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Appropriating New Technology for Minority

Language Revitalization:

The Welsh Case

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Notational Conventions

Abbreviations

ASCII	American Standard Code for Information Interchange
BBC	British Broadcasting Corporation
CAIN	Conflict Archive on the Internet
CAT	Computer Aided Translation
CEC	Commission of the European Communities
CERN	European Organization for Nuclear Research
CCC	Cornwall County Council
CD	Compact Disc
CD-ROM	Compact Disc (Read Only Memory)
COE	Council of Europe
CYDAG	Cymdeithas Ysgolion Dros Addysg Gymraeg
DAB	Digital Audio Broadcasting
DETR	Department of the Environment, Transport and the Regions
DfEE	Department for Education and Employment
DTV	Digital Television
DiViTh	Digitale Videotheken
DVD	Digital Versatile Disc
DVD-R	DVD (Recordable)
DVD-RAM	Digital Versatile Disc (Random Access Memory)
DVD-ROM	Digital Versatile Disc (Read Only Memory)
ELWa	Education and Learning Wales
ERDF	European Regional Development Fund
EiTB	Euskal Irrati Telebista
EKE	Euskal Kultur Erakundea
ESRC	Economic and Social Research Council
ETB	Euskal Telebista
GIDS	Graded Intergenerational Disruption Scale
GOSW	The Government Office for the South West
EU	European Union
ELWa	Education and Learning Wales
HEFCW	Higher Education Funding Council for Wales
HFS	Horizon Family Solutions
HTML	Hypertext Markup Language
IBIS	Interfaces for Bilingual Information Systems
ICT	Information and Communication Technology
ICD	Intercultural Dialogue

IFCC	Irish Famine Curriculum Committee
IMD	Independent Media Distribution Plc
ISDN	Integrated Services Digital Network
ISOS	Irish Script On Screen
IT	Information Technology
IP	Internet Protocol
IPA	International Phonetic Alphabet
KBps	Kilobites
LLGC	Llyfrgell Genedlaethol Cymru
LPP	Language Planning and Policy
MSD	Marysville School District
MT	Machine Translation
MTV	Music Television
MYM	Mudiad Ysgolion Methrin
NafW	National Assembly for Wales
NARA	National Archives and Records Administration
NIRS	National Indigenous Radio Service
NLP	Natural Language Processing
NLW	National Library of Wales
NILTS	Northern Ireland Life and Times Survey
NREL	Northwest Regional Educational Laboratory
NZDL	New Zealand Digital Library
PAW	Pintubi Anmatyerre Warlpiri
PC	Personal Computer
PFECMR	Public Foundation for European Comparative Minority Research
PGI	Profit Gate Incorporation
PPA	Pre-school Playgroups Association
PSUD	Prescott School Unified District
RNIB	Royal National Institute of the Blind
RNID	The Royal National Institute for Deaf People
RLS	Reversing Language Shift
RSI	Repetitive Strain Injury
SALTMIL	Speech and Language Technology for Minority Languages
SAPI	Speech Application Programming Interface
S4C	Sianel Pedwar Cymru
SD	Super Density
SNP	Scottish National Party
TBCS	Treasury Board of Canada Secretariat
TM	Translation Machine
TPR	Total Physical Response

TREL	Tele-Rent Eastbourne Limited
TTS	Text to Speech
UK	United Kingdom
UKERNA	United Kingdom Education and Research Networking Association
UKP	United Kingdom Parliament
UNESCO	United Nations Educational, Scientific and Cultural Organization
UOW	University of Waikato
USA	United States of America
UUP	The Ulster Unionist Party
UZEI	Unibertsitate Zerbitzuetarako Euskal Ikastetxea.
VAT	Value Added Tax
VOC	Verenigde Oostindische Compagnie
VOWB	Vlaams Overlegorgaan inzake Wetenschappelijk Bibliotheekwerk
VSO	Verb Subject Object
WAG	Welsh Assembly Government
WISPR	Welsh and Irish Speech Processing Resource
WMA	Warlpiri Media Association
WLB	Welsh Language Board
WLS	The Welsh Language Society
WWW	World Wide Web

Use of terminology

The term *appropriating* will be used to mean the deployment of technology by minority language communities.

The terms *minority*, *lesser-resourced*, and *lesser-used* languages will be used interchangeably. In some cases, *native*, *indigenous*, and *heritage* languages will also be utilized variously.

In my thesis, the term *mass media* can be extended to include all types of technologies.

The terms *digital* television and *satellite* television will be employed variously as far as the Basque television is concerned.

Language modernization and *language revitalization* will be used interchangeably in my dissertation. While language revitalization will be applied to extinct, weakening, moribund, and healthy languages, the process of *language revival* will only revolve around extinct languages.

1. Introduction

According to Grenoble and Whaley (2006), there is a number of innovative programs that deal with endangered languages, which have been emerging around the world over the past five decades. With soaring frequency, the aim of these programs has been to revitalize languages that are on the brink of extinction because of the declining numbers of their native speakers. In addition, it is claimed that the

nature of these initiatives varies as greatly as the languages that are their targets... Many of these programs are connected to claims of territorial sovereignty, though cultural sovereignty or a desire to maintain a unique ethnic identity is just as often the explicit goal. While in one context a revitalization effort may be centered around formal education, in another it may be focused on creating environments in which the language can be used on a regular basis. Although tremendous variety characterizes the methods of and motives for reinvigorating languages, revitalization, as a general phenomenon, is growing and has become an issue of global proportion. There are now hundreds of endangered languages, and there are few regions of the world where one will not find at least nascent attempts at language revitalization. (Grenoble and Whaley 2006: 1)

Grenoble and Whaley also reflect on the connection of technology with regard to language revitalization as well as its function, saying that emerging technologies are regarded as

highly beneficial to language revitalization. Without a doubt, they can recharge and enhance language revitalization programs, and they offer a way for communities to make themselves better known in regional, national, or international context. Current technology can also offer relatively inexpensive ways of developing language materials; it can be used to document language materials more efficiently than in the past, to create online dictionaries and other reference tools... In perhaps the most optimistic view of the role of technology, some see it as a way to create or expand the speech community and the situations where the language is used. (2006: 190)

1.1. *Plan and interest*

Language endangerment and language revitalization are looked upon as highly interesting topics, which have been discussed extensively by many linguists and authors. They have also been approached from different perspectives and with various degrees of emphasis. As Tsunoda explains: “*In almost every part of the world, minority languages are threatened with extinction. At the same time, dedicated efforts are being made to document endangered languages, to maintain them, and even to revive once-extinct languages*” (2006: V).

Tsunoda (2006: 1) highlights the fact that the vast majority of languages are languages of minority people, which are declining with an alarming rate. Quite recently, a number of strategies and careful measures have been deployed with regard to the fate of disappearing languages. Tsunoda claims that language loss is not a recent phenomenon in human history. It has indeed happened in historic times as well as in prehistoric ones. Colonization may perhaps be taken as the most potential cause of language loss from the perspective of Tsunoda (2006: 3). At this level, I am going to resort to a quotation by Leanne Hinton where she defines the loss of language as

part of the loss of whole cultures and knowledge systems, including philosophical systems, oral literary and musical traditions, environmental knowledge systems, medical knowledge, and important cultural practices and artistic skills. The world stands to lose an important part of the sum of human knowledge whenever a language stops being used. Just as the human species is putting itself in danger through the destruction of species diversity, so might we be in danger from the destruction of the diversity of knowledge systems. (2001a: 5)

Before giving an idea about the way I have planned my thesis, I am going to reveal my major interest behind the study of the Welsh language along with the technological devices, which have been appropriated by the Welsh community to revitalize its language. According to Coupland et al. (2006: 352), “*Wales is well known as that part of the British “Celtic fringe” hosting the most resilient of the Celtic languages, which has hung on to vitality despite a long and acrimonious history of minoritization and Anglicisation.*” I am interested in studying this minority language because of the large spectrum of linguistic, historical, cultural, as well as technological dimensions it encompasses. These aspects will be further explained throughout my exploration of the Welsh language as well as the revitalizing Welsh language technologies.

In the first part of my dissertation, I am going to present the topic and display central points I will investigate throughout my thesis. I will then embark on a study of the Welsh language and

explore some of its characteristics. I will equally look at the other minority languages spoken in the United Kingdom such as Cornish, Manx, Scottish Gaelic, Ulster Scots, as well as Irish, and shed light on their features. Before revealing the technological tools appropriated by the Welsh community along with insights into the devices used by the different communities of the other minority languages in the United Kingdom, I will look at some cases from around the world which have also made use of new technologies to rejuvenate their lesser-used languages. On the basis of these explorations, I will then derive some implications for my thesis. Before concluding, I will analyze the data collected, assess the Welsh technological tools contributing to the revitalization of the Welsh language, and point to the insights they reveal.

There are three hypotheses, which will be tested throughout my analysis. First, the extent to which new technology can play a vital role in revitalizing the Welsh language is among the crucial ones. Additionally, I will highlight the fact that the use of technological devices is a useful measure to promote Welsh and further boost its status. Second, I will see if the use of Welsh can be facilitated in people's everyday lives through the use of technology. Third, fundamental ideas such as learning and teaching a minority language can be highlighted as a result of explorations of appropriating technology for the revitalization of Welsh. The investigation of the hypotheses will be carried out within a broader framework. In other words, the pattern followed is to relate revitalization activities applied to Welsh to the other minority languages in the United Kingdom.

1.2. Defining some terms

In this section, definitions of some concepts and technical terms are provided and will be resorted to in the course of my dissertation.

1.2.1. What is a minority language?

Abbi (2000: 13) argues that the idea “*of ‘minority’ brings in the picture of underprivileged, dominated, subservient people who lag behind the idea of progress and development. The notion of ‘minority’ also brings home the idea of smallness.*” This idea of smallness intimately pertains to the minority or regional languages of the EU. About 40 million people of the Union, which is developing with the expansion of the EU, often use a regional or minority language. According to Kumar Das (2004: 2),

[t]he customary definition of regional or minority language is that used in the European Charter for Regional or Minority Languages, an international treaty supervised by the Council of Europe and adopted by many EU Member States, i.e. “languages traditionally used by part of the population of a state that are not dialects of official languages of the state, languages of migrants or artificially created languages.”

The definition encapsulates several languages and a broad spectrum of social, political, as well as linguistic contexts. It is to be noted that from all regional or minority languages in the EU, which are spread in some 59 linguistic population groups, there are only six languages, which are spoken by about one million people and only two by over half a million. For instance, I can refer to Catalan—a minority language spoken by some 7 million people in the countries of Spain and France as well as in the town of Alghero in Sardinia. It should be mentioned that many speakers of Catalan reside in autonomous areas of Spain. There, Catalan is conversed by a great percentage of the population and has official status along with Spanish. Nevertheless, Saami is a family of languages spoken by minority communities in the areas of northern Finland, Sweden, Norway, and the Kola Peninsula of Russia. What is striking about the members of this language family, whose number is subject to a powerful degree of decline, is that they only represent a few hundred of speakers .

Kumar Das (2004) goes on to say that the communities, which speak a language similar to the official or majority language of a neighboring state, are also covered by the definition. Some cases can be exemplified by the German-speaking communities in the countries of Belgium, Denmark, France, and Italy; the Albanian and Greek-speaking communities of southern Italy, as well as the Croatian and Slovenian speaking communities of Italy and Austria. Because of the official status of these languages in a neighboring country, the degree of vitality of the language and its related cultural resources in these places is subjected to strong pressures quite reminiscent of those of minority languages like Breton or Gaelic. Furthermore, the definition encompasses Yiddish and the languages of the Romani and Sinti people—languages which have been traditionally spoken throughout Europe—apart from the aforementioned territorial languages. Famous cases are Irish and Luxembourgish, which both display many of the characteristics of regional or minority languages in spite of their officially recognized status as national languages in their countries.

Cunliffe reflects on the definitions that have been given with regard to minority languages, saying that it

is indicative of the complexity and sensitivity surrounding minority languages that even the decision as to what term to use to describe them has been problematic. Aside from 'minority', a plethora of terms have been used, each with slightly different connotations: 'lesser-used', 'disadvantaged', 'threatened', 'endangered', 'indigenous', 'heritage', 'local', 'non-state', and so on. (2005: 133)

Apart from the decision of what term should be used to depict a minority language, one can mention that there is the pervading issue of its definitional manner along with questions such as whether minority language status should be evaluated on a regional basis or in terms of the number of its speakers, according to Grimes (1986).

Since I have pointed out that the term 'minority' has become synonymous with the epithet 'endangered,' I am going to mention other definitions of endangered languages: the easiest one is that they are languages below some critical number of speakers. Smaller languages are in more danger, but several social, economic, political, or religious factors are decisive for the transmission of an original language from parents to children. Dorian (1980) indicates three different symptoms of language death: fewer speakers, fewer domains of use, and structural simplification. Krauss (1992), in his comparison of language to endangered biological species, singles out three types of languages: (a) *moribund* (languages which are no longer being learned as mother tongue by children), (b) *endangered* (languages which, though still being learned by children, will, if the present conditions do not change, cease to be learned by children during the next century), and (c) *safe* (languages with official state support and great numbers of speakers). For practical reasons, I will adopt the classification used by Tsunoda (2006: 13), which follows a four-degree pattern:¹ (a) healthy, (b) weakening, (c) moribund, and (d) dead. It will be explained in 2.4.1 that the temporal context needs to be taken into account to develop an understanding of the endangerment level of the Welsh language.

1.2.2. Reversing language shift

Over the last number of years, many linguists and non-linguists have indicated that a considerable proportion of the world's estimated 6000 languages are under threat. According to Foy (2002: 11),

¹ This classification has been suggested in studies such as Hudson and McConwell (1984: 29-30) and Schmidt (1990: 54).

some linguists have claimed that as many as 90% of the world's languages are in danger of extinction within the coming century. The process by which languages become imperilled and eventually extinct is referred to by linguists as *language shift*. Fishman (1990) points out that most of the linguistic interest in endangered languages over the past decades has been targeted at the phenomenon of language shift. Meanwhile, some little research has been conducted with regard to the reversal of the process.

Fishman (1991: 81-82) further argues that threatened languages, necessitating reversing language shift (RLS) efforts to save them from ultimate decline, are languages that are not replacing themselves demographically. In other words, these languages have fewer and fewer users generation after generation. RLS is considered a promising attempt on the part of authorities that are identified by the users and supporters of threatened languages to engage in efforts meant to reverse the process of attrition.² RLS also involves a general agreement among those who advocate it. Without such an agreement, RLS policy itself may become a subject of debate even among its own proponents.

1.2.3. The digital age

According to Cole et al. (1997: XVI), the information age “*is characterized by a fast growing amount of information being made available either in the public domain or commercially.*” This massive circulation of information has been facilitated by the development of new technology and has increasingly acquired important function for many aspects of people's professional, social, and private life. The Welsh minority has established its position within the context of the digital age because of the new media it has appropriated to promote its language on different platforms, which can be regarded as a community resource, as will be confirmed in section 8. It should be noted that several areas of the world have been witnessing a digital revolution in the area of Information and Communication Technologies (ICTs), according to the Commission of the European Communities (CEC) (2001).³ In a recent United Nations report (2000: 3), it is claimed that the world is undergoing a revolution in information and communication technologies, which has great implications for the present and future social and economic situation of all countries of the world. According to the

² Bot, Kees, De (2000) defines language attrition as the loss of language skills within an individual over time.

³ This description is available at Rice (2003)—a detailed account about Information and Communication Technologies as well as the Global Digital Divide.

report, some instances of benefits to countries resulting from the impact of introducing ICT are the following:

1. Direct contribution of the ICT sector's output to the economy . . . ;
2. improvement to public sector administration, in particular that transparency in the procurement process for public service contracts had reduced corruptive practices;
3. tremendous potential for improving education, including distance learning and training;
4. important improvements in the delivery of services such as health care, including... the application of tele-medicine; and
5. enabling countries to monitor ecological situations and maintain environmental stability. (2000: 4-5)

Information technology (IT) is defined as the use of electronic machines and programs for the processing, storage, and management of information, according to Bjork (1999). IT, whose purpose is to play a facilitating role with regard to the exchange and management of information, involves a huge array of technologies such as computers, software, networks, telephones, and fax machines (Rivard 2000). In this regard, Mitchel Resnick points out that *"the declining cost of computation will make digital technologies accessible to nearly everyone in all parts of the world, from inner-city neighborhoods in the United States to rural villages in developing nations"* (2002: 32). Resnick goes on to say that people believe that computers and education are intimately intertwined. Computers are providing people with the capacity to transmit, access, and represent information in manifold ways. Increasingly, both education and computers are developing a strong connection due to the fact that they are associated with information. In another quotation, Resnick argues that

psychologists and educational researchers, building on the pioneering work of Jean Piaget, have come to understand that learning is not a simple matter of information transmission. Teachers cannot simply pour information into the heads of learners; rather, learning is an active process in which people construct new understandings of the world around them through active exploration, experimentation, discussion, and reflection. (2002: 33)

As far as computers are concerned, they are looked upon as more than information devices in spite of the fact that the phrases 'information technology' or 'IT' are commonly used. As a matter of fact, computers play a major role in the transmission as well as the accessibility to information.

Generally speaking, they are considered a new tool through which people can express and articulate their wishes. It is to be mentioned that not every large urban area is taking part in the digital revolution and modern technological trend or being aware about the fastly changing ICTs, according to Rice (2003).⁴

Mitchell Resnick (2002) further asserts that the proliferation of digital technology has laid a pervasive stress on the need for imaginative thinking in many aspects of people's lives by supplying them with tools that can contribute to improve themselves. Nonetheless, one should note that computing and communications technology is launching a new entrepreneurial voice, construction of innovative products, as well as increased productivity. Expanding further on this idea, Cole et al. mention that language technology offers people the opportunity to better

communicate, provides them with the possibility of accessing information in a more natural way, supports more effective ways of exchanging information and control its growing mass. There is also an increasing need to provide easy access to multilingual information systems and to offer the possibility to handle the information they carry in a meaningful way. Languages for which no adequate computer processing is being developed, risk gradually losing their place in the global Information Society, or even disappearing, together with the cultures they embody, to the detriment of one of humanity's great assets: its cultural diversity. (1997: xvi)

1.2.4. Technological terms

Having described the digital age and its specific characteristics, I turn now to define some technological terms. The purpose of this is to gain a clear insight into the workings of the different technological programs, which will be explored in sections 7 and 8.

***CD-ROM**

The term CD-ROM, which is an abbreviation, stands for (Compact Disc, Read-Only-Memory). This technology is a CD adaptation, which aims at storing computer data in different forms such as text and graphics, and stereo sounds, according to Profit Gate Incorporation (PGI) (2006). The original

⁴ I am going to elaborate further on this idea in section 6.4.4.

data format standard, which is by the way the same as for audio CDs, was developed by Philips and Sony in 1983. The difference between a CD-ROM and a CD is captured by this quotation:⁵

A standard CD is 120 mm (4.75 inches) in diameter and 1.2 mm (0.05 inches) thick and is composed of a polycarbonate plastic underlayer - this is the main body of the disc, one or more thin reflective metal (usually aluminum) layers, and a lacquer coating. The CD-ROM, like other CD adaptations, has data encoded in a spiral track beginning at the center and ending at the outermost edge of the disc. The track holds about 650 MB of data. That's about 5.5 billion bits. (PGI 2006: n.p.)

In order to read the contents of each disc, a CD-ROM drive or 'player' makes use of a laser beam. Initially, CD-ROMs were launched with a speed transfer rate of 150 Kilobits (KBps). Now, their speeds have become multiple forms of the old speed transfer rate. To list some examples, I can refer to these: 2X, 4X, and 6X. Yet, recent models are estimated to be over 50X. In sections 7.5.2 and 8.9, I am going to talk about the different ways that Mohawk and Welsh communities are using this modern device in order to revitalize their minority languages. Additionally, I will attempt to deduce results that this form of new technology leads to.

***DVD**

According to Zeytinci (2001), Digital Video Disc or Digital Versatile Disc (DVD) is an optical storage device that is similar to a compact disc. Moreover, it is able to hold about 15 times as much information and transfer it to the computer about 20 times as fast as a CD-ROM. A DVD, which is also known as a Super Density disc (SD), can hold 8.5 gigabytes of data or four hours of movies on a side. Now, double-sided and rewriteable DVD discs are also available. Zeytinci explains that DVDs come in two formats:

[T]he DVD-Video format and the DVD-ROM (DVD-Read Only Memory) format. The DVD-Video format is used for home movie entertainment through a DVD player. DVD players are backward compatible to existing technologies, so they can also play Audio CD and CD-ROM formats. The DVD-ROM stores computer data. DVD-ROM uses include interactive games, video file storage, and photographic storage; it is called the "digital versatile disc" because it can be used in a variety of

⁵ www.profitgate.net/dictionary.html is an internet dictionary that provides definitions of technical terms.

ways. Recently, DVDs are also used to record data on a DVD-RAM (DVD-Random Access Memory) or DVD-R (DVD-Recordable) disc. (2001:19)

Zeytinci goes on to say that when compared to CD-ROM technology, DVD allows for better graphics, greater resolution, and increased storage capacity. Sections 7.4.5 and 8.10 will highlight the use of DVDs for both Basque and Welsh language communities.

***World Wide Web**

According to CERN (2006), the World Wide Web was developed in 1989 by Tim Berners-Lee—a scientist at CERN. Initially, the Web was meant to respond to the increasing demand for information to be shared between scientists who work in different universities and institutes from all areas of the world. Basically, the underlying motivation behind WWW was to integrate the technologies of personal computers, computer networking, and hypertext into a practical and global information system. In fact, hypertext is a text with

links to further information, on the model of references in a scientific paper or cross-references in a dictionary. With electronic documents, these cross-references can be followed by a mouse-click, and with the World-Wide Web, they can be anywhere in the world. There is no need to know where the information is stored, and no need to know any detail on how it is formatted or organized. (CERN 2006: n.p.)

The metaphor, which is used to depict the browsing activity, is ‘[w]andering from one document (webpage) to another.’ ‘Surfing the Web’ is an activity that a lot of people do just to entertain themselves by following links in order to see what is available there. Surfing the Web implies a wide range of design concepts, protocols, and conventions. Recently, the WWW has shifted from its initial scientific context towards the academic and commercial sector where it has a huge number of users (CERN 2006). This dissertation will shed light on the use of Websites for the purpose of language revitalization in sections 7.2 and 8.2 along with other related matters.

The *digital library* can be regarded as a form of a Website. According to Raitt (2000), there is an abundance of expressions, which have been used interchangeably to capture the concept of a library replete with digitized pieces of information. Among these, I mention the following terms: the electronic library, the virtual library, the library without walls, and the digital library. Sections 7.3.2 and 8.3 will respectively elucidate the role of the digital library with regard to the revitalization of

Maori and Welsh languages. Concerning the nuances surrounding the aforementioned concept, a working definition has been provided by the partners of the Digital Library Federation:

Digital libraries are organizations that provide the resources, including the specialized staff, to select, structure, offer intellectual access to, interpret, distribute, preserve the integrity of, and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of communities. (Raitt 2006: n.p.)

***Videoconferencing**

According to Prescott School Unified District (PSUD) (2004), videoconferencing is a technique whereby two or more participants at different sites carry out a conference through the appropriation of computer networks to transmit audio and video data. Besides, it has been cited that

a *point-to-point* (two person) videoconferencing system works much like a video telephone. Each participant has a video camera, microphone, and speakers mounted on his/her computer. As the two participants speak to one another, their voices are carried over the network and delivered to the other's speakers and whatever images appear in front of the video camera appear in a window on the participant's monitor. (PSUD 2004: 15)

It should be said that multipoint videoconferencing allows many participants to sit in a virtual conference room and conduct a conversation as if they were sitting close to each other. The technique of videoconferencing, which will be discussed in sections 7.6.3 and 8.11, will clarify the different outcomes resulting from its deployment.

***Digital Television**

Digital Television (DTV), which is considered a new kind of broadcasting technology, has deeply transformed television. Casey and Aupperle (1998: 3) point out that the dawn of digital television

is an inflection point in what has sometimes been referred to as 'convergence' technology – the blending of various features of computing, communications and

broadcasting. As with any other technological watershed, there will be changes, risks and opportunities in this transition period.

The new form of technology allows broadcasters to offer television service with a wide spectrum of options such as movie-quality picture and CD-quality sound as well as other enhancement techniques. According to Common Assets (2005: 29), it is argued that DTV technology can also be appropriated for the transmission of huge amounts of data into the home, the access to which will be facilitated through the use of computer or television set. Sections 7.4.4 and 8.5 will focus on Basque and Welsh digital televisions and point to the purposes these technologies serve in their respective minority language communities.

1.2.5. Globalization

Clearly, linguistic diversity is being confronted with the forces of globalization. Nettle and Romaine (2000: 30) highlight the extent to which the spread of English around the world is linked to the pervading dimension of English speakers in the areas of science and technology—something which has paved the way for greater control of the world's economy. Indeed,

those who control particular resources are in a position of power over others. Linguistic capital, like other forms of capital, is unequally distributed in society. The higher the profit to be achieved through knowledge of a particular language, the more it will be viewed as worthy of acquisition. The language of the global village (or McWorld, as some have called it) is English. (Nettle and Romaine 2000: 30-31)

Globalization has increasingly led to layers of diglossia on an international scale.⁶ In Sweden, for example, the Swedish language is in a diglossic relationship with some other languages such as Finnish and Saami. Usually, it seems enough for a Swede to know both Swedish and English. Yet, the Saami often need to know the dominant language of the area where they live—either Swedish, Norwegian, or Finnish—as well as some other languages enabling them to communicate beyond national territories (Nettle and Romaine 2000: 31).

⁶ Malcolm (2001) uses the diglossia definition introduced by Charles Ferguson: "A diglossic situation exists in a society when it has two distinct codes which show clear functional separation; that is, one code is employed in one set of circumstances and the other in an entirely different set" (1959: 87). Malcolm adds that it may sometimes be a serious breach of social behaviour if codes are not used in appropriate contexts.

Focusing on the issue of globalization, McCarty points out that “[a]t the dawn of the twenty-first century, the world’s linguistic and cultural diversity is under assault by the forces of globalisation—cultural, economic and political forces that work to standardise and homogenise, even as they stratify and marginalise” (2003: 147). Pattanayak (2000: 47) says that “[b]y luring people to opt for globalisation without enabling them to communicate with the local and the proximate, globalisation is an agent of cultural destruction.” Therefore, these pressures seriously threaten the so-called minority linguistic, cultural, and educational rights. To give a further insight into the drastic phenomenon of globalization and its aftermath, I am going to use this quotation by Neville Alexander to depict the whole picture:

Colonial conquest, imperialism and globalisation have established a hierarchy of standard languages, which mirrors the power relations on the planet. The overall effect of this configuration has been to hasten the extinction of innumerable language varieties and to stigmatise and marginalise all but the most powerful languages. Above all, English, in David Crystal’s coinage, is ‘global language,’ indeed, *the* global language. From all parts of the world, including the continent where the English language originated, we hear the same complaint: *English is destroying our languages*. Tové Skutnabb-Kangas has taken the issue furthest by attacking the phenomenon of ‘linguistic genocide’ which, as she explains, is the direct result of globalisation. (2005: 1)

The aforementioned definitions have elucidated crucial concepts and technical terms, which will be recurrent in my analysis. First, exploring the meaning of a minority language leads to a better grasp of the concept since this dissertation will center around Welsh—a clear example of minority languages. Second, the description of the digital age shows the paraphernalia of technology along with its enormous impact on many communities. Third, the technical terms are very useful in the sense that they disclose the different specificities of the technological devices. Fourth, the trend of globalization sheds light on the climate that has characterized linguistic diversity and the dominance of English as a global language. All these definitions are going to be taken into consideration in the course of this thesis due to their explanatory dimensions.

1.3. Models

In this section, I am going to present some theoretical models, which have been proposed by Giles, Fishman, as well as Tsunoda. These are useful because they can help highlight some pertinent matters revolving around language loss and maintenance. An online questionnaire has been added to this range of models to be deployed to account for the answers provided by Welsh participants, as will be clearly shown in section 9.

1.3.1. Giles’s Ethno-linguistic Vitality Theory

Giles et al. (1977) established a construct called ‘ethno-linguistic vitality’ to develop a framework for the role of socio-structural variables in intergroup relations, cross-cultural communication, second-language learning, mother tongue maintenance, and language shift and loss.

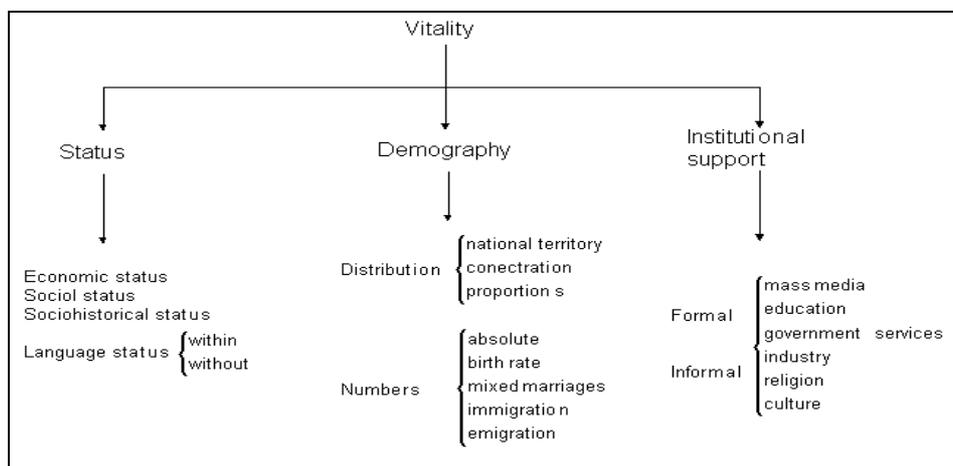


Diagram 1-1. A taxonomy of the structural variables affecting ethno-linguistic vitality

Initially, they introduced the taxonomy of various structural variables affecting ethnolinguistic groups and then presented an integration of Tajfel’s theory of intergroup relations and Giles’s theory of speech accommodation. The vitality of an ethnolinguistic group is defined as “that [which] makes a group likely to behave as a distinctive and active collective entity in intergroup situations” (Giles et al. 1977: 308). If ethnolinguistic minorities have little or no group identity, they will eventually cease to exist as distinctive groups. As diagram 1-1 above shows, the structural variables most likely to influence the vitality of ethno-linguistic groups are:

1. *Status* variables: economic status, social status, socio-historical status, and language status.
2. *Demographic* variables: sheer numbers of group members and their distribution throughout the territory.

3. *Institutional support* variables: the extent to which a language group receives formal and informal representation in various activities such as mass media, education, government services, industry, religion, and culture.

This model will be put into practice in section 10 because it is highly relevant to evaluate the outcomes of new media deployments with regard to Welsh. This is one of the famous models that has its unique perspective on the assessment of minority language revitalization activities.

1.3.2. Fishman’s Model

Joshua A. Fishman (1991) has designed a set of guidelines for the reinforcement of an imperilled language named the Graded Intergenerational Disruption Scale (GIDS). At the same time, the scale serves to account for ‘the severity of intergenerational dislocation,’ which is the level to which the normal transmission of the language from generation to generation is interrupted. Generally speaking, it is used to assess the state of an endangered language.⁷

Stage 1	Xish is used in education, work sphere, mass media and governmental operations at higher and nationwide levels.
Stage 2	Xish is used in local/ regional mass media and governmental services.
Stage 3	Xish is used in the local/regional (i.e. non-neighbourhood) work sphere both within the ethno-linguistic community (among other Xmen), as well as outside it (among Ymen).
Stage 4a	There are schools in lieu of compulsory education and substantially under Xish curricular and staffing control.
Stage 4b	There are public schools for Xish children, offering some instruction via Xish, but substantially under Yish curricular and staffing control.
Stage 5	There are schools for literacy acquisition, for the old and for the young, and not in lieu of compulsory education.
Stage 6	Xish is transmitted as mother tongue in between the generations in a demographically concentrated home-family-neighbourhood-community.
Stage 7	Cultural interaction in Xish is primary involving the community-based older generation.
Stage 8	Reconstruction of Xish and adult acquisition of Xish are necessary.

Table 1-1. Joshua Fishman’s intergenerational disruption scale⁸

⁷ The language at risk is called Xish as opposed to the threatening language Yish.

⁸ This scale has been adapted from Fishman (2001: 466). Fishman’s work is a collection of papers pertaining to language vitality.

As one can see on table 1-1, there are eight stages, which should be read from the bottom up. This means that for a language at stage eight, RSL efforts must start with reconstructing the language and teaching it to adults. In contrast, a language at stage one has relatively a safe position. In other words, it is not only passed on naturally to children in the home and the local communities, but also used in education, business, mass media, and public administration even on a national level. The most important stage of the devised framework is number six because it is concerned with children's natural learning of the language from their parents and from the neighborhood in which they live. If a language is, Bartens (2001) argues, below this stage, it is then seriously threatened. As a result, any attempt to revive the language will not be successful if this stage is not reached. Even if some aspects of the Graded Intergenerational Disruption Scale are subject to controversy, the model has been applied to several minority languages around the world as a tool for analysis and a program for efforts at reversing language shift. Yet, there is a broad consensus, which raises attention to the most important element of language maintenance: the normal intergenerational mother tongue transmission.

1.3.3. Tsunoda's Revitalization Theory

To evaluate the validity of a language revitalization program, Tsunoda (2006: 169) singles out two major points: (1) the definition of language revitalization and (2) the aim of a given revitalization program. When it comes to language revitalization, two things stand out: level of language endangerment and intactness of language structure. Language endangerment comprises consecutive phases, which vary from 'weakening' to 'extinct,' as will be explored in section 2.4. Some scholars argue that a language has reached an extinct level when it is no longer used as the medium of communication in the community. In other words, the revival of a language means restoring it to the state where it is used again as the means of communication—something which is a difficult task to attain despite the existence of the successful case of Hebrew. There

are other views, e.g. the view that a language is alive if place names in the language survive. In this view, language revival is an easy job; mere replacement of a few place names with the indigenous ones will result in revival of the language. For example, the traditional names of some of the islands of the Palm Island of North Queensland, Australia are Palm Island [B]urruguman, Curacoa Island ngugu,

Phantome Island yumili, and Havannah Island muyirr.⁹ Replacement of these English names with the Aboriginal names would result in the survival of the language of the area (the [B]uluguyban language). (Tsunoda 2006: 170)

Concerning the second part of Tsunoda's theory, the task is considered useful if an intact language structure is maintained to the extent it is or was spoken by its traditional speakers. With regard to the revitalization of Welsh, Jones (1998: 141) mentions the development of 'a form of school dialect' of Welsh. In many instances, where children are acquiring the language in a naturalistic setting and where there are fluent sources (as opposed to a language program as is the case with Welsh), the language of the children often indicates some deviations from the norm.¹⁰

Tsunoda (2006: 171) argues that the variation of the goals of language revitalization activities can be explained in terms of the amount of language documentation as well as individuals. It is possible to plan a relatively comprehensive program. An instance of this is Tsunoda's records about Warrangu of North Queensland, Australia. Tsunoda was able to record about 6 hours of running texts, about 1500 words, and some detailed grammatical information. The aims of the individuals do vary. Indeed, there are some people who may have modest aims. Others may be more ambitious. According to Schmidt (1990: 35), there are also people who seem to be happy if they can use a few Aboriginal words in their English sentences. Yet, there are other people who wish to speak their language—an aim which is more difficult to achieve than the other ones.

To summarize the major points mentioned above, I would say that Tsunoda's widely adopted perspective seems to be that a language revitalization program aims to maintain or restore a language to such an extent that it is spoken by a reasonable number of people, according to Amery (1994: 147). With regard to the validity and necessity of the revitalization activities, Dorian (1987: 63-66) on Irish, Amery (1994: 147-148), McKay (1996: 137), and Schmidt (1990: 107) on Australian Aboriginal languages, and Bradley (2001: 158) on languages of Southeast Asia, have argued that these efforts are worthwhile. In addition, Tsunoda goes on to claim that language revitalization activities produce a cultural climate

where the people's ethnic heritage (the language, culture, history, etc.) is appreciated and where publications on them are available to those interested. They in turn foster

⁹ This has been mentioned in Tsunoda (1996).

¹⁰ See Dorian (1992: 144, 1994: 481-484) on the Tiwi and Dalton et al. (1995) on Gurindji.

the people's sense of pride, self-esteem, identity, and ethnicity, and they contribute to the attenuation of the negative attitude towards the language to raising its profile... Overall, language programs help to build bridges between indigenous and non-indigenous peoples and improve the relationship between them. Furthermore, revitalization programs may bring economic benefits, eg, creating jobs, such as teachers and teacher's aides. (2006: 172)

1.3.4. Online questionnaire

I try to clarify the difference between a usual questionnaire and an online questionnaire by resorting to the following definitions.¹¹ Kilman (2005: 1) explains that a questionnaire is “*a form containing a set of questions, especially one addressed to a statistically significant number of subjects as a way of gathering information for a survey.*” The online questionnaire, however, is a Website service designed to facilitate the development, distribution, and analysis of the results of online surveys. Its user interface, which is made for Internet surfers, represents a service, which can be accessible from any station with Internet connection, without having recourse to download or install software on computer, according to HyperObjects (2004). The online questionnaire constitutes an instance of new technology. And since my thesis is centered around the deployment of technological tools for specific cases of minority languages, I am going to use this new online technology to account for the responses provided by Welsh participants with regard to the different sections of my questionnaire.

What should be underscored is that the aforementioned models have different approaches to the phenomena of language endangerment and language revitalization. Their applications to the Welsh case will be carefully investigated in sections 9 and 10 where I will provide a detailed assessment of the contributions of the multiple deployments of technological tools for the purpose of Welsh language revitalization as well as the various implications they feed into. My selection of the diverse strategies is a purposeful attempt to have a clear picture of the results of appropriating new technology for modernizing Welsh from a variety of perspectives because the models not only have several points of focus and theoretical orientation, but can also help in maximizing the insights about the scope of language revitalization activities and its large spectrum of ramifications.

¹¹ By “usual,” I mean the common form of a questionnaire available in printed form, as opposed to an online questionnaire, which is highly innovative, sophisticated, and practical.

2. Language endangerment and language revitalization

2.1. Overview

In this section, I am going to talk about the causes surrounding the phenomenon of language erosion, the concern for language loss, as well as the different types of language revitalization programs.

2.2. Causes of language endangerment

In his book *Language Endangerment and Language Revitalization*, Tsunoda (2006: 57) specifies the factors that contribute to the loss of endangered languages. He claims that language death may be caused by the death of a population or by language shift. On the basis of the factors he reveals, I have attempted to classify them under five major levels for practical reasons: (a) social, (b) economic, (c) linguistic, (d) political, and (e) cultural. The categorization I have adopted here is an eclectic suggestion, which involves a variety of perspectives. Yet, there are alternatives.

