.s. The student who sketched the racist drawing in 1994 became a teacher at Poly High, the very same high school that had kicked him out for bringing a gun to school, before his participation in the Freedom Writers project. Beyond this, the Freedom Writers continue to contribute to the day-to-day running of the Freedom Writers' Foundation, a non-profit organization which offers teacher training workshops and scholarships.⁵⁵

Following Stephenson & Papadopoulos, we could define what happened in the Freedom Writer's project as 'Outside Politics': "Outside politics is contingent, unpredictable, and unintentional". It refers to work "with unrealized trajectories, possibilities which do not yet exist (not even in the symbolic, nor the imagination), potentials which may never manifest [themselves]" and suggest that such a work requires an "expanded, slowed-down present [which] fuels new relations with other actants and new forms of action..." and not a "vision of an alternate future" (Stephenson & Papadopoulos, 2006, p. 205).

Considering that this dramatic process of personal and social development began with a racial note made by a student and was later materialized in a series of mediators such as diary entries, books, a film and other cultural artifacts, I also note that mediators were of particular importance here. Mediators do not only "slow down our revolutions" (s. introduction), they also surprise us. They function differently from how they are supposed to, mediators 'involve', in

⁵⁴ http://www.freedomwritersfoundation.org/site/c.kqIXL2PFJtH/b.2286935/k.AD6E/About_Erin_Gruwell.htm

⁵⁵ The Freedom Writers' approach, especially as it was presented in the film, has been criticized because it reproduces a romantic understanding of the teacher as a hero who should sacrifice her/his personal life to overcome broader social and educational deficits which state institutions are responsible for (Chhuon & Carranza, 2008). For a critical analysis of the film see: (Harris et al., 2008, pp. 36-38). The book, however, may also be perceived as a richer source of information if not analyzed from a teacher-centered perspective. I do not aim here to evaluate the book or the film but to select some aspects of the Freedom Writers' project and analyze them from the perspective of cultural-historical psychology.

Deleuze's words (Deleuze, 1968/1994), they establish relations that never existed before. Bringing different entities together, they turn into agents in communication and lead to processes which elicit surprising difference. To use Brown's comment on it, "[j]okers are 'wild' in the sense that they are unpredictable—we do not know what will happen when they are put into play" (Brown, 2002, p. 20). In the following, I will try to explore more closely the role of the jokers and mediators in the Freedom Writers' project.

Enacting Collective Pasts and Collective Futures

By reading theatre plays and novels, by discussing them, by visiting the Holocaust Museum in Los Angeles, and especially by writing diaries, the students of the Gruwell's class viewed themselves from a meta-perspective in a metaphorical way (Bertau, 1996). In the first instance they perceived themselves as being *in a war*, which had so far been undeclared or imperceptible. After a while, they perceived themselves as *Freedom Writers*, which is also a metaphor, connecting them to the 'Freedom Riders' of the 1960s who fought against segregation during the Civil Rights Movement in California. Writing was of particular importance here (cf. Esgalhado, 2002), and metaphoric thinking was exactly what enabled difference-in-itself to emerge. Reading a book, watching a film, or perceiving a piece of art were practices that supported this kind of critical social reflectivity (Freire, 1973, 1986; Sullivan & McCarthy, 2007; Veresov, 2005)⁵⁶. The function of this metaphorical thinking becomes clear in one of the diary extracts written by a male 'Freedom Writer'⁵⁷:

Extract 1

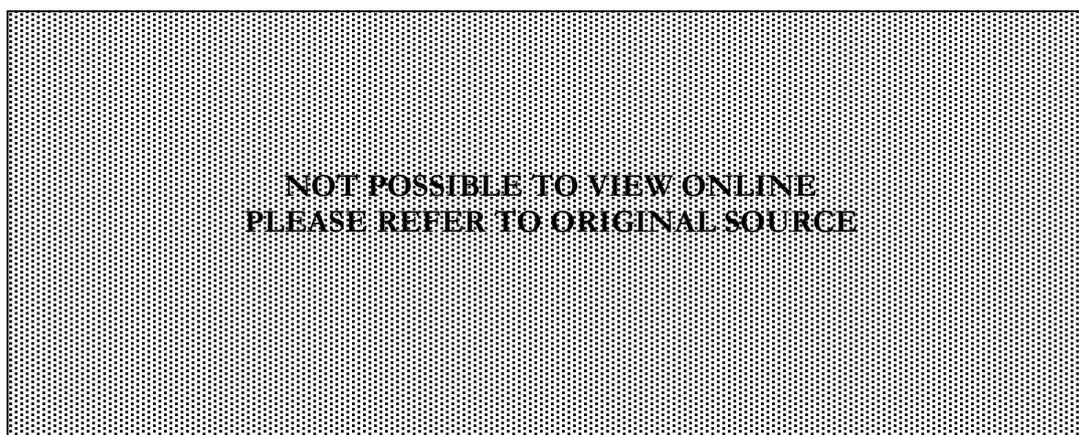
Dear Diary,

Ms. Gruwell's always trying to give meaning to everything. Like today, we were supposed to read this play, *Romeo and Juliet* ... and out of the nowhere, she busts out with, "The Capulets are like the Latino gang, and the Montagues are like the Asian gang." What? One minute, we're reading about a guy

⁵⁶ Here again we can remind ourselves of how important art was to the whole Vygotskian project of revolutionizing psychology, education, and human development.

⁵⁷ For a detailed account on gender and gang membership, see Dukes & Stein, 2003; Yoder, Whitbeck, & Hoyt, 2003.

named Mercutio getting killed, and she sets us up with the question “Do you think this family feud is



(Gruwell, 1999, p. 34)

What was quite similar in both educational projects, that of the School for Individual Learning-in-Practice that of the Woodrow Wilson High School in Long Beach, is that students in both schools engaged in describing their everyday life in writing. While the students of the School for Individual Learning-in-Practice wrote daily and weekly reports on their individual vocational educational projects, the students of the Woodrow Wilson High School wrote anonymous diaries like the one presented above, which, as already mentioned, were anonymously circulated and discussed in the class. Here the student describes how in being guided by Erin Gruwell through the reading of Shakespeare’s *Romeo and Juliet*, he realized that the grouping of him and his classmates into ‘friends’ and ‘enemies’ according to racial categories was as relative as the grouping of the Capulets and the Montagues in Shakespeare’s famous play.

The most important part of what happened in the Freedom Writers project was, of course, not the reading of fictive stories but the confrontation of the students with the real consequences of fascism. By means of metaphoric thinking as well as of anonymous writing, the students participating in the Freedom Writers’ project realized that ‘they were not alone’. First they drew a parallel between themselves and Anna Frank and Zlata Filipovic. Secondly, through the anonymous writing, young students who once refused to speak to someone of a different color realized that classmates with *different* ethnic backgrounds were confronted with the *same* everyday problems. Thirdly, all the Freedom Writers as a collective communicated with people outside of the classroom—whether this was the school director who at different stages expressed his opposition to the projects, film makers and journalists, or Zlata Filipovic and other war

survivors. Visiting different places, reading, writing and discussing with each other in the classroom were all collaborative activities which directly transformed the students both as individuals subjects and as a collective subjectivity (Lee & Smagorinsky, 2000). Liberali suggests the term ‘creative chain of activities’ to refer to collaborative activities which produce new meanings which will be, afterwards, shared with other new partners and lead to new collaborative activities. As a result of these new collaborative activities, still more new meanings are produced which carry some of the aspects created in the first activity. “Similarly, some of the partners from the second activity, when engaged in a third activity, follow the same path”, thus leading to new ways of being in the world, acting in the world thus transforming it (Liberali, 2008, p. 10). This is indeed a ‘drama’ with an unpredictable end, in terms of Vygotsky (Vygotsky, 1925/1971; Vygotsky, 1929/2005) or a process in terms of Whitehead which, as we will see, involves emerging meanings, senses, and affects at the same time (Brown & Stenner, 2009; Stenner, 2007, 2008).

Learning and writing about Anna Frank and other war victims was especially important here (Shore, 2006), as was being able to express one’s self without any reservation because everything was anonymous (Schoneboom, 2007). Of particular importance regarding the diary presented above is that they are not addressed towards a teacher, who embodies institutional control, but towards potential readers (the other students and the teacher), who eventually share similar experiences or face similar problems. Writing the diary is thus a kind of emancipatory memory work that regards individual experience(s) from a collective perspective (Haug, 1987, 1992; Stephenson & Papadopoulos, 2006). According to a student:

We began writing anonymous journal entries about the adversities that we faced in our every day lives. We wrote about gangs, immigration, drugs, abuse, death, anorexia, dyslexia, teenage love, weight issues, divorce, suicide, and all the other issues we never had the chance to express before. We discovered that writing is a powerful form of self-expression that could help us deal with our past and move forward. Room 203 was like Anne’s attic or Zlata’s basement, it was our safe haven, where we could cry, laugh, and share our stories without being judged⁵⁸.

⁵⁸http://www.freedomwritersfoundation.org/site/c.kqIXL2PFJtH/b.2286937/k.5487/About_Freedom_Writers.htm

Diaries were written anonymously and, although the writers remained anonymous, students took turns reading aloud each other's entries. "I constantly used their stories to teach," teacher Gruwell says. "We read aloud, edited aloud. I could take something from a journal and compare it to a story by T.C. Boyle or Amy Tan or Gary Soto. We could look at the work side by side, juxtaposing themes or comparing literary techniques. It's an authentic way to teach" (N.N., 2002, online). Following Dreier, one could say here that internalized contradictions were resolved through a process in which "societal mediation is recognized and theorized by the individual, who is enabled by the process of reflection to develop new possibilities for action" (Dreier, 1991, see also Roth & Tobin, 2002). A box placed by the teacher at the back of the classroom where everybody could put her or his journal without her or his identity being revealed was a very important material-semiotic ordering which attributed a new element to the history of diaries as mediators (Roth, 2007b; Vygotsky, 1924/1993). It supported students not only in expressing themselves, but also in moving beyond their identities and understanding how their everyday experiences were similar to students from different racial groups or from different social positions. It was thus revealed that a series of everyday problems were not private, but public, and related to citizenship (Buckingham, 2000). This in turn had consequences for the local community (Liberali & Rahmilevitz, 2007), especially in its dealings with poverty (Weisner, 2008b), thus going together with radical socio-political transformation (Agamben, 1993).

In this regard, what took place in the Freedom Writers' project was a collaborative transformation (cf. Stetsenko, 2008). The students saw themselves from a relational point of view. Doing this, they did not reflect about their performance or their individual past and future in the way the students of the School for Individual Learning-in-Practice did (see previous maps), but they reflected about their relations to the other students and, broadly speaking, to other subjectivities. In this way a particular version of the history of these relations was *enacted* which was of particular significance for their present as well as for their future. John Law refers to enactment as:

the claim that relations, and so realities and representations of realities (or more generally, absences and presences) are being endlessly or chronically brought into being in a continuing process of production and reproduction, and have no status, standing, or reality outside those processes (Law, 2004, p. 159).

In the sense of John Law, one could say the Freedom Writers enacted their history and their

future *in relation to* the past of other subjectivities. Students here were not seen from the point of view of their past leading linearly to the future, but the opposite: they perceived themselves from a future point of view as *witnesses* of the racial war around them as well as of a series of other forms of repression. One could say here that witnessing took place from an imagined or virtual future point of view (Kontopodis, 2009b), which was only possible on the grounds of a particular enactment of the past (cf. Agamben, 2000).