2.2.1. Social level

According to Tsunoda (2006: 58), the social dimension of language decline may be related to invasion, conquest, colonization, settlement, and grazing. The process of relocation, through which people may be relocated to an unfamiliar context for resettlement, may be voluntary such as in migration. To clarify this, I refer to the relocation imposed by the Japanese government:

A village named Tokuyama-mura, in a deep valley north of Nagoya, was well-known for the unique features of its dialect. The government decided to build a dam there, in order to secure water supplies for human consumption and irrigation, and the villagers were forced to leave their home village and were dispersed, losing contact with their fellow villagers. The dialect is now on the verge of extinction. (Tsunoda 2006: 58)

Tsunoda then turns to say that language loss is also manifested in the decline of the number of population. Indeed, this may take place in a variety of ways: (1) natural catastrophes such as volcanic eruption, earthquakes, droughts, floods, and famines, (2) diseases such as smallpox,

measles, influenza, common cold, leprosy (Hudson and McConvell 1984: 25), and malaria, according to Kinkade (1991: 157), (3) malnutrition, (4) violent acts by humans such as warfare and genocide, (5) decline in fertility (Swadesh 1948: 227), and (6) emigration. Focusing on emigration as part and parcel of the social side of language decline, I refer to Spiess (1999: 48) when he points out that since the turn of the 20th century, the pressures of the education system, emigration caused by unemployment, losses sustained into two World Wars, as well as immigration into Wales, have all contributed to the decline of the language enormously. With regard to Irish emigration, I clarify the phenomenon by referring to this short description by the Irish Famine Curriculum Committee (IFCC), which shows the big impact of emigration on Irish:

A terrible national calamity which decimated the population and all but killed the Irish language (the everyday speech in areas ravaged by famine) was now occupying everyone's attention. The great potato famines of 1845-51 reduced the population from 8 million to 6.6 million through starvation, disease and emigration to Britain and America. (1998: 26)

With regard to social development and modernization, which are also factors leading to language attrition, Tsunoda (2006: 59) suggests specific elements like these: (a) electrification, (b) improved communication and mass media, (c) greater mobility, and (d) tourism. As far as the situation of Welsh is concerned, the development of media has led to the opposite effect. Indeed, media technology has helped revitalize the Welsh language, as will be clearly demonstrated in section 8. This shows that technology can be regarded as a two-fold device. While Tsunoda (2006) points out that media exert an eroding impact on minority languages, my investigation of the Welsh case will clarify the extent to which technology can contribute to Welsh modernization.

2.2.2. Economic level

Because of the lack of job opportunities, Tsunoda (2006: 59) maintains that some people see no economic benefit in their language. In this case, they will be inclined to shift to the pervading language and not teach the language to their children (Crawford 1996: 57; Dixon 1991: 191). The case of S4C, which will be carefully investigated in section 8.5, shows that many Welsh people do not leave their economically depressed locations because of the gains they achieve in working in the industry of minority language television, as this quotation explains:

S4C commissions its programmes from a number of independent companies located in different parts of Wales (although the channel's own headquarters are in Cardiff). A number of these companies are located in areas which are comparatively economically depressed... and which are also important linguistically as communities where the Welsh language remains relatively strong. The employment opportunities the development of the industry brings to such areas are of some significance and may prevent some Welsh speakers from having to leave the area in search of work. (Jones 2004: 10)

The economic level seems to have fewer ideas to characterize the complex phenomenon of language erosion—something which is made to contrast with the social level that goes through a variety of concrete manifestations along with diverse illustrations, as has been mentioned above.

2.2.3. Linguistic level

Tsunoda (2006: 62) believes that the lack of indigenous literature is a dominant theme that has characterized the causes of language decline. Concerning the Australian context, Schmidt (1990: 17) argues that linguistic work in the Aboriginal language, such as grammars and dictionaries, is limited. This fact leads to a poor impression of the status of the Aboriginal language when compared to English. The opposite side of this is that the provision of material in a minority language normalizes the status of language as well as leads to its maintenance, as can be exemplified by the situation of Welsh. Indeed, the presence of Welsh language material on the different technological platforms is a clear indicator that the Welsh minority can maintain its language and prevent it from decline, as will be elucidated in sections 8 and 10.

Tsunoda (2006: 59) explains that the status and prestige of a group and its language are also among the elements that lead to language loss.¹² For example, an ethnic group will have low status in society, according to Dorian (1993: 567). Therefore, their language and culture may be treated negatively because of prejudice and stigmatization—something which often pertains to the evaluation of the language by outsiders. Language attitude, which can be classified into three

¹² I have classified the attitudinal concept within the realm of sociolinguistics. But what needs to be highlighted is that the branch of sociolinguistics has been integrated into the discipline of linguistics since the second half of the 20th century, as Fasold and Connor-Linton (2006) explain. It is for this reason that I am embedding it in 2.2.3.

categories, is one of the major factors regarding the fate of endangered languages (Bradley 2001: 152; Sasse 1992: 10).

Due to socioeconomic and other forms of oppression, Tsunoda (2006: 60) claims, speakers of a minority language often assess their language not positively. Moreover, speakers of the majority language often regard the minority language negatively. With regard to the positive attitude, three subcategorizations may be identified: language loyalty, language purism, and language optimism. *Language loyalty* is considered one of the decisive factors for the survival of a language. The language has a better chance of survival if speakers are loyal to their language (Dorian 1981: 108). According to Crystal, the idea of *language purism* is illustrated by the following example:

A purist minority inculcates feelings of inferiority in the majority, who are made to feel that they do not speak the language correctly – which means not according to the rules of the grammar books originally written by other purists. The paradox is well illustrated by the remark, often made by English speakers, that ‘foreigners speak English much better than I do’- a patent absurdity, yet demonstrating the way in which people have allowed themselves to be brainwashed by the purist image of the language. And the same point is often made in relation to Welsh. ‘I don’t speak proper Welsh’- say most Welsh-speaking people. (2005: 4)

With regard to *language optimism*, some people have a strong belief that their language is not going to decline (Hudson and McConvell 1984: 29). The third type of attitude is called indifferent attitude. This is incarnated in language apathy (Fishman 1972: 140) as well as language negligence. Some people do not actually care about this happening, according to Hudson and McConvell (1984: 29). Nevertheless, it is too late when the language disappears—a fact which often takes place (Tsunoda 2006: 61).

2.2.4. Political level

One of the basic ideas for assimilation could be education of children, according to Tsunoda (2006: 62). This idea has promoted the majority language at the expense of minority languages. To clarify this aspect along with its deep impact on minority speakers, I am going to cite a short account about the policies, which have been applied to Welsh speakers in the 19th century:

By the time the 1870 Education Act brought Welsh elementary schools in line with provision in England, there was no incentive to teach the language. The use of corporal punishment was another tool in the imposition of English. The Welsh Not-a wooden block-was hung round the neck of any child heard speaking Welsh in class. It was passed from one child to the next, and whoever was wearing it at the end of the day was beaten. (Edwards and Newcombe 2005: 301)

In the late 19th century in the United States, there was a similar scenario in the sense that young Indian children were assimilated into mainstream American culture.¹³ The aim of Indian education from the

1880s through the 1920s was to assimilate Indian people into American society by placing them in schools where traditional ways could be replaced by those sanctioned by the government and American society. Many children were forced into boarding schools where their hair was cut, their traditional clothes were replaced with American style clothing and their language and religion were banned in favor of English and Christianity. The taking of these children often caused intense anger among the communities on the reservation, resulting in violence and mistrust of the Bureau of Indian Affairs, whose responsibility it was to oversee the education of Indian children. (NARA 2007: 2)

The political level describes the role of governmental policies in undermining the use of minority languages and cultural practices through a variety of oppressive measures, which were designed to favor the majority language. This could be looked upon as the implicit motivation of such influential policies, which had negative effects on the preservation of minority languages, as the aforementioned scenarios explicitly demonstrate.

2.2.5. Cultural level

Tsunoda (2006: 63) highlights this level by referring to the contact of cultures. He argues that whenever an ethnic group is confronted with a culture that is considered less esteemed than theirs, they will often undergo transformations related to values and shift of cultural emphasis. Thomas argues that the idea of cultural assimilation

¹³ In section 7, I will elaborate on the plight of Native Americans by referring to the situation of Lushootseed.

was strongly affected by the precise nature of the social interaction between the two assimilating peoples. Yet one cannot simply mechanically trace the relative contribution of each ethnic group and the shape of the new integrated culture from the numbers of individuals in each people, or even from the numbers of each people in various social groups. Many factors will influence the process of cultural assimilation. For instance, the idea that a group is tainted in some way, through being portrayed as barbaric, backward, or lower class, can cause the customs and culture of that people to be devalued. Once the English had decided that the Welsh and Irish were barbarians, even the most attractive elements of their cultures could be viewed with suspicion, which would hamper or prevent cultural assimilation. (2005: 374)

The description of the multiple factors affecting language decline shows that there is a difficulty in discerning the different levels because there is a high degree of overlap between them. These factors may cause glottocide or language shift. They may also result in gradual death. The description above demonstrates that the social side of language decline graphically represents the process of language endangerment because of the concrete and straightforward illustrations it entails. The other sides are also to be taken into account, though they do not equally reflect the vivid portrayal of language loss. With regard to the various levels of language decline, it seems that they can all be exemplified by the situation of Welsh. This implies that the Welsh community has been subject to all levels of language erosion. Yet, there are some specific aspects of these levels, which are not applicable to Welsh, as I have clearly pointed out. The fact that Welsh is subject to all levels of language attrition does not speak for the situation of all minority languages around the world. Therefore, one is likely driven to argue that there is no room for overgeneralization on the basis of the descriptive survey for minority language decline.

2.3. *Why care?*

This part will be concerned with elucidating the underlying motivations behind the maintenance of minority languages.

2.3.1. Language as a marker of diversity

Crystal (2000: 32-33) points out that the idea of diversity is a further development of the ecological frame of reference.¹⁴ The arguments, which support the need for biological diversity, can also be applicable to language. Indeed, many people would agree that ecological diversity is an excellent thing whose preservation should be enhanced. Likewise, the preservation of linguistic diversity is also crucial because language is an attribute of human beings. Accordingly, when language transmission breaks down through language death, then there is a serious loss of inherited knowledge. Although there are many arguments that support the idea of linguistic diversity, I would argue, on the basis of Grenoble and Whaley (2006), that since the end of the Cold War, minority language communities have gained visibility, increased flexibility, as well as formulated different ways in pursuing their own agendas to counter the globalizing impact of English, as can be exemplified by the situation of Welsh. Indeed, the Welsh language community has deployed many strategies to favor Welsh at the expense of English. So, one can clearly see that the major issue for the Welsh language community is not about linguistic diversity. Indeed, there is a tendency to compete with English and provide services in Welsh—a tendency which stands at the heart of the revitalization activities undertaken by the Welsh minority, something which can be confirmed by Ifor Gruffydd.¹⁵

2.3.2. Language as a determiner of identity

A Welsh proverb can be used to reflect on the concern directed towards the death of languages:

Cenedl heb iaith, cenedl heb galon

A nation without a language is a nation without a heart

Identity is an entity, which is at the core of language. To talk of endangered languages in terms of identity, for instance, monolingual speakers of thriving languages focus on the role of dialect within their community. Indeed, those who are concerned about this issue often group themselves into dialect societies by compiling lists of old words and preserving old stories. Up to this level, one is driven to say that the concept of identity is what makes the members of a community recognizably the same. Furthermore, it is an aggregate of features, which may relate to

¹⁴ The ecological argument will also be applicable to media in section 6.3.1.

¹⁵ This insight is from an interview (2006), which I conducted with Ifor Gruffydd, the head of Welsh Language Services at Cardiff University.

physical appearance, local customs (such as dress), rituals, beliefs, as well as personal behaviors. However, language, which is regarded as the most interesting form of behavior, is available even when one can not see other people (shouting at a distance) or see anything at all (talking in the dark). Therefore, language is viewed as the primary symbol of identity (Crystal 2000: 36-40). Studies, such as Maguire (1991: 94, 98) on the revival of Irish in Belfast and Jones (1998: 128) on the revitalization of Welsh, have revealed that one of the underlying motivations behind these movements is concerned with identity (Tsunoda 2006: 140)—a pervasive idea which will be further explored and exemplified in section 7.8.2.

2.3.3. Language as a source of pride and self-esteem

Tsunoda (2006: 141) points out that a certain stigma has been attached to minority languages. However, measures have been taken to reverse this denigrating tide, according to Giles, Bourhis, and Taylor (1977: 338). Hudson and McConvell (1984: 38) use an example from Kimberly, Western Australia: *“The speakers of the languages are proud of their languages.”* In the same way, Jocks (1998: 222-223) explains the view of Mohawk people of the USA: *“the mere fact of speaking [Mohawk] even in rudimentary form is a potential source of pride and identity.”*¹⁶ Perspectives reminiscent of ‘language as a source of pride and self-esteem’ are also reported by scholars such as Tovey, Hannan, and Abrahamson (1989: 33) on the topic of Irish. As I have mentioned in 1.3.3, the idea of pride and self-esteem stands at the heart of Tsunoda’s theory for language revitalization—something which will be applied to Welsh in section 10.

2.3.4. Language as a source of solidarity

Tsunoda (2006: 141-142) refers to an instance of language as a factor promoting solidarity. This example, which has been mentioned by Suwilai (1998: 155), deals with So (Thavung) of Thailand. This instance revolves around a woman who stated that she will be ready to teach her children So (Thavung) so that when her offsprings get older and may experience some difficulties in their lives. They could then return and live with their parents and families. Expanding further on such concern, Wardaugh argues that solidarity is a feeling of equality that people have with one another as well as a common interest around which they will bond. The author (2002: 30) further argues that “[a]

¹⁶ For some perspectives on the Welsh language, see Jones (1998: 328).

feeling of solidarity can lead people to preserve a local dialect or an endangered language to resist power, or to insist on independence.” The idea of solidarity will be further clarified when I will talk about the concept of Welshness in sections 8.3.3 and 9.5, as it is a straightforward and extralinguistic outcome reflected through the use of Welsh technological devices.

2.3.5. Language as a repository of history

When he was in Scotland with James Boswell, Dr Johnson formulated a remark that made him very famous:

Alas! What can a nation that has not letters [=writing] tell of its original? I have always difficulty to be patient when I hear authors gravely quoted, as giving accounts of savage nations, which accounts they had from the savages themselves. What can the M’Craas tell about themselves a thousand years ago? There is no tracing the connection of ancient languages, but by language; and therefore I am always sorry when any language is lost, because languages are the pedigree of nations.¹⁷

A language embodies the history of its speakers. “*Language is the archives of history*,” says the American essayist and philosopher Ralph Waldo Emerson (1844). Indeed, language texts, through their layers of grammar and lexicon, reveal past events and happenings. Many people give considerable importance to these linguistic scraps of personal documentation, which they have gathered from their ancestors—for instance, a grandparent’s diary or the name written on the back of a photograph—provide ample evidence for their own pedigree. According to Crystal (2000: 41), this clearly indicates the level to which people are dependent on written language to understand their origins. The fact that people wish to know about their ancestry is something universal. Yet, this tendency requires a language to achieve that need. And, once a language becomes extinct, the links with their past may disappear. The application of technology to Welsh language texts will show that the digital library of Wales preserves linguistic material in Welsh, which entails the archives of its history, as will be explained in section 8.3. Therefore, it could be said that the digital library acts as a double preservation technique.

¹⁷ Boswell (1785: n.p.): the day is 18 September 1773. ‘M’Craas is one of the Scottish clans.

2.3.6. Language as a source of human knowledge

Crystal (2000: 44-45) argues that identity and history are combined together to ensure that each language reflects a unique interpretation or vision of human existence. This highlights another reason for caring when languages die. Linguists care about endangered languages because there are many important things to be learnt from them. For example, the view that languages other than the native language provide people with a means of personal growth has been a crucial theme in literature at various levels of intellectual depth. Indeed, it is argued that humanity draws many benefits from each reflection of itself in a language, as this quotation spells out: “*The world is a mosaic of visions.*”¹⁸ *With each language that disappears, a piece of that mosaic is lost.*” Crystal further claims that one

story does not make a world view. A world view gradually emerges through the accumulation of many sources from a community... But all over the world, encounters with indigenous peoples bring to light a profound awareness of fauna and flora, rocks and soils, climatic cycles and their impact on the land, the interpretation of the landscape, and the question of the balance of natural forces... And it is language that unifies everything, linking environmental practice with cultural knowledge, and transmitting everything synchronically among the members of a community, as well as diachronically between generations. (2000: 46-47)

According to Fettes (1997), the indigenous knowledge can be very powerful and relevant to community members. This idea will be resorted to in section 8 to show how technological platforms through their display of Welsh convey the indigenous knowledge of the Welsh people, though the prevalent tendency has often been to put emphasis on language and dissociate it from its social and cultural contexts.

2.3.7. Dimensions of languages

From the point of view of Crystal (2000: 54), each language displays a combination of sounds, grammar, and vocabulary to form a system of communication, which stands for a unique encapsulation of a world view. Marianne Mithun (1998: 189) talks about the issue, saying that

¹⁸ This has been reported in Geary (1997:n.p.).

“*[t]here is not a language in North America that fails to offer breathtakingly beautiful intricacy. For descendents of speakers to discover this beauty can profoundly enrich our lives.*” As far as Welsh is concerned, Cambrian Institute provides this account to reveal some specific aspects of the language:

A knowledge of the Welsh language would be advantageous to Englishmen as an example of how to attain true strength and expressiveness by the use of primary words compounded, instead of infusing in such plenty Greek, and Latin, and Franco-Latin and compounds into his own tongue.

The self-life, or individual vitality, of the Welsh language is somewhat extraordinary. Its words so readily intermarry and coalesce with each other, that a fair, healthy, and progeny springs from their union. This gives the language a wonderful advantage over those who enter into alliance with foreign tongues, and have an offspring of hybrids. (1860: 49)

Additionally, Hudson and McConvell (1984: 38) give the following report from Kimberly, Western Australia: “*To each group their language is beautiful to speak and listen to, versatile and expressive. Many are proud of the complexity of their languages, although this is not so appealing to learners!*”¹⁹ The more analyses about languages are carried out, the more comprehensive the picture of the human options will be. Languages which are ‘off the beaten track’ are especially important in so far as their isolation means that they may have developed some specific features not available in other languages. Language death is therefore the central threat to the achievement of this goal. Because with the death of each language, another source of information disappears (Crystal 2000: 55).

Commenting on the motivations to reverse language shift, I would argue on the basis of Cormack (2005) that there are many ideas, which support the promotion of minority languages. For minority language advocates, the issue is about linguistic survival. But for linguists, the issue of minority languages along with their specific characteristics is a matter to be discussed in academic circles and conferences. With regard to minority languages, my investigation of the diverse arguments has shown that there are different levels of focus that lie at the center of minority language revitalization activities. This does not imply if an argument is expressed by a particular minority language community, it will then be automatically reflected by another. As I have shown

¹⁹ This has been cited in from Tsunoda (2006: 142).

above, the position of Welsh in this detailed analysis is clear since it is supported by a variety of arguments that would incite its minority language proponents to take concrete measures to revitalize it.

2.4. Types of language revitalization programs

With regard to language revitalization, several methods have been suggested such as those in studies such as Amery (2000: 18-27) and Grenoble and Whaley (2006: 50-68). The methods I am going to explore are shown in connection with the degree of language endangerment. Since I am focusing on technology, I am going to put this revitalization technique in a broader frame. On the basis of the model below, which is taken from Tsunoda (2006: 201), I have tried to group the different methods under two major parts for practical reasons. These are non-technological and technological programs.

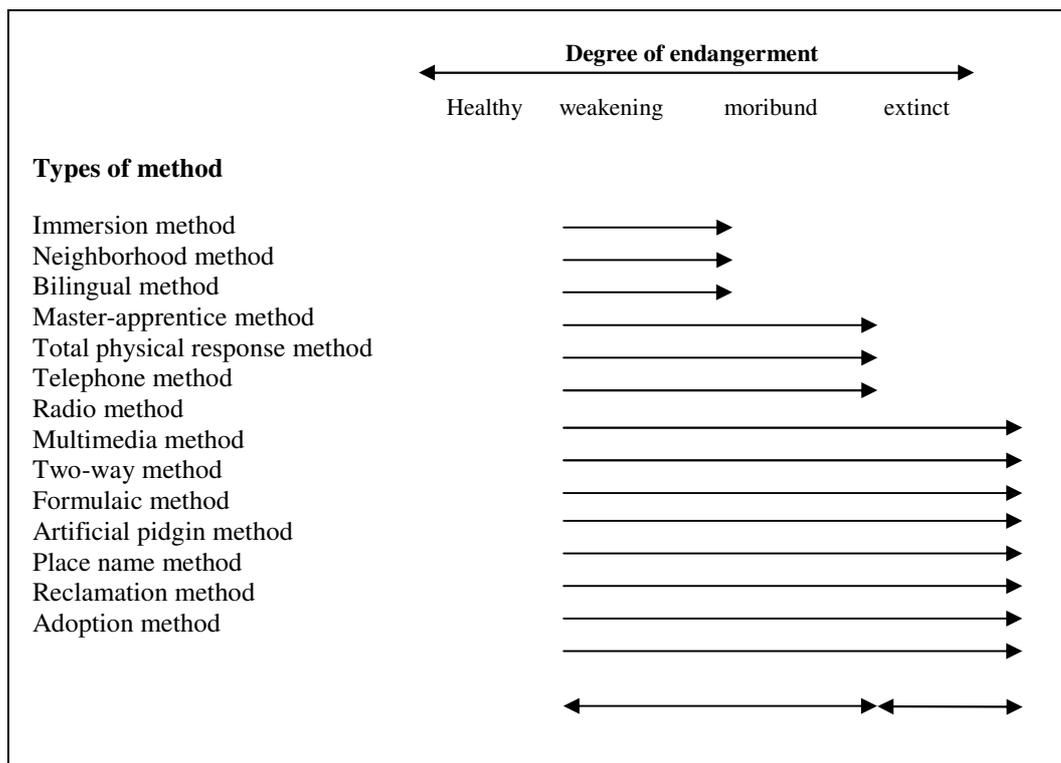


Diagram 2-1. Tsunoda's model

2.4.1. Non-technological programs

In this section, I am going to elucidate the non-technological programs, which have been used by many minority language communities and also exemplify the situation of Welsh in the course of my survey if the non-technological programs are applicable to it. According to Tsunoda (2006: 202), the technique of *immersion* is an environment in which learners will only hear and try to speak the language. Such a circumstance may be arranged, for example, in a pre-school, a school, a one-week residential course, or trips. This method is possible for weakening languages, very difficult for moribund ones, and impossible for extinct ones. In other words, this method is for language maintenance and not for language revival. The most successful language immersion program is the famous ‘language nest’ for the Maori language of New Zealand. Starting in the late eighties, the revitalization of the Maori language may be regarded as the most famous attempt at language maintenance of all language revitalization efforts, according to studies such as King (2001) and Spolsky (1995). The most famous feature of Maori language activities is the use of the immersion method—a method which is conducted in diverse ways: (1) *Kohanga Reo* (nest + language, ‘language nest’) for preschoolers, (2) *Kura Kaupapa* Maori (school + philosophy/world view + Maori), immersion schools for school-aged children, and (3) *Wananga Reo* (place of higher learning + language), immersion camps for adult learners. Concerning the situation of Welsh, it is to be noted that there was a dramatic increase in the 1970’s and 1980’s with regard to the numbers of parents choosing immersion education for their children in Wales. Moreover, this demand is still continuing to increase. According to the Welsh Language Board (WLB),

[t]he obvious advantage of an immersion education programme is that students are able to read, write, speak, understand and use Welsh as well as youngsters from Welsh-speaking homes. In addition and at no cost they can also read, write, speak and understand Welsh in a way that non-Welsh speaking students who follow a traditional programme of Welsh as a second language cannot normally do. (2007i: 1)

Tsunoda (2006: 204) argues that the *bilingual method* may be applied to weakening and healthy languages, but it will not be applied to moribund languages. Along with the dominant language, the minority language are used as the medium of instruction in this technique, which includes teaching through the language rather than teaching of or about the language. As far as the situation of Welsh is concerned, the difference between immersion and bilingual methods becomes blurred, as it seems hard to discern the one from the other. Yet, WLB (2007i:1) argues that

[i]mmersion bilingual education has been an educational innovation of unusual success and growth. It has influenced bilingual education throughout the world. For

example, research indicates that Spanish-speaking children who follow an immersion programme not only become fluent in Catalan, but also their Spanish does not suffer.

Because it is an educational tool, immersion can be considered an integral component of Fishman's fourth stage of his model mentioned in 1.3.2. To apply this stage to Welsh,²⁰ I would argue that education, the bedrock upon which the language movement has flourished, has played several different roles. It has underscored Welsh bilingualism and developed the value of bilingual skills. Moreover, it could be considered a focal point of a national project of identity reformulation as well as a domain of socio-cultural networks. Finally, education in Welsh has become an additional marker of the country's distinctiveness within a global context (O'Neill 2005: 75-76).

Concerning the *neighborhood method*, Tsunoda (2006: 203) argues that it may perhaps be considered another version of the immersion method. Perhaps the language needs to be only at the weakening stage in order for a neighborhood program to develop successfully. If the language is in a moribund status, the program will be difficult and almost certainly impossible, especially if the language is on the verge of extinction. For the development of a cohesive speech community, a group of eleven families bought houses in the same neighborhood called Shaw's Road—a place which is located in the middle of the English-speaking community in Belfast. These families had learnt Irish by themselves as adults. Yet, some of them learnt it in prison, according to Maguire (1991: 202). Exploring further the neighborhood method, Tsunoda explains that the

first family took up residence in Shaw's Road in 1969, followed by other families, and a school for Irish-medium education opened in 1971, with nine pupils. This project proved successful. A second school was established in the city in 1987-88 to meet an ever-pressing demand. The project exerted a significant impact upon the surrounding neighbourhoods, and inspired other community enterprises throughout the North, particularly in the area of Irish-medium education. (2006: 204)

Maguire (1991: 12) argues that although Irish was spoken in other areas on the island, it was not spoken in Belfast. Therefore, the project may be regarded as a case of language revival rather than language maintenance. The success of the project can be traced to the fact that the program overcame the frequent difficulties such as lack of funding and lack of support from the authorities.

²⁰ By referring to the context of the 1970s, it could be said that the status of Welsh was in a decaying position. Thus, one could classify it at the fourth stage of Fishman's model.

Moreover, the families reached their goal in an urban area rather than a rural location and the school played a major role in the revival of Irish (Maguire 1991: 95). This fact supplements the idea that the school can not replace intergenerational transmission of the language in the family, neighborhood, and community.

On the basis of Hinton (1994: 231, 1997), Tsunoda (2006: 205) mentions that a *master-apprentice program* was launched in order to revitalize Californian languages. The method is depicted in Hinton's terms:

The idea is to fund the living expenses of teams of elders and young people with grants, so that they do not have to work for several months, and can thus isolate themselves from English-speaking society and become immersed in traditional culture and language. It was estimated that three to four months in an immersion situation would go a long way towards the development of proficiency, especially for people who already have some passive knowledge. (1994: 231)

- 1. Be an active teacher.** Find things to talk about. Create situations or find something in any situation to talk about. Tell stories. Use the language to tell the apprentice to do things. Encourage conversation.
- 2. Don't use English,** not even to translate.
- 3. Use gestures, context, objects,** actions to help the apprentice understand what you are saying.
- 4. Rephrase for successful communication.** Rephrase things the apprentice doesn't understand, using simpler ways to say them.
- 5. Rephrase for added learning.** Rephrase things the apprentice says to show him correct forms or extend his knowledge to more complex forms. Encourage communication in the language, even with errors.
- 6. Be willing to play with language.** Fantasize together; make up plays, poems, and word games together.
- 7. Understanding precedes speaking.** Use various ways to increase and test understanding. Give the apprentice commands to follow. Ask him/her questions. It is not necessary to focus on speaking each new word right away; that will come naturally.
- 8. Be patient.** An apprentice won't learn something in one lesson. Repeat words and phrases often, in as many different situations and conversations as possible.

Diagram 2-2. Eight rules for teachers²¹

²¹ This diagram has been adapted from Tsunoda (2006: 206).

The master-apprentice program is another variety of the immersion method (Hinton 1994: 241). However, it is different from the aforementioned type of immersion program. A team in this program involves just one master (e.g. a fluent speaker), one apprentice (e.g. a learner), and from time to time an interpreter. The technique can be applicable to moribund languages, particularly when such a team comprises only one fluent speaker. The immersion program needs a relative number of speakers—something which is not easily applicable to moribund languages. For the master-apprentice program, Hinton (1994: 243-244) mentions eight rules of teaching for teachers, as shown above in diagram 2-2. She also lists eight rules of learning for apprentices. They are almost similar to the rules of learning for teachers, except for these two:

- 4. Practice.** Use new words and new sentences and grammar as much as possible, to yourself, to your teacher, to other people.
- 5. Don't be afraid of mistakes.** If you don't know how to say some thing right, say it wrong. Use whatever words you know; use gestures, etc. for the rest.

Diagram 2-3. Rules of learning for apprentices²²

With regard to the *total physical response method*, Tsunoda (2006: 207) gives this account on the basis of Cantoni to reveal how the lessons proceed:²³

The teacher begins by uttering a simple command such as ‘walk to the window,’ demonstrating or having a helper act out the expected action, and inviting the class to join in. Commands are usually addressed first to the entire class, then to small groups, and finally individuals. When a few basic verbs and nouns have become familiar, variety is obtained by adding qualifiers such as ‘fast,’ ‘slowly,’ ‘big,’ ‘little,’ ‘red,’ ‘white,’ ‘my,’ and ‘your.’ Since the students are not required to speak, they are spared the stress of trying to produce unfamiliar sounds and the consequent fear of making mistakes. (1999: 53-54)

This method, Cantoni (1999: 54) argues, has a shortcoming: “*TPR promotes only the learners’s receptive language skills and ignores productive ones, which are essential to real communication.*” The TPR method may be regarded as another form of the immersion method and it may only be applied to moribund and willingly weakening languages rather than extinct languages.

²² This has also been adapted from Tsunoda (2006: 206).

²³ Ellis (1994: 552, 571, 645) elaborates further on the total physical response method.

Concerning the *two-way education method*, Tsunoda (2006: 209) says that it will be applied to languages at any stage in the diagram 2-1 mentioned above. Yet, it will be more applicable if the language is at a healthier stage. The concept of a ‘two-way’ school, McConvell (1982, 1994) claims, was the idea of Aboriginal Australians such as Pincher Nyurmiyarri.²⁴ In Nyurmiyarri’s view, the following two ingredients should be encapsulated in this method: (1) Several negotiations between teachers, departments, and the community over policies and programs. (2) Two-way exchange of knowledge: (a) The aims of the European programs need to be understood by the Aboriginal people involved in the school. The European teachers would also need to learn about the language, culture, and wishes of the Aboriginal people. (b) Identical exchange of knowledge between old and young Aboriginal people. Although the method seems comprehensive, it does not explicitly reveal which Aboriginal language to be revitalized as well as the process by which language revitalization should take place.

Tsunoda (2006: 209) highlights the fact that the *formulaic method* is for the revival of the Kaurna language of Adelaide in South Australia. According to Amery (2000: 209-212), this technique involves a systematic introduction of well-formed Kaurna sentences into speech. One-word utterances characterize the initial stage that can be exemplified in the forms of questions, responses, commands, greetings, and leave-takings. Later, sentences, which consist of two or three words, will be introduced. A similar technique is developed by Fettes (1997: 309). The aims of this method, which will be applicable to extinct languages, are the levels of word speakers, phrase speakers, and perhaps simple sentence speakers.

The *artificial pidgin method* is employed in the revival of the Ngarrindjeri language, south of Adelaide, according to Amery (2000: 215-217).²⁵ Tsunoda (2006: 210) explains that some community members have learnt the Ngarrindjeri language and claim to speak it. Yet, what they learnt is a sort of reflexified English. In other words, word order is strictly AVO²⁶ as in English and the sentences are word-for-word translations of English sentences. A striking dimension of this method, Amery (2000: 216) argues, is the ease with which the language can be constructed and utilized.

²⁴ In the 1970s, Pincher was the leading Gurindgi figure of the Northern territory of Australia.

²⁵ This term has been cited from Powel (1973: 6-7) in the revitalization of Ngarrindjeri.

²⁶ A stands for transitive subject, V stands for verb, and O stands for transitive object (Tsunoda 2006: 80-81).

As shown in the diagram above, the *place name method* can be applied to all stages. According to Tsunoda (2006: 210-211), the method highlights the fact that the replacement of some place names (in the dominant language) with their traditional equivalents leads to the revival of the endangered language in question. In Hawai'i, many places are Hawaiian or Hawaiian-based and the same thing happens in New Zealand with Maori place names. In the 1940's, Placenames Commission was appointed by the governmental body in Ireland to "*ascertain the correct Irish forms of the placenames of Ireland, and to compile them,*" according to Bord na Gaeilge (1998: 8).

Eve Fesl (1982) describes a particular instance of language revival—the revival of language by way of adoption. In contrast to Kaurna people, the people involved abandoned the rejuvenation of their ancestral language and therefore turned to adopt another language. Theoretically speaking, the adoption method is applicable to all types of languages. Practically speaking, however, it will be used only with extinct languages. Tsunoda (2006: 213) gives the following account, which is a profound insight into the adoption method:

In the mid-1970s, Fesl was requested to search for a language of Victoria to revitalize, only to find none. Fesl then looked for a language which was spoken in a similar—naturally and socially—environment to theirs, that is, a coastal and urbanized area. Finally, Fesl found the Bandjalang—also spelt Bundjalung... language of the Lismore area, New South Wales. It still had some speakers, and it was spoken in a similar environment, both naturally and socially. Fesl and the group applied to Bandjalang tribal elders for permission to teach their language in Victoria. Despite a prolonged debate that arose from jealousy in the Bandjalang, the Victorians finally succeeded in obtaining permission to teach Bandjalang, on the condition that it is taught to Aboriginal children only.

Taking language ownership into account, a permission from Bandjalang people was needed for Aboriginal Australians of Victoria to be able to teach the language. As far as the language is concerned, Bandjalang people are considered 'language owners.' Nevertheless, those Victorians who learnt it and use it are considered 'language users.'

2.4.2. Technological programs

Unlike the non-technological programs, the technological programs are another approach to reverse the phenomenon of language endangerment due to the highly sophisticated and technical dimensions

they encompass. The various dimensions will be explored in the coming paragraphs, taking into account the high degree of variability that characterizes the technological methods.

The *telephone method*, Taff mentions, is employed for the Deg Xinag language of Alaska, USA:

Since the number of Deg Xinag speakers, all elders, is less than twenty and the learners, young adults, are spread among sites too distant to make it feasible to get together face-to-face, we organized a one-credit distance delivery class under the authority of the University of Alaska. (1997: 40)

Through the use of audioconference, Tsunoda (2006: 207) argues that the speakers and learners meet few times per week. The emphasis is placed on speaking and listening rather than on writing because of the nature of the equipment. Yet, the method has also other shortcomings. The learners, for instance, do not witness the faces and gestures of the speakers—something which makes it hard to utter some of the sounds, especially when the telephones are not well operating. Cunningham (2006) points out that the techniques of audioconferencing and videoconferencing are among the technological variants, which have characterized the previous decades. In sections 7.6.3 and 8.11, I am going to show how Warlpiri and Welsh communities are making use of the videoconferencing technique to revitalize their minority languages. The modern technology of videoconferencing will also shed light on the idea of distance learning as well as the implications that can be deduced from its deployment.

Tsunoda (2006: 208) asserts that the *radio method* can be applied to extinct, moribund, and weakening languages. An instance of this is exemplified by Maher (1995: 86):

In 1987, a commercial radio station in Hokkaido, Japan, began broadcasting an Ainu-for- Radio language course. The program is not broadcast nationwide but in Hokkaido only and it is aired early (6.05-6.20) on Sunday morning. It aims to develop public interest in both the language and the traditional Ainu outlook on nature and life. The audience rating is relatively high for that day and time: 0.1-0.2 percent. This suggests that the program has achieved its aim., though to a limited extent.

Although the radio station was designed for commercial reasons, it pays attention to the development of the Ainu language and some traditional views. Undoubtedly, the radio method is a famous technique used in the process of language revitalization, as Rosser (2006) asserts.²⁷ In sections 7.6.4 as well as 8.6, I will exemplify this idea by studying Warlpiri and Welsh Webradios—new technologies which embody multifaceted aspects in their formats.

With regard to the *multimedia method*, considerable use is being made of computer technology with the increasing development of IT, according to Tsunoda (2006: 208-209).²⁸ Recently, community members have become interested in multimedia resources, acknowledging their role in the process of language revitalization. The presence of these materials not only makes the lessons more enjoyable, especially for the younger people, who display a strong interest in the language, but also overcomes the lack of fluent teachers in the class. Mark Nodine's Welsh language lessons, which are among the famous language lessons available on the Internet, will be scrutinized in section 8.8.2. Nevertheless, there is one limitation to this method, namely poor funding—a problem which makes it hard to buy computer technology products. If funding and materials are provided, the multimedia method may be applied to any language at all different levels.

Language reclamation method, Amery (2000: 17) reports, means the revival of an extinct language through the use of earlier recorded materials when the language was spoken. (Further details about this method are available in studies such as Mckay (1996: 135-136) and Nathan (1996: 184-202).) The Kurna situation of Adelaide is an example of this, which is expressed in this short account:

The last fluent speaker of Kurna appears to have died in 1929, but the language was documented by the nineteenth century missionaries, Christian Teichelmann and Clamor Schürmann. Attempts have been made to restore the Kurna language, including the sounds, on the basis of the written documents and of the sounds of other Australian languages,²⁹ and even a CD of the language, including the sounds, has been produced. (Tsunoda 2006: 211)

²⁷ This insight is from an interview carried out with Siwar Rosser from the Department of Welsh at Cardiff University.

²⁸ Further insights are in studies like Kushner (1999) and Miyashita and Moll (1999).

²⁹ The papers in Thieberger (1995 (ed.)) provide a method of reconstructing sounds on the basis of written documents.

Reflections on the non-technological and technological programs provide some clear insights into the various minority language efforts, which have been mounted in different portions of the world to revitalize languages subject to different degrees of endangerment shown in the diagram 2-1 above. Yet, one clearly notices that the non-technological programs outnumber the technological ones because minority language media studies is a recent and growing field of investigation and much literature is available on non-technological methods. In sections 7 and 8, I am going to elaborate on the technological programs. For this, I have attempted to add further tools to complete the technical picture of language revitalization in my thesis since the descriptive survey of programs does not make reference to digitized projects and software. Besides, Tsunoda displays many revitalizing programs, some of which are rare to utilize such as the neighborhood and adoption methods due to their particular dimensions. Therefore, they are not applicable to all minority languages unless there are similar situations which obtain. However, this gives an insight into the other language revitalization efforts, which are undertaken outside the Welsh environment, and highlights the mechanisms whereby they function as well as the contributions they make to understand the phenomenon of language revitalization.