Representation, Development, and Time-Image

In the famous opening of his book *The Order of Things*, Foucault analyzes the painting *Las Meninas* by Velázquez, which represented the painter himself painting King Philip IV and his wife, Mariana, who were serving as models are not directly visible in the painting—we can only see their reflections in a mirror (Foucault, 1966/2002). In this painting, Velázquez is being watched painting by Infanta Margarita, who has come to watch him paint together with a group of maids and other people. Foucault claims that what we find in this painting is not a representation *of a person resembled* but a representation *of representation*. “Representation undertakes to represent itself here in all its elements, with its images, the eyes to which it is offered, the faces it makes visible, the gestures that call it into being” (Foucault, 1966/2002, p.17). According to Foucault, representation offers itself here in its purest form. This is indicative of a movement of thought at the end of the sixteenth century and the beginning of the seventeenth, when “resemblance was about to relinquish its relation with knowledge and disappear in part at least, from the sphere of cognition” (Foucault, 1966/2002, p.19). From this time onwards, signs were no more perceived as resembling the objectively existing truth somewhere ‘out-there’, but only to account for the truth of the semiotic relations at stake. The movement of thought that Foucault referred to is a movement of freedom taking place at the margins of modernity in the sense that the representation of representation enables the questioning the very existence of given semiotic relations and the creation of new ones.⁵⁹ In his later work, Foucault explored the link between the

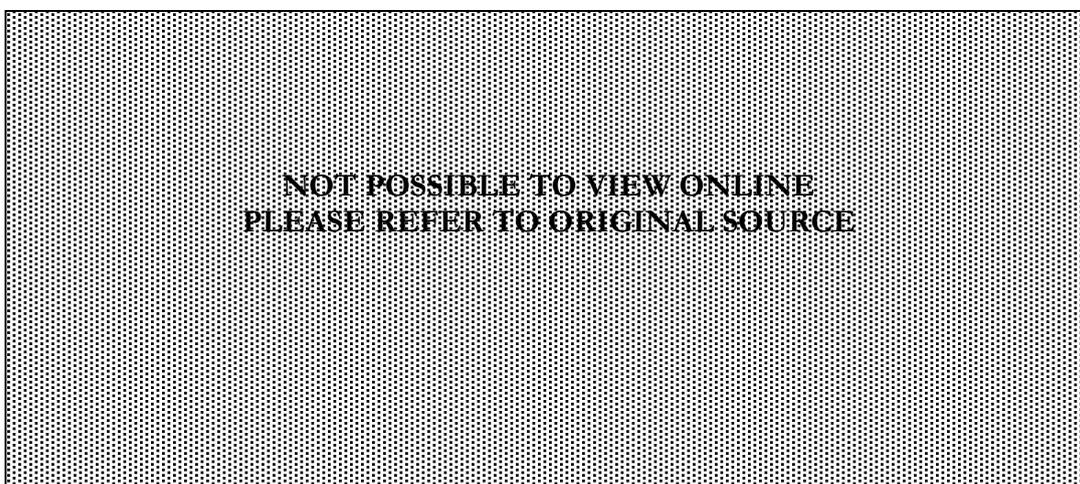
⁵⁹ Following post-foucaultian approaches (Haraway, 1997; Law & Hassard, 1999), I would like to add here that semiotic relations can vary endlessly—their performance or enactment, however, carries material consequences that should be seriously taken into consideration. What Foucault described as semiotic relations can only be conceived in

representation of representation, the constitution of the self, and relations of power (Foucault, 1982, 1988; Foucault et al., 2005).

Moving from Foucault's analysis of *Las Meninas* to the everyday lives of students at school, for the purposes of my analysis I would like to examine now an extract of a diary written by a female student of the Woodrow Wilson High School:

Extract 2

Growing up, I always assumed I would either drop out of school or get pregnant. So when Ms. G. started talking about college, it was like a foreign language to me. Didn't she realize that girls like me

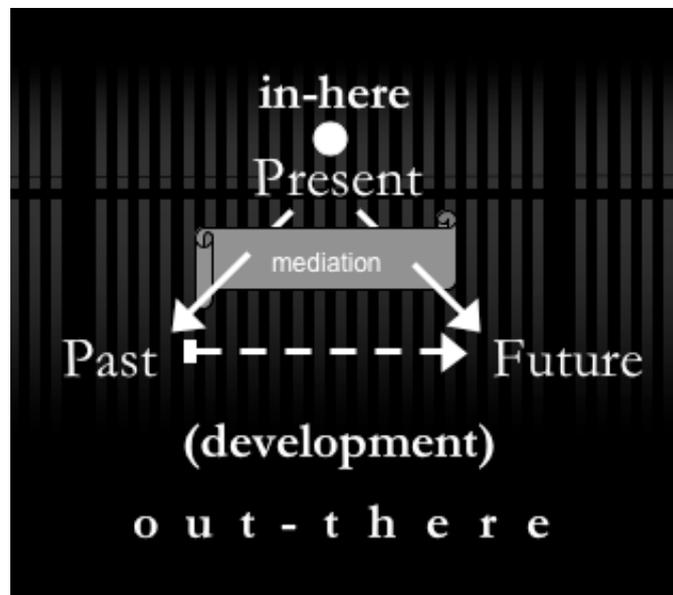


„They Say, I Say: They say I am brown/I say I am proud/They say I only know how' to cook/I say I know how to write a book/So don't judge me by the way I look/They say I am brown/ I say I am proud/They say I'm not the future of this nation/I say/ Stop giving me discrimination/Instead/I'm gonna use my education/to help build the human nation“. I can't wait to read it to the class tomorrow (Gruwell, 1999, pp. 202-204)

The extract presented here is written by Maria (pseudonym), a girl of Chicano background. As already mentioned in map 4 and 5, critical researchers have extensively analyzed how colour, gender, ethnicity, and social class are expressed in social expectations about education and career, therefore affecting girls' and young women's performance (Conchas, 2006; Walkerdine, 1988, 1990, 1997, 1998; Walkerdine et al., 2001)—which was also the case of Samira referred to in the previous maps. Garcia-Reid has also examined the impact of social capital on the motivation and

interdependence with material orderings. It is in this sense that Haraway (1997) suggested the term material-semiotic practices, which I also use in this dissertation.