Tsunoda's list of methods does make reference to home-based programs, which have been explored by Hinton (2001a) where she emphasizes the role of family in language preservation, where parents are actively engaged in teaching the language to their offsprings. Otherwise, moribundity will take place. In my master thesis, I have explained how parental involvement crucial is to the preservation of minority languages in my investigation of both Navajo and Yup'ik revitalization activities (Ben Slimane 2005).³⁰ In some programs such as immersion and bilingual methods, there are other foci apart from language revitalization because these programs tend to reinforce bilingualism and biliteracy, as the situation of Welsh confirms. Moreover, it should be underscored that Welsh revitalization activities are exemplified by some cases in the two-fold categorization of methods. This reflects the other level in which the Welsh community is engaged to revitalize its minority language apart from technology. Another point that needs to be mentioned is that the classification paradigm is considered to be an idealization because most real programs employ different methods. There are also some problems with regard to the assessment of the impact of the tools on the process of language revitalization, as one needs to think of some models to account for the contributions of the technological tools—something which I will attempt to carry out in section 11.

³⁰ While Yu'pik is spoken in Alaska, Navajo is spoken in Arizona, Colorado, Utah, and New Mexico.

3. Celtic languages

3.1. Overview

In this part, I am going to talk about Celtic languages by mentioning some approaches, which provide an understanding of these languages. I then turn to explain some perspectives on Celtic Englishes as well as the contacts between English and Celtic languages.

3.2. Approaches

There are three approaches, which are going to be considered. These are ethnological, genetic, and typological. The approaches have different levels of emphasis. Yet, they are complimentary in defining Celtic languages.

3.2.1. Ethnological approach

Fife (1993: 3) argues that the question of what forms a ‘Celtic’ language is not as evident as linguists may think because there are at least three different approaches defining what is meant by terms such as ‘Celtic’, ‘Romance,’ or ‘Slavic.’ Historically speaking, all the three approaches have been applied to the Celtic languages with each perspective further modifying and narrowing the domain of investigation. These are: an ethnological approach, a genetic approach, and a typological approach. Fife explains that the original use of the term ‘Celtic’ emanates from the name *Keltoi* employed by the Greek geographers of the mid-first millenium BC for a people residing in parts of Central Europe. The first reference to this people is in

the Ora Maritima of Festus Rufus Avienus, proconsul of Africa in AD 336, based on a Greek original of the sixth century BC, though accounts of the Celts occur also in works by Hecataeus of Miletus (c. 500 BC), Herodutus (450 BC) and Aristotle (c. 330 BC). Extensive descriptions are found in Polybius (second century BC) and in Poseidonius (first century BC); the latter was a major source for later accounts by Diodorous Siculus and Strabo, and may have influenced Caesar’s Gallic War...

The Keltoi of the Greeks appear to equate with an archaeological record which reveals the existence of a war-like, iron-working culture originating in Central Europe... The

Celts are associated with the material remains designated phases C and D of the Halstatt culture (eighth to early fifth centuries BC). This phase gave way to a more flamboyant and wealthy successor known as the La Tène culture (late fifth to early first century BC). (1993: 3)

Spreading their political and martial influence on the classical world, practitioners of La Tène culture started to emerge in Roman histories and military reports. To the Romans,

they were known as *Galli* and acknowledged as a fearsome adversary who settled *en masse* in the vale of Lombardy, set the Etruscan state tottering and sacked Rome in 390 BC. During the course of the fourth and third centuries, the Celts established themselves in areas stretching from the British Isles to Asia Minor. It seems certain enough now that the Roman *Galli* and the Greek *Keltoi* were one and the same nation. However, the ancients apparently did not fully recognize the ethnic unity of the Celts (indeed, Caesar states even the three parts of Gaul were linguistically disparate). Thus they were most often referred to by individual tribal designations (the Aedui, the Belgae, the Helvetii, the Boii), sharing certain cultural traits (for example, religious institutions and a warrior aristocracy). (Fife 1993: 3-4)

As soon as the Celts spread their language and culture over Europe, they rapidly declined again. The Celtic-speaking population of Spain, Gaul, and Northern Italy were under the rule of Rome before the fall of the Republic and eventually assimilated to Latin.³¹ The corner of *Romanitas*, in which Celtic languages were continuously spoken, was Britain. In that area, the native language survived and spread back to the continent to develop into languages of rule in many medieval states before they all experienced a decline because of the loss of political independence and economic isolation in the sixteenth century. The languages, which had remained beyond the bounds of Roman rule, differed little from those who were controlled by Rome for centuries. Irish, Manx, and Scots Gaelic were considered viable languages through the millennium following Roman collapse, though they were subject to decline with the arrival of the centralized state and capitalism. Moreover, Fife (1993: 4) argues if we look then at ‘Celtic’ as referring to the languages of peoples descended

from the ancient *Keltoi* and *Galli*, as was once the case, we come up with a very varied group. For if present-day speakers of Irish and Welsh are to be united with those of Gaul by reason of heritage, the very same can be said of today’s speakers of

³¹ Note the extant Galatian speakers in the 4th century AD.

Hiberno-or Cambro-English. While the ethnological approach does capture the continuity of the development of the Celtic peoples, a process one might describe as ‘cumulative deCelticity’ ... it does very little to discriminate the speech communities in a linguistically useful manner. In this sense, modern French is a ‘Celtic’ language, as it organically (i.e., via contact) partakes of the original Celtic heritage. Though one occasionally still meets with such a use of ‘Celtic’ (as with the efforts by Galician nationalists towards admission into the Celtic league), it has limited usefulness for modern linguists.

Nowadays, the ‘Celtic’ epithet is often used to refer to the languages along with the respective cultures of Ireland, Scotland, Wales, Cornwall, the Isle of Man, and the French region of Brittany—something which the map 3-1 below shows.



Map 3-1. Locations of Celtic speakers³²

In addition, many of the people residing in these regions have ancestral Celtic backgrounds. Moreover, the term corresponds to the Celtic language family—in which these languages are still spoken: Scottish, Irish, and Manx (Gaelic languages) and Welsh, Breton, and Cornish (Brythonic languages), according to Crystal (2006).

³² Campbell (2004) includes Devon and Galizia in the map because these are areas where the Celts people had lived.

3.2.2. Genetic approach

The genetic meaning of what is a ‘Celtic’ language pertains to the ethnic because it considers Celtic any language lineally descended from the reconstructed proto-language. Fife argues (1993: 5) that there are still some problems in deciding what determines lineal descent. Could Scots perhaps be regarded a descendant on the ‘*distaff side*’ of Gaelic? Yet, this is quite familiar and acceptable to the modern linguist. The genetic criterion has turned its emphasis to specifically linguistic features instead of populations or cultures. This is the meaning of ‘Celtic’ with which linguists are well acquainted and which seems to be firmly rooted in scientific evidence. Since the early days of modern comparative grammar, Celtic languages have played a considerable role in the development of the reconstruction of Indo-European. The seminal study by Zeus (1853), revised edition (1871), is regarded as the ultimate source of modern research into diachronic Celtic.

Much discussion of the structure of the Celtic language family and its relation to other Indo-European languages has taken place since Zeus’s investigation. Despite the debate, there are many basic questions, which still remain unresolved. For example, one of the most hotly debated matters was the so-called *Italo-Celtic hypothesis*. The theory that Celtic and Italic formed a *Sprachbund* is reminiscent of that suggested for Baltic and Slavic. The argument, which focuses on isolated features such as the form of demonstratives and the use of deponents/passives in *-r, has been subject to controversy for decades. At the moment, the theory is no longer valid and Celtic and Italic are viewed as separate branches.

According to Fife (1993: 5), the internal structure of the family has been controversial and the major arguments for divisions are the pseudo-geographic division into Insular and Continental Celtic and the more linguistically-based division into P and Q Celtic languages. Despite the nomenclature, Fife (1993: 5-6) explains that

the Continental-Insular division is not a truly geographic one. In the first place, it is a misnomer to refer to Breton as geographically insular after some 1,400 years of residence on the continent. Second, there is not necessarily an implication that the geographic division has any strong correlation with actual linguistic features. That is to say, while it is true that the Insular Celtic languages share many traits... their counterparts do not appear to have many specific characteristics which group them

together in opposition to the former; ‘continental’ really is a catch-all for ‘non-insular.’

In reality, the division is based rather on a gap in the attestational tradition between the earliest forms of Celtic present on the continent in classical sources and the corpus of materials native to the British Isles and Brittany as well as in other portions of the world such as the Scots Gaelic community in Nova Scotia and the Welsh settlement in Patagonia. Fife goes on to argue that the fragmentary record of the earliest forms of Celtic languages are confined almost exclusively to the continent. Additionally, it is only plausible in that sense to speak of these languages as forming a common grouping within the Celtic languages. With regard to the Continental subgroup, Fife (1993: 6) asserts that it consists of several languages or dialects attested in different degrees of completeness. The main

languages/dialect-clusters recognized are (in decreasing order of attestation) Gaulish, Hispano-Celtic (or Celtiberian), Lepontic and Galatian. The areas where these languages attested or known to have been centred are roughly the area of Gaul, northern and eastern Spain, north-east Piedmonte and the region of Asia Minor around the present-day city of Ankara. Evidence suggests that Gaulish and Celtiberian had several dialects (indeed Lepontic is sometimes treated as a dialect of Gaulish), but the evidence is so limited as to make any grouping a matter of speculation.

Insular Celtic, Fife further explains, is recognized to have two branches,

the Goidelic or Gaelic branch, and the British, Brythonic or Brittonic branch. The former consists of Irish and other descendents of Old Irish, viz. Manx and Scots Gaelic, which are on occasion distinguished from Irish by being grouped together as Eastern Gaelic. The British branch consists of Welsh, Cornish and Breton: the latter two are sometimes considered to form a southwestern subgrouping. In addition to these languages... [T]he Insular group contains a sparsely-attested Brythonic language called Cumbric, spoken in Cumberland and southern Scotland. This language appears to be close to Welsh and seemingly survived into the tenth century. (1993: 6)

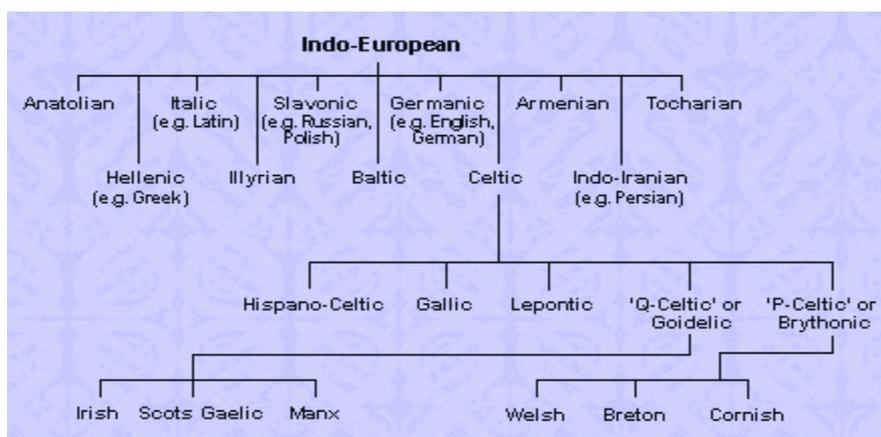


Diagram 3-1. The Indo-European family language tree

The diagram 3-1 shows the relations among some of the languages in the Indo-European family. It should be stressed that Cymbric is also part and parcel of the Brythonic family. Nevertheless, it has not been included because it is believed to have become extinct in the 11th century, according to Crystal (2006). Another linguistic group of Britain is the Picts,³³ which is regarded as one of the five languages of Scotland, is only sparsely attested. Thus, it makes it difficult to determine its affiliation. According to Fife (1993: 6), the suggestions “*run from treating it as pre-Indo-European to being a full-fledged Celtic language (of the P-Celtic variety), or even a mixture of both.*” It is claimed that it became extinct after the fall of the last Pictish kingdom in the ninth century. Fife (1993: 6-7) highlights the second main theory on division of the Celtic family, saying that it is more linguistically

oriented and cuts across the Continental-Insular divide. This grouping is based on the reflex of proto-Celtic **k*^w, which in the P-Celtic languages loses its velar quality and becomes a voiceless labial stop, but in Q-Celtic retains the velar point of articulation. Based on this diagnostic, the Brythonic languages now group with most Gaulish dialects, while Goidelic patterns with Hispano-Celtic and a few dialects of Gaul.

Furthermore, Fife says that the genetic definition of Celtic is based on sound scientific principles—something which does not lead to satisfactory results. For example, the inability to clarify the maximum of subgroupings persists despite the long decades of discussion. There have been some linguistic traits favoring a P/Q split. However, it is not clear that the sociolinguistic situation of the Insular languages provided the degree of contact, which would allow separate

³³ They were a Scandinavian people who lived in the northeast of Scotland.

branches to converge. Besides, the shared features, which do not make part of a clear borrowing framework, outnumber those which underlie the P/Q distinction. How best to divide the family into subgroups depends on an analysis of the common features of the suggested groupings. These features allow one to define the term ‘Celtic’ on the basis of the third criterion, *typology*.

3.2.3. Typological approach

It should be noted that linguistic science has provided sufficient empirical and theoretical knowledge about human languages, which paves the way for a description of universal features as well as the several parameters along which grammatical systems vary. In the contexts of commonality and variation, patterns build up leading to a categorization of language types. Therefore, the typology of a group of languages is explored by asking the question about the significant linguistic features, which are typical or unique to this group. Fife (1993: 7) explains that “[i]n asking this question of the Celtic languages, we are faced with a difficult evidentiary problem: our knowledge of the great bulk of the grammatical features of any of the Continental languages is too limited to make any reliable generalizations.” For this reason, he argues that the discussion needs to be broken down into a descriptive part divided into features relating to phonology, morphology, and syntax.

With regard to phonology, Fife (1993: 8) explains that the phonetic inventories of the Celtic languages, while possessing some striking features do not reveal many shared idiosyncratic patterns. Commonalities mostly exist in a paired voiced-voiceless stop series and stop-fricative series. This pairing of segments on the axes of voicing and continuance is fundamental to the major typological feature of initial mutations. Moreover, the kinds of phonological rules, which work in the various languages, are not to be taken into account to derive typological features. An example of this is that all Celtic languages have stress fixed on a particular syllable without considering its syllabic structure or morphological status.

As a matter of fact, in one branch the target syllable is absolute and in the other it is relative. The Goidelic languages favor initial stress, yet there are many exceptions and differences between dialects, especially in Irish. As a consequence, affixation does not result in stress movement in most Gaelic languages. In Brythonic languages, the stress is relative in that in present-day Welsh and Breton, the usual locus of stress is on the penultimate syllable, yet there are some dialectal variants.

The stress will shift to a new penult upon suffixation: Welsh/aval/‘apple,’/aval+ai/‘apples.’ Therefore, there are few generalizations with regard to the phonological stress across the Celtic languages apart from its fixed locus.

Turning to morphology, Fife (1993: 13) says that Celtic languages have some morphological categories and processes in common. The

gender distinction is recognized by different mutation effects, but also by alternate forms of some numerals (particularly for ‘two’) and of course choice of anaphor. Grammatical gender is assigned by natural gender, form of the noun and by semantic fields (e.g., time periods, seasons, rivers, etc.) A neuter gender was once distinguished, but has since disappeared.

A straightforward morphological trait of Celtic is the presence of inflected or conjugated prepositions in both Insular branches. Apart from being mutation triggers on full noun phrases, most common prepositions in all languages fall into one of many conjugations in combination with pronominal objects, according to Fife (1993: 14). Some examples from each of the languages are provided in (1):

(1)

Irish: *le Cait* ‘with Cait’: *liom* ‘with me’

Manx: *ec fakin* ‘seeing (lit. ‘at seeing’): *ayd* ‘at you’

Scots Gaelic: *fo dhuine* ‘about a man’: *fodha* ‘about him’

Welsh: *trwy Gymru* ‘through Wales’: *trwyddi* ‘through her’

Breton: *da Vrest* ‘to Brest’: *din* ‘to me’

Cornish: *yn tus* ‘in men’: *ynne* ‘in them’

According to Fife, this morphological trait seems to be restricted to the two branches of the Insular languages since this formation does not appear in Continental texts.

With regard to syntax, Fife (1993: 15-16) carries on his explanation saying that the typological feature of Celtic, which has received most attention, is VSO (Verb Subject Object) basic word-order. The proof emanating from the continent reveals that VSO was one possible option in Gaulish, yet all the earliest records of both branches of Insular Celtic show these languages to have

the VSO feature. Celtic languages are not just VSO due to their arrangement of verb, subject, and object, but because of their consistent patterning as VSO, as Greenberg (1966) observed and subsequent proposed arguments have pointed out.

Fife (1993: 23-24) further mentions that on a typological level, the Insular languages seem to have more traits with one another than with the ancient languages of the continent. This idea leads to much discussion concerning the relationship between the synchronic analytical tools and the diachronic methods, as well as about the mechanisms of language contact which could shed light on the shift. Moreover, it provides an understanding of linguistic evolution and the processes of language change without reference to external factors.

Summarizing all the three approaches, Fife says this:

So far, it appears each of these three approaches to defining celticity has something to offer. Given the strong integrative trend of our age, it is perhaps not too daring to venture a prediction that the most satisfactory model will be one that partakes in proper measure of all three approaches. May be only then we will gain a more comprehensive and adequate picture of what it means to be a Celtic language. (1993: 24)

3.3. Perspectives on Celtic languages and Englishes

Haarman (1990a) argues that Celtic languages are particularly rich in concrete or object-bound color terms. In addition, he attempts to give an impression of the color dimension by referring to Welsh and its inventory of cognate and borrowed expressions. The Welsh term *glas* can be

translated into English as ‘green’ ‘blue’ or ‘grey’, not to speak of shades of these concepts which might be associated in varying contexts. The polysemy of *glas*, which also is a characteristic element in the color terminology of the other Celtic languages (i.e. Irish, Scottish-Gaelic, Manx, Breton and Cornish), has puzzled many scholars and has been the crystallizing focus of extensive speculation about the formation of lexical structures in this field. The fanciful assumption is that in the past the Celtic peoples must have been color-blind because they do not make a proper distinction between ‘green’ and ‘blue’ in their languages. The simple explanation for

the polysemy of *glas* can be found in the circumstance that this term is related to natural phenomena. (1990a: 171-172)

Filppulla et al. (2002: 1-2) argue that it is acknowledged that Celtic languages have indeed played a central role in the development of the so-called Celtic Englishes. Many of the features, such as the syntax and phonology of Hiberno-English or Welsh English, can be accounted for in terms of an assumed Celtic substratum in the English varieties. This implies that the English language cannot be studied without considering early and continuing contacts with British Celtic. It is to be mentioned that textbooks on the history of the English language clearly elucidate the dominant canon in philological research on English-Celtic contacts. The largely accepted standpoint on the minimal role played by the Celtic languages in the development of English is explicitly reflected in textbook accounts about the nature and outcomes of the contacts between English and the Celtic languages.

Jespersen, whose recurrent saying has paved the way for nearly all the following treatments of the topic, depicts the role of Celtic languages in the development of English in the following terms:

We now see why so few Celtic words were taken over into English. There was nothing to induce the ruling classes to learn the language of the inferior natives; it could never be fashionable for them to show an acquaintance with that despised tongue by using now and then a Celtic word. On the other hand the Celt would have to learn the language of his masters, and learn it well; he could not think of addressing his superiors in his own unintelligible gibberish, and if the first generation did not learn good English, the second or third would. (Jespersen 1905: 39).

Jespersen's argument shows that only few Celtic words were borrowed into English because the Celtic languages along with their speakers were not looked upon as prestigious in the post-conquest period. Capturing the same idea, many arguments about the relative presence of Celtic words in English have been formulated in many books. In addition, Baugh and Cable (1993: 85) mention that "*outside of place-names the influence of Celtic upon the English language is almost negligible.*" Besides, Pyles and Algeo (1993: 292) point out that "*we should not find many [Celtic loanwords in English], for the British Celts were a subject people, and a conquering people are unlikely to adopt many words from those whom they have supplanted.*" Moreover, Strang (1970) further explicates the same idea in her famous book on the history of English. She argues that "*the*

extensive influence of Celtic can only be traced in place-names” (1970: 391). Additionally, she points out that “[t]he poverty of the Celtic contribution to English vocabulary even in this area, and at a time when Celtic cultural influence was enormous, is very remarkable” (1970: 374).

Barbara Fennel, in a recent textbook called *A History of English: A Sociolinguistic Approach*, describes the early English-Celtic contacts in a way reminiscent of Jespersen’s account from almost a century ago:

By contrast with Latin, fewer than twelve Celtic words are thought to have been in English before the twelfth century. [...] It has been suggested that the limited influence of Celtic on the language stems from the fact that the Celts were a submerged race in the Old English period. Once again, it appears that they were neither sufficiently well organized or centralized, nor militarily or culturally superior, so that the influence was extremely limited.

In these instances we can talk about prestige borrowing vis-a-vis Latin and casual or superficial contact between the languages (Celtic), which resulted in only minor lexical borrowings and no influence on language structure. This would accord with stage 1 on Thomason and Kaufman’s borrowing scale. (Fennel 2001: 89-90)

According to Filppulla et al. (2002: 3), the major part of the textbook accounts about the linguistic outcomes of the early English-Celtic contacts has rarely changed over the last century of scholarship. Only few Celtic words were borrowed into English—something which is only to be expected due to the relative status of the speakers of these languages in the historical contexts in question. It could thus be argued that the small number of Celtic loanwords is often taken as an evidence against the possibility of Celtic influence on English on other levels such as syntax and phonology. In addition, it is to be noted that the availability of the pervading canon in English historical scholarship can be made graspable only against the background of the views on the English settlement expressed by historians of the 19th century.

Filppulla et al. (2003) argue that the time has come for a re-evaluation of the question of Celtic impact on the development of English. In contrast to what has been previously supposed, it seems that external circumstances for early contacts between English and Celtic languages were to be taken into consideration. This is because of the recent historical and archaeological proofs of the Germanic settlement. Moreover, it has been suggested that the two populations had co-existed

peacefully. Therefore, widespread bilingualism had resulted in many areas. Besides, the linguistic proof for contact effects needs to be re-evaluated, taking into account the experience of other contact cases from all over the world. As to the modern period, Filppulla et al. (2007) point out that considerable contacts have taken place between English and Celtic languages in the areas of Wales, Cornwall, Ireland, and Scotland—areas which have by now become mostly Anglicized—a claim which is expressed in this quotation:

The last few years have witnessed an upsurge of interest in the dialects of English spoken in these areas. Indeed, a new term has been coined for them: “Celtic English” or, rather, “Celtic Englishes”. Yet it should be noted that the substratal influence of Celtic is not confined to the Welsh, Cornish, Irish or Scottish dialects of English but also extends to some conservative northern and south-western dialects of English (EngE). Thus, although there is some justification for the claim that there is relatively little Celtic influence in Standard English, the situation is very different in some conservative regional varieties. (Filppulla et al. 2007: n.p.)

Section 3 has displayed different approaches to highlight what is meant by a Celtic language. These are ethnographic, genetic, and typological. The approaches have attempted to delve into the term “Celtic” in their own ways and clarify the different developments it has been undergoing. This has led to a large spectrum of explanations and standpoints. It thus seems that an integrative perspective is useful to have a better understanding of the meaning of the concept of Celticity. Moreover, the section has touched on the issue of language contact, pointing to the scarcity of Celtic loanwords in English. In addition, it has revealed the different Celtic Englishes, which are the resulting outcomes of the linguistic contacts between English and the Celtic languages over different periods of time. For further reflections, the discussion on Celtic Englishes opens up ways on considering how Englishes can be studied in other contexts and whether they share common characteristics with Celtic Englishes. Moreover, the analysis points to the fact that the maintenance of Celtic languages including Welsh preserves a cultural heritage and ensures its continuation into the future. In section 4, I am going to provide some insights into the minority languages spoken in the United Kingdom. One will note that there are some Celtic languages, which are referred to as minority languages. These are Welsh, Cornish, Manx, Scottish Gaelic, and Irish. Concerning Ulster Scots, however, it is not a Celtic language, but rather a minority language, as will be clearly explained.

4. Minority languages and language policies in the UK

4.1. Overview

Before concentrating on minority languages in the United Kingdom along with policies supporting them, I am going to reveal the ongoing impact of the *European Charter for Regional or Minority Languages*³⁴ on linguistic minorities in the UK and the policies of governments and public bodies with regard to such minorities. This needs some close attention because it depicts the political as well as the social climate surrounding minority languages in the UK.

First, the predominant language in the UK is English, one of the world's most widely spoken languages, and the one that has emerged as the global *lingua franca*. Second, the UK has one of Europe's more centralised systems of government. Unlike most European [s]tates, the UK has no written constitution, and arguably has no *de jure* official language, although English is and has for several centuries served as the *de facto* official language, since it is the language through which the conduct of public affairs takes place. Until 1999, there was effectively only one level of government in the UK, and the UK Parliament at Westminster had absolute legislative authority with respect to all matters... [T]he Scottish, Welsh and Northern Irish devolution of 1999 changed this picture to some extent, but the power of the English-speaking south-east and Londonbased political, economic, cultural and social institutions remains profound. Third, the linguistic minorities to which the Charter applies are, with the exception of Welsh, generally amongst the more threatened or institutionally marginalised of Europe's linguistic minorities... Fourth, the linguistic minorities to which the Charter applies are only part of a wider linguistic mosaic. (Dunbar 2003: 2-3)

Like many other European states, the UK has experienced considerable waves of immigration, particularly since the Second World War. Many immigrants have come from the

³⁴ According to Intercultural Dialogue (ICD) (2007:1), the *European Charter for Regional and Minority Languages European treaty* was "adopted in 1992 under the auspices of the council of Europe to protect and promote historical regional and minority languages in Europe. It only applies to languages traditionally used by the nationals of the State Parties (thus excluding languages used by recent immigrants from other states), which significantly differ from the majority or official language."

former colonies of Britain. The resulting outcome is that there are many minority communities in several British cities, adding to the ethnic and linguistic diversity of Britain. According to Dunbar (2003: 3), state policies concerning the autochthonous linguistic communities to which the Charter applies are only a small part of a broader set of considerations with respect to minorities policy in general. However, it is not yet clear how these various policy strands will interact. In section 4.2, I am going to give some historical perspectives on the development of Welsh from the very start until its recent situation and then turn to reflect on the policies applied to it.

4.2. The Welsh language

4.2.1. Historical development

The following quotation traces the beginning of the Welsh language from the perspective of the Welsh Language Board:

Very few examples of Early Welsh exist today, with the earliest dating back to the middle of the ninth century. Elements of Old Welsh are seen in the work of the Cynfeirdd, originally dating back to the sixth century, although all manuscripts are much later than this date. The most famous of these is Canu Aneirin (The Songs of Aneirin), written in Welsh, in an area of Britain now known as south Scotland and the north of England, where Welsh was spoken during this period. (WLB 2007a: n.p.)

Without any doubt, one of the most widely known Welsh literary works is the *Mabinogi*—a series of tales transcribed between 1050 and 1170. Over a period of centuries, this series of tales had been transmitted from generation to generation through the medium of the *Cyfarwydd*—the Story Teller. The famous tales, which constitute the four branches of the Mabinogi, are *Pwyll Pendefig Dyfed* (Pwyll, Prince of Dyfed), *Branwen Ferch Llyr* (Branwen, Daughter of Llyr), *Manawydan Fab Llyr* (Manawyddan, Son of Llyr), and *Math Fab Mathonwy* (Math, Son of Mathonwy).

Nonetheless, the series also encompasses a wide range of other tales such as *Owain, Neu Iarlles Y Ffynnon* (Owain, or The Lady of The Fountain), *Breuddwyd Rhonabwy* (The Dream of Rhonabwy), and *Culhwch ac Olwen* (Culhwch and Olwen). According to Ap Dyfrig et al. (2006: 6),

the collection of tales known as the *Mabinogi* is believed to have contributed to writing at some point between 1050 and 1170. The stories or parts of them are likely to have existed in oral form a long time ago. In modern times, however, prose writing is represented by many genres such as novels, short stories, essays, and drama.

4.2.2. Welsh from 1200-1600

Several instances of Welsh literature, which were transmitted from generation to generation, date as far back as the early Norman period and are still existant in the form of ancient tales and poetry. It has been pointed out that this era was

an important period for Welsh poetry, with lords and princes across the whole of Wales sponsoring court poets. These poets were employed in order to produce eulogies for the princes and lords, describing their military prowess, and were known as *Beirdd yr Uchelwyr* (the poets of the gentry).

Following the defeat of Llywelyn ap Gruffudd's army at the end of the thirteenth century, the tradition of sponsoring poets among the gentry continued for many years, but were now known as the *Gogynfeirdd*. (WLB 2007b: n.p.)

Dafydd ap Gwilym, whose humorous poems marked the agitating period in Welsh history and whose major themes in his work were love and nature, is considered the most famous poet of the time. Nevertheless, one can argue that his work remains popular today in Welsh as well as in other languages into which it was translated. Throughout the Middle Ages, Welsh remained the dominant language of Wales despite the fact that many English and French speakers moved to Wales. During that time, different parts of Wales had their own forms of the language such as *Gwyndoleg* in the Gwynedd area as well as *Gwenhwyseg* in Gwent.

The use of the Welsh language has been deeply affected by the passing of the 1536 and 1542 Acts of Union. Four centuries later, the language would be employed again as an official language after the passage of the 1942 Welsh Courts Act. According to WLB (2007b: n.p.), the objective of the Acts of Union was to make Wales part of England. As a consequence, English became the official language of business and administration in Wales. It followed from the enactment of the Acts that it was not possible for any monolingual Welsh speaker to hold official office in Wales. Despite the fact that the language was not banned, it lost its status and brought with it centuries of

steady linguistic loss. That started a shift to English. But it might be said that if the Welsh Bible had not been translated into Welsh, the Welsh language would have been threatened during the Tudor Period. Edwards and Newcombe argue that

[w]hen Elizabeth I authorised a translation of the Bible into Welsh in 1563, the aim was to assimilate the Welsh and hasten the acquisition of English. Ironically, the development had the opposite effect. It prevented the fragmentation of the language into different dialects and helped ensure an enduring national identity. (2005: 301)

Bishop William Morgan of *Llanrhaedr ym Mochnant*'s translation, which appeared in 1588, helped promote the language and play a role in the preservation of the future of Welsh for many centuries (WLB 2007b).

4.2.3. Welsh from 1600–1900

What characterized the seventeenth century and the start of the eighteenth century, it is claimed, is the fact that

many Welsh people had turned their backs on the church and were worshipping in the growing number of non-conformist chapels, which were being built across the whole of Wales. The chapel became the centre of Welsh life during this period, and therefore played an important part in the history of the language. (WLB 2007c: n.p.)

This was also a prolific period in the history of Welsh literature—a period which witnessed the publication of many famous works such as Ellis Wynne's *Gweledigaethau'r Bardd Cwsg* (The Visions of The Sleeping Bard) and the Vicar Prichard's *Cannwyll y Cymru* (The Welshman's Candle). Theophilus Evans's *Drych y Prif Oesoedd* (A Mirror of The First Ages) is another popular book published during this era. This book, which displays the history of Wales throughout the ages, had been republished several times by 1900 to become the first Welsh language best seller (WLB 2007c).

In the field of publishing, major developments in both Welsh and English paved the way for literacy to significantly infiltrate people's lives in both Wales and England during this period of

time. Some people believe that the Sunday School along with the circulating schools have³⁵ played a major role in increasing literacy. The immediate response to the increasing need for written material in Welsh was that over 2500 Welsh language books were published in the 18th century. In 1858, the first National Eisteddfod

–a national cultural festival–was organised, and in 1872 the first university in Wales opened at Aberystwyth. In 1890, following the Education Act of 1870 which introduced compulsory education in Wales, the Government made a concession and paid capitation grants to schools which taught Welsh. This by no means obliged any school to teach Welsh–the Act followed the English model–but it did mean that, for the first time, the Welsh language gained a toehold in the education system. (Mercator Education 2001a: 3)

Nevertheless, one should not forget the fact that the Industrial Revolution at the start of the 19th century brought

another change to the history of the language. At the beginning of the century, 80% of people in Wales spoke Welsh, but during the century, English became the main language of some areas of the country.

This period also saw mass immigration into the industrial areas of south Wales, which had a huge impact on the language. By the end of the century, the number of Welsh speakers in Wales had decreased from 80% of the population to 50%. (WLB 2007c: n.p.)

4.2.4. Welsh in the twentieth and twenty first century

According to WLB (2007d), Welsh was spoken by a huge number of the population at the very beginning of the 20th century. According to the 1911 Census, about half a million people considered themselves Welsh speakers. From that census on, the number of Welsh speakers gradually declined because of migration patterns from rural to urban areas in search of work and increased availability of English-language news and entertainment media. These factors led to the decline of Welsh in many predominately Welsh-speaking communities. The number of people who could speak the

³⁵ These schools were developed by Griffith Jones from Llanddowror.

language had been estimated up to (508,098) by 1991—a figure which reflects just 18.7 per cent of the population. To give an idea about the 1991 census as well as the difference between the 1981 and 1991 results, I use the following quotation:

However, 1981 and 1991 results are comparable and on this basis the 1991 results were encouraging. Significantly, the 1991 Census saw an increase in the number and percentage of young people who spoke Welsh - and young people of course represent the future of the language. For example, between 1981 and 1991, the percentage of children aged 5-9 who spoke Welsh rose from 17.8% to 24.7%, and the percentage of young people aged 10-14 rose from 18.5% to 26.9%. (WLB 2007d: n.p.)

According to WLB (2008: n.p.), the trend went on beyond 1991 and this is “*reflected in the results of the 2001 Census, published in 2003, which recorded that 20.8% of the population of Wales said they could speak Welsh.*”

4.2.5. Welsh language policy

In this section, I review some legislations, which have been made to promote the use of Welsh. Then, I turn to the Welsh Language Board and its major purposes. It is to be mentioned that the way to the development of effective language legislation in the twentieth century was a demanding process.³⁶ In addition, the victories, which were won in the first half of the twentieth century, were the product of hard initiatives. The Welsh Courts Act of 1942 was partially triumphant, though there was no equal treatment of Welsh and English in the courts. As far as civil administration is concerned, official or statutory forms were seldom developed in Welsh.

In 1963, the UK government set up a committee under the chairmanship of Sir David Hughes Parry in order to investigate the legal status of the Welsh language. In 1964,

the Committee argued that the law contained little that was damaging to the standing of the language, but that this position should be regularized by an Act declaring that Welsh had official status (or ‘equal validity’). It also argued that public sector bodies should be prepared to give effect to this by responding to demands for services in

³⁶ Section 4.2.5 is taken from Mercator Education (2001a).

Welsh. The Government responded by passing the 1967 Welsh Language Act, providing for Ministers the right to prescribe statutory forms in Welsh, and giving a commitment, for the first time, that individuals in Wales would have a choice of using Welsh or English in courts as they preferred. This commitment to choice has underlain the growth in the use of Welsh by many other public bodies since 1967. (Mercator Education 2001a: 6)

Nevertheless, the 1967 Act did not make any recommendation that there should be a declaration of the status of the language. In the eighties, the government established a consultation program to see if there is overwhelming support for the enactment of further legislative pieces. Partially though, these consultations accelerated the development of the non-statutory Welsh Language Board in July 1988. The purpose of the organism developed was to inform the Secretary of State for Wales on linguistic issues.

In 1991, the advisory Board suggested a proposal, which should highlight the status of Welsh, pointing to the fact that the statement should spell out that the language had an equal status as English. The government welcomed the suggestion that new legislation was needed and mentioned that declaration of equal validity could pave the way for both legal and practical difficult matters. In 1992, the Secretary of State for Wales was strongly committed to set up an equal status between the Welsh and English languages via administrative measures. In 1993, the Welsh Language Act came into effect. It then set up the Welsh Language Board and provided the Board with statutory powers. Furthermore, the Act made it clear that both Welsh and English languages should be considered equally in Wales with regard to public business and the administration of justice.

Apart from what has been mentioned, the status of the Welsh language has been impacted by the following legislative measures, which involved the 1981 Broadcasting Act that established S4C, the Welsh Television Channel, and the 1988 Education Reform Act—pieces of legislation which made Welsh a mandatory section of the National Curriculum in Wales. According to the Government of Wales Act 1998, the National Assembly was given the authority to take a series of attempts to support the Welsh language. In March 2000, with regards to Welsh, Gaelic, Irish, and Ulster-Scots, the UK government signed the European Charter for Regional or Minority Languages. In all, 52 clauses were signed—clauses which pertain to language rights for Wales and other parts of the United Kingdom.

It should be highlighted that the Welsh Language Board is a statutory organization as well as a public body sponsored by the National Assembly for Wales, which aims at promoting and facilitating the use of the Welsh language. This quotation attempts to sum up how the Board has been funded over the last period of years:

In 1999-00 it received £5.9 million of grant-in-aid, of which over £4.4 million was distributed by the Board to other organisations in the form of grants to promote and facilitate the use of the Welsh language and to support Welsh language education. The Board has also been successful in attracting European grants and private sponsorship to support specific projects. (Mercator-Education 2001a: 7)

By 2001, the Welsh Language Board had 30 full time members of staff working in five policy departments at its office in Cardiff. The departments consider a spectrum of issues relating to the Welsh language. They involve advising the National Assembly concerning the language as well as the distribution of annual grants to organizations across Wales. One of the main functions of the Welsh Language Board

under the Welsh Language Act 1993 is to agree Welsh Language Schemes with public bodies in Wales. Under Section 9 of the Act the Welsh Language Board issues guidelines to public bodies as to the form and content of their Welsh Language Schemes. As a part of this function the Board's Education and Training Department agrees Welsh Education Schemes with Local Education Authorities. The Education and Training Department of the Board is responsible for reviewing LEA policies, approving and monitoring the implementation of their Welsh Education Schemes and also maintaining a strategic overview of Welsh medium education and training. A Welsh Education Scheme is a language scheme pertaining to education and forms part of a Local Authority's main Language Scheme. (2001a: 7-8)

Section 4.2 has shown that the historical position of Welsh, which has been subject to neglect and alternating with hostility, has began to change starting from the 1940's with a passage of a series of state policies from which Welsh has enormously benefitted. In addition, an emphasis has been placed on the Welsh Language Board and its major role in Welsh language revitalization, as will be further explained in section 8.

4.3. The Cornish language

4.3.1. The language

According to Mercator Education (2001b: 4), one should not confuse Cornish, which is a Celtic language, with the Anglo-Cornish dialect also spoken in Cornwall. Cornish, which is spoken by few people in Cornwall, is a direct descendant of the language that was spoken by the Celtic population before the Roman conquest had taken place and is also part and parcel of the Brythonic branch. It is to be noted that speakers of one Celtic language do not actually understand speakers of the other languages. The Cornish language, which is referred to as *Kernowek* by its speakers, is considered among the other minority languages of Europe. This is because it has been revived after having declined in the 18th century.

4.3.2. Population

According to CCC (2007),³⁷ there are about 300 people who speak the language in an effective way. Moreover, there are about 3,000 speakers who could lead simple conversations in Cornish. Cornwall is an area, which has just over 356,000 hectares. The population was

496,600 according to an estimate made by Cornwall County Council in 2001. The two main groups who inhabit Cornwall are of Cornish and English descent. Rapid population growth and counter urbanisation has resulted in a situation where the percentage of indigenous Cornish people (not necessarily Cornish speakers) declined from between 70 and 80% in the 1950s to somewhere between 40 and 50% today. Copper and tin mining were the traditional industries of Cornwall; today the county is largely dependent on tourism. (Mercator Education 2001b: 3)

4.3.3. History

³⁷ This report, which was undertaken on behalf of the Government Office for the South West (GOSW), derives from an academic study of Cornish.

The region, which comprises current Cornwall, Devon, and West-Somerset, has been inhabited by the Cornish.³⁸ These residents are a Celtic people who perhaps descend from the Celtic people who have lived in the region when farming was introduced around 3000 BC. Before the Roman invasion took place, a Celtic language known as Brythonic (British) had been the language of the British Isles. To provide an insight into the Cornish language along with some developments throughout the centuries, I refer to this:

The language survived the Roman period and crossed the Channel due to the extensive migrations of the 5th and 6th centuries. In Britain itself, the Anglo-Saxons drove the Celts to the further corners of the British Isles following the Roman period. In the fifth century, the Celts regained some territory when the Irish Celts invaded Scotland and the Celts from Cornwall invaded Armorica (Brittany). Although they did not establish a Celtic state, they did sow the seeds for the Breton language that is still alive in Brittany today. The Saxons eventually overran Cornwall in the ninth century. In 936 AD, King Athelstan's settlement established the river Tamar as the border between England and Cornwall and the Cornish and the Welsh were separated. From then on, their languages developed independently. Cornwall has been a Duchy since 1337. (Mercator Education 2001b: 4)

During the late Middle Ages, the number of Cornish speakers reached about 33,000. This constituted about three-quarters of the whole population in 1300. Nevertheless, as the population developed, the number of Cornish speakers did not change in contrast to English speakers whose number significantly rose. The period of greatest popularity of Cornish literature was the Middle Cornish period (1200-1575)—an era which also witnessed a great number of Cornish speakers reaching about 38,000. The English tongue had appeared to be the first language for state matters by 1362. Meanwhile, the Cornish people still made use of their language in other fields. In the late Middle Ages, the language started to weaken in the east of Cornwall. This is contrasted with the situation in its western part where it remained used significantly. The use of Cornish has also been stimulated by commerce and cultural interaction with the Breton people.

In the 14th century, monks wrote the so-called *miracle plays* in Cornish. These plays were known as '*The Ordinalia*' and their aim was to teach people about the church. What marked the first

³⁸ This historical insight as well as the revival attempts are also taken from Mercator Education (2001b).

attempts to revive the Cornish language in the beginning of the 20th century was that they were based on texts of this nature. During the Middle Ages, it is claimed that

Tudor centralism caused the Celtic languages, including Cornish, to decline. Cornish revolts against the English in 1497 and 1549 led to the end of the halcyon days of Cornish culture. At the time of the Reformation, English replaced Latin as the language of the church. The Cornish speaking population was against English replacing Latin as the local language of the church instead of Cornish. However, there was never to be a Cornish translation of the Bible. After the Prayer Book Rebellion of 1549, over half of Cornwall's able-bodied men were slaughtered. The death of so many indigenous men set the course for the language's extinction. (Mercator Education 2001b: 5)

Cornish was only conversed in the furthest areas of Cornwall around 1700 and remained in these reaches for another period of time. In the late 18th century, English largely played a capital role in supplanting Cornish as vernacular speech—the period during which it was reported that the last native speakers died. Yet, throughout the 19th century, it was reported that there had been some people who possessed some knowledge of the language. The other factors that contributed to the ultimate decline of the language are the following: (1) Cornwall's early industrialization, (2) the transformation of an autonomous speech community into a bilingual community, (3) economic change that led to emigratory flow in the late 18th century, (4) the move of many Cornish people to Australia or North America, (5) English has become the language of commerce, and (6) the view that Cornish was seen as the language of the poor.

4.3.4. Revival of Cornish

Among the attempts to revive Cornish at the turn of the 20th century was the one made by Henri Jenner. His book published in 1904 is believed to have laid the foundation for the efficient writing and teaching of Cornish. It is to be noted that Jenner's revival of the Cornish language was based on Middle Cornish. The major underlying force behind updating the spelling and pronunciation of Cornish emanates from Robert Morton Nance. While Jenner's work was centered on Middle Cornish texts, Nance worked on the spoken language of its last semi-speakers. What marked the early proponents for revival was that they corresponded and wrote in Cornish, although the language was rarely spoken. Between the World Wars, the major revivalistic bodies were set up such as the

Gorsedd of Cornwall as well as classes in Cornwall and the city of London. The Gorsedd, which was founded in 1928,

was the chief centre of the revival and it provided examinations for language learners until that function was taken over in 1967 by the newly founded Cornish Language Board (*Kesva an Taves Kernewek*). The Gorsedd is a Celtic cultural organisation and one can become a bard for important contributions to Cornish culture. Cornish is used in Gorsedd ceremonies today but only an approximate one in twenty of the bards has an active knowledge of the language. (Mercator Education 2001b: 6)

Under the supervision of Robert Morton Nance, a standard Cornish was developed from Jenner's work in 1930's—a fact which contributed to the first set of grammars and dictionaries. Steadily, the language advanced as far as public esteem and use are concerned. However, it took a period of time before Cornish was able to reappear as a living spoken language. The introduction of the car as a common transport medium may have given the language a strong impetus, knowing that Cornish-speaking people lived quite sparsely. The *Kowethas an Yeth Kernewek* (Cornish Language Fellowship) organizes nowadays a wide range of events to enable people to use Cornish. For instance, one can refer to gatherings like the *Yeth an Werin* (Language of the People), which are weekly held in pubs across Cornwall as well as *Dydhyow Lowender* (Fun Days) where all the activities are carried out in Cornish. There have been Cornish Language Weekends known as *Pennseythun Gernewek* since the late 1970's. These yearly weekends take the form of full board weekends luring numerous speakers (Mercator Education 2001b: 6-7).

4.3.5. The status of the Cornish language

The Cornish language is not officially recognized in the United Kingdom, according to Mercator Education (2001b: 8). With regard to its position, there is no legislation referring to it. In March 2000, the European Charter on Regional and Minority Languages was signed by the UK government and later ratified without including Cornish. For the purposes of the Framework Convention for the Protection of National Minorities, the national government has made it clear that the Cornish does not represent a national minority. According to the UNESCO Redbook of Endangered Languages, Cornish is considered an artificial as well as extinct language—a language spoken today by about 2000 Cornish people.

The role of the Department of the Environment, Transport, and the Regions (DETR) is to coordinate advice on governmental policy for Cornish in connection with the European Charter. The GOSW, the Government Office for the South West, undertook a study on behalf of the DETR to account for the current position. While taking various policy issues into account, the aim of the commissioned study was to inform government departments and provide them with key pieces of advice. The report

provides information concerning the historical position of Cornish up to the present day, the way in which the language is used, the availability of and enrolment in the teaching and study of Cornish at each level, Cornish literature, organisations that promote Cornish and details of sources, funding and support available in the UK and in the EU. Generally, the report concludes that Cornish is a living language with a growing number of speakers but that it suffers from a huge lack of funding and support. (Mercator Education 2001b: 9)

However, the report has not been implemented, according to CCC (2007). The Cornish and the Council of Europe Framework Convention for the Protection of National Minorities was a report, which was made in 1999 by a steering committee and members from the Cornish language movement and the county council. The community of Cornish-speaking people, which does not consider its Cornish language to be an artificial one, protested in the report against the lack of any recognition provisions.

The local authority, the Cornwall County Council, considers the Cornish language an important ingredient of the Cornish heritage as stated in its policy statement on Cornish. Moreover, it argues positively for the attempts which have been done as far as the promotion of the language is concerned. Efforts to set up a Cornish Regional Assembly (*Senedh Kernow*) to integrate some effective aspects of government to a local level are being carried out. It is to be mentioned that the current Cornwall County Council is devoid of any legislative functions. An assembly may have some restrictions to promulgate local legislations as well as language laws. To rejuvenate its language, a Cornish assembly may follow the same pattern in which the revived Manx language has been stimulated. On the Isle of Man, several peripatetic teachers, with the support of the Manx government, are paid to teach Manx. It should be pointed out that the Manx government has more influence than the local government of Cornwall. Behind the campaign lies the Cornish Constitutional Convention, which is considered the driving organism. This body comprises people

from all political parties, business, and the voluntary sector, not forgetting the Cornish language movement, according to Mercator Education (2001b: 10).

4.4. The Manx language

4.4.1. Historical background

Manx, or Manx Gaelic, is the native language of the Isle of Man and a descendent of Old Irish like Scottish Gaelic. The Isle of Man retains some diverse elements of its native culture though it is highly Anglicized.³⁹ The Isle of Man is an area, which is neither a part of the United Kingdom of Great Britain and Northern Ireland, nor it is in the European Union. Under a mixture of pressures, many Manx people have attempted to avoid the use of their own language for over one century. Meanwhile, they have sought to keep some sense of pride in their unique identity. The considerable decline of the language in the nineteenth century has paved the path for the portrayal of Manx as a very endangered language in many works of reference as well as in textbooks of the other Celtic languages. In the eighteenth century, Stowell claims that there was a flowering of Manx

language and literature... However, this spell of optimism for the language ended with the Revestment Act of 1765, whereby the British Crown effectively annexed the Isle of Man. This led to economic decline and loss of confidence on the part of the Manx people and eventually to the loss of Manx as a community language in the late nineteenth and early twentieth centuries. (Stowell 2001: n.p.)

Yn Cheshaght Ghailckagh (The Manx Gaelic Society) was set up in the Isle of Man in 1899. Its purposes were the preservation of Manx as the language of the Isle of Man and the study and publication of Gaelic literature and modern literature in Manx. This society has conducted work, which has tended towards preservation rather than revival.

It appeared that the spoken Manx language was likely to become utterly extinct. In the late twenties, Marstrander, the Norwegian scholar, mentioned the absence of fluent Manx speakers. The following quotation encapsulates some of the attempts that have been taking place since the thirties:

³⁹ The account in section 4.4.1 is taken from Stowell (2001).

From the 1930's, a small group of people made determined efforts to acquire a fluent knowledge of Manx and use it as a living language. They did this by seeking out native speakers and not confining themselves to written material. In one notable incident, Charles Craine, a bank manager, discovered that one of his customers was a previously unknown native speaker. This was John Kneen, or Yn Gaaue (The Smith), who later made invaluable tape recordings. (Stowell 2001: n.p.)

In 1946, there were still twenty native speakers of Manx. The official visit of the Irish Taoiseach, Eamon de Valera, to Mann in 1947 contributed to some significant developments such as his sending of a unit from the Irish Folklore Commission to produce tape recordings of some native speakers. These recordings, which were complemented in the 1950's and later by recordings made by *Yn Cheshaght Ghailckagh*, were conducted by Doug Fargher, who was a charismatic figure and who did a lot for the revival movement. What characterizes the recording activities was that they were totally conducted in Manx—something which facilitated for some learners the acquisition of Manx in informal situations. One should point out that attitudes towards the language had become highly sympathetic in 1974—a time during which Ned Maddrell, the last native speaker of the so-called 'traditional Manx,' passed away. Throughout the seventies, more

learning material was becoming available for adults in evening classes, newsheets were being produced in Manx and records of singing in Manx were becoming available. Attempts were made to widen the appeal of the language by holding Manx-speaking evenings in selected public houses throughout the island. The number of people claiming to speak Manx had increased from an all-time low of 165 in 1961 to 284 in 1971. In 1979, Doug Fargher published his comprehensive English-Manx dictionary with support from the Manx government. This gave a significant boost to the language movement. (Stowell 2001: n.p.)

As people were highly motivated by the revival of the language, they showed a similar interest in the revival of Manx folk music and dancing. The publication of the first booklets on Manx folk music, *Kiaullyn Theay* (Music of the People) in 1978 by Colin Jerry, was among the first popular attempts to revive the language. These booklets provide words of traditional songs in the Manx language and have attracted a large number of young people in Mann. Manx is still considered the only Celtic language for which it is not possible to possess formal qualifications. In the 1980's, this situation was partially corrected. Under the leadership of Robert Thomson, the dominant academic authority on the language, it was possible to acquire a secondary school qualification in Manx. Practically speaking, only adults could obtain this qualification due to the lack of Manx

language tuition in the schools. Nonetheless, one could note that even when a change took place in secondary school qualifications, there was no provision for new qualifications in Manx.

4.4.2. Population

According to McArdle (2005), the population, as noted in 2001, was 76,315. The Manx national census of 2001 involved many questions for the resident population with regard to Manx Gaelic:

Do you speak, read or write Manx Gaelic?	
Do you speak Manx Gaelic?	
Do you write Manx Gaelic?	
Do you read Manx Gaelic?	
The responses were the following:	
Speak, read or write Manx Gaelic	1,689
Speak Manx Gaelic	1,527
Write Manx Gaelic	706
Read Manx Gaelic	910

Table 4-1. Questions and responses during the 2001 Census

There was no clarification as far as the quantity, quality, or fluency of Manx Gaelic spoken, written, or read are concerned. Possibly, fluent practitioners and some respondents, possessing a limited knowledge of the language, may have answered positively. The results show

an increase in the statistics from the 1991 census when 643 people (0.9% of the then resident population) were recorded as being able to speak Manx Gaelic and 0.7% able to write it. While there has been a noticeable trend towards more sympathy with, and interest in Manx Gaelic as shown in the census and other statistics over the ten year period 1991-2001, the actual number of fluent practitioners has increased at a slower rate. (McArdle 2005: n.p.)

4.4.3. Policies for the Manx language

Before embarking on the policies applied to Manx, I am going to describe some parts of the Charter. According to COE (2008), the Charter is divided into two main parts, a general one containing the principles applicable to all regional or minority languages (Part II) and a second part which lays down specific and practical commitments, which may vary according to the state and the language (Part III). COE (2008: n.p.) explains that “*Part II sets out the main principles and objectives upon which States must base their policies, legislation and practice, and which are regarded as providing the necessary framework for the preservation of the languages concerned.*” In addition, it is claimed that

Part III lays down detailed rules in a number of fields, some of which develop the basic principles affirmed in Part II. States undertake to apply those provisions of Part III to which they have subscribed. Firstly they have to specify the languages to which they agree to this part being applied, and then they have to select at least thirty-five undertakings in respect of each language. A large number of provisions consist of several options, of varying degrees of stringency, one of which has to be chosen “according to the situation of each language.” (COE 2008: n.p.)

According to McCardle (2005), the UK government signed the European Charter for Regional or Minority Languages in April 2003. It was agreed upon that the treaty at Part II protection level should be extended to the Isle of Man. Theoretically speaking, Part III of the Charter encapsulates very specific requirements for regional or minority language provision. Practically speaking, however, many of the requirements are already being fulfilled by the government of the Isle of Man, specifically as far as education and heritage are concerned. In addition, the Charter’s requirements for Part III are being reviewed. As one of its six overall objectives, the Business Plan for 2005-8 of the Manx government has disclosed a sense of ‘National Identity’—something which can be fulfilled through the collaborative work of government departments and authorities. Increasing the number of people connected with Manx Gaelic is a particular target of that aim.

4.5. The Gaelic language

4.5.1. Historical insight

The Gaelic language, or *Gàidhlig*, which is primarily spoken in the areas of the Highlands and Islands of Scotland, is closely related to Irish and Manx.⁴⁰ The introduction of Gaelic into Scotland was made by settlers from Ireland in the 4th and 5th centuries AD who were referred to by the Romans as Scotti. These inhabitants have had a strong impact on the development of the country, which has borrowed its name as Scotland. Towards the end of the 10th century AD, the Gaelic language had become very widespread, affecting many areas of the country. In addition, its use as the language of the Crown and Government is considered a famous development in the history of the language. There followed a period of attrition of the language and culture, which can be traced to the Anglicizing impact emanating from the south, which started changing the thriving linguistic situation in the 12th century. It is claimed that the language kept a strong base in

the Western Highlands and Islands, particularly during the period of the Lordship of the Isles from the 13th to the 16th centuries. The interests of the Lordship often conflicted with those of the Government in Edinburgh and numerous efforts were made by the Crown to impose its authority over the western seaboard. Even after the forfeiture of the Lordship of the Isles, there was continuing resentment and intermittent strife between the Highland clans and the authorities in Edinburgh. Many attempts were made to subjugate the clans and the Gaelic language and culture was deliberately targetted by the Crown. The Privy Council Act of 1616, for example, was explicit in its call “that the vulgar English tongue be universally planted, and the Irish language, which is one of the chief and principal causes of the continuance of barbarity and incivility among the inhabitants of the Isles and Highlands, be abolished and removed.” (Mercator Education 2001c: 2-3)

The decline of Gaelic language and culture became more pronounced only after the failure of the Jacobite rebellions in the mid 18th century. The government was determined to connect the Highlands with the remaining parts of the country. In addition, it has criticized all forms of cultural distinctive traits such as the language, the bagpipes, and the kilt. Huge emigration was witnessed in the 18th and 19th centuries from the Highlands as well as lasting decline of the language and culture.

By the late 1800's, the number of Gaelic speakers had thus been reduced to about 250,000 or 6% of the Scottish population due to long periods of repressive governmental policies and massive emigration. Monoglot Gaelic was the predominant feature of the speakers. This fact was not taken into account during the establishment of state education in Scotland by the 1872 Education Act.

⁴⁰ This historical insight is taken from Mercator Education (2001c).

While many previously private schools, which are run by societies and churches, had made provision for the language, the Act does not provide for Gaelic education or for education through the medium of Gaelic. The language and culture have therefore entered another stage of decline.

4.5.2. Population

According to the estimates of the 1991 Census, there were 69,510 Gaelic speakers in Scotland—something which represents

1.4% of the Scottish population. 60% of Gaelic speakers live in the Highlands and Islands. The most strongly Gaelic-speaking communities are in the rural areas of the Outer Hebrides and Skye. Two thirds of the inhabitants of the Outer Hebrides and almost half of those living on the Isle of Skye were Gaelic-speaking in 1991. The main concentrations of Gaelic speakers outside the Highlands and Islands are to be found in the Glasgow conurbation and in Edinburgh. The Census revealed that the Gaelic-speaking population was heavily weighted towards the older age-groups, with a quarter aged 65 or over and 52% aged 45 or over. (Mercator Education 2001c: 3-4)

The description of the recent situation of Gaelic speakers has been provided by McLeod where he points out that the 2001 census

showed a total of 58,969 Gaelic speakers aged 3 and over in Scotland, a mere 1.2% of the national population... Some 7,094 persons claimed the ability to read or write Gaelic but not speak it, and a further 27,538 could understand Gaelic but not speak, read or write it... The rate of decline has now slowed somewhat, however: the drop in speaker numbers between 1991 and 2001 was only about half as great as that between 1981 and 1991, primarily due to an increase among younger age-groups that reflects the impact of Gaelic-medium school education, which grew rapidly in the 1990s... This trend notwithstanding, the Gaelic-speaking population is skewed to older age-groups, with some 53% of speakers aged 45 or over... (2006: 3)

4.5.3. The status of the Gaelic language

The establishment of the Scottish Parliament in July 1999 has provided Scotland a significant level of autonomy that includes legislative and fiscal powers in the domains of education, health, industry, and transport.⁴¹ The following quotation shows some aspects of governmental initiatives with regard to Gaelic after its ratification:

Gaelic does not have official status, either within the United Kingdom or within Scotland itself, but the UK Government has recently ratified the Council of Europe Charter for Regional or Minority Languages and is committed to applying 39 of the 65 conditions to Gaelic in Scotland. The Labour Government at Westminster created the post of Minister for Gaelic in 1997 and this post has been retained by the Scottish Executive. (Mercator Education 2001c: 4)

In addition to what has been stated, there is evidence of linguistic provision in legislation with regard to education and broadcasting. Nevertheless, the language can be used to a certain restricted extent with regard to civil and land courts. Gaelic has official status in one local governmental area known as the Outer Hebrides. In this region, there is the local council, now called *Comhairle nan Eilean Siar*, which has launched a bilingual policy since its development in 1974. The advent of the Scottish Parliament has witnessed a boost with regard to the status of the language. Gaelic has been employed in several debates in both the Chamber as well as in committee proceedings. Indeed, there is bilingual signage “*throughout the Parliamentary Chambers, a Gaelic Officer has been appointed, a Dictionary of Parliamentary Terms has been produced and the language has been the subject of parliamentary debate,*” according to Mercator Education (2001c: 4).

The description of Scottish Gaelic shows that the autochthonous language has also been subject to various measures of oppression, quite reminiscent of the situation of Welsh. These measures aimed at decreasing the use of both Welsh and Gaelic. Yet, with the passage of the European Charter as well as the advent of the Scottish parliament, the status of the Gaelic language has changed increasingly.

4.6. The Ulster Scots language

⁴¹ This piece of information is also available in Mercator Education (2001c).

4.6.1. Language

Since Ulster Scots is a descendent of Scots,⁴² I am going to put it in a broader frame and then turn to visualize the policies to which it has been subject. Dunbar (2003: 12) argues that Scots descends from the Germanic languages

brought to Britain starting in the fifth century, and which arrived in Scotland in the seventh century with Anglian peoples coming north from Northumberland. Influenced by Anglo-Danish, Norman French, Dutch and to a limited extent Gaelic, it had become the tongue of urban centres and much of the lowlands by the middle ages; by the mid-fifteenth century, it had replaced Latin as the language of the Scottish court and of public administration and had also become the principal literary language of the country.

The following insight shows that the implications of the measures taken by the monarch have prepared the ground for the emergence of Ulster Scots:

In the early seventeenth century, the Protestant King James VI and I sought to break the power of the Catholic and Gaelic speaking earls of the north of Ireland, and to break the unity of the Gaelic cultural zone which stretched from Cork in the south of Ireland to Lewis in the Scottish Hebrides, and pursued a policy of settling Scottish and English Protestants in the north of Ireland; those Scots coming from Lowland areas brought their language with them, and this speech has been preserved to the present as Ulster Scots. (Dunbar 2003: 12-13)

Starting from the mid-sixteenth century, Scots has been subjected to a gradual process of Anglicization because of several factors such as the Reformation that increased political and social ties between Scotland and England and the ascension of James VI of Scotland to the English throne in 1603. The resulting Union of the two Crowns and of the Scottish and English Parliaments in 1707 paved the path for the displacement of Scots by English as the language of public administration.

⁴² Ulster Scots is considered a minority language, because it fits in with the definition provided by the COE (2008: n.p.): "As defined by the Charter, "regional or minority languages" are languages traditionally used within a given territory of a state by nationals of that state who form a group numerically smaller than the rest of the state's population; they are different from the official language(s) of that state, and they include neither dialects of the official language(s) of the state nor the languages of migrants."

Despite the Anglicizing forces, Scots continues to survive in both Scotland and Northern Ireland as a language with a literary tradition. It should be pointed out that there are elements of Scots in the speech of the majority of the population of Scotland and Northern Ireland, yet the actual position of the Scots tongue is still less clear. Besides, it is not easy to provide some statistics with regard to the precise number of speakers of Scots. For instance, despite lobbying by Scots language activists and the Scottish National Party (the SNP), the Scottish Executive did not include a question on Scots on the 2001 census. The Ulster Scots Language Society has estimated the number of speakers of Ulster Scots, sometimes referred to as ‘Ullans,’ at 100,000, though no census data exists. Part of the difficulty in determining the demographic position and usage patterns of Scots is its similarity to English. Nonetheless, Scots activists have advanced

a number of reasons for regarding Scots as a language distinct from modern English: the Scots tongue has many attributes not shared by any regional English dialect, and these linguistic characteristics differ more sharply from Standard English than any English dialect; Scots has a distinct literature, and there is no English dialect which can compare with it in its antiquity, extent, variety and distinction; and, it is arguably at least as distinct from standard English as, say, Catalan is from Castilian Spanish, or Danish is from Norwegian... However, the language faces a number of significant challenges: the similarity to English, the relative lack of political activism amongst the supporters of the language (at least until very recently) and their relative inability to articulate a plan and vision for the revival and promotion of the language, and the almost total lack of state support for it. (Dunbar 2003: 14)

4.6.2. The status of Ulster Scots

The definition of Ulster Scots is provided in legislation by the North/South Co-operation (Implementation Bodies) Northern Ireland Order 1999 as: “*the variety of the Scots language which has traditionally been used in parts of Northern Ireland and in Donegal in Ireland,*” according to United Kingdom Parliament (2007: n.p.). As far as the European Charter for Regional or Minority Languages is concerned, the declaration made by the United Kingdom government is expressed in these terms: “*The United Kingdom declares... that it recognises that Scots and Ulster Scots meet the Charter’s definition of a regional or minority language for the purposes of Part II of the Charter,*” according to Council of Europe (COE) (2007: n.p.). The aforementioned definition from the North/South Co-operation (Implementation Bodies) Northern Ireland Order 1999 was actually used

in the 2005 Second Periodical Report by the United Kingdom to the Secretary General of the Council of Europe. In this report, it highlights how the UK specifies its objectives with regard to the European Charter for Regional or Minority Languages (COE 2005). The Belfast Agreement of 1998 was a significant step in

the recognition of the Irish and the Ulster Scots languages as an expression of cultural wealth in Northern Ireland. Following the Agreement, two implementation bodies were established: Foras na Gaelige (the Irish Language Agency) and Tha Boord o Ulstèr Scotch (Ulster-Scots Agency). There is, however, a need to provide the necessary means for organisations to support the Ulster Scots language. At present there does not exist a language policy for Ulster Scots and Irish, which makes it difficult for its speakers to use the language in public life. (PFECMR 2007: 10)⁴³

Providing an insight into Ulster Scots,⁴⁴ John Wells (2007) argues that Ulster Scots “*is like Scots. The only reason people are now paying attention to it is that as the republicans in Northern Ireland claimed rights for Irish Gaelic, so the loyalists claimed rights for Ulster Scots (including in the framework of the EU). Previously it was considered a variety of Scots.*”

4.7. The Irish Gaelic language

4.7.1. Language

Irish, which is also referred to as *Gaeilge* and considered an autochthonous language spoken in the Republic of Ireland as well as in Northern Ireland, is remotely linked to Welsh, Breton, and Cornish, according to Mercator Education (2004: 2). The majority of speakers of Irish in Northern Ireland are second language learners. In addition, many people are able to learn the language through the system of education or at informal language classes, which are available throughout Northern Ireland. Ulster, Connacht, and Munster are the three major dialects of Irish, which are spoken in Ireland. It is to be mentioned that the Ulster dialect is spoken and taught in Northern Ireland.

⁴³ PFECMR stands for Public Foundation for European Comparative Minority Research.

⁴⁴ This personal communication has been provided by John Wells via an email.

4.7.2. Population

When the state was founded in 1921, Irish was spoken by some communities of native speakers in Northern Ireland. The last native speaker of Tyrone Irish from these communities survived until 1970. Today, the Irish-speaking community in Northern Ireland includes

those who have learned Irish as a second language at secondary school, university, or at night classes; children who have been brought up with Irish as their first language (often by parents who themselves learned or are learning it as a second language); and an increasing number of children from English-speaking homes who are being educated through the medium of Irish in Irish-medium schools. While this community extends throughout Northern Ireland it is largely an urban phenomenon with the highest concentration of speakers in Belfast, particularly the west, Derry, and in the Newry and Mourne districts. (Mercator Education 2004: 2-3)

The 2001 Census has shown that 167,490 or 10.4% of the total population in Northern Ireland aged three and over possessed some knowledge of Irish. The Census does not give details about the fluency or ability of speakers. Yet, scholarly estimates demonstrated that between 13-15000 speakers are ‘fluent speakers’ and that about 40-45000 are ‘functional speakers’ of the Irish language, according to Mercator Education (2004: 3). The following table illustrates the results of the Irish language question in the 2001 Census:

All persons	1,617,957
Understands spoken Irish but cannot read, write or speak Irish	36,479
Speaks but does not read or write Irish	24,536
Speaks and reads but does not write Irish	7,183
Speaks, reads, writes and understands Irish	75,125
Speaks, reads, writes and understands Irish	24,167
Has some knowledge of Irish	167,490
Has no knowledge of Irish	1,450,467

**Table 4-2. Knowledge of Irish of all persons aged 3 years and over
(Northern Ireland Census 2001)**

4.7.3. Historical background

Archaeologists and historical linguists have traced the coming of early waves of Irish speakers roughly as far back as 200 BC,⁴⁵ claiming that they possibly arrived from Spain. Focusing on the development of Irish, it has been argued that the

first written sources of the language date from the early Christian period (between about 400 and 600 AD). What were the Dark Ages in the rest of Europe was the Golden Age for Irish. At that time, Ireland was the center of learning in Western Europe and the language flourished, with large amounts of literature being written in that time. This was also the expansionist period for the Irish. They set up colonies in Scotland (whose people eventually became today's Scots Gaelic speakers) and a similar colony on the Island of Man. (Carnie 1995: 2)

As the remaining parts of Europe, Ireland was subjected to raids from the Vikings during the so-called Dark Ages. The Viking invading missions represent the emergence of towns in Ireland. To give but an example, Dublin, Galway, Cork, and Waterford were established by the Norse and they never become assimilated to Irish. In 1170, the Anglo-Norman invasions of Ireland began where large portions of the country as well as all the towns had been conquered. These people who lived in the countryside quickly became assimilated in contrast to those who lived in the towns. Therefore, English tremendously affected the towns and cities. To show how oppressive measures were taken against the Irish language and its speakers, I cite this account:

The Statutes of Kilkenny, in 1366, are the first example of official oppression against the Irish language. Irish was banned in the court system and for use in commerce. Later, in the early 16th century, the Tudors attempted to 'unify' their realms. Languages other than English were banned during this period. This was, however, generally a failure outside the towns and the Pale (the area near Dublin). The year 1609 marks the start of the plantations of Ireland, starting under the rule of James I. English-speaking Protestant settlers, mainly from Scotland, were settled in the rich farmlands...The Irish-speaking Catholics native to the plantation areas were evicted and displaced to less hospitable land. These plantation areas became almost exclusively English-speaking. The Cromwellian government cleared much of the Irish-speaking nobility of Leinster and Munster and heavily settled these areas. This plantation was less successful than the Jacobite plantations, however, since by 1700 the Cromwellian settlers had assimilated and started speaking Irish. (Carnie 1995: 3)

⁴⁵ This account is taken from Carnie (1995)—a detailed description about Irish history.

By 1780, the Industrial Revolution had centered around Belfast, Dublin, and the Pale. The resulting social and demographic transformations may be looked upon as the steady decline of the primacy of the Irish language in Ireland. As people in Ireland moved from the countryside to the cities and towns, the language of these places as well as the technology, which attracted the comers, was English. Therefore, in many segments of the population, a pronounced shift from Irish to English had taken place. Yet, the peasantry was the predominate section of the countryside population to converse in Irish.

The 19th century is the era during which the Irish language enormously declined. It should be emphasized that there are diverse factors, which contributed to such huge minority language loss:

The Industrial Revolution spread across the country. In the 1840s, the Irish potato famine took its toll on the rural population of Ireland, who were the bulk of the Irish speakers. During this time there was widespread death and emigration, especially among Irish speakers. Emigration was primarily to English-speaking places like Canada, the United States, and Australia, so a whole generation of Irish speakers was lost. In the late 19th century, the republican home-rule movement was growing in strength. The English governmental reaction to this was to suppress Irish culture and language. (Carnie 1995: 3)

The 19th century was not only synonymous with the increasing interest in the language, but also with the language revival attempts, which significantly developed among non-native speakers. The Irish language has become emblematically associated with the Republican movement. Many people have become interested in the linguistic data collected by linguists, philologists, and folklorists who travelled to the *Gaeltachtaí*, which represented the Irish-speaking areas. In 1893, the Gaelic League was set up with the aim to promote the language revival. In 1900, primary schools were permitted to teach the Irish language inside school hours on the basis of the specific standards they met. Nevertheless, most schools in Irish-speaking areas did not meet these standards because of the poor and distant dimensions of many areas of the *Gaeltachtaí*. Consequently, English remained the only language to be used as the medium of instruction in *Gaeltacht* schools.

The year 1921 is associated with the establishment of the Irish Free State and the division of Ireland into two parts: the Free State and Northern Ireland. At least one hour of Irish was required from schools to be taught every day. Later, the Irish civil war, which broke out in the south, had a great impact on the language revival movement. Officially speaking, Irish was considered the ‘first

language' of the south in the constitution in 1937. This happening may have reinforced the language revival movement through the considerable level of official and public support. Nevertheless, many authors regard the language to be still in constant decline despite the impetus given by the formal declaration in the constitution. Dunbar comments on the situation of Irish in the twentieth century, saying that Irish

had all but died out as the native tongue of people in what is now Northern Ireland. Irish has managed to fare somewhat better in the twentieth century in the Republic of Ireland than in the north, due at first to a vigorous language restoration movement and later to various measures of positive support from the government of the Irish Free State and the Irish Republic, although the number of native speakers of the language has continued to decline... While the language revival movement has continued to play an important role with respect to Irish in Northern Ireland, the language has largely been deprived of the benefits of a supportive State. (2003: 15-16)

4.7.4. Irish language policy

It is essential to mention that Irish was acknowledged as a school subject and as 'Celtic' in some third level institutions before the founding of the Northern Ireland state in 1921. This measure continued despite the fact that efforts have been taken to limit its scope in the curriculum during the thirties. Northern Ireland had a devolved governmental body in the period between 1921 and 1972. During these years,

one party, the Ulster Unionist Party (UUP), which was hostile to the Irish language, was in power in the Northern Ireland Parliament. Northern Ireland was ruled directly from Westminster, London, from 1972 until 1998. During this period the government's attitude to the Irish language changed somewhat. The first Irish-medium schools were funded in the early 1980s and later that decade a number of Irish language projects received funding from the public purse. However, significant change was to occur only after the signing of the signing of the Good Friday Agreement in 1998. (Mercator Education 2004: 4)

Irish is not considered an official language in Northern Ireland. Yet, the British government took various steps to support the language as the Good Friday Agreement stipulates.⁴⁶ The Agreement makes the following point that “[a]ll participants recognise the importance of respect, understanding and tolerance in relation to linguistic diversity, including in Northern Ireland, the Irish language, Ulster-Scots and the languages of the various ethnic communities,” according to CAIN (2007: n.p.).

The British government also took a ‘resolute action’ to promote the Irish language and reinforce its use in different spheres such as public and private life, the media, and education. The duties of the North/South Ministerial Council that the government made provision for its establishment comprise

setting up six cross-border implementation bodies funded by the two administrations. One of the bodies is the North/South Language Body which contains two associated agencies, Foras na Gaeilge (dealing with Irish) and Tha Boord o Ulstèr-Scotch (dealing with Ulster-Scots). Foras na Gaeilge has a role in advising administrations, north and south, as well as public bodies and other groups in the private and voluntary sectors in all matters relating to the Irish language. (Mercator Education 2004: 4)

After the ratification of the European Charter in 2001, the British government and the Northern Ireland Assembly took then some steps to encourage the use of Irish in public life:

Measures relating to education include facilitating Irish-medium education or the opportunity to study Irish at all school levels where requested and where numbers are sufficient; facilitating Irish-medium education or the teaching of the language at universities and in adult education; ensuring the teaching of the history and culture associated with the language; and providing the necessary teacher-training. (Mercator Education 2004: 5)

Developed by the Good Friday Agreement, the Northern Ireland Human Rights Commission has proposed some suggestions for inclusion in a Northern Ireland Bill of Rights. Its perspective is to empower all language users rather than make provisions for official and second languages. The Commission aims at recognizing all languages, dialects, and other communication forms because

⁴⁶ This agreement is also referred to as the Belfast Agreement.

they contribute to the cultural richness of the community. Unlike other minority languages in Northern Ireland, Irish and Ulster Scots are protected under the Good Friday Agreement.

The Commission also made some recommendations with regard to the involvement of users of sign language, travellers, speakers of Chinese and Urdu, as well as speakers of Irish and Ulster Scots in the proposed Bill. The Commission's set of suggestions gives the right to use any language or dialect for private and public purposes apart from the fact that they back up the committed efforts stated in the Belfast Agreement and the European Charter. These proposals require the enactment of legislations to guarantee that members of all linguistic communities enjoy some rights concerning their language or dialect as well as having "*the right to learn in it and to be educated in and through it,*" according to Mercator Education (2004: 5-6).

On the basis of the descriptive accounts about the different minorities mentioned above, I am going to attempt to put the situation of the Welsh language in a broader framework, taking into consideration the other minority languages in the United Kingdom, which have been carefully studied. From a sociohistorical and political perspective, the minority languages have been subject at different points in time to various levels of language endangerment, which have been mentioned in section 2.2. Yet, what is crucially important to stress is the role of Anglicization and governmental policies, which were meant to severely punish those who speak and use minority languages in general and Welsh in particular. Despite such oppressive measures, Welsh has struggled to attain a healthy status.

With regard to the legal position of Welsh, it seems that it has been supported by a number of legislative measures such as the European Charter for Regional or Minority Languages as well as Welsh language acts, and especially the Welsh Language Act of 1993. This Act paved the way for the development of an agency known as the Welsh Language Board to promote the use of the Welsh language as well as bolster its status. It should be highlighted that there are other languages, which have also been covered by the major Charter for minority languages. These are Irish, Scottish Gaelic, and Ulster Scots. Therefore, they enjoy somehow an equal legal status compared with that of Welsh. Concerning the situation of Manx, it is mentioned in the treaty that Part II protection level should be extended to the Isle of Man and that some requirements are being reviewed with regard to Manx. Ultimately, there is no reference in the Charter concerning Cornish—something which puts it in a different position compared with the other linguistic minorities of the United Kingdom.