education of Hispanic girls (Garcia-Reid, 2007). In this context, because of her ethnicity Maria was expected to either drop out of school or get pregnant. However, instead of accepting this ‘future’ as self-evident, she views from a meta-perspective how this ‘future’ is fabricated. As in most diary extracts created at the Woodrow Wilson High School, and in contrast to the daily reports written by the students at the School for Individual Learning-in-Practice, Maria does not produce an ‘objective’ account about what has happened ‘out-there’ (in the ghetto), but reflects about how the ‘out-there’ (ghetto) relates to the ‘in-here’ (college, where she is writing the diary) and how this relation is mediated by what people say about living in the ghetto and skin color, as depicted in picture 1:



Picture 1: Relational Model of Time and Development

An escape from the technologies of the self is performed here, and past and future are viewed from a poetic perspective. The student does not reflect about her performance or about her self by trying to understand what her true interests or thoughts are; she reflects about how she would usually reflect and about how reflection and development are usually done. Reflection on reflection (Fichtner, 1996a; Fichtner, 1996b, 2005; Lopes, 2007), deterritorialization, and radical novelty (Deleuze & Guattari, 1980/1987) take thus place. One could say that the diary presented above is a representation of representation in a similar way to *Las Meninas* by Velázquez. As a result Maria is neither apologetic nor anxious about her future (compare here the reports and interview extracts presented in maps 4 and 5) but in contrast to the usual limited expectations of

students of Chicano ethnicity, she thinks that she will follow higher education and ‘help build the human nation’.

The notion of time and the concept of mediation is of major importance here. If mediators are not visible, relations are perceived as self-evident. In this case Latour says that mediators function as intermediaries. When mediators function as intermediaries, then time usually unfolds in a linear way and development is the actualization of potentialities. The very moment mediators become visible—and this happens in the painting of Velázquez or in the the written diary of Maria—difference itself is generated. The very moment Maria realizes that she is part of a network of relations which could be totally different, the mediations that prevent these different (virtual) relations from becoming realized are revealed and a process of generation of radical novelty takes place, as part of the broader process of collaborative transformation described so far. Development is no longer the realization of potentialities (get pregnant and live in the ghetto) but the actualization of virtualities (becoming a teacher and contributing to social change).

According to modern ontologies and temporal orderings, time and human development are objective phenomena ‘out-there’. The models of irreversible time and of human development regard from ‘no-where’ a reality ‘out there’ instead of studying the mediations and translations between the phenomena studied somewhere ‘out there’ and the settings of knowledge production somewhere ‘in here’ and their performative effects. In this context, development is represented, assessed, and spoken about. ‘Development’ is not, however, ‘out there’, ‘in time’, or ‘in the other’: it is always created from a perspective and through mediation. Development is not something happening ‘out-there’, in school or everyday life, nor is it just a discursive category specialists use ‘in-here’ to describe what is happening ‘out-there’. Development is instead the *product* or the *enactment* or the relation between the ‘in-here’ and the ‘out-there’, and this relation can be liberating only in the case of the representation of representation, which generates difference-in-itself as presented above. What happens through the painting of Velázquez or through the written diary of Maria is that the same (i.e. Velázquez or Maria) ‘returns but is different’ (Nietzsche, 1885/2007) because it is embedded in different relations—relations that were virtually there and now are realized.

It is a mistake to conceptualize time as an objective reality existing ‘out there’ without revealing the ways in which the past, the present and the future—as well as the relations between them—

are produced ‘in here’ through the involvement with different materials and tools. As also argued in map 5, pasts and futures are *performed* or *enacted* during material-semiotic action and can be performed or enacted in various ways, which in turn has implications for action itself. In this regard, time does not exist as a container in which development takes place, but is interdependent with it. In the case presented above, the self-evident continuity between the present and the future was broken and the linearity between the present and the future was reversed. The performance of the past, the present, and the future was the actualization of virtualities and not just a realization of potentialities (Bergson, 1896/1991; Deleuze & Guattari, 1980/1987). Mediators were of particular importance because they enabled concrete relations between subjectivities while rendering other relations impossible. In his critique of the modern notion of representation in *Cinema 1* and *2*, Deleuze introduces a new concept of time: that of time-image (Deleuze, 1986, 1987). The hyphen in the compound word ‘time-image’ designates that image *belongs to* time and does not just *represent* time (Kozin, 2009). Following Deleuze (1986, 1987) and Deleuze & Guattari (1980/1987), one could argue that a written narration, a picture, a diagram—in their terms a ‘map’—is not a *representation* of reality but a *mediator* or a *translator*. It does not just *represent* something already existing but *creates* new realities—virtual ones. Notes and memos, reports and other material-semiotic tools such as CVs, students’ files, or questionnaires (Kontopodis, 2007b, 2009a) *mediate* the relation between the in-here and the out-there.