Turning to the number of speakers, it appears that the Welsh language community takes the lead in comparison to the other minority language communities. The number of speakers the Welsh community has, which is estimated at about 576 000 speakers, conveys the message that the status of the Welsh language is idiosyncratic and less endangered if I take the other minority languages into consideration. In terms of numbers of speakers, however, Welsh speakers are respectively followed by Irish (167, 490 speakers), Ulster Scots (100,000 speakers), Scottish Gaelic (58,969 speakers), Cornish (3000 speakers), and Manx (643 speakers). As previously mentioned, the statistics reflect the number of speakers that use minority languages in the UK, according to the latest estimates. The position of Welsh will be further studied in section 8 within the frame of the remaining linguistic minorities in the UK context. But, the major focus will then be placed on the various tools of media provision.

5. Issues in language planning and policy

5.1. Overview

In this section, I am going to discuss some issues that pertain to Welsh language planning and policy. The aim is to put Welsh language initiatives in their contexts, taking into account a number of historical, linguistic, as well as economic dimensions. In other words, this is an attempt to develop a wider framework to show how Welsh language revitalization activities have been nurtured by various perspectives. According to Ager (2005) and Baker (2003), successful language planning efforts answer a number of concomitant issues and articulate a message of pragmatism. A remark I would like to make here is that the Welsh Language Board has undoubtedly played a crucial role in language planning activities, as will be demonstrated in this section as well as in section 8.12 where I will study the deployment of IT for Welsh.

5.2. Image and prestige planning

Ager (2001) has suggested a scheme whereby he was able to represent the reasons by which planners embark on planning and policy initiatives. According to Ager (2005: 1), this is made up of three sections: stages in the formation of identity with which the nation, community, or individual concerned was content; the attitudes which planners brought to the task; and the aims they pursued. Image, which can be taken as the embodiment of identity of the organism in question, was seen as a segment in the process of identity construction, defence, and protection—stages which were themselves large types of motive. Words like image and prestige are value terms, which

could be represented as resulting from, or being, a particular pattern among the three components of attitude that we identified: the cognitive (perceptions of the excellence and vitality of the language (s) involved); the affective (its attractiveness); and conative (the action to take in relation to it). Both the formation of image, as a stage in the process of formation, modification, defence and maintenance of the identity of a person, group, or state, and prestige as an attitudinal complex, have roles to play in the motivation which brings about planning, and which enables planning to be successful. (Ager 2005: 1-3)

Having said this, I turn to explore the concepts of image and prestige within the context of Welsh language planning and policy. According to Ager (2005: 3), the 1993 Welsh Language Act, which updated the 1967 language Act, paved the way for a Welsh Language Board (WLB)—an organism whose major goal is the planning for the Welsh language in Wales. The Board is not a language planning body with its own specialists, it is rather a section of government machinery, which implements the provisions of the Act and the wishes of the Welsh Assembly. The Welsh Language Board has developed an approach to Language Planning and Policy (LPP), which seeks to build a frame to facilitate for the community the promotion of the language. In 1996, the Board devised a four-part strategy document clarifying how it has aimed at the promotion of the Welsh language, according to WLB (1996).

Ager (2005: 3) explains that the first section was about improving the educational system to teach Welsh as a second or foreign language in selected schools. The second section is about the language status in terms of enhancing the platforms of Welsh language use. The fourth part has been utilized for the development of *Mentrau Iaith* or small groups of amateurs to promote a wide range of local initiatives. The third section is specific. The WLB's target in this section was to increase confidence among Welsh speakers by bettering the image of the language as well as by attempting to change the linguistic habits of its users in a variety of settings.

The strategy the WLB adopted was to promote the use of the language by young people through a variety of services as well as to influence the media. Language planning in Wales, as carried out through the Board, is about convincing rather than control. This means that there are effective means of reinforcement and there are also provisions for control. Indeed, the Board can heavily emphasize that organizations develop Welsh language schemes—something which it has done for many public and private bodies.

As an area of investigation, language planning and policy needs an understanding of a wide range of disciplines. Ager (2005: 9) argues that

Cooper's 1989 definition of an accounting scheme for LPP asked the question: 'What actors attempt to influence what behaviours of which people for what ends under what conditions by what means through what decision-making processes with what effect?' To be able to respond adequately, we need a background of theory from a number of disciplines.

Some of these are social and environmental, comprising matters such as types of social community or category and the nature of the social, economic, and cultural environment within which planning takes place such as in Northern Ireland and Wales. Moreover, simple matters of geography and the physical environment can also be added to this set of domains. Other relevant disciplines are primarily focused on political matters; planning and policy systems and processes; decision-making; and the kind of organizational networks. Economics is also an important component and a considerable effort of the Welsh Language Board is geared towards private industry. Yet, there has been some concern that the head offices of many enterprises are not situated in Wales.

Haarmann (1984, 1990b) explores the idea of prestige: *“Every planning effort... has to rely on a kind of psychological background which favours an effective implementation of planning goals and which, ultimately, is the most crucial variable for a long-term success of planning”* (Haarmann 1990b: 104).⁴⁷ Haarmann, who is preoccupied with language planning as a continuous process of controlling language variation under changing social conditions, suggests that the two main productive activities of LPP—status and corpus planning—could be supplemented by prestige, which he regarded as a third, ‘receptive’ or value function.

Haarmann’s view is that prestige is both an essential reason for planners and a spur to success. He says that *“any kind of planning has to attract positive values, that is planning activities must have such prestige as to guarantee a favourable engagement on the part of the planners, and moreover, on the part of those who are supposed to use the planned language”* (Haarmaan 1990: 104). In addition, Haarmaan believes that language planning is a serious effort to succeed in impacting behaviour. He also considers that what is vital is the psychology which attracts both planners and the targets of planning. Besides, he is persuaded that the prestige attached to the linguistic element of planning, both by planners and the recipients of the planning, is a crucial motivator for both planning and for success.

Now, I turn to reveal the difference between image and prestige planning concepts, which are quite similar on a practical level. Ager (2005: 37) argues that both aim at changing the mental image of a language to give it a more positive dimension. Both are part and parcel of the ‘ideology and beliefs’ element of Spolsky’s (2004) model. It may not often be easy to find out whether a policy is

⁴⁷ For further insights, see Kaplan and Baldauf (1997: 50-1).

an instance of image or prestige planning. For example, governments may improve the teaching or learning of a language. They may also give grants to ‘reform’ the language and may urge people to use it in higher status domains. Organizations may attempt to convince policy authorities to enact legislative pieces. The difference lies in the plan to be developed rather than the objective to be attained. It also lies in the identity involved and/or in the attitudes encouraged. Image planning

is a long term, idealistic and rooted in an attitude based more on the search for equality of languages than on dominance; while prestige planning tends to be short term, policy oriented and borne along by a very strong attitude reminiscent of a military struggle and a fierce awareness of dominance. But the main difference between identity formation on the one hand and attitude change on the other: they are independent components of motive, and require different approaches and different policies. (Ager 2005: 38)

Another way of shedding light on the dichotomy would be to investigate the semantic opposites of the terms of image and prestige. Thus, there are two categories, which can be singled out. The first is image planning, which is about developing a good as well as a positive image of a language. The opposite of it is planning to construct a poor image of the language. Likewise, the opposite of high prestige is low prestige, and planning to ensure a language has a low prestige is scorned. This can be illustrated from Barère’s attack in 1794 on Breton as the language of federalism, according to Ager (1999: 25).

To exemplify the difference between image planning, as a stage in the identity process, and prestige planning, as a specific attitudinal code, seems to have developed from the result of a dichotomy between the programs for the Welsh language of *Cymdeithas Yr Iaith Gymraeg*, the Welsh Language Society (WLS), and the Welsh Language Board (WLB):

The one seems to base its approach on prestige planning: it sees Wales as an occupied country whose language has been marginalised by conquest, and aims to restore Wales to control over its own affairs and particularly its language, with an attitude coloured by an overall political philosophy. The Welsh Language Society was after all formed at a meeting of Plaid cymru, the nationalist party seeking Welsh independence. It has a clear ‘enemy’, and aims to place Welsh in a position where, through legislation, its use is to be enforced on the same basis as English. The other, the Language Board, originally established as an independent body implementing a specific law and only then restructured to report to the Welsh Assembly, sees its role

as working for equality between the languages in a bilingual country, improving the image of the language for its inhabitants including non-Welsh speakers - and indeed elsewhere - but not aiming for the degree of central control over the planning process nor the end-point of the WLS. (Ager 2005: 38-39)

This section has attempted to define some theoretical concepts as far as some aspects of language planning are concerned. These are image and prestige planning. In addition, it has highlighted the strategy adopted by the Welsh Language Board, which aims at promoting the use of the Welsh language in different domains. Before ending this section, I have resorted to an exemplification of the difference between image and prestige planning by referring to the situation of Welsh.

5.3. Initiatives in intergenerational transmission

In this section, language reproduction in the family will be studied. It is a topic, which is likely to have been less underscored than education and other ‘more eye-catching but ephemeral efforts,’ according to Fishman (1991: 161). The causes for the fairly low profile of the family in language transmission are clear. It is easy to achieve increases in the number of speakers through bilingual education. In addition, it is difficult to reach and influence families. Against this background, a report on an innovative initiative in intergenerational transmission in Wales will be clarified—a considerable aspect of which will highlight the use of technology for Welsh language promotion.

Edwards and Newcombe (2005: 299) explain that education is thought to have played a capital role in helping reverse language shift in many communities where the speakers of minority languages are to be found in the older age groups and intergenerational transmission has become rare. Fishman (1991), among the language shift experts, argues not to rely heavily on efforts in this field. Instead, he points to the major role played by family—a role which he depicts as an ‘unexpendable bulwark’ to reverse language decline. If the family is not actively involved, schools will then find themselves in a struggle against the phenomenon of language shift. To sum up, education cannot assume sole responsibility for reversing language shift despite the fact that it plays a large role in the process.

Gruffudd (2000) believes that a number of students, who have acquired Welsh in school, use English as the only language of the home when they become parents.⁴⁸ Therefore, genuine social spaces need to be developed for minority language use if it is not primarily associated with the classroom. Three major recent developments in Wales plainly address this issue.⁴⁹ The first deals with the extensive pre-school provision prepared by *Mudiad Ysgolion Meithrin*, a Welsh language nursery school movement, providing a bridge between home and school (Baker 2003). The second is concerned with the national network of *Mentrau Iaith* or language initiatives. *Mentrau* support local communities to develop their use of Welsh and organize activities to promote the image of the language, according to Campbell (2000). The third concerns *Twf*, a project whose aim is to encourage parents to transmit Welsh to their children through a variety of measures.

Educational attempts are not enough in themselves to reverse language decline. They could be supported by other methods such as marketing strategies and technology to help spread the message of minority language promotion, as I am going to explain in the coming paragraphs. As a matter of fact, considerable importance has been attached by the Welsh Language Board. It is to be noted that language choice has never been referred to when discussing issues relating to parenthood. The WLB and Welsh hospitals

arranged for an information pack on *Bringing up bilingual children* to be included in the 'Bounty' packs of free samples and advertising literature distributed to new mothers. Later, following a successful pilot involving midwives, the National Assembly approved a three-year project (2001/02-2003/04) to encourage parents to transmit the Welsh language to their children. The project was launched under the name of 'Twf' (Growth) in March 2002, with WLB responsible for the overall management, and fieldwork undertaken by a private company called Cwmni Iaith (The Language Company). (Edwards and Newcombe 2005: 303-304)

The *Twf* project has three strategic aims: (1) to highlight the advantages of bilingualism in the work of midwives and health visitors, (2) to develop some awareness among parents, prospective parents, and the public of the advantages of bilingualism, and (3) to change the language patterns of the target group, especially mixed language families in order to boost the number of children conversing in Welsh in the home. In the following paragraphs, attention is directed to two aspects of

⁴⁸ This has also been formulated in Aitchison and Carter (1988).

⁴⁹ These reports have been reported in Baker (2003) and Williams (2000).

the project accomplishments: the need for building strong alliances with professional groups collaborating with families with young children; and the design of a marketing strategy appropriate for the target audience.

Targeting the family in language planning is something, which is not clearly defined. As Fishman (1991: 95) points out: “*Families are not captive audiences, as pupils are in school, as workers are in the workplace, or as soldiers in the armed forces. There is no particular, parsimonious point of assembly where one goes to find families.*” According to Edwards and Newcombe (2005: 305), a central accomplishment of the Twf project is “*the ingenuity which it has demonstrated in accessing not families per se, but prospective parents and parents of young children.*”

Soon after birth, health visitors take over from midwives. Their task is relevant to the project, as child development is at the heart of their interests. In addition, language development is a topic which parents like to talk about. Routinely, language matters are addressed at the eight-month evaluation. Most health workers collaborate with project staff and are seriously concerned about bilingualism. The Twf message

is, however, in competition with many other demands on time and the promotion of bilingualism is inevitably a relatively low priority. For instance, the number of childbirth preparation classes sometimes has to be reduced from the full course of six for a variety of reasons, such as holidays and illness. On these occasions, the Twf presentation cannot compete with more pressing medical issues and is usually dropped. Health visitors also spoke of the pressures on time. One admitted, for instance, that they saw the need to talk about language as unwelcome ‘extra work’. However, this attitude was not typical. (Edwards and Newcombe 2005: 305-306)

Apart from collaboration with health professionals, which constitutes the core work of Twf, strong associations have also been made with a number of other partners, including Welsh language organizations,⁵⁰ traditionally English language Early Years organizations,⁵¹ and signposting

⁵⁰ Examples are *Mudiad Ysgolion Methrin* (MYM) (the Nursery School Movement) and *Mentrau Iaith*.

⁵¹ Instances include the Pre-school Playgroups Association (PPA), SureStart, and Home-Start.

services.⁵² According to Edwards and Newcombe (2005: 306), the work of *Twf* and other Welsh language organizations

is mutually reinforcing and involves the distribution of promotional information and co-operation on a range of events. Project officers have particularly close relationships with MYM and, because they have access to antenatal and baby clinics, are well placed to promote Welsh language preschool provision. In the case of the traditionally English language Early Years organisations, cooperation usually takes the form of presentations to parents and the distribution of *Twf* materials. Representatives of these organisations were generally very positive, although there was some initial hesitancy in the more Anglicised areas as to whether the *Twf* message was of immediate relevance for their work.

The economic strategy of the project has been to market bilingualism as well as promote the use of Welsh. Indeed, the decision to use the minority language

in the home requires particular commitment, particularly when in competition with English, which has now achieved the status of a global language. English is, after all, the language of power and glitter—Coca-Cola, MTV and the mass media. In comparison, minority languages can seem old-fashioned and unglamorous. One of the major challenges for *Twf* is therefore to help to counteract this image. It has achieved this end by broadening the audience for its message; and by developing a marketing strategy appropriate to the needs and interests of the target audience. (Edwards and Newcombe 2005: 307)

Traditionally, efforts to promote bilingualism have been welcomed by middle-class parents. This tendency can be reflected in resources such as the video produced by the Welsh Language Board, which involved only middle-class, two-parent families. This is also clear in access to Welsh-medium education, particularly in areas where low-income families could not afford bilingual education. In contrast, *Twf* has been developed to be socially inclusive. According to Edwards and Newcombe (2005: 307), one indicator

of this commitment is the attempt to establish links with organisations such as SureStart, which target low-income families; another is the *Twf* presence at a wide

⁵² The Children's Information Bureaux, and children's libraries are among the services.

range of national and local events. In addition to organising stalls at national gatherings such as the Urdd Eisteddfod, which have a clear association with the Welsh language, the project has been responsible for a range of local events, which have reached wide audiences. These have included fun evenings for the whole family, where parents were given the opportunity to learn some Welsh; visits to children's libraries to stimulate interest in books in Welsh; and colouring competitions promoting the project, sponsored by the local branches of McDonalds.

In addition, parents spontaneously reported that project workers presented information positively—something which made them feel that learning the Welsh language is very interesting. With regard to promotional materials, *6 good reasons for making sure your children can speak Welsh*, is the central message of *Twf* marketing. According to Edwards and Newcombe, this brightly colored leaflet

was developed in response to questions that parents frequently asked about bilingualism. An earlier version featuring 10 questions was rewritten with a sharper focus to ensure that the message came across more clearly. It reaches very large numbers of women through inclusion in records of pregnancy and bounty packs; it is also widely distributed at events, through libraries and children's information bureaux and in response to initial inquiries. (2005: 308)

The *6 good questions* leaflet can also be found in poster form to be exhibited in health centers, libraries, and other public places. The other promotional materials, which aim at helping parents to use Welsh with their children, include a CD, a bilingual coloring and activity book. However, there was huge praise for the CD.⁵³ Parents were quite happy; health professionals and other partners enjoyed the opportunity to distribute a popular learning resource. A development officer for MYM summarized its effectivity in these terms: "*There are a lot of situations in which the parents use the CD to play during the time when the children are settling down or at the end of the group when children are putting their coats on or having tea. Lots of parents have liked the CD and found it easy to use.*" In addition, a coloring book has been successfully developed and has provided some useful tasks. Children have something to take home with them and parents are reminded of the *Twf* message.

⁵³ The Board has resorted to make use of CD technology to promote Welsh in its economic strategy. In section 8, I am going to show how significant using technology is for Welsh revitalization.

Another marketing tool is the *Twf* newsletter, which encompasses stories of families—including celebrities—who have successfully raised their children to be bilingual. The newsletter “*has proved extremely popular and is another example of how Twf workers have been able to transform the abstract notion of family bilingualism into a concrete message with which the target audience can identify,*” according to Edwards and Newcombe (2005: 309).

This section has clearly emphasized the role of the *Twf* project because of its ability to relate language planning theory to the local situation. The project has also recognized the central role of the family in language transmission and found a way of marketing bilingualism to a group that is difficult to target. In addition, it has shown that partnerships extensively reinforce the efforts of health professionals in the promotion of bilingualism. The success of the project has revealed the insight of language planners in identifying the organizational and social structures that allow the most effective access to the target population. Ultimately, promotional materials, which facilitate bilingualism, appeal to the target audience because the form and content of advertising is important in confronting negative attitudes. This has been supported by the use of video and CD technologies to promote the message of the project—an indicator that language planning efforts encompass a variety of techniques to promote a minority language. The discussion has also emphasized the role of family in language transmission and highlighted the point that educational activities are not the only factors to reverse language shift.

6. Focus on Technology

6.1. Overview

In this section, I am going to provide a clear insight into the development of technology over different periods of time and then embark on an investigation of some issues relating to new technology and minority languages to provide a basis for my study of the different cases of media appropriations.

6.2. Development of technology

6.2.1. The history of technologies for writing

Early in the history of writing, people formulated different strategies to associate texts with a portable nature.⁵⁴ The Sumerian people, who lived around the Tigris and Euphrates rivers, appropriated clay as a writing material between 4000 B.C. and 3500 B.C. They used picture language somehow like the Egyptian writing. Throughout time, however, the pictures of the Sumerians have been reduced to some patterns of a few lines. The development

of this basic writing was also determined by the technology used to make marks in the clay. This was a tool rather like a pencil but without a lead, and not sharpened. The writer would press a corner of the end into the clay, making a wedge-shaped line. The writers soon found that by combining five or six such lines or strokes, in a range of vertical and horizontal positions, they could produce a range of symbols to cover all objects and ideas about which they might want to write.

Highlighting some of its features, it is claimed that the writing of Egypt, which is somehow similar to that of the Sumerians,

⁵⁴ Sections 6.2.1, 6.2.2, and 6.2.3 are taken from Moore (2005: n.p.)—an account about language technology.

started as a picture language. Here, too, the pictures became stylized over time, but less so, because the Egyptians had a more flexible means of writing. Their writing material was papyrus, a kind of reed, which grows in marsh areas. The soft pith from inside the tough stems was cut into long strips. These were laid side by side to form a first layer, after which a second layer was laid on top, at right angles to the first. Both layers were pressed together, releasing a natural gum, which bonded the strips together to form paper sheets. These were glued together to form much longer sheets, which were rolled up for carrying.

The Greeks would later replace the writing implement used by the Egyptians with a split reed, which constitutes a nib. This nib makes it easy for the writer to control an ink flow to a specific point. The Egyptians used the hieroglyphics technique to write on stone. Soon, they found that the writing on paper would be easier once it is simplified to a script form. Through the use of straight lines, carving on stone would be made easier and it is also possible to get rounded strokes if a brush and paper are utilized. The writing on papyrus has developed into a cursive style, signaling somehow a shift in the development of writing between hieroglyphic and alphabetic script.

The Phoenicians are believed to be the people traditionally associated with the transition to a system of characters to represent sounds rather than whole words. In other words, an alphabet. This move meant that few symbols could be mixed to express all the words in a spoken language. Starting from this level, it becomes possible to highlight the development of various writing systems which utilize alphabet. From about 200 B.C. onwards, the parchment material appeared. The skins of goats and calves were shaved, bleached, hammered, and polished to form a smooth writing surface. The parchment was a more expensive writing material than papyrus. With regard to the first books, however, it could be said that they

were scrolls, up to thirty metres in length, formed by pasting together papyrus sheets. For reading, these were unrolled from one end, and rolled up from the other, to present a manageable portion of text to the reader. The Romans developed a different kind of book type. This was made of wooden tablets, coated with wax, in which the writer cut letters with a stylus. These tablets were bound with leather thongs that passed through holes in the wood. It is easy to see how this gave us our modern book form. The only big difference was that for many years these books were written entirely by hand - which is why they are called manuscripts.

6.2.2. Typesetting and printing

Printing is a relatively recent development. In fact, printing with clay type started in China in the 9th century AD. Yet, as far as the western tradition is concerned, it has began in 1436 in Germany with the printing press of Johannes Gutenberg. To give an account of printing, it is argued that it

was at first an expensive way to produce books, and for many years after its invention more books were produced in manuscript (hand-copied) than printed form. Over several centuries the process became faster and more accurate. The greater availability of type eventually made it possible to leave pages set up. In the 19th century, Charles Dickens and others were able to publish novels serially in relatively cheap instalments - perhaps for the first time bringing substantial printed texts to a mass readership.

Printing may have impacted language in two different ways in the west. On the one hand, it is a factor of mass literacy, especially through the huge provision of texts for ordinary people to read. On the other hand, it is a standardizing measure. This is reflected through the use of house styles, especially after the publication of Dr. Johnson's dictionary in 1755 as well as prescriptive books on grammar such as Robert Lowth's (1762). It should not be forgotten that the house styles have also standardized some specific written forms.

It is believed that the technology used to print books is not cheap—something which makes it limited to a small number of publishing houses as well as different to modern computer-mediated publishing methods. The publishers have displayed a careful methodology during the process of checking texts before their ultimate production in volumes. This is meant to make sure that the use of standard forms as well as some varieties, distinguishing the language from everyday speech, are reinforced through the English printed books. Until the end of the 20th century, English publishing made a big distinction

between the publisher and the printer. The publisher determines the language forms, reading the printer's proofs and showing where they are to be altered, if incorrect. The publisher is also responsible for the content (and liable if it is treasonable or libellous). The typesetter and printer - seen as skilled artisans - are responsible for setting up the movable type, printing the pages, and, if need be, collating these and binding them together. In the 21st century, the publisher's role may seem little

changed, but modern computer technologies have largely replaced the skilled work of the artisans, as the mass production of all printed texts is performed by machinery driven by information technologies.

6.2.3. Technologies for communicating remotely

Modern communication technologies, it is claimed, are the outcome of some restricted systems, which were developed for similar purposes to go beyond the issues of distance or time. The following quotation gives a vivid insight into the different ways whereby people communicate and interact with one another:

In the case of fighting a battle on land one can communicate information by showing a flag or standard, by use of devices that reflect natural light or that show artificial light (heliography). For more complex methods one can use pairs of flags displayed in different positions (semaphore). Until very recent times (well into the 20th century), for some kinds of communication the most reliable method was to send written notes carried by messengers on horseback, motorcycle or even on foot (usually young men who were fast runners). For battles at sea a complex system of signalling by use of flags was used until these were superseded by heliograph and radio.

Starting from the 19th century, a wide range of technologies have been developed. Their aim was to make use of physical tools to communicate and make recordings of natural speech. The recording technologies

began with the phonograph, which evolved the gramophone disc or record. Later came the use of magnetic tape, in the reel-to-reel and compact cassette recorders (as well as the short-lived four track and eight track cartridge formats). At the same time, radio found ways to convert physical sounds to electromagnetic waves, while telephony found ways to use the physical properties of sound to produce a variable electric current; the same variations, arriving in the receiver, cause a corresponding vibration which the user hears as an approximation of human speech.

6.2.4. Technologies in the Information Age

Commenting on the age of technology as well as some features of the computer, Cunningham (2006: 200) says that we are in an era of

technological evolution, the Information Age, where advances at the cutting edge outstrip our ability to keep pace, to capitalise fully upon recent developments.

When we talk of technology, most of us think immediately, and perhaps only, of computers. It would be accurate to suppose that most of us now regard the computer as an essential tool in our everyday existence. But this wasn't always so.

Cunningham goes on to say that the computer invaded our lives only in the last decades of the twentieth century. In the meantime, there have been different waves of technological configurations and some of these were used for education. Some have not included the computer (e.g. audioconferencing or telelearning, radio, television or broadcast television, videotext or teletext, talking book, videoconferencing, videophone, photo-CD, satellite television, and interactive satellite television).

Turning to the second wave of technology, one can say that it incorporated the computer in some way. It may have involved software or authoring packages, simulations or games, and wordprocessing or databases. The computer may have been integrated with other media, audio or video, to improve efficacy. Over the last 15 years, there have been some developments such as multilingual wordprocessing, synthetic speech and digitization, speech recognition, laser disc and interactive video, audiographics, the interactive book, bulletin boards and email, computer conferencing, desktop videoconferencing, and machine translation.⁵⁵

Providing a further insight into the technological devices, Cunningham says that some of these had

had short life spans, while others have been compatible with or have entered the next level: interactive multimedia. Some examples of this that we enjoy personally or professionally might be CD-ROM, electronic texts, CD-Interactive, touchscreen,

⁵⁵ Some of these tools are highly sophisticated and are not appropriated by the Welsh language community, as will be shown in section 8.

multimedia authoring shells, laboratories, and DVD. We must remember, however, that in the context of electronic networks and technology, access relies on the availability of the infrastructures of electricity.⁵⁶ (2006: 201)

6.3. *Minority language media*

In this section, I provide several perspectives on minority language media and then shed light on the context of electronic technology.

6.3.1. Perspectives

Cormack (2005: 107) argues that the surrounding matters about the influence of media as well as the mechanisms of globalization reflected in the media are viewed by minority language advocates not just as academic topics to be debated at conferences, but as subjects of cultural life and death—topics which are intimately connected to the individual's own identity. What stands at the center of discussions concerning minority languages is the interrelated issues of politics and culture. On the one hand, issues relating to minority languages are primarily concerned with the issues of power. On the other hand, language difference (whether in the shape of separate languages or in the form of vocabulary differences) stands at the center of cultural difference. The issues of

politics and culture are not separate domains with only occasional or accidental overlaps. Politics is at the heart of culture, and culture is a political issue. For a minority language, cultural politics is the only kind of politics. This is true for minority language media studies also.

However, behind such arguments lies the brute power of economics. Minority communities (of any kind) are by their very nature unrewarding audiences for the media. Even in areas with successful television channels in the local language, such as the Basque Country and Wales, those channels depend heavily on government subsidy. (Cormack 2005: 108)

Economy, regulations, and cultural ecology, which are going to be analyzed, are regarded as main arguments in favor of the provision of minority language media. In the frame of this, there is a

⁵⁶ This will be highlighted in section 6.4.4.

pressing need for the vitality of media in minority languages and their significance to speakers of other languages.⁵⁷ Concerning the economic perspective, media provision can be an effective way of investing in communities, which are found in less economically advanced as well as rural contexts—something which is contradictory to the territories of majority languages. This can be exemplified by the situation of many European languages such as Saami and Irish. In this regard, Cormack (2005: 109) argues that new media can help development in three ways. First, they provide a direct economic boost in terms of jobs. Second, they provide a focus for economic development, especially through the use of advertising and programs pertaining to the development of the community such as news and current affairs. Third, they can increase the confidence of the region, which can stimulate economic growth.

Investing in minority language media is investment in the minority language community—a region of the state which is likely to be in a state of needing aid. This highlights the vital role of the state to invest in the less economically developed places, which are about to contribute to political and social problems. This perspective will be exemplified by the Welsh case in section 8 as well as accounted for in the frame of Tsunoda's model in section 10.

According to Cormack (2005), what typifies his second argument is that it is focused on specific ideas. While Cormack explains that his argument is about human rights issues, I have referred to it as the regulatory argument because it entails acts, documents, and a list of regulations, which have been accepted by several governments in many parts of the world. Moreover, the ideas that Cormack claims to base his argument on are only the implications of this regulatory frame if they are enacted. The two famous documents, which I am going to analyze, are called the European Charter for Regional or Minority Languages and the Universal Declaration of Linguistic Rights.

The European Charter for Regional or Minority Languages was made in the 1980's and was accepted as a Convention by the Council of Europe twelve years later.⁵⁸ According to Grin (2003: 214-15), Article 11 is primarily concerned with the media. The Article spells out

⁵⁷ Here, I am talking about the different perspectives with regard to the provision of minority language media—this is completely different from the causes of language decline, though there is some degree of overlap.

⁵⁸ To get a background on the European Charter, see Grin (2003).

what signatory governments should be doing to support minority languages through the media. The ideal which is set up is at least one radio station, at least one television channel, distribution of audio and audio-visual works, and at least one newspaper (its periodicity is not specified). However the European Charter allows lesser standards, and broadcasting provision is given a lesser alternative... No quantification of programming is given here. There is no indication of how substantial the output of a radio station or television channel should be. Presumably, therefore, a couple of hours a day on a dedicated channel would be enough for a government to claim compliance. (Cormack 2005: 110)

There are many reasons for this ambiguity. In Europe, for instance, minority language speakers vary from 7 millions, such as in Catalonia, to 100,000 in other communities. Furthermore, many countries have “*different patterns of media provision, with newspapers in particular having slightly different roles in different countries. This difference in media use has become even more obvious since the development of the Internet,*” according to Cormack (2005: 110).

With regard to the second document, Cormack (2005: 110-111) argues that the Universal Declaration of Linguistic Rights has been recently developed. Its formulation

was completed at a conference in Barcelona in 1996 and it awaits United Nations adoption. As would be expected, it has been developed out of the 1948 Universal Declaration of Human Rights... which had little to say specifically on language, other than grouping it with several other basic factors which should not be the basis of discrimination (Article 2) and little on the media, other than a basic statement in Article 19 of their importance in relation to freedom of expression: ‘Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.’

An investigation of this document clearly shows that there is no provision linking media with language. Although the aforementioned declaration has increased the role of minority languages,⁵⁹ it does not have full United Nations recognition. The reference to media has been mentioned in Section IV (including Articles 35-40), which explicates the role of media. In this section lies the major proposition in Article 36:

⁵⁹ This has been mentioned in UNESCO (1996).

All language communities are entitled to have at their disposal all the human and material resources required in order to ensure the desired degree of presence of their language and the desired degree of cultural self-expression in the communications media in their territory: properly trained personnel, finance, buildings and equipment, traditional and innovative technologies. (Cormack 2005: 5)

The issues are clear, though they do not reveal what a quantification of minimum media provision is. However, they declare the basic right to media access for any language group as well as the right to resources to achieve this. Cormack believes that speaking about minority language media provision on the basis of human rights is an argument about accepted ideas. He goes on to explain that

this makes the arguments for minority language media stronger - it means, for example, that when the British government ratified the European Charter for Regional or Minority Languages in 2001, it declared that such rights were officially recognized within its jurisdiction. On the other hand, the obvious weakness is that when states have not recognized such documents they still stand in need of other, independent arguments. However, the very existence of the European Charter for Regional or Minority Languages and the Universal Declaration of Linguistic Rights indicates a movement of opinion towards recognizing the rights of minority languages and also the recognition of media provision as an essential component if these rights are to be meaningful. (2005: 112)

These statements show little about how much media is needed in a particular context. Yet, they provide the legal foundations for minority language communities to develop their own media. Cormack then turns to say that radio, which is a relatively inexpensive medium emphasizing the spoken language, is regarded as the backbone of minority language media services. Newspapers are viewed as a more permanent medium than broadcasting—something which can easily encompass a wide range of news reporting and opinion pieces. The Internet plays a significant role because it provides a linguistic portal as well as a news site and discussion forums. Commenting on some aspects of television, Cormack argues that

[t]elevision's ubiquity should not blind us to its limitations. It is certainly good at publicizing issues but it is arguable that it is not the best medium for a minority language (in the sense of actually supporting language use), although no language community can do without it. Television has unparalleled power to dramatize issues,

to keep them in the public eye, and also to provide the entertainment which all communities now see as a fundamental aspect of media provision. If this is not provided, then the community will turn to other languages. (2005: 113)

An example of minimum media provision can be illustrated by the situation of Irish within the Republic of Ireland. The radio station *Raidió na Gaeltachta*, the television channel TG4,⁶⁰ and the weekly newspaper *Foinse*, with another one *Lá*, published in Northern Ireland, are likely to provide the type of provision mentioned in the previous paragraphs. In addition, it could be argued that giving people the right to media services in their own language is not the same as arguing about what is necessary for language maintenance—something which may seem completely different, according to Cormack (2007).

Turning to cultural ecology, Cormack explains that his argument responds to the aspirations of those who do not speak a minority language or are less interested in it. As mentioned earlier in section 2.3, the general argument has been provided by Crystal.⁶¹ Crystal derives it from ecological principles. “*The whole concept of the ecosystem is based on the insight that living entities exist through a network of interrelationships*” (2000: 32). The fact that societies are not treated as living entities contradicts the argument provided by Crystal. The discussion can then be broken down into individuals and their interrelationships with regard to media use, as I am going to clarify in the coming paragraphs.

Crystal further argues that his idea encompasses both biology and culture. “*In a holistic conception, the cultural as well as the biological domains are brought into a mutually reinforcing relationship,*” according to Crystal (2000: 33). Abram de Swaan,⁶² who provides a similar argument, highlights the concept of ‘collective cultural capital.’ This notion has been defined as ‘the totality of available texts in a given language,’ according de Swaan (2001: 42), who associates it with the interests of the speakers of the language.

Communication in any language leaves a sediment of ‘texts’ - all utterances that are recorded or remembered in that language. These texts accumulate as a collective cultural capital, available to the members of the particular language group. If,

⁶⁰ It has originally been called *Teilifís na Gaeilge*.

⁶¹ The argument is for minority languages and not minority language media.

⁶² In an e-mail, Prof. Carol Myers-Scotton oriented me to refer to De Swaan because of his diverse arguments about minority languages.

however, the language is abandoned by its speakers, the texts become inaccessible (although they may be salvaged by translation). (de Swaan 2001: 58)

The notion of texts points to the role of media—a less persuading viewpoint than that of Crystal because it only addresses the users of the language. Further, de Swaan elaborates on the cultural ecology argument and makes the distinction between an ecological standpoint in biology and the one which relates to language. “*Species can survive if people will just leave them alone; languages die precisely because people abandon them,*” according to de Swaan (2001: 188). The death of languages can be attributed to the fact that an inadequate number of people wish to rejuvenate them. “*But there is no good reason why people should not switch to another, more viable language, if, all things considered, that is what seems best to them*” (de Swaan 2001: 188). In section 2.2, I have shown that the many factors, which have been classified in terms of different levels, play a significant role in the phenomenon of language decline. Therefore, I would discard the fact that few people are interested in the revitalization of their minority languages is the only factor affecting language erosion.

Furthermore, Cormack mentions that the media allows any language to claim its place in the wide range of linguistic diversity. It develops a public domain in which the language can exist. It also enables language users to see

themselves as a community (something that is particularly important for dispersed languages). We are simply not in a position to be able to pick and choose which languages most deserve preservation, even if such a selection was seen as desirable. The media also allow the language group to fully participate in contemporary life through the creation of a public sphere of information, opinion and discussion. This allows it not just to enact an internal debate, but to contribute, on the basis of its own culture and history, to international debates. We should not make the mistake of thinking that good ideas only come from powerful linguistic groups. (2005: 115)

The author continues to argue about minority language media by elaborating on the cultural ecological argument in terms of the kind of culture as the kind of media that people may be expecting to develop in the future. He says the following:

If we want a rich mix of culture, with the media not just reflecting this, but actually producing it, then protection for smaller languages is essential, as is their media presence. All that we think of now as contemporary culture has developed from

cultural mixing, and in frequently unpredictable ways. The main arguments for supporting minority language media are partly to do with the rights which are now seen by many (and recognized constitutionally and internationally) as basic to what any individual should be able to expect, and partly to do with the future adaptability and generative power of human cultures. (2005: 121)

The points discussed in this section have revealed that minority language media are supported by many arguments. The economic side of minority language media provision is more straightforward and clearer than the other arguments because of the gains minority language community members achieve in working in the media sector as well as the direct contributions economy brings to the region where a minority language is spoken. The regulatory argument is not clearly defined, as it needs enactment to provide for minority language media. Yet, it provides a basis for language planning activists to embark on the development of minority language media since language policy is the ideology at the heart of language planning efforts. From a cultural ecology viewpoint, media is thought to foster the concept of collective participation in contemporary society through technological platforms and the public sphere.

6.3.2. The context of electronic technology

Recent research on minority language broadcasting has placed a pervasive emphasis on the consequences of appropriating electronic mediation for the maintenance of lesser-used languages. Eisenlohr (2004: 24) stresses that

the central concern of the use of lesser-used languages in electronic mediation is not only encouraging language maintenance and revitalization by providing speakers with opportunities to hear and maintain skills in the language, but [is also] achieving a transformation of ideological valuations of the language so that the lesser-used language is viewed as part of the contemporary world and as relevant for the future of a particular group.⁶³

Having said this, the author (2004: 24) then turns to say that one

⁶³ These ideas have also been explored in studies such as Brandt (1988) and McHenry (2002).

obvious use of digital technology is that it provides comparatively inexpensive and effective ways of recording linguistic practice in lesser-used languages, especially in situations where language shift is almost complete and the last remaining persons competent in the relevant language are old, and intergenerational transmission of competence in the lesser-used language has failed so far.⁶⁴

According to Eisenlohr (2004), the search for practical and cheap methods for the dissemination of materials in minority languages, such as sound recordings and digital material, is meant to learn and teach minority languages. Therefore, electronic mediatory forms can be looked upon as playing a big role in literacy, according to Kroskrity (2000). Eisenlohr (2004) also maintains that new technological devices display some spheres where the computer provides students with a lot of interactive tasks as well as an assessment of their answers. It could be said that the role of the computer is highly assisting with regard to language learning, especially in the absence of a formal teacher in society, according to Auld (2002).

Instruction in minority languages through the deployment of technological strategies has become widely accessible. Yet, this can be achieved only through the availability of computers and the related skills to small groups of dispersed language learners such as Native American groups, Hawaiian language learners connected by the *Leoki* computer system, or Maori in New Zealand.⁶⁵ Today, materials on endangered languages have become common on the Internet and some languages have more documentation than others. Hinton (2001a) believes that the growth of technological learning aids is also an important part of language teaching that can be regarded as a considerable gift to the community's future generations. Besides, Eisenlohr mentions that much of the focus

in the emerging literature on the use of digital technologies in minority language activism has been on the instrumental advantages for documentation and pedagogical dissemination of discourse in such languages, primarily the ability to record, integrate, and circulate more discourse data across multiple dimensions and the possible economic advantages over previously used technologies. (2004: 25)

⁶⁴ Further studies include Bennett (2003), Hinton (2001b), Kroskrity (2002), Kroskrity and Reynolds (2001), and Parks et al. (1999).

⁶⁵ These instances are mentioned respectively in studies by Haag and Coston (2002), Warschauer (1998, 1999), and Benton (1996b).

This section has attempted to highlight the cause of minority language communities, which reflects the message that such minorities do not wish to be represented as part of an outmoded heritage, but rather as coping with the contemporary world. This is achieved through electronic mediations, which not only establish changes at the level of ideological valuations of the language, but also facilitate the dissemination of minority linguistic material. These ideas will also be applicable to Welsh in section 9 in my analysis of the results of the online questionnaire.

6.4. Issues surrounding technologies

In this section, I am going to explain some issues, which relate to the nature of technological projects and the different purposes of their appropriations in the context of globalization.

6.4.1. Websites

Buszard-Welcher (2001: 331) has pointed out that the number of Websites, which revolve around the topic of endangered languages, has drastically risen over the last few years. She adds that while

there are no published counts of these sites, even a casual observer would notice that the amount of information on endangered languages available on the Web is substantial, and growing. Five years ago there were only a few sites; now there are more than one could visit in the course of a week. By using a search engine, one can find references on the Web today to just about any endangered language.⁶⁶

“An endangered language will progress if its speakers can make use of electronic technology” is Crystal’s often quoted statement and one from his six postulates for a theory of language revitalization (Crystal 2000: 141). The World Wide Web, Cunliffe (2003) claims, may be considered the most pervasive tool of electronic technologies as well as a new form of mass media. A big opportunity is given to minority languages to develop when their speakers have access to the Internet on a continuous basis. State regulation of the Web in many countries, the possibility to attain an audience, as well as its use as an information source by children in education and the home are

⁶⁶ This information is taken from a paper which was originally developed for a seminar on endangered languages taught by Leanne Hinton at Berkeley/California in the Fall of 1999.

the major ingredients standing at the heart of this considerable opportunity to promote minority languages. Cunliffe (2003) argues that the presence of a minority language in this new form of media will play an important role in language survival. Nowadays, there is an abundance of examples of Websites, which can be viewed as single language ‘channels’ for minority languages.⁶⁷

6.4.2. Language and identity

Warschauer and De Florio-Hansen (2003: 2) argue that language has often played a central role in the expression of identity. In the postmodern era, the role of language in identity construction has become crucial, especially as other traditional markers of identity are being questioned. Along with the processes of international economic and media incorporation, the information revolution has manifested itself as a ‘battling ram’ against traditional elements of social authority and meaning along with considerable changes in economic and political power that have reduced the state role and decreased employment possibilities. Castells (2000: 3) points to the major role of identity in the world of today, claiming that “*[i]n a world of global flows of wealth, power, and images, the search for identity, collective or individual, ascribed or constructed, becomes the fundamental source of social meaning.*”

Becoming a member of a community, Ochs and Shieffelin (1994) point out, has been attained through gaining knowledge of the roles, social distribution, and interpretation of language. Furthermore, language choice by minority groups, Heller (1982: 308) suggests, stands for an ethnic marker as well as a means of communication. Warschauer and De Florio-Hansen expand on the definition and function of language saying this:

In the current era, language signifies historical and social boundaries that are less arbitrary than territory and more discriminating (but less exclusive) than race or ethnicity... Language-as-identity also intersects well with the nature of subjectivity in today’s world. Identity in the postmodern era has been found to be multiple, dynamic, and conflictual, based not on a permanent sense of self but rather on the choices that individuals make in different circumstances over time. (2003: 4)

⁶⁷ Some of the studies which have been carried out with regard to this matter can be found for example in Guardado (1998) and Falkena (2001).

Warschauer and De Florio-Hansen (2003) go on to say that the medium of language displays greater flexible dimensions than other matters such as race and ethnicity. In many ways, people could develop dual identities because of the linguistic patterns they select. This can be exemplified within a single sentence when they combine languages. It will be demonstrated in the course of my investigation in sections 7 and 8 that identity is a clearly direct outcome of new media deployments for minority languages.

6.4.3. Digital libraries

Fields et al. (2004: 2) mention that digital libraries are huge repositories of electronic documents. Generally speaking, they are gathered together according to specific collection criteria and they also provide some assurance of quality. In comparison to the Web, they have a clearly defined thematic organization and offer sophisticated document searching and management capabilities. Lu et al. (2004) also point out that digital technologies offer the best promise for the preservation of endangered language data for they give permanent storage, wide dissemination, and flexible access.

Carrying on their reflections, they argue that, because of the desire to preserve endangered linguistic material, many linguists and librarians have embarked on constructing digital recordings and database records as well as Internet Websites. A possible threat to the development of minority European languages is the considerable use of English as the dominant medium in the fields of science and information discovery. Adams et al. highlight the importance of digitized projects in these lines:

In Ireland there has been a project to capture early Irish language manuscripts, through the ISOS (Irish Script on Screen) project. In the Netherlands an example would be the heritage of VOC, of which a complementary collection can be found in Flanders (which makes it a language based project, not a country based project). Other examples could be the digitisation of collections of architectural photographs of the built-environment or collections of newspapers, as a record of contemporary history. This is linked to the preservation of audiovisual heritage which has also a language related aspect, for which streaming technology is providing exciting and real opportunities. Initiatives with its application in education and scientific research are running as well in the Netherlands (DiViTh) as in Flanders (VOWB). (2006: 2)

6.4.4. The digital divide and endangered languages

Cunliffe points out that the digital divide is an expression, which is often resorted to when highlighting marginalization matters as far as the large field of information technology is concerned. He further mentions that

this is couched in terms of economic or educational barriers, or issues of physical access to the technology. While these aspects of the digital divide have obvious relevance for many minority language communities, other aspects should not be ignored. One that is particularly relevant is the divide between languages that are ‘information rich’ and languages that are ‘information poor’ with regard to online content and services. (2005:131-132)

If the content is not provided in the local language, the majority language of the region would then be used increasingly by non-native speakers in both use and production—something which paves the path for language shift, according to Kelly Holmes (2004). From the point of view of UNESCO (2004), the production of Websites is either predominantly among young, educated people, or geared towards activism and does not thus address the needs of the community, as can be evidenced by some minority language communities. Clarifying the issue further, Cunliffe et al. argue that even when minority language content is available

on the Internet, the software used to create and access that content is often in English or the regional majority language, implicitly reinforcing the dominant status of those languages, both in the domain of information technology, and in general. Although many minority language communities only have access to older technologies, which are typically less able to support their languages, users often do not wait for the development of technology capable of supporting their language or for technology that does support their language to become affordable. Instead, they adapt their language and communication practices to suit the available technology. (2005: 132)

The romanization of some languages has been explored in studies such as Danet and Herring (2003). Some examples can be found in email and chat in Egyptian Arabic, according to Warschauer et al. (2002). Users of languages written in non-roman forms, Cunliffe (2005) maintains, have established some particular phonetic representations of their language through the utilization of standard Roman characters. This fact allows consumers to appropriate older (text-based, ASCII)

technology that does not endorse the language in its native version. Cunliffe et al. further mention that these

solutions, while unsatisfactory in certain respects, enable people to overcome the technical barriers to using their language online. However, when minority language communities have appropriate tools to create content, the possibilities expand beyond simply consuming Internet content or communicating through email and chat: Minority speakers can increase their languages' online presence with content that is aligned to their communities' needs and aspirations. (2005: 132)

6.4.5. Media and globalization

Some people may believe that debating minority languages is an academic as well as an unproductive activity in the context of the contemporary world. Cormack has pointed out that globalizing processes,

particularly in the media, seem to be driving us towards a more homogenized international culture, if not an actual global culture as such. Alongside this, and closely linked to it, is the broader set of phenomena labelled as postmodernity. All of this seems to be taking us further and further away from the kind of traditional community with which many minority languages are linked. The move through postmodernity appears as a move away from communities with a strong and traditionally based identity, rooted in an individual culture and language. An integral part of this is the ever-developing dominance of the English language, along with the increasing impact of a small number of other international languages. (2005: 118)

According to Cormack (2000), globalization of the media can open new avenues for minority languages that were not available under more traditional regimes. The spaces opened up by digital broadcasting and the Internet reduce the entry barrier for media presence. This also places the language in the international domain, making it available in areas where it was simply unknown previously. Minority languages take their place in the global cultural marketplace. Yet, digital broadcasting and the Internet also enhance the degree of media content in majority languages. This reflects the idea that greater possibilities are associated with greater threats.

Niamh Hourigan develops a clear connection between indigenous minority language media campaigns and the so-called ‘new social movements’ (Hourigan: 2003).⁶⁸ Investigating some campaigns for television in Welsh, Irish, and Scottish Gaelic, she develops some ways whereby the campaigns fitted the discourse of new social movements provided by Alberto Melucci. Firstly, “*the campaigns for these television services were led by activists concerned with the production of culture*” (Hourigan 2003: 161). Secondly, “*many campaigners explained their activism by referring to a personal need to define and express their identity in a changing world*” (Hourigan 2003: 161). Last but not least, the concerns, which paved the way for these campaigns, were connected to ‘economic and spatial changes within post-industrial societies’ (Hourigan 2003: 162).

The campaigns were not merely protecting a traditional language community by its traditional users. They stood for something new. Hourigan’s approach highlights how significant the postmodern context is for minority language media campaigns despite the fact that minority language campaigns have been different in many ways from the classic examples of new social movements such as feminism as well as the ecology movement. According to her, indigenous minority language communities

are not victims of postmodernity (in the sense that many were victims of modernity), but – at least in some aspects - examples of it. A comparison can be made between these minorities and non-indigenous minority language communities (that is, languages which have moved from their original territories and developed as minority communities in other countries since the nineteenth century, such as the speakers of Arabic, Hindi and Turkish within Europe). Although in many ways such ‘new’ minority languages (‘new’ as minorities, having come from countries where they are majority languages) are different. Most notably, they are likely to have a much stronger media presence due to the strength of the language in its original home. (Cormack 2005: 120)

These points, Cormack further argues, clarify the fact that minority languages “*are not a remnant of some out-of-date world-view, fragments of now superseded linguistic, political or cultural structures. Rather, they fit into the current global structure very easily*” (2005: 120).

⁶⁸ Cormack (2005) provides an account about minority language media and related matters.

The exploration of the plethora of technological issues provides a wide range of insights with regard to the connection and convergence of minority languages with media. First, the projects of minority language communities have developed a sophisticated dimension, which transcends the nature of earlier forms of technologies. Second, the various purposes of media appropriations reflect the fact that identity is a recurrent pattern and multidimensional component that lies at the center of minority language efforts, aiming at the attenuation of the stigmatized image that has been attached to many minority languages. Third, the context, in which media deployments have been differently taking place, sheds light on the age of digital technology and the postmodern cultural trend that has overwhelmingly typified the era of globalization. The new ways and discursive spaces opened up by media utilization provide minority language communities with practical insights and strategies as to how they could reinvigorate their languages. It thus remains to be seen the extent to which Welsh fits this discourse.

7. Study of some examples of technology forms

7.1. Overview

In this section, I am going to study some examples from different areas of the world. The major aim is to investigate why such programs are taking place, what lies at the heart of language revitalization activities, as well as the broad implications the technological programs lead to.

7.2. The Lushootseed case

This part highlights the situation of Native American languages, then describes Lushootseed, a representative example of these languages, and finally focuses on the technology used by its indigenous community.

7.2.1. Revitalizing Native American languages

According to Van Hamme (1996), many Native American cultures and languages have been declining because of a continuous history of colonizing activities, struggle, as well as forced assimilation.⁶⁹ Many Native American children were forced to attend boarding schools⁷⁰ from the 1850's until the 1960's. In these schools, the traditional languages and religions of these children were banned. The impact of being brought up in the context of boarding schools is still being felt by many Native American people. The Native American Languages Act of 1990 strongly supports the maintenance of Native American cultures and languages as well as endorses the rights of people to practise, promote, and develop their languages. Yet, Reyhner (1996: 1) claims that Native Americans "*lack what may be termed the effective right to save their languages and cultures,*" although they legally have the right to preserve their languages and cultures. In addition, if effective techniques are not put into practice, it is estimated that around 90 percent of the 6,000 world

⁶⁹ This account, which is taken from NREL (2002), highlights the situation of indigenous languages in the United States.

⁷⁰ According to HFS (2008: n.p.), a boarding school "is an educational institution where some or all pupils not only study, but they also live, amongst their peers."

languages will disappear in the next century. With regard to the situation of the United States, Crawford provides the following account, claiming that while Krauss

estimates that 155 indigenous languages are still spoken in the United States, he classifies 135 of these—87 percent of the total—as moribund. Increasingly, young Native Americans grow up speaking only English, learning at best a few words of their ancestral tongues. Out of 20 native languages still spoken in Alaska, only Central Yupik and St. Lawrence Island Yupik are being transmitted to the next generation. Similarly, in Oklahoma only 2 of 23 are being learned by children. All of California's 31 Indian languages are moribund; of these, 22 are spoken only by small groups of elders. Among the 16 indigenous tongues still spoken in Washington State, few if any have fluent speakers under the age of 60. At today's rates of language shift, 45 of today's American Indian and Alaska Native languages are likely to be extinct by the year 2000; 105 by 2025; 135 by 2050. Many of the 20 remaining tongues, while still viable, will soon be fighting to survive. (1995: 18)

Reyhner (1996) concludes that this not only stands for a huge loss to the world of 'different ways of being, thinking, seeing, and acting,' but for native people, language also stands at the heart of their cultural survival. Reyhner explains that for many young natives, "*cultures and languages, have, in fact, been separated. As a result, most of these young people are trying to 'walk in two worlds,' with only one language. This is a far more complex and stressful undertaking than the 'two worlds' metaphor would suggest*" (1996: 2).

7.2.2. The Lushootseed language

Lushootseed is an indigenous language, which is spread in the east side of Puget Sound—an arm of the Pacific Ocean. Traditionally, native people have conversed in Lushootseed from Puyallup and Nisqually in the south to the Skagit River in the north. The map 7-1 below shows the location of the Lushootseed people. As will be explained in the coming paragraph, there are many factors which have shaped the actual status of Lushootseed so that it is now spoken by a number of elders. However, throughout the area of Puget Sound, many young people are engaged in learning their ancient language as a second language. In addition, old people hope to revive the language so that it will be brought back to its original status as a first language spoken by the native people of Puget Sound.

The history of the decline of Lushootseed is quite reminiscent not only of the history of Native American languages in general, but also of the operative forces against minority languages throughout the world. The following quote is a brief account of it:

The U.S. government attempted to eradicate the language through its boarding school policies beginning in the late 19th century. Children were separated from their families and taught at government boarding schools, where they were forbidden to speak their native language. Erosion of the language continued after World War II when young people returning to the reservation from military service tipped the scales in favor of English. The Tribal Council meetings at Tulalip began to be conducted in English after this point. (NREL 2002: 75)



Map 7-1. The location of the Lushootseed people⁷¹

By the 1960's, when Thom Hess started to collaborate with Tulalip elders, most young people were no longer interested in learning their native language. Over the last decades, however, cultural pride movements have sparked a growing interest in native languages and several tribal language programs have been launched. Nevertheless, media, such as television and the Internet, have acted as an eroding factor with regard to the position of minority languages in the United States. In section 8, I am going to show the opposite side of this by studying the Welsh case. Additionally, the struggle of Lushootseed can be interpreted as a mirror of the struggle of Native American languages. According to NREL (2002: 74), it is claimed that indigenous languages *“represent beauty and wisdom acquired by humanity over the course of countless generations, and*

⁷¹ This has been taken from Stonington Gallery (2007).

their loss is a terrible loss for human culture... And if you live in the Puget Sound, there is no better language to learn than Lushootseed, the First Language of your home.”

7.2.3. Tulalip Elementary School's Lushootseed page

To promote Lushootseed, the fourth grade students of Tulalip Elementary School have designed a Website,⁷² which can be taken as a specific instance of a native online project encompassing a mixture of technical, linguistic, and cultural dimensions. Concerning the technical dimensions of the page, it can be loaded with a certain ease from different platforms and Internet connection speeds. McHenry describes the Website, saying that it includes elements such as

language, art, stars, science, and math. Each page presents a manageable amount of text, all in clear prose and an easy-to-read font. Most importantly, while the site invites exploration, it is nearly impossible to “get lost” even if you do not read Lushootseed: Each new topic opens a new page with its own navigation buttons. (2002: 110)

The artwork for the site is based on a story pole developed by the Tulalip elder called William Shelton, according to the ‘About Our Site’ page. Students tell an ancient story, which is supported by some music made by the Tulalip Tribes as well as KVOS studios and performed by former students and community members. The authors articulate a message of thankfulness to the tribe, the school district, and one elder in particular. The Lushootseed page is a collaborative venture with input, resources, and perspectives resulting from many sources, such as the selling of bilingual CD-ROMs. But concerning the site, the students are the responsible designers of it.

The site also comprises pages of vocabulary in context—something which is made to contrast with what can be found on many foreign language sites designed for non-speakers. It should be stressed that the language part provides

a variety of introductory-level lessons in Lushootseed, from how to use greetings to how to count to 10. These lessons are all bilingual. The user can click on the Lushootseed word to hear it spoken in Lushootseed or translated into English. After

⁷² www.msvl.k12.wa.us/elementary/tulalip/home.asp is the Tulalip Website.

being clicked, the Lushootseed and English words remain visible, with the English in a darker color slightly beneath the Lushootseed. (McHenry 2002: 110-111)

Before clicking on a section of human figures, users are requested to read the explanatory theory of the technique. The section encompasses simple actions as soon as it is activated such as shutting a door or lifting an object. In addition, users are invited to do the actions as they click, read, and hear the words. Undoubtedly, counting lessons and learning to say ‘good morning’ are common characteristics of several language learning techniques. The site has further special instances of Lushootseed, as stories are told and supported by traditional music. To sum up, the page can be looked upon as an introductory insight into Lushootseed.

The most striking aspect of the site is that it does not depend on English. It makes use of somehow equal amounts of English and

IPA transcriptions of Lushootseed. Most buttons on the site use IPA transcriptions of Lushootseed words -- not familiar to most readers -- with English translations available only when the cursor is moved over the word. In addition, clicking on the button causes the user to hear the pronunciation of the Lushootseed word. The result is unsettling for those accustomed to reading about Native languages in English or those used to surfing silent, English-based Native sites. (McHenry 2002: 111)

Hearing Lushootseed words spoken and seeing many native words in unfamiliar IPA transcriptions conveys the message that Native American languages like Lushootseed have established their unique place on the World Wide Web. Ultimately, one is tempted to argue that the language revitalization attempts of the Lushootseed tribe are unfold in its design of an Internet Website to articulate a message of visibility, identity preservation, as well as linguistic survival—something which provides a clear basis to talk about Welsh Websites in section 8.

7.3. The Maori case

7.3.1. The Maori language

According to Sutton (1994), Maori is part of the Polynesian group, as the diagram 7-1 shows. More specifically, it is an Eastern Polynesian language, which has been spoken in New Zealand since Maori settled the country some 800 to 1000 years ago.⁷³

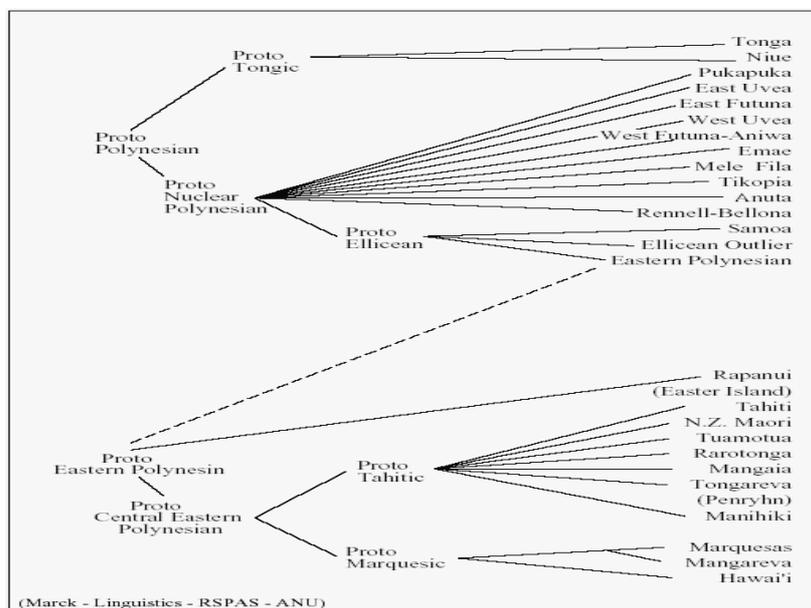


Diagram 7-1. The Polynesian group including the Maori language⁷⁴

Since the late 18th century, there have been some contacts between Maori and English speakers, when following Cook’s voyages, sealers and whalers visited the country as part of their hunting expeditions. From the 1820’s, the Christian missions as well as the establishment of British rule in the 1840’s heightened the contact between the two languages. The interaction reached its apex in the second half of the 19th century when many Maori received schooling in English. Until the first half of the 20th century, all Maori spoke the language and there were many bilingual people in both English and Maori.

Between the 1950’s and 1980’s, there was a shift from Maori to English so that many young Maori spoke only English. During the 1970’s, surveys found that

the number of fluent speakers of Maori had declined dramatically. There were some 60,000 native speakers at that stage, though the great majority were older people... This discovery was an important trigger for the major revitalization effort which has been taking place since the 1980s.

⁷³ This account is taken from Maclagan et al. (2004).

⁷⁴ This map is adapted from Marck (1999).

As a result of this, many younger Maori are now fluent L2 speakers, having learnt English as their first language. More recent studies including the 1996 and 2001 censuses, which for the first time included a language question, confirm that the older generation of speakers has indeed declined in number, while total numbers of speakers (including L2 speakers) has risen... It is hoped and anticipated that these young speakers will raise children for whom Maori is their first language. (Maclagan et al. 2004: 1)

It should be pointed out that there is little historical information about the pronunciation of Maori. In addition, changes with regard to pronunciation, which have occurred because of the influence of English, have not been documented systematically.⁷⁵ While lexical borrowing is well documented, Benton (1991) mentions that there is only the anecdotal remark on the influence of English on Maori pronunciation.

Jones et al. (2004) claim that the relationship between Maori and their lands is expressed in their social organization. Tribes are spread over geographically different areas—areas which are often close to the landing and early activities of the voyaging canoes. Over a long span of time, the location has not changed despite the fact that some areas have undergone some transformations. The connection to the land can therefore be taken as a connection to a particular place as well as a deep association with a tribe and a family. The feeling reflects the mood of being home—of being *tangata whenua*. Quite often, it is something that has been transmitted for up to 30 generations. In the following part, I am going to introduce *Greenstone*, which is a software designed to construct and distribute digital library collections, and then focus on the Maori digital library known as the *Niupepa* collection.

7.3.2. The Maori digital library

Greenstone, which is the product of the New Zealand Digital Library Project at the University of Waikato, offers a new technique of how to organize information and publish it on the Internet or on CD-ROM. What is characteristic of Greenstone is that it is an open-source as well as a multilingual software. According to the University of Waikato (UOW), the aim of the Greenstone software is “to

⁷⁵ See Harlow (2001) for descriptions of modern Maori pronunciation.

empower users, particularly in universities, libraries, and other public service institutions, to build their own digital libraries” (2007a: n.p.).

According to Witten et al. (2000), the New Zealand Digital Library (NZDL) project has developed several collections by implementing its open source Greenstone software. The collections, which are self-contained and able to operate independently, have concentrated on topics such as disaster relief management, computer science research, oral history, indigenous peoples, and first aid, according to UOW (2007b). The *Niupepa* collection is not only regarded as a historical tool that reports on events of colonial New Zealand, but also a linguistic device that documents the language of Maori (UOW 2007c). The majority of publications are in Maori. But there are some which are in English as well as some which include a combination of both languages.

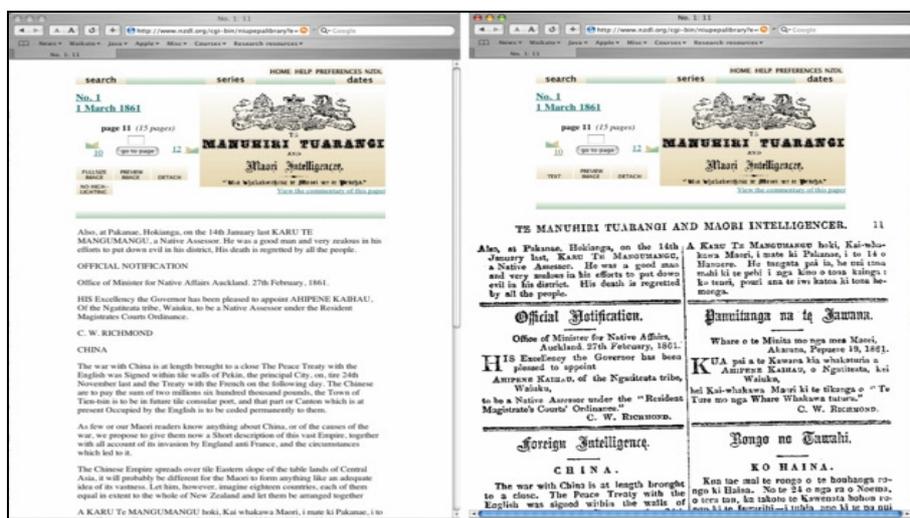


Illustration 7-1. The Niupepa collection⁷⁶

The collection has some forty-two newspaper titles—newspapers which were published in New Zealand between 1842 and 1933. In addition, there are about 18000 individual newsprint pages. Commenting on the collection, Jones et al. point out that it

was originally gathered from dispersed locations in New Zealand and recorded on microfiche, which was then held in the National Library. Although a step forward, this method of storage had two key drawbacks: it was not easily accessible and it could not be searched. The NZDL group began a project to digitise the newspapers,

⁷⁶ This illustration displays an excerpt of a text of a search result document as well as an image of result document in published form.

provide a full-text searchable index for them and make them freely available over the WWW... A user can carry out a full-text search of the collection, and by default is provided with the extracted text of any document that they choose to view. They can additionally choose to view the original page image... The newspapers can also be browsed by series, issue or date. The user interface to the collection can be presented in either the Maori or English languages. (2004: n.p.)

7.3.3. Maori spellchecker

Te Ngutu Kura free Maori Spell Checker was developed by Karaitiana Taiuru. The concept was concretized by the Maori Education Trust, which financed the development of *Te Ngutu Kura* as well as the Website, according to Karaitiana Taiuru (2006).⁷⁷ Over the past five years, the Maori Education Trust has also sponsored the free distribution of *Te Ngutu Kura*—an activity which was decided to be carried out until the end of 2007. It is claimed that Karaitiana Taiuru

has devoted most of his career to empowering Maori in Information Technologies and creating free Maori resources as well as commercial Maori resources. For many years Karaitiana believed that Maori should not have to pay for a Maori Spell Checker. The same as we do not pay for English spell checkers. (Karaitiana Taiuru 2006: n.p.)

To promote the Maori language in the IT area, it seems beneficial to Karaitiana that all the source code and word lists should be offered freely to other developers. Apart from the practical side of the technology, there is a symbolic message, which epitomizes the sense of Maori pride.

7.3.4. Translation Machine

In the cultural context of New Zealand, Olsen (2004) argues that TM technology can contribute to the promotion of the Maori language. Maori translation providers and government agencies are using TM tools and other technology products for many projects such as: (a) online educational resources and Websites, (b) digitization of historic newspapers and archival material, and (c) development of terminology to record new terms for use. In this way, TM technology has transformed the everyday

⁷⁷ This is the Website: www.maorispellchecker.net.nz/index2.htm.

work of translators beyond anyone’s imagination and ensured the consistent use of terminology for big projects in the electronic age.

An example of Maori online dictionaries is the *Ngata* dictionary, which seems to be very useful, practical, and time-saving for many translators, as the Website below shows.⁷⁸ However, the problem of technology affordability has come to be regarded as an obstacle to the appropriation of expensive TM software. Moreover, the lack of trainers and training possibilities can limit the use of these forms of new technologies.



Illustration 7-2. Maori dictionaries online

This section has highlighted how the *Niupepa* digital library promotes the use of Maori. In addition, it has shown that Maori software helps revitalize the indigenous language and how this can be achieved in the age of technology, though this may be confronted with some obstacles. On the basis of this investigation, I am going to explore in section 8 the different ways by which the Welsh language community appropriates software technology to revitalize its language and visualize the extent to which the digital library of Wales and Welsh software can preserve linguistic material and enhance Welsh language use.

7.4. The Basque case

⁷⁸ New Zealand Folksong (2007) is the source of the Maori dictionaries online Website.

7.4.1. The Basque language

According to Mercator Education (2005), the Basque language, or *Euskara*, is a non-Indo-European isolated language. Several theories have emerged to account for its roots. Yet, none of them has proved to be satisfactory. The map 7-2 below shows many parts of the Basque country where Basque is spoken. The location where the Basque language

has traditionally been spoken is called *Euskal Herria*, the Basque Country. Since the late nineteenth century this name has been applied to an area comprising seven historical provinces: four in Spain (Araba/Álava, Bizkaia/Vizcaya (in English, Biscay), Gipuzkoa/Guipúzcoa and Nafarroa/Navarra (in English, Navarre)) sometimes collectively called *Hegoalde*, the southern Basque Country, and three in France (Lapurdi/Labourd, Nafarroa Beherea/Basse Navarre and Zuberoa/Soule), collectively *Iparralde*, the North Basque Country. (Mercator Education 2005: 2)



Map 7-2. The Basque country⁷⁹

The effort to maintain the Basque language goes as far back as the 1950's. Its major vehicle is the educational sector.⁸⁰ Attempts to keep the Basque language within the education system should be taken within the overall dimension of language maintenance. A strong effort of corpus planning has simultaneously come with another attempt of status planning. Indeed, since the 1960's, a newly adopted written standard referred to as *batua* has been developed and is being designed by the Royal

⁷⁹ This map is available in GeoNative (1999).

⁸⁰ Further details can be found in Azurmendi et al.(2001), Fishman (1991: 149-186), and Nelde et al. (1995).

Academy of the Basque Language (*Euskaltzaindia*). In addition, several terminological activities have been conducted, especially by *Unibertsitate Zerbitzuetarako Euskal Ikastetxea* (Basque Center for University Services).

7.4.2. The television landscape in the Basque country

As an introduction to the situation of Basque television, I use the following quotation by Arana et al.:⁸¹

If the necessary technological infrastructure is available, when you switch on a television set anywhere in the Basque Country, you can gain access to a wide range of differently transmitted channels, such as terrestrial analogue, satellite or cable. All these systems are available at this moment in history when soon digital technology will allow us to enjoy a greater number of channels. (2003: 1)

The terrestrial analogue transmission in the Basque country, which is the traditional television broadcasting system, shows that the northern and southern parts of the country receive French television (six channels, three state ones, and three private ones) and Spanish television (five channels, of which two are state ones). Spanish and French television broadcasters have adopted a focused approach in their programming, content, as well as news references. In addition, there is ETB, the national television broadcaster in Spain, which has two channels, one broadcasting in Basque and the other in Spanish.

With regard to satellite television, the number of channels broadcasting in Basque is less than that in Spanish. It should be noted that the two satellite channels of *Euskal Telebista*, (Canal Vasco) for America and (ETB Sat) for Europe, have content programs developed in the Basque Country. Nevertheless, cable television is a broadcasting network, which is not spread in the Basque Country, but is used as a means of transmitting the terrestrial signals. In other words, this form of technology comprises the terrestrial and satellite channels as well as broadcasts the signals of local stations belonging to capital cities of provinces.

⁸¹ Arana et al. (2003) is a detailed description about the Basque television.

7.4.3. Euskal Telebista

Prior to the launch of *Euskal Telebista* (Basque Radio-television) (ETB) in 1982, the Basque Country had no television service stemming from the Basque Country or targeting it. The legislation, which paved the way for the establishment of the Basque television broadcaster, has two major goals, which are meant to establish ETB channel as a communicative tool as well as promote the cultural and linguistic normalization of the country. Despite the fact that some progress has been made, the fulfillment of these goals has not been entirely met. The signal of *Euskal Telebista*

is not broadcast in the normal way outside the Basque Autonomous Community due to the obstacles placed in the way of this by the Navarrese political authorities, who are deeply contemptuous of Basque culture and the Basque language. Something similar happens in the north, where agreements have been reached only on a local basis and only a weak network of terrestrial analogue television relay stations has been created, covering almost the whole territory. (Arana et al. 2003: 2)

Euskal Telebista is a television station for the three provinces of the Basque Autonomous Community—a station which attains the remaining Basque areas in the north and Navarre. Before the development of ETB and after its establishment, the other remaining television stations in the Basque country have only had some decentralized broadcasts in the form of brief daily news programs—programs where the Basque language is not much used. As far as the content of the programs is concerned, Arana et al. (2003: 2) say that the Basque speaking channel has

a smaller audience and children's and sports programmes predominate, making it a second rate station within a highly competitive TV context. ETB2, on the other hand, with an all Spanish schedule, is struggling to become a leading television channel. The news programmes give attention to social, cultural and political matters of specific relevance to the Basque Country, but the rest of the programmes have little to distinguish them from those found on channels in Spain, France or elsewhere.

7.4.4. ETB SAT: the Basque satellite television

ETB SAT is a satellite channel, which provides a service for European viewers. With regard to its programs, it could be said that they are a summarized combination of the contents of ETB-1 (in Basque) and ETB-2 (in Spanish). Starting from May 2001,

following an agreement between the Canal Satélite Digital and EITB, 87 million households all over Europe have been able to pick up ETB Sat from the ASTRA satellite. In the Spanish State, it may be picked up via Canal Satélite Digital and through the Vía Digital platform. ETB SAT provides general programmes that are closely connected to reality and which bear in mind that European viewers know and follow the current situation in the Basque Country from close up. It takes into account that a large part of its audience wish to be informed, educated and entertained in Basque. It takes into account that there are Basques who speak Spanish and French, as well as Basque. (EiTB 2007: n.p.)

7.4.5. The Basque DVD

According to *Euskal Kultur Erakundea* (Basque Cultural Institute), the best way to know

the Basque Country or any other place is being there but, in order to do that, we have to have the time and the wherewithal to get there. When this is not feasible, we have no choice but to refer to books which, at times, may not be easy – unless there is an alternative. In today's world an alternative is the use of new technologies. (2005: 2)

Some of the facets of interactive systems are the attractive dimension they have as well as the curiosity they stimulate in the viewing audience. The wide range of possibilities provided by multimedia tools stands for a specific way of getting information in a fast manner. EKE (*Euskal Kultur Erakundea*) (2005: 2) shows that the *Euskal Herriko Aurpegiak* (Navigating the Basque Country) DVD offers many pieces of information combined with a spectrum of images, which offers a rapid but complete perspective of the Basque Country for the audience watching it on their PC screens. Because it is aimed at both Basque citizens and people from other areas, the DVD offers its content in four different languages: Basque, Spanish, French, and English.

The aim of the *Euskal Herriko Aurpegiak* DVD is not to develop a complete analysis nor offer detailed data on the Basque Country, but rather to get an understanding of the major features of

its political, historical, cultural, and geographical evolution. For this reason, and on the basis of a written and spoken script, a wide range of multimedia tools such as audio, video images, photographs, and animations have been introduced. The appropriate information has been documented in libraries and photo archives. In addition, the graphical aspect of the publication has been pushed to its most explicit limit, devoting 85% of the DVD to the visual aspect. Details encompass the following: (1) text: 16,000 characters; (2) photographs: about 300; (3) video-clips: about 50; (4) music: 20 pieces; and (5) duration: about 60 minutes.

EKE (2005: 3) shows that the DVD aims at a wide range of points: (1) to provide opportunities to get to know the diversity of the social community, (2) to display historical and social events that lead to understand current society, (3) to get to know and understand linguistic and cultural variety, (4) to visualize the relationships established by society with its neighboring areas as far as the use of space and natural resources is concerned as well as evaluate the economic, social, political, and ecological consequences of such relations, and (5) to develop a deep understanding of the natural, cultural, linguistic, artistic, historical, and social heritage.

The most pervading dimension of the Basque people is their language. *Euskara* or the Basque language, which has no definite origin, is the oldest language in Europe. On this DVD, however, the possible roots of the tongue are explored, the geographical area where it has been conversed over the centuries is highlighted, as well as the distribution of its dialects and the recent language situation are analyzed. The user is provided with the possibility of listening to the many dialects of the Basque language along with their meanings so that the consumer can gain insights into the language, according to EKE (2005: 5-6). To sum up, the Basque television and DVD technologies are recent multimedia attempts to revitalize Basque and preserve the identity of its minority language community. This investigation clearly provides a solid basis for discussing Welsh in section 8.

7.5. The Mohawk case

7.5.1. The Mohawk language

Kanatiiosh (2001a) portrays the language of the Haudenosaunee as pictorial. In other words, the terms used form an image in the mind of the listener and speaker. The language of the Haudenosaunee is important to maintain in its traditional form for its native community because it is an important part of one’s identity. In section 2.3.2, I have referred to the concept of identity since it is a crucial component of language revitalization efforts.



Map 7-3. Locations of Mohawk speakers

Furthermore, each of the Six Nations, Mohawk, Oneida, Onondaga, Cayuga, Seneca, and Tuscarora, has a different language, though there are some similarities that allow the people to understand each other.

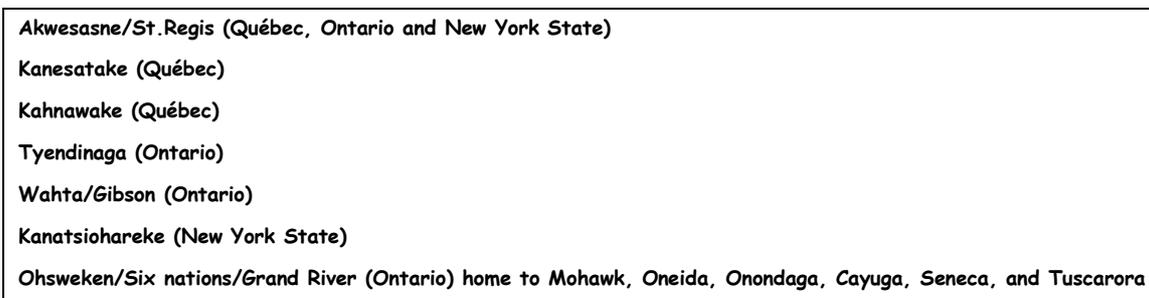


Diagram 7-2. Mohawk communities⁸²

Iroquoian is the term that is applied by linguists to refer to the languages of the Mohawk, Oneida, Onondaga, Cayuga, Seneca, and Tuscarora. When looking at the languages of the Haudenosaunee people, an important thing to bear in mind is that because the language is pictorial, one can not translate it very appropriately into English. For instance, the Mohawk word for cow is *tio-hons-kwa-ron*, which literally depicts the activity of an animal that is always chewing. In other

⁸² Both the map and the diagram are available in Kanatiiosh (2000b).

words, *tio-hons-kwa-ron* does not mean cow, but rather refers to the action of the cow for it is often chewing its cud. Map 7-3 and diagram 7-2 above reveal the current locations of Mohawk speakers and their different communities. Nowadays, electronic media are being utilized in the educational sector on a widespread basis, according to Cazden (2002). In addition, integrating technology into language revitalization efforts is growing in many places and descriptions of such integrations are gaining visibility too. The following section attempts to describe a CD-ROM in Mohawk and highlights its specific features.