Emotions and Sociability in the Making

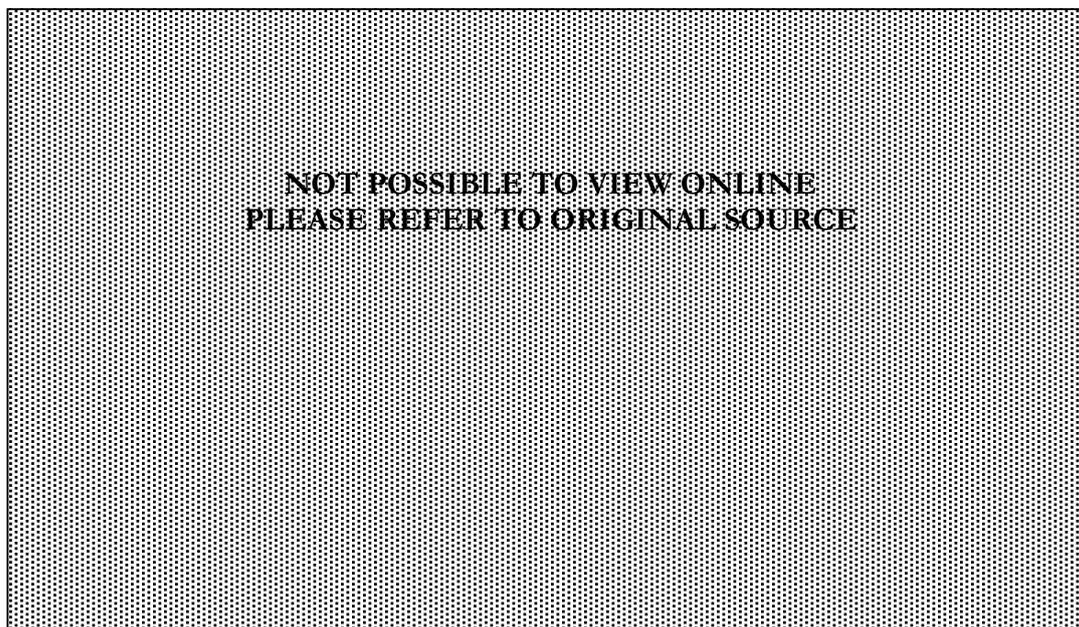
The radical impact of writing anonymous diaries is also revealed in the following diary entry written by a female student:

Extract 3

Dear Diary,

“As his penis twirled in my mouth, thoughts of popcorn he promised me ran through my mind...” As I read these words, I began to wonder who the author of this story was. My mind began to think, “Damn, I’ve been through the same thing”. Bad things always happen to the wrong people. I read the sentence repeatedly, then scanned the room to see any body language that would have reveal who wrote it. I looked, yet no one gave me any evidence who the author was. I can’t believe that I got a

story to read and edit that I could have told. I stared down at the words and began to think back on the terrible act of violence I suffered at the hands of a family member. I felt a sense of relief that



her. But now I know that I am not alone—and that has made a difference. (Gruwell, 1999, p. 151)

The student here describes a traumatic experience of extreme sexual violation by a family member. The healing impact of writing about traumatic experience in general and in regard to the Freedom Writers in particular has been well studied by MacCurdy (MacCurdy, 2007). From my point of view, however, what was significant for the whole Freedom Writers' project was not only the writing itself, but also the editing of the others' entries and the classroom discussion. Through these practices, the sharing of experiences of suppression with imagined others who had or could have similar experiences led to a process of socio-political transformation that was much more than just relief for a single traumatized person. As becomes evident through reading the diary entry presented above, affects were of particular importance for this process of collective becoming: shame, solidarity, anger, sorrow. "Some girls left the room, too overwhelmed with emotions, to stay and here the rest" as we read.

Emotions and affects have recently received particular attention in cultural-historical activity theory and critical theory and have been studied in their relation to "power, struggles and contradictions" (Braidotti, 2002, p. 25) and in their role in socio-political change (Blackman et al., 2008; Roth, 2007a, 2008a; Venn, 2009). Emotions were also a favorite topic of Vygotsky in his developmental and educational psychological work (Puzyrei, 2007; Veresov, 2004; Vygotsky,

1929/2005) which in the broader context of spinozic monism (Spinoza & Curley, 1994) was not about the development of cognitive or professional skills but about the development of a child or an adolescent as a whole person *in relation to* other persons and to the society as a whole (Kotik-Friedgut & Friedgut, 2008; Robbins, 2001, 2003; Vygotsky, 1933/2002).

Radical approaches to human development inspired by Vygotsky as well as by Freire (1973, 1986) argue that being in the world is transforming the world, not adapting to it. Human development is the process of the purposeful transformation of the world which is collaborative per definition (Liberali & Rahmilevitz, 2007; Stetsenko, 2008; Vianna & Stetsenko, 2006). Emotions and affects are what bring different people to act together, thus transforming themselves as well as social and societal relations. The notion of virtuality by Bergson and Deleuze (Bergson, 1896/1991; Deleuze & Guattari, 1980/1987), as well as the notions of ‘drama’ by Nietzsche (Nietzsche, 1885/2007; Nietzsche, 1882/1974) and Vygotsky (Vygotsky, 1925/1971; Vygotsky, 1929/2005; Vygotsky, 1933/2002) refer both to collectivity and affectivity: “By the virtual we understand the set of powers to act (being, loving, transforming, creating) that reside in the multitude” (Hardt & Negri, 2000, p. 357)⁶⁰. Stephenson and Papadopoulos introduce the term ‘sociability in the making’ to emphasize the processual way in which collectivities emerge when people share their experiences of exclusion, which might be unique but can at the same time be seen as very similar to the experience of the other people (Foucault et al., 2005; Stephenson & Papadopoulos, 2006):

[C]hange is not an individual affair but a matter of sociability. Reworking the social order, becoming-other to oneself, occurs in social relations. Although exclusion is enacted in social relations they are not completely constrained by liberal political rationalities or practices. They carry an excess which can open possibilities for contesting hegemonic forms of exclusion. (Stephenson & Papadopoulos, 2006, p. xix)

Following Liberali & Fuga in their analysis of educational projects in Brazil that were based on the ideas of Spinoza, Freire and Vygotsky (Liberali & Fuga, 2007), we could say here that the

⁶⁰ Etymologically, virtual (Virtue, virtuous) means full of virtue, i.e. capacity to act. Seen from this perspective, this term has nothing to do with cyberspace and information technology, where the concept of the virtual has gained wide currency. Rather, it concerns two fundamental questions—being and time, ontology and temporality—and the attempt to redefine both of these philosophical domains in terms of the concept of virtuality.

communicative and affective practices which emerged in the context of the Freedom Writers' project enforced the *conatus*, the strength to deal with reality in acting with others and not alone. To refer to another example from the Freedom Writers' project, one student wrote when reflecting about child loss in a gang shooting: "My mother is Mexican and this woman is black, yet the emotions that made them cry came from a heart that was tearing apart the same way" (Gruwell, 1999, p. 65). Within a similar framework based on the philosophy of Spinoza and the psychology of Vygotsky, Kagawa & Moro use the term 'politico-affective processes' to refer to the procedures "through which individuals try to preserve themselves and increase their power of acting" by collaboration (Kagawa & Moro, 2009, p. 7).

Development after Representation: from Linear Time to Virtuality

Diaries, books, and works of art *mediated* the communication between various subjectivities who were confronted with similar problems. This enabled the so-called 'Freedom Writers' to view reality not in developmental terms, i.e. in terms of potentiality (development towards a given end), but in terms of virtuality. Following Bergson, from the viewpoint of theory there is no difference between the potential and the real. Something is *already given* as 'potential' and simply has existence or reality added to it when it is 'realized'. Conversely, the virtual is real but not actual (Bergson, 1896/1991). In actualizing itself, it does not proceed by limitation or exclusion but rather must *create* its own lines of actualization in positive acts that require such 'a process of invention' (Ansell-Pearson, 2002, p.72) that it diverges or differentiates itself from itself. In this perspective and taking under consideration the various materials from the School for Individual Learning-in-Practice in the previous maps as well as the materials from the Freedom Writer's project, it seems important to differentiate between two modes of reflection: a) reflection about oneself i.e. about one's performance, and b) reflection as witnessing i.e. reflection about one's actual and virtual relations to other subjectivities as realized in concrete material-semiotic orderings. This second kind of reflection is directly linked with transforming these relations because it implies a critical enacting of history and of the future which is per definition collaborative, affective, and unpredictable (cf. Freire, 1972; Freire, 1973).

A student's development is virtual if it is radically redefined not as individual development but as societal development of new relations between different subjectivities (Daniels, 2001; Lave & Wenger, 1991), i.e. as development towards the coming community (Agamben, 1993). However, mediators used in school settings (i.e. discourse, school files, reports, teachers' memos, etc.) usually fabricate time and development towards a state of equilibrium and not as a drama so that existing power relations are maintained. The concept of development which dominates developmental psychology, educational science, and modern education is grounded on the model of irreversible time which stems from thermodynamics and evolutionary theory. In this context, the *self* is the main locus of control: institutional control and later self-control (Foucault et al., 1988). When the material-semiotic mediations which fabricate time and development become visible, it becomes possible to get 'involved' with them and to change them, viewing the present and the future from a meta-perspective (Bateson, 1972/ 2000, pp. 271-278; Bateson & Bateson, 1987; Fichtner, 1996a; Fichtner, 1996b, 2005, 2007). Following Haraway (Haraway, 1997), I could say here that all the relations to which I refer are at the same time semiotic and material in the sense that the action which actualizes or realizes these relations transforms the material world (e.g. creation of books, movement of students to different places, upcoming social mobility, mixture of populations) and also transforms relations of meaning (e.g. Maria is no longer a marginalized female student but a 'freedom writer' who wants to become a teacher of other marginalized students). The enacting of the past, the present, and the future is then an actualization of virtualities and not just a realization of potentialities with very important consequences for what might be seen as child and youth every day life and development (cf. Gallagher, 2004). At the moment when the self is dissolved and social relations are made visible, time is no longer linear and the future is no longer predictable. Individual development and societal development merge into each other and lead to radically new realities. Such a development is required especially nowadays in order to escape the neo-liberal technologies of the self which go together with a series of educational and socio-political problems (Langemeyer).

The difference between the examples from the School for Individual Learning-in-Practice and the Freedom Writers' project is that in the first case, development was represented and enacted as development towards the possible and not as development without any given end. Future and past have been presupposed and time and development have been the objective lines connecting them. Latour suggests that if the relations of entities that fabricate the development, i.e. "the

sorts of connections, short-circuits, translations, associations and mediations that we encounter daily” (Latour, 2005b, p. 181) are revealed, then difference is possible: potentiality turns into virtuality. This has been the case for Maria presented above and for the other Freedom Writers. Advancing the concept of ‘virtuality’ of Bergson (Bergson, 1896/1991), one could claim that there can be *endless* ways of relating a past, a present, and a future to each other, i.e. there can be endless pasts, presents, and futures. There are multiple ways of enacting pasts, presents, and futures by interrelating them. In this sense, development could be ‘un-limited’ and institutional memory and biography could fuse with imagination. However, development towards the unknown does not of course mean liberal or neo-liberal endlessness and flexibility (for a critique to flexibility see Martin, 1994). Following Haraway, we can also say that:

Complexity, heterogeneity, specific positioning, and power-charged difference are not the same thing as liberal pluralism. Experience is a semiosis, an embodying of meanings [...]. The politics of difference that feminists need to articulate must be rooted in a politics of experience that searches for specificity, heterogeneity, and connection *through struggle*, not through psychologistic, liberal appeals to each her own endless difference. Feminism is collective; and difference is political, that is, about power, accountability and hope. Experience, like difference, is about contradictory and necessary connection. (Haraway, 1991, p. 109)

Finale

Unlimiting Human Development

“[A] multiplicity is defined not by its elements, nor by a centre of unification or comprehension. It is defined by the number of dimensions it has; it is not divisible, it cannot lose or gain a dimension without changing its nature”⁶¹

A primary- or preschool class of children from an immigrant background is passing in front of the School for Individual Learning-in-Practice. They are dark-haired, dark-skinned and dressed in rather formal, not colorful clothes, and it is clear that they are of Turkish or Arabic ethnicity. It is a break, so many teachers and students are outside the building, standing near the school entrance. The passing children attract their attention. A Turkish male student of the School for Individual Learning-in-Practice comments, loudly enough for everybody to hear him: “You will soon come to this school, too”. And then adds: “This is the future”. The ironic joke he is making here refers to two different meanings: i) the official discourse: the School for Individual Learning-in-Practice is (good for, ensures) the future and ii) the students’ discourse: your future is the School for Individual Learning-in-Practice because you will also be excluded from everywhere else and end up at this school.