7.5.2. The Tsi Karhakta CD-ROM

The *Tsi Karhakta* (At The Edge of The Woods) CD-ROM is meant to support a first-year university course in Mohawk.⁸³ The CD has been designed by David Kanatawakhon Kanatawakhon,⁸⁴ a Mohawk speaker from Tyendinaga, near Kingston, Ontario. *Tsi Karhakta* is divided into seven parts: (1) two which deal with Mohawk grammar; (2) three which provide practice in understanding Mohawk structures; (3) a dictionary; and (4) an index for navigation. In addition, instructions and explanations are given in English. The seven modules are Supplements, Index, Textbook, Lexicon, Practice, Exercises, and Drills. To highlight some instances of these, I am going to focus on the Lexicon as well as the Practice modules.



Illustration 7-3. Lexicon module

⁸³ Dyck (2002) is an account, which not only offers a detailed description of the Mohawk language technology, but also a better visualization of the different modules.

⁸⁴ Kanatawakhon has taught Mohawk courses for approximately a decade at the University of Western Ontario, Brock University, and elsewhere in Ontario and Québec.

Concerning the Lexicon module, it consists of a dictionary of 250 entries listed thematically and also contains a search engine. Each entry in the lexicon is accompanied by a sound file of the Mohawk pronunciation. The Practice module, however, plays a facilitating role in the sense that it enables the person to hear Mohawk and record one's own pronunciation of the endangered language with the appropriate hardware. Furthermore, any interested learner can make a comparison of one's own output with that of a Mohawk speaker.⁸⁵ The method can be regarded as a feedback tool, particularly if the consumer is the kind of person who hears the language and assesses one's own pronunciation.



Illustration 7-4. Practice module

Teaching Mohawk is a complex activity due to the rich structure of its core vocabulary. To give but an example, a number of nouns and verbs can have 11 to 15 prefixes, which denote relationships between individuals or groups to actions or objects, according to Michelson (1988: 45-46). Dyck (2002: 30) explains that

while nouns always function as such, verbs can function like verbs, nouns (including kinship terms), adjectives, and enumerating expressions; particles can serve as demonstratives, quantifiers, adverbs, interjections, and so forth. Consequently, the second-language-learner is faced not only with acquiring the complex word-formation rules of Mohawk, but also with putting words and sentences together in a manner that is functionally different from English and other Indo-European languages.

According to Dyck (2002), this is the only CD available that attempts to teach Mohawk in a systematic manner. *Tsi Karhakta* would be most helpful for a relatively proficient computer user

⁸⁵ The voice of David Kanatawakhon accompanies all audio files.

with some background in linguistics or with some knowledge that languages can have different structures than English. *“If the CD is intended for use by completely novice computer users and language learners, it would be best to have a moderately computer-literate Mohawk teacher available. In other words, this CD would be most useful for an introductory, post-secondary language course,”* according to Dyck (2002: 33).

The *Tsi Karhakta* CD-ROM is an innovative attempt undertaken by the Mohawk community to revitalize its indigenous language. The CD-ROM technology can be considered an instance of multimedia because it combines images, visually presented texts, and sounds. Thus, it allows a variety of experiences, which go beyond that what is allowed by traditional monomedia. In section 8.9, I will investigate the situation of Welsh CD-ROMs and visualize the contributions they make with regard to Welsh language revitalization.

7.6. The Warlpiri case

Before talking about the history of Warlpiri communication, I am going to refer to this clear insight provided by Leitner and Malcolm, which reports on the Aboriginal people of Australia and their specific characteristics:

Australia’s Aborigines are a group of peoples that attract deep interest worldwide but are, despite the wealth of information available, little understood. Though a mere 2.5 percent of Australia’s current population, they are important far beyond their demographic strength. Their symbolic association with their long past history is willingly adopted by Australia and its writers to claim a history that reaches beyond colonization. Aborigines have suffered massive losses in a short period of time. Yet, some of their cultures, religions and languages have survived, have been revived... in a form that represents Australia’s Aborigines of today. (2007:1)

7.6.1. Aboriginal communication

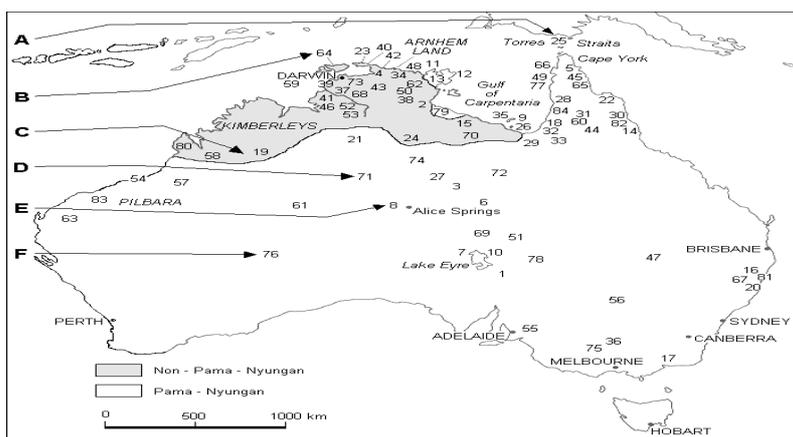
Clemens (2002) argues that the issue of communication across a large geographical space has always been an issue to Aboriginal communities both prior to and post European colonization. Buchtmann (1999) explains that a scrutiny of some traditional communication patterns would be

useful to understand why Aboriginal broadcasting has been highly regarded by the Warlpiri minority. Indeed, communication has always been a vital part of traditional Aboriginal culture. While Aboriginal culture was devoid of a written language, it had its own style that relied heavily on symbols. However, the Warlpiri used an intricate system of symbols in sand and body painting. With no written records, all the knowledge that the Warlpiri needed for their usual activities, food sources, kinship relations and technology had to be remembered and then orally passed onto the next generation. Reynolds (1981: 10-11) points out that, at the time of European invasion, there were about 200 language groups throughout Australia that were not isolated from each other as young men would travel on ceremonial visits, taking message sticks, symbolically denoting the purpose for their visit. There is also evidence of the exchange of material goods such as stone axes across Australia as well as the exchange of intellectual property such as ceremonies following traditional routes, according to Flood (1983: 237).

Buchtman (1999) believes that the European colonization had a major effect on Warlpiri communication. After the Coniston massacre, which was the last known massacre of indigenous Australians and which occurred in revenge for the death of a dingo trapper killed by Aborigines in August 1928, Warlpiri elders no longer had any contact with Europeans and retreated to traditional lands. Warlpiri communications and their traditional routes were profoundly affected by the government forced settlement at Yuendumu that took place in 1946. The traditional patterns of moving off in bands to hunt and gather to return to a large group for ceremonies several times a year were interrupted. Reynolds (1981: 129-30) argues that fences also prevented communication between groups though there still existed some free movement between the Yuendumu settlement and Warlpiri camps at the Mt Doreen, Mt Allan, and Coniston cattle stations. Buchtman (1999) further asserts that while the Warlpiri no longer live their traditional lifestyles, they have maintained social structures, language, and ceremony. Their traditional culture and social practices have been enhanced by the use of new technology, which has helped restore, and possibly improve, traditional communications. In sections 7.6.3 and 7.6.4, I am going to show how the uses of videoconferencing and radio technologies have led to the improvement of Warlpiri communication and reflected other concomitant dimensions.

7.6.2. The Warlpiri language

Warlpiri is the main language group in the Ngarrkic family. Laughren et al. (1996) point out that the Warlpiri language covers an extensive area to the north-west of Alice Springs, as indicated in the map below. The main Warlpiri speaking communities are to be found in Yuendumu (Yurntumu), Lajamanu, Nyirрпи, and Willowra (Wirliyajarrayi), with speakers also in Tennant Creek, Katherine, Alekarenge, Ti Tree, and Alice Springs.⁸⁶



Map 7-4. Aboriginal languages of Australia⁸⁷

As shown in diagram 7-3, there are around 3000 speakers of Warlpiri. For these speakers, Warlpiri is their first language. Yet, there are many speakers of Warlpiri as a second or third language as well. Within the Warlpiri language group, there are numerous mutually intelligible dialects with differences evident in pronunciation and vocabulary.

A [25] Kala lagaw Ya (3000-4000 speakers)
B [64] Tiwi (1500)
C [19] Walmajarri (1000)
D [71] Warlpiri (3000)
E [8] Arrernte (1500)
F [76] Pitjantjara and Ngaanyatjarra; both dialects of Western Desert (3500)

Diagram 7-3. Languages with the largest numbers of speakers⁸⁸

⁸⁶ Yuendumu, Lajamanu, Nyirрпи, and Willowra constitute the traditional Warlpiri Country. While Tennant Creek, Katherine, Alekarenge, Ti Tree, and Alice Springs are communities around the Warlpiri Country (Angelo 1998: 175). The map 7-4 above attempts to locate the place where Warlpiri is spoken.

⁸⁷ This map of Australia is adapted from Evans (1995).

⁸⁸ This figure shows the distribution of speakers of Aboriginal languages.

7.6.3. Warlpiri videoconferencing

Since the mid-1980's, Australian indigenous peoples' engagements with new media technologies have attracted considerable interest from scholars working in the fields of cultural studies, media studies, and anthropology, according to Hinkson (2002). As a technological device and a promising medium for language revitalization appropriated by the Warlpiri community, videoconferencing assumes a major function in the process of reversing language decline, as I am going to show in this section. Indeed, for many isolated Aborigine communities in the Australian remote areas, the modern form of technology has become the central tool for personal and business communications (Hodges 1996). Unlike the telephone or radio, the tool conveys the system of hand gestures that Aborigines make use of while speaking. The unique feature that makes the tool specific and different from other modern media such as broadcast television is its interactive dimension. Therefore, videoconferencing plays a significant role in facilitating the consultations employed by Aborigine leaders in reaching ceremonial and community decisions.

Since 1993, Warlpiri Aborigines in the Tanami region of Australia's Northern Territory have launched a sophisticated rural videoconferencing network. The Tanami Network, as it is often referred to, connects four Warlpiri areas with each other and with videoconferencing sites in the cities of Sydney, Darwin, and Alice Springs. Links to these urban places provide the Warlpiri, Hodges (1996) suggests, with audio and video access to government service providers, other Australian Aborigines, and indigenous groups on other continents. In the early years of the Tanami system functioning, community members logged some 1,200 hours in personal or ceremonial videoconferences and made contacts with different government agencies, providing services such as adult and secondary education, teacher training, remote health care, and social security. Moreover, each of the network's seven sites has a videoconferencing system designed by PictureTel of Danvers in Massachusetts. PictureTel spokesperson Kevin Flanagan argues that the PictureTel system, through some electronic bridges, can link up to 16 participants in a single videoconference.

In addition, Peter Toyne—a rural specialist in telecommunications—says that “[t]he *Tanami Network project has shown that videoconferencing greatly improves the frequency and quality of family and community contacts for Aboriginal people.*” Most importantly, there is frequent communications among large families and friends in Australian Aborigine communities. In these locations, social unity has been endangered by factors relating to geographic isolation as well as the impact of Australian dominant culture.

It is emphasized that many videoconferences carried out over the network have been personal or ceremonial in nature. Numerous families from different communities conduct regular reunions by gathering in front of the television monitor at their videoconferencing sites. Warlpiri artists and craftsmen are also marketing their arts and crafts through the network. For instance, several artists in the community of Yuendumu recently used the tool of videoconferencing to discuss their work with an audience in London's Festival Hall.

Commenting on the use of the medium of videoconferencing and its foci, Hodges (1996: n.p.) says that "*the most intriguing use of the system is a continuing series of videoconferences among the Warlpiri [A]borigines and indigenous groups on other continents, including the Scandinavian Saami, Alaskan Inupiat, Canadian Inuit, and the Little Red Cree nation in Alberta, Canada.*" What needs to be highlighted is that the videoconferencing activities have placed a strong emphasis on land rights and language preservation—something which is regarded to be essential for many indigenous peoples around the world.

Hinkson (2002: 211), who has extensively worked with Warlpiri people on their use of new media and communications technology, fully captures some of the recent developments with regard to videoconferencing, saying that over the last two decades,

a new kind of mobility—interstate and overseas travel—has become commonplace, most directly as a result of the growing national and international interest in Warlpiri art. As Warlpiri people travel further away from home they and their kin require new social mechanisms through which to maintain communication with each other. Such linkages are highly valued because of the premium Warlpiri people place on maintaining and reproducing social relationships through intensive interaction. Mechanisms such as video conferencing enable such communication to take place in a new technologically extended... form. Because video conferencing is a visual medium, it also enables the kin who stay at home to witness some aspects of the traveller's experience.

7.6.4. Warlpiri radio

The launch of the radio network in October 2001 was a significant event for Aboriginal people living in the north-west region of Central Australia. From the point of view of Hinkson (2004), PAW Radio

(Pintubi, Anmatjerre, Warlpiri) is the first radio network linking so many Aboriginal towns—eleven when they were last counted,⁸⁹ two spread across an area reported to be 480,000 sq kms—to operate independently of a major regional center and regional broadcasting association. PAW Radio can be viewed as the latest in a series of initiatives by people associated with the Warlpiri Media Association of Yuendumu, indicating the growth of the organization from local to regional broadcasting body. The PAW Radio Network—based at Warlpiri Media in Yuendumu—has been a huge success in the area and provides a way of connecting people, families, and communities across large distances. The radio network continues to expand by offering the local community culturally appropriate radio broadcasts to listen to. It is not only a radio network to feel a part of, but also an effective means for communicating and keeping in touch with friends and family (NIRS 2004).

In the course of PAW's establishment, WMA has become the thriving center of social activity, particularly for young people. Since the start of its programs, there has been a dramatic increase in the number of hours of local radio broadcasting in the region. In the case of Yuendumu, radio broadcasting was infrequent throughout much of the 1990's. Since the start of PAW, radio workers from at least two locations have regularly broadcast six to eight hours a day, five days a week.⁹⁰ Before the PAW network was set up, radio workers at Yuendumu had a maximum potential audience of 1,000. The establishment of the system has increased this potential listening base by at least six to extend in the growing social world where the Warlpiri people would join other people who listen to the network and whom they consider a 'family.' Networked radio is being utilized by young Warlpiri people to help sustain and reinforce social relationships across distance (Hinkson 2004). The manifold contributions of Warlpiri media will be investigated in section 7.8.

7.7. The Khasi case

In this part, I start first by looking at the Khasic languages and then embark on exploring the Khasic technology for the revitalization of its minority language.

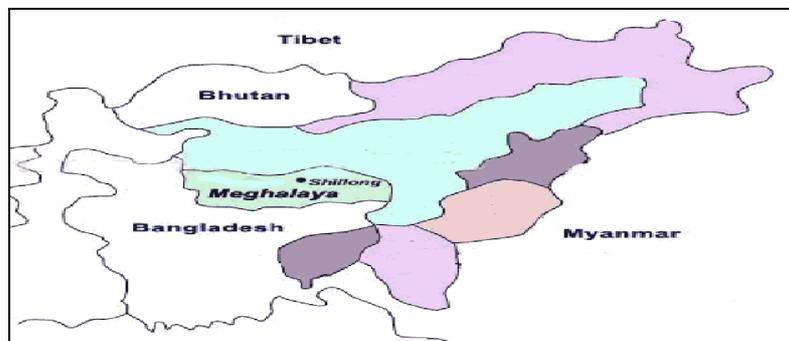
⁸⁹ These are Yuendumu, Ali Curang, Nturiya, Pmara Jutunta, Laramba, Willowra, Yuelamu, (Mt Allan), Nyirripi, Papunya, Mt Liebig, and Kintore.

⁹⁰ Kintore and Nyirripi are the regular sites from which broadcasts take place.

7.7.1. Khasic languages

The Khasic languages are spoken in the Meghalaya state of India and close regions, as well as Bangladesh. In Meghalaya,

the variety known as Khasi has official status and a very healthy literature, including many dictionaries, grammars and teaching texts. From the literature one gains the impression of a standard language with some dialectal varieties, but really we can speak of a Khasic (or Khasian) family of languages, one of which has been blessed by accident of history to be fully developed as a language of literature and education. (Sidwell 2006: n.p.)



Map 7-5. North East India with Meghalaya State⁹¹

The population of all Khasi in Meghalaya was estimated at 879,192, according to the 1991 census. Other sources have estimated more than 150,000 Standard Khasi speakers. At least five Khasic languages are distinguished. These are Standard Khasi (or Cherrapunji Khasi), Synteng (or Pnar), War and Amwi dialects, Lymngam (or Dko), as well as Bhoi.

Standard Khasi may be considered “*the most innovative and thus least historically representative of the family, yet it is the best documented, and thus relied upon for comparative studies.*” It is argued that Standard Khasi was developed in the 19th century by a group of Welsh Presbyterian missionaries who chose the famous Cherrapunji dialect for their religious activities. As a consequence, they developed a phonetic alphabet adapting Welsh/English spelling conventions.

⁹¹ The map as well as the account are taken from Sidwell (2006).

7.7.2. Mawphor

Mawphor, which appeared on the 1st of July 1989, had a four page tabloid size with a mere 1000 copies of circulation. After a period of 14 years, people have come to understand the role and standard of the daily—something which has made its readership amounts to about 2 million people.



Illustration 7-5. The Khasi online newspaper⁹²

Confronted with difficulties at its start, the publication has begun with a letter press, steadily changed to electronic typing and now computerized with the latest and sophisticated printing technology.⁹³ The multiple driving factors behind the development of *Mawphor* are explored in this quotation:

After Seventeen Years of Statehood, though various vernacular weeklies and English dailies had mushroomed, but yet non[e] could fulfill the expectation of the people, especially the rural masses are still missing the opportunity of important informations. So with a humble beginning ‘to serve and to inform’... *Mawphor* was started with a view to raise the standard of newspapers in the state by disseminating correct and latest information to its esteem readers... [O]ur missions [are] not only to give information of various incidents, schemes, developments but also to educate and create awareness among the people. At present, *Mawphor* has won the hearts of peoples, young and old and even non Khasis also. The Paper has reached to every nook and corner of the state and even outside the state. (Mawphor 2007b: n.p.)

⁹² This illustration has been taken from Mawphor (2007a).

⁹³ This account is also taken from Mawphor (2007b).

Mawphor is an online newspaper, which can be considered a sophisticated form of new technology that facilitates the use of information in Khasi. In the Welsh context, there are also some electronic newspapers, which aim at the promotion as well as the dissemination of information in Welsh. These points will be fully investigated in section 8.7.

7.8. Assessment

In this section, I am going to evaluate the motivations and goals of minority language efforts as well as the diverse accomplishments of the uses of new technology. It should be noted that in some scenarios there are several resulting outcomes apart from language revitalization.

7.8.1. Language storage and modernization

As far as the Maori language devices are concerned, the aim behind the use of software technology has been to promote the use of the language; and it is for this reason that the spellchecker has been produced. Additionally, the use of machine translation has been designed not only to serve online educational purposes, but also to rejuvenate the Maori language. With regard to the Basque new technology, ETB SAT channel strives to respond to the diversity of its audience by displaying a wide range of broadcasting programs. It does thus place an increasing stress on the actual situation of the Basque country. Its various programs in Basque have informative, entertaining, as well as educational dimensions. Since the most crucial aspect of the Basque people is their language, the Basque technology has resorted to take this into account by disseminating materials in Basque. Turning to the *Euskal Herriko Aurpegiak DVD*, it could be said that it provides its audience with the possibility to listen to the wide spectrum of Basque dialects along with their meanings. In this way, the DVD multimedia technology contributes to the development of the Basque language and displays it in a new form.

With regard to *Tsi Karhakta*, the technology serves to highlight some grammatical constructions and thus plays a role of paramount importance in facilitating the learning of the indigenous language through the different ways of Mohawk modules that the CD-ROM displays. The example studied has shown that the new technological device contributes to the maintenance of the Mohawk language, as the selected illustrations above confirm. Concerning the Khasic online

newspaper, however, its major objective is to disseminate correct information to its readers by giving them insights into various incidents, schemes, developments. In addition, it fulfills an educational function and raises consciousness among its users. Through the flow of circulated information and the provision of Khasi on the Website platforms, *Mawphor* can thus be taken as an instance of language modernization.

7.8.2. Identity preservation

What is implicit in media technologies is that they are empowering strategies enabling community broadcasters to appropriate media for their culturally specific uses. The Warlpiri have adopted new forms of technology, as they are eager to maintain a powerful form of communication to preserve their unique identity. Additionally, it could be argued that the Warlpiri community embraced the new communication technology for numerous reasons: preserving culture, improving information flow, support health education campaigns, enhancing employment opportunities, and providing entertainment. Therefore, the traditional and solidaristic patterns of the Warlpiri have been preserved through the deployment of new technology apart from the other concomitant outcomes that have resulted. It seems thus clear that the modern technology of videoconferencing has specifically contributed to the preservation of Warlpiri identity as well as the continuation of Warlpiri use, according to Buchtman (1999).

Turning to the situation of Basque technology, there is no doubt that the Basque satellite television has played a crucial role in the preservation of the identity of the Basque people, as I am going to show. In the Basque country, it needs to be clarified that there are different television channels that articulate various ideological messages, which carry within them political and administrative fragmented aspects. Besides, these varied messages stem from different states, which have different electoral allegiances to pro-Basque, pro-Spanish, or pro-French parties. ETB-1, for instance, is a pro-Basque channel, which has developed its unique perspective on the reality of the Basque country, aims at the circulation of an identity by making the Basque language at the center of its programming on one of its channels.

7.8.3. Interconnectedness between language and culture

The appropriation of new technology in the form of Internet Website with regard to the Lushootseed language has brought about several implications. The reconstruction of the linguistic as well as the cultural heritage of Lushootseed through the multimedia Website leads to the fact that the revitalization of the Lushootseed language and culture is a plausible outcome of media utilization. Moreover, the appropriation of the Maori digital library to act as a historical and linguistic resource is an indicator that the Maori community can preserve its minority language. The *Niupepa* collection, which includes a detailed newspaper report on the colonization history of New Zealand, is indeed an instance of language maintenance apart from the cultural facets it reflects.

From the accomplishments mentioned above, it becomes clear what the results achieved are—results to which the different media tools have led through the investigation of the diverse cases from different portions of the world. One can thus visualize how minority language storage takes place, especially in the Khasic case through its display of information on its Website technology. Moreover, the issue of identity is another integral part of the revitalization activities, which have been differently mounted—an example of which is the Warlpiri case. Furthermore, the linguistic as well as the cultural heritage of the Lushootseed community has been restored. Therefore, it reverberates the extent to which language and culture are intertwined. Another telling instance is the preservation of the historical way of life in the Maori case—at the heart of which language plays a dominant role.

The achievements attained are clear signs of the significant roles of the revitalizing strategies. Yet, there is a high degree of overlap concerning the resulting outcomes since it is very hard in some cases to discern the one from the other. The multiple roles that the different forms of technologies play such as language promotion, the maintenance of a specific identity, as well as the interconnectedness between language and culture, which have been deduced from the appropriations of new media for the different minority languages, will also be applicable to the Welsh case in the coming section. It should not be forgotten that displaying “*media in a language puts large amounts of language use into the public domain, whether in print, video and audio recordings, or multimedia formats. For languages that traditionally have had little media exposure, this is a significant achievement,*” according to Cormack (2007: 55).

8. Technologies appropriated by the Welsh community

8.1. Overview

In this section, I am going to explore the different forms of new technologies, which have been used by the Welsh community in an attempt to revitalize its language, and also include a look at the technological situations of the other minority languages in the United Kingdom.

8.2. Bilingual Websites

In his book called *A Brief History of the Future: the Origins of the Internet*, John Naughton comments:⁹⁴

The [I]nternet is one of the most remarkable things human beings have ever made. In terms of its impact on society, it ranks with print, the railway, the telegraph, the automobile, electric power and television. Some would equate it with print and television, the two earlier technologies which most transformed the communications environment in which people live. Yet, it is potentially more powerful than both because it harnesses the intellectual leverage which print gave to mankind without being hobbled by the one-to-many nature of broadcast television. (Naughton 1999: 21-22)

In *Weaving the Web*, the World Wide Web developer, Tim Berners-Lee, quotes a speech made by the South African president, Thabo Mbeki, which deals with “*how people should seize the new technology to empower themselves; to keep themselves informed about the truth of their own economic, political and cultural circumstances; and to give themselves a voice that all the world could hear*” (Berners-Lee 1999: 110).

8.2.1. Welsh language scheme

⁹⁴ These quotations are cited in Crystal (2001: vii).

A language scheme is a document that enables Welsh speakers to receive public services in Welsh, just as English speakers can.⁹⁵ In addition, a language scheme sheds light on how the public organism takes into account the linguistic aspect with regard to their public roles. Without undermining the Welsh language, its aim is to make sure that their work contributes to linguistic parity. A language scheme ensures the availability of the following points in both Welsh and English, in accordance with the individual's language choice:

- applying for a passport or driving licence
- receiving health services
- sorting out VAT or income tax affairs
- phoning helplines
- getting advice on benefits or in a Job Centre
- receiving information from local councils
- receiving further and higher education (WLB 2007e: n.p.)

The Statutory Guidelines 'Welsh Language Schemes—Their preparation and approval in accordance with the Welsh Language Act 1993,' display what a Welsh language scheme should involve, according to WLB (2007f). In addition, the document, which is available in WLB (2007g), provides some direction with regard to the preparation of a language scheme. With regard to the contents, as stipulated in section 5 of the Act, the scheme should note the measures that the organization is about to put into practice as well as the manner by which the organization utilizes them. After a draft language scheme had been agreed upon, the draft is then proceeded to public consultation before receiving the approval of the Board. The responses of this consultation are regarded as part of the approval process.

It should be said that the monitoring of scheme implementation will be carried out by the public body and the Board (WLB 2007h). Prior to its presentation to the Welsh Language Board, annual progress reports will be prepared by the public bodies—reports which will be taken as the organization's Council or Board of Governors. The Annual Monitoring Report Framework highlights the dimensions to be monitored and the suggestions on some monitoring systems that can be used. Later, the Board considers the reports as well as the proof from the public and others. To determine the success of a language scheme, separate surveys from the standpoint of service user

⁹⁵ WLB (2007e) is a description of the nature of a Welsh language scheme.

have been temporarily commissioned by the Board. The following quotation explains what happens after the implementation of the scheme:

After a period of implementing the Language Scheme (approximately 3-4 years), the time will come to evaluate the organisation's performance and revise the Scheme. At that time, the organisation and the Board will undertake a fuller evaluation of the Scheme and its implementation with a view to reviewing and revising the Welsh Language Scheme. (WLB 2007h: n.p.)

8.2.2. Context of bilingual Websites

The Internet, it is believed, is a highly vital and expanding tool of communication, which affects every aspect of life. Both public and private organizations appropriate this technology not only to provide services but also to get in touch with the public. Some people have claimed that

it will continue its rapid growth in the future, and will touch hitherto unconnected equipment in the home and at work (as is already the case with satellite and cable television and some mobile phones). Home refrigerators are already available with an Internet connection, and it is probable that, in several years, they will be able to automatically order food for the home. In the case of public organisations, the Internet is used to advertise services, to create discussion fora, and to make citizens aware of their rights. All this is set to increase in the future. It is for this reason that the Internet is increasingly available in libraries and schools. (Lingua Cambria Cyf 2001: 3)

Gomer and Cymad (2003) argue that the Web has increasingly been used as a marketing medium in order to attain new audiences. Regularly, technological developments are being enhanced—something which has contributed to the rise of population percentage to have access to computer systems. As far as the Welsh language is concerned, the Web is regarded as a cheap medium that reaches a large audience. It is to be mentioned that the manner in which the Welsh language is provided within Websites can have broad implications, especially when the Welsh population is fluent in both Welsh and English.

There have been two surveys of Websites relating to public sector organizations with a statutory language scheme carried out by the Welsh Language Board. These studies are part and

parcel of its monitoring program of statutory language schemes under the Welsh Language Act 1993, according to Crown (2006). The first survey is a baseline analysis, which was conducted in 2001 and repeated two years later.⁹⁶ The surveys give a detailed insight into the design of bilingual Websites, according to WLB (2006: 14).

8.2.3. Developing Websites for bilingual users

Generally speaking, readers from bilingual communities often have some proficiency level in their second language. This is made to contrast with multilingual sites where readers are presumed to be monolingual. This shows that the design of Websites for bilingual communities differs from the design of multilingual sites. In order to facilitate the promotion and use of minority languages on a Website, Cunliffe (2003) believes that it is vital to take into account not only the objectives of readers,⁹⁷ but also the impact the minority language will have on how to serve them. Selecting a language and deciding to move from one language to another are considered the crucial choice points of the reader. (This decision is often from the minority language to the majority one.) Cunliffe further argues that there

is a need to understand how design and other factors (such as quality or topic) will influence the readers' choices. In order to *promote* minority language use, rather than simply *facilitate* it, it is necessary to consider not only how readers can be encouraged to select the minority language, but also how they can be encouraged to continue using it during their visit. By providing a more supportive language environment it may be possible to encourage the use of minority language both when using the site and in other contexts as well. (2003: 3)

Cunliffe maintains that there is little direction for the design of Websites for bilingual users, although there exists many publications about designing Web usability as well as about designing sites whose content go beyond one language.⁹⁸ The author further reflects on the availability of bilingual Websites for minority languages, claiming that it is difficult

⁹⁶ These studies were carried out by Linguacumbria Cyf. (2001) and Gomer and Cymad (2003).

⁹⁷ Instances are locating a piece of information or purchasing a product.

⁹⁸ See IBIS (2000), TBCS (2001), Cunliffe (2001), and Linguacambria Cyf.(2001).

to generalise from existing practice, as published case-studies of bilingual developments are few in number and often do not discuss the bilingual issues in detail. Papers describing Web sites for bilingual users include Voge (1998) and Hendler (2000) who describe a Spanish/English health information site; Guanipa (2001) who describes a Spanish/English information and referral site for psychoeducational services; and Cunliffe et al. (2002) who describe part of the development process for a Welsh/English resource portal for Welsh medium Speech and Language Therapists. (2003: 3)

Cunliffe goes on to argue that a lot of studies in this field are based on anecdotal or experiential evidence and existing practice in Web design. This may relate to the lack of accessibility of academic literature in the study of bilingualism, but may also reflect the limited amount of research into bilingualism and new media.

8.2.4. Features of Welsh language Websites

With regard to Internet Welsh Websites, Cunliffe (2003: 2) argues that the

use of the Web has added impetus within Wales due to the UK Government's commitment to providing electronic access to government services (including Welsh language provision), Welsh Assembly Government promotion of the Web through initiatives such as Cymru Ar-lein (a strategic framework for Wales in the information age) and the Welsh Language Act (1993) which requires the public sector to treat the Welsh and English languages on an equal basis when providing services to the public in Wales (including electronic services).

Williams (1993) mentions five focal areas of social pressures for language change to occur. These points are expressed in the following terms:⁹⁹

- * *Idealism*: the view of a completely rehabilitated endangered language
- * *Protest*: triggering agitation behind a lesser-resourced language
- * *Legitimacy*: achieving normalcy in practising language rights in specific fields
- * *Institutionalization*: striving to represent the language in strategic state organizations
- * *Normalization*: making use of the language in further domains, particularly with regard to the

⁹⁹ This has been cited in Aitchison and Carter (1999:181).

public sector

Due to a strong desirability to use Welsh on the Web, Cunliffe (2003: 2) asserts that it would appear

reasonable to expect the Web to be making a significant contribution towards enhancing the legitimacy, institutionalisation and normalisation of the Welsh language. However, studies of Web sites in Wales has shown that there is great variability in the usability, scope and quality of Welsh language provision, even on the sites of organisations with a statutory obligation under the Welsh Language Act.¹⁰⁰

The Web device should be appropriate to use as well as provide material which meets the same standards as that in English. It seems that diversity in the range, standard, and convenience of material provision on the Websites of organizations in Welsh can be taken as a specific factor, according to some studies on bilingual Websites. If Welsh is poorly provided on these Websites, Daniel Cunliffe accounts for this matter in these terms:

- 1)-Lack of resources to develop a bilingual site
- 2)-Lack of a measurable inventory on investment that gives a big importance to language
- 3)-Belief that the needs of the majority of users will be met through majority language provision
- 4)-Organizations do not attribute much value to minority languages
- 5)-Bilingual issues are not often understood by Web developers

What impacts the consistent dimension of Welsh language provision on Websites is the idea that the content preparation and integration of a Welsh language scheme is a relatively long process to be carried out, according to Gomer and Cymad (2003). Consequently, it appears that organizations find themselves at different levels with regard to their scheme development. The content and emphasis are characterized by variation, according to appropriate and practical considerations in different fields. Consequently, parity between Welsh and English provision on organizational Websites is also subject to considerable variations. The Websites can be totally bilingual, partially bilingual, or limited in their Welsh provision. Generally speaking, the same features are also

¹⁰⁰ These ideas have been further explored in studies such as Cunliffe (2001) and Linguacambria Cyf. (2001).

applicable to all public institutions, particularly if they offer some services to the Welsh people (Gomer and Cymad 2003).

8.2.5. Standards in language and terminology

To make a bilingual reader able to browse a particular Website in his first language, it is thus suggested that the content of Website is provided in Welsh and displays features, which are correct, appropriate, as well as understandable. If this

is not the case, the reader is likely to lose faith and patience, and transfer to the other language. There are a number of factors in Wales today which militate against the ideal of a high standard of Welsh, suitable for its potential audience. The most important and influential of these is the fact that a high percentage of the Welsh material seen on websites is translated from English. Naturally, the same author is unlikely to have written most of the material on any particular website, and this gives uneven results in terms of standards and fluency. (Gomer and Cymad 2003: 13)

What has been noticed on some Websites is that there are some errors, which have been found on headings such as in illustration 8-1. The Website shows some incomprehensible Welsh headings on the right hand menu. This could be attributed to the fact that they were prepared by a designer who included some unclear ways of heading formulations.

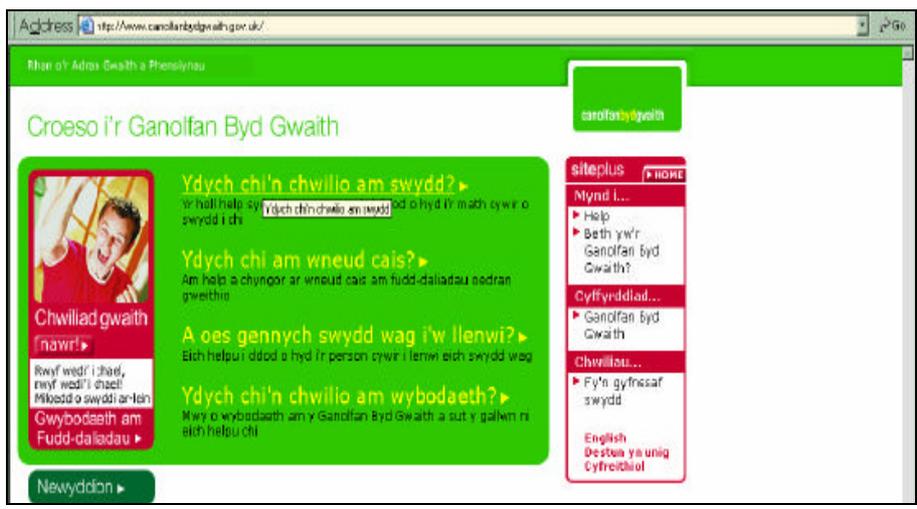


Illustration 8-1. The Job Centre Plus Homepage

It is thus important to have confident speakers of Welsh and English as well as a professional editor. The objective of this is to investigate the contents of a Website before its publication in so as to make them meet consistency, high standards, as well as intelligibility.

8.2.6. Situation of other bilingual Websites of minority languages

In the first section of the appendix below, I have collected some bilingual Websites to show the situation of the other minority languages in the United Kingdom. The collection demonstrates that the other minority language communities have indeed some bilingual Websites, which makes their situation relatively competing with that of Welsh language provision. Nevertheless, there is an abundance of bilingual Websites as far as Welsh is concerned (a detailed investigation of Websites has been listed in Gomer and Cymad (2003) along with further insights into the nature of these Websites.)

8.3. Digital library

In this section, I am going to describe the concept of language documentation and then focus on the library of Wales along with some recent developments to which it has been subject.

8.3.1. Language documentation

The basic idea of a *language documentation* is to provide a comprehensive account of the linguistic practices that characterize a given speech community, according to Himmelman (1998). The language practices and traditions are represented in two ways: (1) The *linguistic behavior* which is reflected in everyday interaction between speech community members. (2) The *metalinguistic knowledge* of native speakers which is represented in their ability to interpret and systematize linguistic units.

Nevertheless, the objective of a language documentation is totally different from the objective of language description. The goal of a *language description* is to provide a record of a language. In this case, 'language' is viewed as a system of abstract elements and principles, constituting the underlying form of utterances, which can be observed in a speech community,

according to Bird (2002). In the coming section, I am going to focus on the National Library of Wales (*Llyfrgell Genedlaethol Cymru*) before making the transition to the *Digital Mirror*—the Digital Library of Wales.

8.3.2. Insight into the library

The National Library, which is situated in Aberystwyth, was set up by a Royal Charter in 1907. The library is governed by a Council and a Court of Governors, which comprises representatives from different sectors of Welsh life.¹⁰¹ Furthermore, the LLGC (*Llyfrgell Genedlaethol Cymru*) has been authorized to collect a copy of every printed text published in Britain and Ireland since 1911. Therefore, it is not only considered the legal deposit library for Wales, but also one of the six libraries in the United Kingdom, according to Priddle (2004).