All the students of the School for Individual Learning-in-Practice understand the joke and burst into laughter.

(Extract from field notes translated from German by M.K.).

Drawing on a variety of approaches such as cultural-historical psychology, social psychology, the anthropology of youth, science and technology studies, and process philosophy, this dissertation analyzes research materials from two case studies of experimental urban educational projects and investigates how the day-to-day performance of pasts and futures at school is related to students’ development. The work presented here is an attempt at casting human development as a material-semiotic ordering which reflects power relations. It explores everyday practices of students and teachers in a concrete school setting in Germany, where I conducted ethnographical research for one schoolyear, and contrasts them with a very different school project, that of the Freedom Writers, which took place at the Woodrow Wilson High School in Long Beach, California, from 1994 till 1998.

⁶¹ Deleuze & Guattari, 1980/1987, p. 249

A lot of material-semiotic orderings have been established in modernity in order to objectify, regulate, channel, and institutionalize time. While everything ‘always already differs from itself’ (Deleuze, 1968/1994), modern institutions work continually to exclude difference-in-itself, to limit diversity, and to control development. The School for Individual Learning-in-Practice, presents a particular case of such a modern institution. Referring among others to the cases of the students Husk and Samira as presented in maps 2 through 5, we could claim that reports, diaries, teachers’ memos, files, registers, and other school documents (broadly speaking: *cultural artifacts*) mediate development, applying a particular temporal order upon everyday action. From this perspective, human development seems to be a material-semiotic ordering taking place in school and consisting of mediations, translations, connections, and circuits.

However, teachers and students usually ignore or conceal these mediations, circuits and translations and believe that what they represent as the development of a particular student is identical with the development(s) happening ‘out-there’. In this way, development is objectified and therefore either labeled as ‘non-development’ as in the case of Husk (see map 3), or organized, institutionalized and thus directed, guided, and stabilized as in the case of Samira (see maps 4 and 5). In such a paradigm, it is impossible to create a situation with completely new properties—only another way of combining the already known properties is possible—and development unfolds towards the known and not towards the unknown in the same way in which a modern train either approaches its destination or does not—without the destination or the route itself being questioned (Latour, 2005b). In the context of reflection tasks, consultation, and evaluation practices, students and teachers thus accept the linear temporal order as the only possibility which shapes their further motives, decisions, and actions.

Development as fabricated in the School for Individual Learning-in-Practice implies the creation of a neo-liberal self that, independently of his/her gender and socio-cultural or ethnic background, reflects upon his/her past in order to ‘discover her/his talent’ and enter the job market without any critical reflection or resistance (cf. Kaindl, 2005). In this regard, development seems to function as a technology of the self (cf. Foucault et al., 1988) so that the formerly excluded students, for whom the School for Individual Learning-in-Practice was designed, actively enter the current economy and do not depend on the welfare system (Rose, 1999). If all functions well, development leads to a ‘job seeker’—a subjectivity which the school’s control mechanism endorses—while simultaneously being a composite of the

institutional and the subjective, an incorporation of the private by the public which transforms both the institution and the subject, as Papadopoulos points out (Papadopoulos, 2005). According to Deleuze & Guattari, Latour and other approaches presented here, this kind of development can be defined as ‘potential development’.

But development can also be done in very different ways. Seeking alternatives to this kind of organization of development, my analysis turned to the well-known Freedom Writers project in California and explored the role of collective writing, witnessing and reflecting for the education and development of marginalized female and male students. A few diary extracts written by the students about sexual and gang violence or about the school and their future have been exemplarily analyzed, and it has been suggested that there are two different modes of reflection, which are interconnected to two different modes of development:

- (a) Reflection about one’s (past) performance leads to *potential* development as presented above, referring to the School for Individual-Learning-in Practice
- (b) Reflection about one’s relations to other subjectivities i.e. collective relations and the mediations that render these relations possible is a very different form of reflection, that can lead to collaborative transformative action (Stetsenko, 2008) and to what can be described as *virtual* development.

Virtual development concerns the generation of difference-in-itself, i.e. the emergence of qualitatively new social relations. As presented in map 6, such a reflection, such a development goes together with the enactment of a collective past or history as well as of a collective future and is unpredictable and *dramatic* in the sense of Vygotsky (Vygotsky, 1929/2005). Development conceptualized in relational-processual terms is not development towards a given (potential) end but can vary endlessly, leading to new and so far unknown social relations—towards what Agamben called ‘the coming community’ (Agamben, 1993). According to a recent article by Andrew Metcalfe and Ann Game, relationality presumes the reality of infinitude:

Relations are based on an alternative ontology, time and space, and on an inclusive rather than an exclusive or oppositional logic. The key to this different logic is a distinction between finitude and infinitude. Whereas oppositions presume the existence of finite terms, relationality presumes the reality of infinitude. In an experience of relationality, subjecthood is suspended; there are no finite

terms, but, rather, the undefinable non-oppositional difference of wholeness (Metcalf & Game, 2008, p. 191)

Interpreting the Vygotskian *Zone of Proximal Development* from this point of view, one could say that it does not consider the (potential) development of a single individual, but the (virtual) development of different relations among subjectivities and objectivities. From this perspective, the question a teacher or, a researcher should be confronted with is therefore not how a given singular or collective subject develops, but how fundamentally new relations (i.e. new material-semiotic orderings) emerge—how old materials can obtain new meaning, how old meaning can be differently materialized.

If there is a possibility for difference-in-itself to emerge, it is not through developing and applying new universal instruments and approaches in developmental psychology. Instead, difference-in-itself emerges through disclosing all mediations that participate in the doing of development and experimenting with them. By rendering visible all the mediations, i.e. all the fabrications of development psychologists and teachers engage in, one could reveal the mediations and relations which unfold potential or establish sameness, going on to destruct them and favor the lines of escape which generate difference (Stengers, 2002, 2007, 2008b). From this perspective, the query presented here can be considered as a springboard for the ‘politics of development’. As has been declared at the beginning of this work, the questions and the ideas expressed here are primarily political. Considering difference as the starting point for psychological or educational approaches could lead to experimenting⁶² with materialities, treating marginal subjectivities with special attention, favoring the movement and coming together of different social groups, genders, cultures, ways of being and becoming. A relational-processual approach to development cannot avoid being political. And it would not predefine a desired state to be reached by young people. Instead it would continuously question research, educational, and school-psychological semiotic-material practices. Development in relational-processual terms consists of experimenting and playing with the real. It is involution, not evolution, as Deleuze &

⁶² I use the term ‘experimenting’ here on purpose in order to connect to Davydov’s ‘teaching experiment’ (Davydov, 2008). A teaching experiment making use of diaries and other means of critical reflection could be seen as the next step in advancing the work presented in this dissertation. Experimental work in the sense of the approach outlined here has already taken place in Greece and in Brazil, being applied in teaching mathematics to ethnic minorities and in dealing with disability (Chronaki, under review; Lopes, 2007; Pourkos, 1997).

Guattari write (Deleuze & Guattari, 1980/1987); it does not unfold automatically in a linear way but requires involvement and drama (Vygotsky, 1925/1971); it is an involution including teachers, students, researchers, documents, technologies, and materialities (Mol, 1999).

Such a relational-processual developmental theory should, first of all, be founded on the methodological principle of transparency. This claims that it is of primary importance to make visible all translations which we—teachers, researchers and specialists make. Making these mediations and translations visible would force us to justify our own criteria and understanding of youth development and would reveal and not hide controversies and conflicts resulting from different material-semiotic practices. Such an approach challenges all the power relations between the ones who plan, evaluate, and support development and the ones who undergo it. From this perspective, the questions which psychology, educational science and education could deal with in order to ‘actualize the virtual’ and not only ‘realize the potential’ are:

- In which situations, contexts, and patterns of action can we observe drama, intensity, conflict, uncertainty?
- How is development fabricated in relational-processual terms, i.e. as a relation between subjectivities and objectivities? How do these relations develop? Does drama generate new discursive-material formations or not? How does matter and meaning develop as an ongoing historicity (Barad, 2007)?
- How is difference-in-itself generated and excluded? What is the role of mediations in regard to the creation of new relations? Do they stabilize existing relations or fundamentally bring different forms together? What are the qualities of connections among actors and/or actants in a particular setting?
- Do these relations and connections reflect and generate freedom, imagination, and movement or do they express limitation and control (Spinoza & Curley, 1994)?

In relational-processual terms, multiple realities are possible: different material-semiotic practices would not concern the child’s or student’s development but would lead to new or different relations between subjectivities and objectivities as well as to different forms of consciousness

(cf. Foucault, 1988, p. 253). To quote Morss: “the forgetting of development may be a remembering of childhood”—to which I would add: a remembering of youth (Morss, 1996, p. ix).

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Appendix

Transcription and Coding of Oral Data

Following the recent research accounts on language and performativity (Bohnsack et al., 2001; Wulf et al., 2001), in my research I have tried to analyse not only *what* was said by the research participants but also *how* it was said. All utterances have been transcribed phonetically rather than in accordance with standard grammatical rules. The correct orthography is often given in single round parentheses, e.g. Dis is ja `ne (das ist eine)⁶³. On the basis of the book *Talking Data: Transcription and Coding in Discourse Research* (Edwards & Lampert, 1993), I have developed the following code regarding particular features of my research oral data:

(text) = (the author's correction of language/ word originally missing, here added)

((text)) = ((the author's comments))

[text] = **T:** [text articulated simultaneously]

H: [text articulated simultaneously]

<text> = <passages modified during speaking> e.g: text <das äh, das äh, das err> das erinnert mich an...

#text# = #changed name for purposes of anonymity#

... = omission: "Text quoted ...the rest of the text quoted"

(...) = pause lasting less than 1 second

(.2), (.3), etc = pause lasting several (number) seconds

@ = laughter

@@ = strong laughter

letter=letter = prolonged sound (e.g: so=o boring)

(*2), (*3) etc = incomprehensible speech lasting several (number) seconds

⁶³ The original spelling and format of all the extracts of written speech presented here in German have been preserved.

^word = word pronounced more loudly than the rest of the utterance

~word = word pronounced more quietly than the rest of the utterance

/sentence = sentence pronounced more loudly than the rest of the utterance or becoming gradually louder

\sentence = sentence pronounced more quietly than the rest of the utterance or becoming gradually quieter

/\sentence = sentence initially pronounced with increasing and then (gradually) with decreasing loudness

\/sentence = sentence pronounced at first increasingly quietly and then increasingly loudly

<F text F> = loudly articulated passage (forte, i.e. loud)

<P text P> = softly articulated passage (piano, i.e. soft)

<CR text CR> = passage articulated with increasing loudness (crescendo, i.e. gradually louder)

<HI text HI> = deliberately raised pitch of voice (higher pitch, usually mimicking somebody else's tone of voice)

<LO text LO> = deliberately lowered pitch of voice (lower pitch, usually mimicking somebody else's tone of voice)

<A text A> = rapid speech (allegro)

<L text L> = slow speech (lento)

<MRC text MRC> = passage with each word articulated distinctly and with emphasis (marcato)

<WH text WH> = whispered passage

<LAU text LAU> = passage articulated while laughing

Erklärung zur Dissertation

Hiermit versichere ich, dass ich die vorgelegte Arbeit selbständig verfasst habe. Andere als die angegebenen Hilfsmittel habe ich nicht verwendet. Die Arbeit ist in keinem früheren Promotionsverfahren angenommen oder abgelehnt worden.

Berlin, den 01.07.2009

Michail Kontopodis