From its inception, its original function has been to collect and maintain manuscripts, books, maps, pictures, and works in Celtic languages or in connection with Celtic people. In addition, it collects documents on other topics for the purpose of endorsing the objectives of higher education as well as literary and scientific research, according to the National Library of Wales (1999). What captures the trend towards bringing the library to the world is that many libraries and other cultural institutions are now looking to digitization as one means of extending access to their contents, or helping with the task of preservation. Indeed, electronic copies can bring within reach of researchers or learners documents they might be unlikely to see in their original printed or manuscript form. Thus, digitization offers many possibilities to an organization like the National Library that is not easily visited by everyone.

A summary of the possibilities includes the following items: (a) putting on the Web some images of the Library's 'treasures' along with texts and translations in both Welsh and English languages, (b) digitizing the contents of some of the Library's collections such as portraits, (c) displaying 'digitized themes' on the Web to bring together archives, pamphlets, maps, and drawings on the same subject, (d) providing digital copies of fragile elements subject to damage, (e) digitizing audio and image collections on CD-ROM tools, and (f) last but not least, providing pieces of advice to other libraries and institutions on the techniques of digitization (National Library of Wales 1999).

¹⁰¹ NLW (1999) is a background information about the National Library of Wales.

8.3.3. The digital library of Wales: ‘The Digital Mirror’

In this section, I am going to further explore some issues of digitization and exemplify this concept by the digital library—a highly sophisticated instance of new technology. The LLGC Website shows that digital collections are gathered in one area.¹⁰² This area, which is called the ‘Digital Mirror–Treasures’ page, includes a lot of links with descriptions about each element.¹⁰³

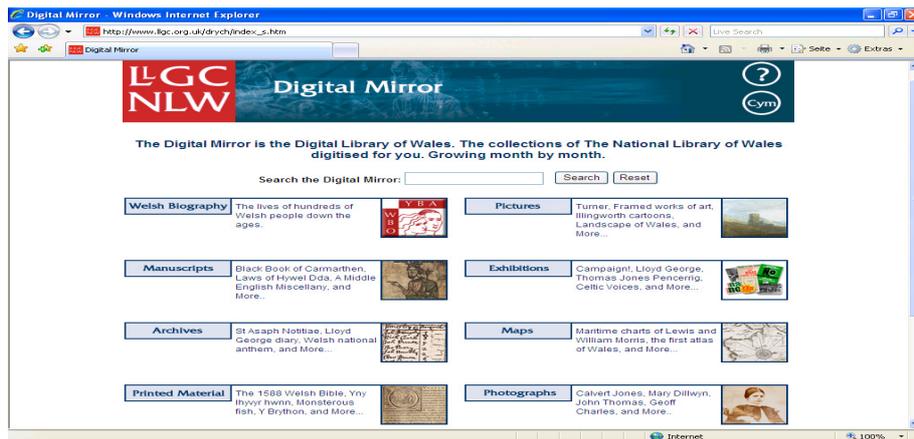


Illustration 6-2. The Digital Library of Wales¹⁰⁴

So far, twenty-nine different digital collections have been made accessible. These include a series of manuscripts and archives, photographs, maps, sound recordings, as well as paintings. A reflection on some aspects of the digital library has been captured by this:

The items that have been chosen for digitization span both centuries and media, and the collections have been made accessible electronically in a variety of ways. The photographic collections in particular are based more on a database schema, where images can be searched by keyword... However, the majority of the collections available are of the required type; i.e. item-level digitization of a specific artifact in its entirety, and within this stipulated boundary twenty-five of the collections fit. (Priddle 2004: 164)

The author carries on her analysis, pointing out that the digitization of the items follows a general pattern that comprises an introduction page, which gives an idea about the artifact history,

¹⁰² The Website www.llgc.org.uk/drych/index_s.htm visualizes the digital collections.

¹⁰³ This account has been taken from Priddle (2004).

¹⁰⁴ The source is NLW (2005)—a collection of diverse artifacts.

the information encapsulated within it, as well as the producer of the piece. Still, within the same frame of reference, Priddle argues that

[i]t is interesting to note that there is little transcription of items that have been digitized. While the personal items, such as Lloyd George's diary, can be read from the screen, there is no direct translation available for those items written in Welsh, and no transcription of all of the items that can be viewed. The introductory information gives a general overview of the narrative or information within each document, with cross references to items of particular interest or pages of note, but it seems that the actual details within the text are of less importance than the symbolic value of the item. (2004: 165)

Digital collections are specifically chosen in so as to foster the concept of Welshness. Indeed, through the circulation of these

artifacts, digitized purely because they mythically represent the essential heritage of the country, the LLGC has continued to keep within the remit of its original Charter, and focus its digital presence on a localized role of examining and displaying artifacts of heritage that have, in some symbolic way, enabled the nation to survive, and which, in this age of electronic information and distributed communication networks, can aid in the continuation of a Welsh identity both within the nation and without. (Priddle 2004: 165)

The choice of the virtual artifacts represents a propagation of a mythic collective identity within the country and an articulation of its cultural Welsh identity on a global basis. It is to be mentioned that the Welsh identity transmission does not reflect the major objective of the institution itself.

8.3.4. Other digital libraries in the UK

Apart from the digital library of Wales, there are other digital libraries in the UK such as the ones in Scotland. According to Raitt (2000), the huge developments in digital technology have paved the way for diverse possibilities for many libraries such as the *National Library of Scotland*, which has produced one of the biggest online bibliographical databases in a European library. One of its initial projects

was to digitize the only known copies of the earliest books printed in Scotland—the Chepman & Myllar Prints produced in Edinburgh about 1508. Ongoing work on the books is directed toward preparing a complete page-through version for the library’s Web site. Accompanied by various levels of introductory material as well as a transcription and commentary, this is expected to appeal both to the general public and to a more specialist audience. More and more of the library’s treasures and most intriguing items are being digitized. One fascinating gem is the last letter written by Mary, Queen of Scots, which was completed at 2 a.m. on Wednesday, February 8, 1587, 6 hours before she was to mount the scaffold at Fotheringay Castle. (Raitt 2000: n.p.)

The second digital library in Scotland, *Glasgow Digital Library*, aims at constructing a digital resource to endorse teaching, learning, research, and public information in Glasgow. In addition to this, it aims at combining material and bridging the gap between its ownership as well as its location. Though funding was made available for two years to develop a feasible approach with regard to a regional digital library, an ongoing service was not provided. By 2003, the library had collected about 5,000 publicly digital objects, and is “*being supplemented by further collections as small amounts of funding are obtained for specific digitisation projects. However... no funding is available for technical support, content management or ongoing maintenance and development*” (Kelly et al. 2003: 3).

8.4. Digital College

8.4.1. Overview

Williams et al. (2000) point out that the Internet has been recently regarded as a strong promoter of adult education.¹⁰⁵ In addition, it has become a relevant medium to lifelong learning in Wales—a scattered rural place. Many people argue that the Internet is very useful in Wales because the country has been known for its traditionally restricted geographic and physical infrastructure. Such infrastructure is considered an impediment “*to, even the cause of, the fragmented culture that is Wales. But whereas newspaper distribution follows road and rail routes (and the vast majority of*

¹⁰⁵ Further studies include Harasim et al. (1995), Heppell and Ramondt (1998), and Walker (1998).

newspapers consumed in Wales are produced in England), with the Internet such physical links become irrelevant” (Mackay and Powell 1997: 204).

The educational dimension of the Internet has been spelt out in the recent UK government drive to establish a ‘learning age,’ according to DfEE (1998). Initiatives such as the ‘*learnirect*’ and ‘*University for Industry*’ programs as well as localized projects such as the Welsh ‘*Coleg Digidol*’ (Digital College) are among the programs that have been reflected through the drive. Besides, one can mention that the aim of the projects has been to enhance participation in adult learning as well as devise new learning possibilities through the use of Internet and other forms of technology, according to Digital College (1998).

8.4.2. The emergence of a ‘Digital College’ for Wales

The idea of an ICT-based adult learning program, which developed from television broadcasters in Wales such as BBC Wales and S4C, was initially considered in 1994. By 1997, there had been an announcement for the setting up of a ‘Digital College’ to serve as a technological-based setting for adult learning in Wales. There has also been a pervasive emphasis on developing learning opportunities through digital television broadcasts and the Internet, according to Digital College (1998). The projects for a digital college have placed specific stress on the appropriation of telecommunications technology for the circulation of learning materials. Despite the fact that other media such as the telephone and fax, paper-based materials, and ‘learning centres’ were vital parts of the program, the utilization of new technologies, such as digital television and the Internet, have played a big role in the successful deployment of the digital college.

Thus, any person who wishes to learn new skills “*vocational or non-vocational would be able to benefit and exciting and effective access procedures would be put in place to attract and support traditionally non-participating groups such as the young unemployed and adult returners*” (Digital College 1998: 15). The fulcrum of the College, as the quotation spells out, is the use of effective technological procedures to attract learners and provide support. The first development has primarily revolved around the use of the Internet rather than digital television. Consequently, Internet-based materials, which have been produced since 1998, have had the objective to attract ‘recruits’ to the college.

The initial efforts of the digital college have been of a business nature. Moreover, the aim of these measures has been to secure financial and commercial support, according to Digital College (1998). To give an understanding about the role of the digital college with regard to the Welsh language as well as its related features, Williams et al. (2000: 2) point out that the

Coleg Digidol has been active in developing its Welsh language provision, most notably via the associated *Acen On-line for Welsh Learners* project. Acen (translated as ‘Accent’) began in 1989 as a scheme within S4C to teach Welsh to adults through the production of a series of television programmes. With a mission statement of ‘*Yn gwasanaethu dysgwyr y Gymraeg*’/‘*Serving Welsh learners*’ Acen is now responsible for providing Welsh language learning provision through residential and workplace-based courses, conventional reading materials, television subtitles and the provision of Web services for Welsh language learners.¹⁰⁶

8.5. Digital television: S4C

This section describes the development of communication in Europe, embarks on an investigation of Welsh television, pointing to the different technological phases it has undergone, and concludes by looking at other digital televisions in the UK.

8.5.1. Daily communication in minority languages in Europe

The start of broadcasting in Europe developed so rapidly to become a state monopoly. Consequently, it became the language of the nation state. Prompted by the decline of unofficial languages, new linguistic and political nationalist movements were shaped during the period of inter-war years. Broadcasting media, such as radio and television, were thought by these movements to be the pervasive tools under the control of the state. The situation of the Welsh language within the context of media development is embedded in this quotation:

¹⁰⁶ I have not found other digital colleges in the UK apart from the aforementioned instance.

Minority languages have often achieved a temporary equilibrium with the official languages through diglossia – Welsh, for example, was long accepted as the language of chapel and home, alongside English as the language of commerce and education. The media, however, spoke the other language on the hearth, penetrating the last refuge of the native language. It became clear that media in one's own language was a condition of linguistic survival. (Ap Dyfrig 2005: 2)

Jones (2004: 9) elucidates the role of minority broadcasters in the environment of present-day media, saying that there is

a 'common-sense' idea that in any language revitalisation strategy the media are a key component, with some hoping that media use of the language will influence people's language practices and promulgate language use in other domains. However, this does not go entirely undisputed. Joshua Fishman has referred critically to the 'media fetishism' of many minority language activists and Mike Cormack (2004) reminds us that the effect of media on people's linguistic practices is by no means firmly established.

Jones carries on his reflections by highlighting the significance of minority language broadcasters from the perspective of speakers, saying that mass media in one's own language fulfill what can be considered a human right to equal access to public discourse. In addition, the representation of one's community from within and through the medium of one's own language can counteract the prevailing tendency for minorities to be made the object of others' cultural gaze. This may also mean that there is some chance of formulating a better image of the language community than the one produced elsewhere. This may thus undermine the prejudices and stereotypes about the minority to survive.

8.5.2. S4C

There have been two reports in the 1970's, which helped promote the idea of a fourth channel in Wales to be broadcast in Welsh.¹⁰⁷ According to the Crawford Committee Report of 1974, it was suggested that a fourth Welsh channel in Wales would successfully provide programs in the medium of Welsh:

¹⁰⁷ Laughton (2004) is a detailed account into the development of S4C over the years.

‘It was put to us forcibly’, the Crawford Report argued, ‘that, if the young watch mainly English language programmes, the decline of the Welsh language will continue... The need for more programmes in Welsh is seen as urgent if the present decline is not to go beyond the point of no return.’ (Laughton 2004: 7)

After a period of three years, the Crawford’s solution was endorsed by the Annan Report. S4C, which stands for *Sianel Pedwar Cymru*, was set up in 1980. Furthermore, it is claimed that its establishment came after an event during which a famous politician threatened a hunger strike and after some figures, such Sir Goronwy Daniel and the Archbishop of Wales, visited the Home Secretary. From its inception up to this moment, S4C has been concerned with the promotion of Welsh language and culture.

The S4C new channel did provide twenty-two hours of Welsh programming. Besides, the benefits of public service broadcasting covered those whose medium of choice was the Welsh language. S4C also broadcast diverse programs in English from Channel 4—the other broadcasting television in the beginning of the eighties. To speak in cultural terms, the channel achieved and preserved a powerful status. S4C became a principal agency, aiming at the promotion of the Welsh language. The situation of the channel in the pre-digital age is further captured by this quotation:

To complete the virtuous circle in which S4C found itself at the close of the analogue age, audiences grew steadily. Viewing shares and reach rose from the beginning of broadcasting until the mid nineties. Between 1985 and 1995, S4C’s reach of Welsh speaking viewers rose from 75% to 85%. Its share of Welsh speaking viewers in primetime peaked at around 20% in 1996. (Laughton 2004: 8)

Recently, S4C has been subject to many developments such as mounting competition for viewers, a new social and political context in post-devolution Wales, as well as a weaker growth in its governmental grant.

In the first fifteen years of S4C’s life, the grant rose from £25 million to £72 million in line with the increase in commercial television revenues. The 1996 Broadcasting Act replaced the established link between the channel’s income and television advertising revenue by a new link to retail price inflation, based on the channel’s share of advertising revenue (3.2%) in 1997. Since 1998, the grant has risen by around 20% to £86 million in 2004. (Laughton 2004: 9)

The second phase of S4C's existence—a phase which has been associated with the development of new channels and the start of the digital age—has been an era, which coincided with S4C exposure to deep financial and commercial pressures. It is claimed that S4C has not gained from the 'digital dividend' resulting from its major terrestrial competitors. Moreover, S4C embraced digital television for several reasons: (1) to offer many programs and viewing times to Welsh-speaking viewers; (2) to ensure that viewers in Wales receive both Channel 4 and S4C; (3) to increase democratic participation through coverage of the National Assembly; and (4) to invest on a lasting basis in a UK digital multiplex operation.

Under the 1996 Act, the channel decided to launch S4C Digital in November 1998. This new form of broadcast offered a Welsh language service outside peak hours. In addition, households outside Wales could watch S4C's wide range of programs—something which is much appreciated by Welsh-speaking 'exiles.' In September 1999, S4C2 was started. It is a cooperative venture with the BBC, which provides a broad coverage of the National Assembly. Apart from the dimension of language promotion in the arts and culture, S4C has also had an economic impact within the country of Wales—an impact which can be seen in the following quotation:

It has been estimated that around 2000 jobs result directly or indirectly from S4C's activities, many located in the poorer regions of Wales. A report prepared for S4C by the Welsh Economy Research Unit in 2001 estimated there was a total disposable income impact in Wales of just over £33 million as a result of S4C's activities. S4C has also played a leading part in supporting the development of the media skills base in Wales, largely working with the training organization, Cyfle, in partnership with Skillset. S4C has a consistently strong record in this area. (Laughton 2004: 10)

The role of the digital channel as a cultural organism within Wales is taking a new turn because of the Assembly that is devising cultural as well as bilingual policies. Furthermore, the Welsh Language Board has been playing a huge role in the deployment of techniques in order to make Wales a bilingual country. Another major theme of the past years has been the competition for viewers as well as its impact on the digital channel. Moreover, the size of audiences of all public service broadcasters has increasingly declined and S4C seems to be the most affected of them in terms of audience decline.

8.5.3. Subtitling

Dubbing and subtitling are considered central matters for minority language broadcasters for several reasons. According to Jones (2004: 1-2), many households in Wales are linguistically mixed as a result of children having education in Welsh while their parents have little knowledge of the language. The availability of subtitles makes it easier for Welsh speakers in such households to choose to watch a Welsh language program and allows non-Welsh-speaking parents of Welsh-speaking children the opportunity to follow the programs that their children watch. Another reason for S4C channel to subtitle is that it enables the broadcaster to claim the Welsh cultural niche and present it to English-speaking viewers—a niche which is not being covered to any adequate degree by English language broadcasting. In a minority language situation, learners are considered a significant target audience. Therefore,

subtitles can be used in ways designed specifically to help them. S4C offers its viewers two sets of subtitles on different Teletext pages, 888 and 889. 888 is a straightforward translation service, whereas 889 subtitles Welsh programmes in simplified Welsh and offers translations of vocabulary likely to prove difficult. 889 subtitles are limited to two lines maximum and are held on screen from between 4 and 6 seconds or even longer if circumstances permit. These subtitles are also used by Welsh speakers who are hard of hearing although not specifically designed for them. The 889 service has been on offer since 1995 and there are now some 10 hours a week of programmes subtitled in this way. (Jones 2004: 2)

8.5.4. Interview with Owain Pennar

In an interview at S4C Press Office in Cardiff,¹⁰⁸ Owain Pennar describes the background of the establishment of the channel, saying that in

the 1960's and 1970's, as part of the civil liberty movement, minority cultures were asking for rights. In Wales today, there is bilingual education, roadsigns, leaflets and so on. Before that, Welsh was seen as a dying language. In the 1960's, the language was given more rights. In 1970's, it became obvious that the TV media was more important to family life. People were campaigning for the Welsh language. At the

¹⁰⁸ This personal communication was conducted in the Summer of 2006.

end of this century, S4C was established. It was considered the key to the future of the language and its survival. The leader of National party (Dr Gwynfor Evans) starved to death unless there will be a channel.

Owain goes on to say with regard to the reception of S4C that people liked to watch S4C because of the red button technology—a new technology that allows to watch many programs at once. In addition, he argues that even the people who do not know Welsh can watch the services. Another point he emphasizes is that broadband and Webtechnology make it possible to see S4C all over the world. For example, the *Royal Show* has been broadcast all over the world. The new technology is thus opening the world to new viewers.

As far as the obstacles are concerned, S4C is being displayed on three platforms: freeview terrestrial, cable (fees), and sky (for the rest of the UK). If Wales wants to expand the freeview, it needs then to broadcast outside Wales. Therefore, it is considered to be localized. But whether it will be expanding to other areas is something which is still under discussion. Pennar maintains that S4C has been part and parcel of digital technology since the last 10 years, though it was different to other channels because of the digital dividend. BBC, for instance, has benefitted enormously and expanded its channel hugely. Yet, S4C has not had any extra help from the government; and its budget amounts only to about 80 million pounds.

With regard to some striking aspects of the television, Owain says that the television allows to coin words and develop its language. In other words, the language is evolving all the time. Besides, he argues that *“the television is considered a key access to language. Children television... new words... catchy inwords. In terms of economic aspects, people recruitment is integral, not Welsh language programs. The spinoff is huge for the whole industry.”*

8.5.5. Situation of other digital televisions in the UK

In Ireland, there is a digital channel called TG4. TG4 broadcasts

over seven hours of innovative, quality programming in Irish each day, which is supported by a wide range of material in other languages. Each month the station receives over one hundred commercials but being based 20 miles outside Galway, same day delivery of UK produced commercials has proved virtually impossible. (IMD 2006: 1)

Tele-G is the Scottish digital television. It “*provides a daily Gaelic language service to viewers of FREEVIEW in Scotland. A range of programme genres is transmitted, which covers factual, drama, arts, entertainment and children’s. The service is available from 6-7pm every evening*” (TREL 2007: n.p.).

The digital television is a new technology that has been designed to serve an educational as well as an entertaining function. The range of programs that Irish and Scottish digital tools display is a clear indicator of the ways whereby the technologies lead to minority language revitalization. These are some of the aspects that I will provide an empirical proof of in my investigation of the responses of the online questionnaire. With regard to subtitling, however, it can be said that it acts as a supportive strategy to reinforce the learning of Welsh structures as well as help viewers select programs to watch in Welsh.

8.6. Internet radios

8.6.1. Overview

As broadband speeds have developed and several homes have become able to afford computers, broadcasting producers have made use of these developments to reach a wider audience and provide them with another working option. According to Ap Dyfrig (2005), the new phase has given a new dimension to radio so that it overcomes the traditional way of transmission, especially with regard to the rigidity of schedules and programming timetables. The new form of radio along with podcasting offer the listener options such as the selection and manner of the program they wish to listen to. Furthermore, it is not costly as well as easily accessible.

8.6.2. Welsh language Webradios

In this part, two radios are discussed: *Radio Amgen* and *BBC Cymru Radio*. With regard to *Radio Amgen*, it is a Welsh instance of how people are appropriating new technology in minority language contexts to promote their language through podcasting weekly radio programs directly to home computers and MP3 players. Ives (2005:47) defines podcasting “*as a means of distributing audio*

and video programs via the Internet that lets users subscribe to a number of files, also known as 'feeds', and then hear or view the material at the time that they choose. A feed is usually in the MP3 audio format."

Radio Amgen is a radio service, which was developed in 2001 by Welsh language DJ and hip hop artist Steffan Cravos. The aim of the service is to promote underground Welsh language music—something which has not been taken into account by *Radio Cymru*. It started podcasting its shows in July 2005.¹⁰⁹ During the same year, one could witness the development of the first side by side podcast, television, and radio broadcast by *BBC Radio Cymru* and S4C for their famous format contemporary music show 'Bandit,' which can be accessed at: www.bandit247.com

Turning to *BBC Radio Cymru*, it is the first radio broadcast in Welsh on the BBC, which was launched in the 1920's. Nevertheless, it was in 1978 that the station started broadcasting all of its programs in Welsh and offering a wide range of programs. The station

is paid for entirely through the BBC licence fee and in 2004/05 received £9.2 million (€13.6 million) and broadcast 18 hours daily (8109 hours including opt outs). This averages out at a cost of £1,190 (€1,770) per hour, but as it is part of a huge corporation it benefits massively from overlap with other sections of the BBC especially in areas such as provision and sourcing of news content and web facilities. (Ap Dyfrig 2005: 7)

In order to make its audience diverse and attract new listeners, the BBC rebranded the station in 2002.¹¹⁰ The previous schedule was about to alienate a huge section of the Welsh language audience. As a result, the number of daily broadcast hours has extended to 18 hours a day. Furthermore, a new youth brand -C2- has been developed to broadcast for 5 hours instead of the previous 2 hours of programming. Moreover, there are two other significant developments, which have characterized 2003/04: in August, *Radio Cymru* became available on the 'freeview' digital service and in January 2004, the service became available online on the BBC's on-demand Radio Player service.¹¹¹

¹⁰⁹ The access to the radio Website is via www.radioamgen.com.

¹¹⁰ Figures in 2003 revealed that 70% of its listeners were over 55.

¹¹¹ It is available in BBC (2007a). They are also available through satellite and cable television. Figures indicate that 63% of UK households can receive digital transmissions.

These developments have enabled people to listen to their favorite shows anytime for about one week after their broadcast. In addition, it seems that the developments have been very popular among the Welsh speaking diaspora who have expressed their approval and thankfulness through emails. The new combination of the different media of BBC has also been a tremendous step for Welsh language learners, particularly through the provision of learning aids. The most recent development resulting from the continual media combination has been the development of BBC Vocab—a special¹¹²

tool on the BBC website that allows users to have on screen assistance with their Welsh vocabulary. All the user needs to do is scroll the mouse over the highlighted words and the definition will appear. This function can be switched on or off. The hope is that this tool can be offered as open source software for use in other websites and other languages. It has already been developed for Somali users on the BBC Wales site (English language). (Ap Dyfrig 2005: 8)

The fact that *Radio Cymru* will not have a frequency on the new DAB Radio outside Cardiff, Newport, and Swansea has been viewed as a worrying development in Wales—something which indicates that listeners will not be able to listen to *Radio Cymru* on their digital radios in these cities. Recently, it has become available through digital television as well as the Web. The rapid growth of Webradio and technology implies that radio is still a pervading tool. The major advantages of this affordable broadcast medium are its major assets with regard to minority audiences: its production and broadcast costs as well as its accessibility.

8.6.3. Situation of other Webradios

RTE Raidió na Gaeltachta is the Irish Webradio, which

broadcasts 24 hours a day,¹¹³ seven days a week and is available on the world wide web. Its range of programmes is wider than ever – news and current affairs programmes, magazine programmes, music programmes covering various genres, sport, debates and entertainment. Anocht FM has developed a contemporary a

¹¹² This is available in BBC (2007b).

¹¹³ RTÉ (2007a) is the source at which *Raidió na Gaeltachta* can be accessed.

contemporary element to Raidió na Gaeltachta with programmes aimed at young people. (Foras na Gaeilge 2007: n.p.)

However, the Scottish Webradio is called *Radio nan Gaidheal*.¹¹⁴ Since

1985 onwards, the BBC Gaelic radio service, Radio nan Gaidheal, has steadily increased the amount of hours broadcast and broadened its geographical range. Programming now exceeds 65 hours per week and is accessible not only to the great majority of Scotland's Gaelic-speaking population but also to the great majority of the Scottish population as a whole (although the service is still unavailable in some parts of the country). Radio nan Gaidheal is also available worldwide via the Internet. (McLeod 2006:10)

According to Dunbar (2006), *Radio nan Gaidheal* not only reaches a huge audience within the Gaelic community, but also plays a crucial role in relation to the publicizing and discussion of Gaelic affairs. In addition, there is a Manx Webradio, which is known as *Manxradio*.¹¹⁵ With regard to Manx Gaelic,

the government-funded Gaelic Broadcasting Commission (Bing. Ymskeaylley Gaelgagh) advises on the making of Manx Gaelic radio programmes. There is one weekly 30-minute programme in Manx Gaelic and English on Manx Radio which is a partly state-run channel. Every Sunday there is a two-hour programme which gives information on the Manx language and customs on Manx radio. (COE 2007: n.p.)

Turning to Cornish, there is no entire Webradio. Yet, there is a 5-minute weekly news program in Cornish every Sunday on BBC Radio Cornwall,¹¹⁶ according to COE (2007). The description of Webradios mentioned above reveal that the devices contribute to minority language revitalization, though this is being done to varying degrees. One would expect more language revitalization with Irish and Scottish radios than with Manx and Cornish. This could be due to factors such as the period of broadcasting, the content of programs, as well as accessibility.

¹¹⁴ BBC (2007c) provides access to the Scottish Gaelic Webradio.

¹¹⁵ Listening to the radio in the Manx language is enabled via Manx Radio (2006).

¹¹⁶ BBC (2007d) is the Website of BBC Cornwall.

8.7. New media

The following quotation serves as an introduction to Elis's so-called vision of the future of Welsh media back in 1957:

The following morning, after breakfast, I happened to ask Mistress Llywarch for the newspaper.

'Well, let's see,' she said. 'It's nearly ten o'clock now. Alfan received *Y Negesydd* this morning before going out, but it's time for the *Cardiff Herald* now if you'd like that.'

'Why, d'you have a paper delivery on the hour?' I asked.

'Oh no, it's much simpler than that.'

Mistress Llywarch walked to the wall by the window, turned a knob, and inserted a coin in a slot. I'd already noticed that there was a type of screen, similar to a cinema screen but not so large, and I'd presumed that it was a sort of television. But I hadn't seen it working yet. Mistress Llywarch placed three or four sheets of paper on the screen.

'You'll see now how we get our newspapers,' she said.

There came a low hum from the screen, and one by one, the sheets of paper dropped into a kind of tray in front. Mistress Llywarch picked them up and placed them in my hand. I stared at them. In my hand I held three or four sheets of a newspaper, with print and pictures – similar in all respects to a newspaper, but printed on one side only.

'A newspaper through the radio?' I asked.

'Exactly. That's how we get our papers these days.' (1957: 80)

Davies (2005) argues that the given description is part of an idealized Wales of a futuristic time expressed in Islwyn Ffowc Elis' novel *Wythnos yng Nghymru Fydd* (A Week in Future Wales). The quotation reflects the novelist's belief that an electronic technology will facilitate the broadcasting of newspapers to a screen at home. Despite the fact that sending text electronically was revolutionary in itself, Elis's idea of how the paper would develop is modelled on the familiar pattern of media broadcasts such as radio and television.

8.7.1. The Welsh online service: *Cymru'r Byd*

The Welsh service, Davies (2005) points out, was developed simultaneously with the BBC's corresponding service in English for Wales. The service was launched as part of the corporation's public service. This development may be regarded as a step, which somehow shows that the provision of Welsh media has been normalized. The status has been achieved and facilitated by the political climate after the devolution referendum in 1997 and its release of further resources to BBC Wales. The development of *Cymru'r Byd* was the outcome of a long period of reflection and consultation within the BBC in Wales and its different headquarters in the United Kingdom. Commenting on the service's title, Davies says that it

was chosen following a competition among Radio Cymru listeners. The 'Cymru'r Byd' title was chosen because it was understood to contain a possible reference to O. M. Edwards' pioneering magazine, *Cymru*, first published a century or so earlier; together with the words 'y Byd,' meaning, 'The World,' which were felt to emphasize that this service was available everywhere, not just within the reach of Wales' television and radio transmitters. (2005: 13-14)



Illustration 8-3. *Cymru'r Byd*¹¹⁷

The service offers a wide range of activities and interests. Indeed, it encompasses some Websites such as the *Pobol y Cwm* (People of The Valley) site and the output of BBC Wales' online education department, a stream of the *Newyddion* (News) program, as well as a live continuous broadcast of *Radio Cymru*—something which I have referred to in the broadcasting section. When the service was launched, it was portrayed as 'the first daily newspaper in Welsh.' This metaphor, which captures the imagination of the public, reflects the cultural dimension of *Cymru'r Byd*. The difference between a daily newspaper and *Cymru'r Byd* has been summarized by this:

¹¹⁷ This has been taken from BBC (2007e).

Cymru'r Byd was never one daily edition; rather, it is continually updated, with at least 15 news stories published per day, as the news breaks, and some of them being updated several times a day. By mid-2004, at least 15,000 news stories had appeared, not counting news-in-brief items – all available in a searchable archive, and generating millions of page requests. That represents a great deal of reading taking place in Welsh, which must be considered a positive contribution to the language's future prospects. (Davies 2005: 16)

8.7.2. The 'Llais Llên' online magazine

Since the *Cymru'r Byd* service was launched, there have been several important developments. Indeed, several resources were received and an executive producer post was made available in 2001 to control the service along with four more posts on local services. The development of *Llais Llên* has been regarded as a major event, which has recently emerged in Welsh media.



Illustration 8-4. The online magazine 'Llais Llên'¹¹⁸

Llais Llên, which is translated into (Voice of Literature) in English, is an online magazine, which weekly reviews at least two Welsh-language books. Nowadays, the e-magazine has gathered many hundreds of quality reviews, which are to be found in a searchable archive along with author interviews. According to Davies (2005), the site has become part and parcel of the Welsh literary scene. In addition, it includes a wide range of quotations cited from the reviews of *Cymru'r Byd* and appearing on dust jackets and book blurbs.¹¹⁹ The above elucidation clearly shows the extent to

¹¹⁸ This has been taken from BBC (2007f).

¹¹⁹ The electronic magazine can be accessed at: www.bbc.co.uk/cymru/adloniant/llyfrau/

which the new forms of media technology facilitate the preservation and dissemination of Welsh language and culture through their comprehensive programs.

8.7.3. Interview with Grahame Davies

With regard to the motivation behind the development of new media, Davies points out that any discussion of the situation of Welsh has to be started by bilingual speakers, especially when the education system prioritizes English.¹²⁰ In Wales, there is no monolingual market and no simple technology in Welsh. In addition, he says that any decision to provide or use the technologies needs to be motivated by language choice and not by necessity. The motivations he mentions are these:

- (a) Political motivation for the preservation of the language as well as a conscious choice to promote the language.
- (b) Need for communication because it is people's first language. Moreover, there is a desirability to speak in the language in which the person feels more comfortable and there is a strong drive to have services in Welsh.

From the 1960's, there has been a conscious desire to provide the language for political reasons. The very success of this has been the normalization of the language. It is to be noted that the provision of media is detached from the political motivation. In other words, the tendency has been to rely less on political efforts. With regard to the reception of new media products, he further argues that the provision of Websites is indeed widespread. But their use is less in a population that includes only 21% of Welsh speakers. Most organizations are offering services in English. The aim has been, since a lot of media have been carried out in Welsh,

to encourage them to make the choice to use the media (the people who are using them are political). The choice is political. The use is however restricted to the minority language who are actively motivated as well as politicized by the use of the language. The challenge remains then to bridge the gap between the committed majority as well as the uncommitted majority—something which stands as a fundamental dilemma of the Welsh language.

¹²⁰ This is a personal communication (2006) conducted at *BBC Cymru* (Wales).

Through this quotation, Davies articulates his point of view while analyzing the context of the development of Welsh language media:

30 years ago, things were not provided; less Welsh language TV, radio (no Welsh language media at all). Little bilingual provision in education. The Welsh language movement had been to pressurize public bodies to provide material in Welsh across. There are some providers who are still reluctant. No lack of provision but lack of consumption. This is a dilemma actually. The best solution is the provision of a differentiated context. Welsh has to provide something you can not get in English. If you provide services answer the common needs, you may have sustainable media models.

Furthermore, Davies asserts that the priority is considered an internal concern. It is not due to the lack of media provision in Welsh. The point he makes is how best one can attract users to consume the cultural products, which are, for example, in the form of reviews and coverage of communities. This is something, which marks the uniqueness of the Welsh language as well as its media. According to him, there are many people who acquire the language and they do not find a partner to speak the language to. Consequently, through new media programs, one can attract these interested people to consume and listen to Welsh programs. Davies also highlights the role of technology by saying that the most crucial factor of technology is its cheapness. The technology *“offers greater opportunities for broadcasting: Internet, radio broadcasting... The major factor is the cheapness of digital technology. They reduce the costs drastically. Thus, they open new opportunities. It is a time of challenge.”* The last idea he emphasizes is the chronology in the use of the tools: radio, television, local monthly newspapers, and the Web.

8.7.4. Other e-newspapers and e-magazines in the UK

The other online newspapers and magazines can be found in the appendix's second section. A close scrutiny of the collection shows that the Irish language community is ahead of all the other minority language communities concerning the availability of both e-newspapers and e-magazines.

8.8. Online lessons

In this section, I provide an overview of the development of online lessons and then clearly emphasize their significant role in the process of Welsh language revitalization through recourse to illustrative examples.

8.8.1. Overview

Since the 1950's, interest in learning Welsh has risen considerably. Nevertheless, in 1964, the first version of *Cymraeg Byw* (Living Welsh) was developed and came to be regarded as an important point of transition (Davies 1980, 1999). *Cymraeg Byw* is an attempt

to define the main features of standard spoken Welsh i.e. the form of the language which lies somewhere between conservative literary Welsh on the one hand and the local regional dialects on the other... Whilst many distinguished scholars earlier in the twentieth century advocated attempting to close the gap between literary and spoken Welsh, some were sceptical of what they perceived as a synthetic language. Nevertheless, it was adopted widely by writers of course books and used for learners' programmes on the radio and television. (Newcombe and Newcombe 2001: 332-333)

Upon her return to Wales from the United States in the 1960's, Kinney (1992) realized that there had been diverse attitudes to Welsh learners since her brief period of residence in the 1940's. As a consequence, she earnestly started learning the language and her fluency can be attributed to the use of *Cymraeg Byw* in immersion settings—something which resulted in a career in broadcasting, lecturing, and adjudicating through Welsh.¹²¹

8.8.2. Mark Nodine's online lessons

Mark Nodine (2003a), the producer of the famous Welsh language online course, argues that the development of Welsh lessons is an indirect descendent of the *Cymraeg Byw* movement of the 1960's and 1970's. According to him, the course is appropriate for beginners, as the illustration below shows.

¹²¹ This is available in Newcombe and Newcombe (2001).

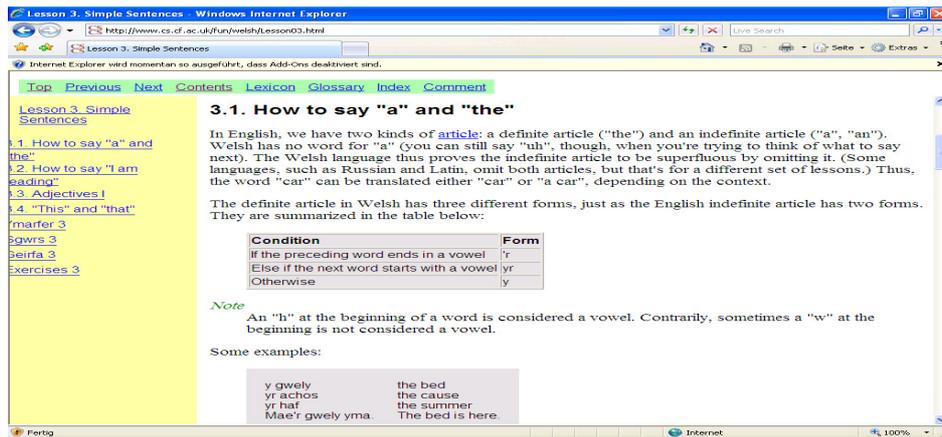


Illustration 8-5. An online Welsh language lesson¹²²

What the lessons stress, however, is the development of conversational skills in the currently spoken Welsh language. This is made to contrast with teaching the forms needed for understanding literary Welsh. The material, which pertains to *Cymraeg Byw* movement of the 1960's and 1970's, as I have pointed out, does not assume neither an adequate mastery of learning languages nor any previous knowledge background in Welsh. Furthermore, the course is developed in such a way that it can be distributed in different forms, such as through an ASCII medium, or in HTML, or on the World Wide Web.

8.8.3. Other online lessons

Some other online lessons in the different minority languages have been listed in the third section of the appendix. The availability of online lessons for all minority languages in the UK gives a clear idea about the fact that these minority language communities are deeply aware of the significance of using technology to promote their lesser-used languages and provide learning materials.

8.9. CD-ROMs

In this section, I am going to describe the *Teach Me! Welsh* CD-ROM and then illustrate some of its multiple facets.

¹²² This illustration is taken from Nodine (2003b).

8.9.1. Example: Teach Me! Welsh

Harry Campbell argues that the *Teach Me! Welsh* CD-ROM is a ‘complete software package,’ with an audio CD and a book of simple stories. With regard to its content, it includes

40 levels of grammar exercises; 28 levels of vocab exercises; grammar explanation for each lesson; more than 20 Welsh stories in 8 levels; voice recognition feature compares your pronunciation with the voice on the CD. Welsh Dictionary can be called from within each lesson; AutoLearn feature moves you from the basics up through the levels automatically. (2004: n.p.)

Some of the aspects of the CD-ROM technology are highlighted through the following illustrations, according to Linguashop (2004a):



Illustration 8-6. Main screenfigure

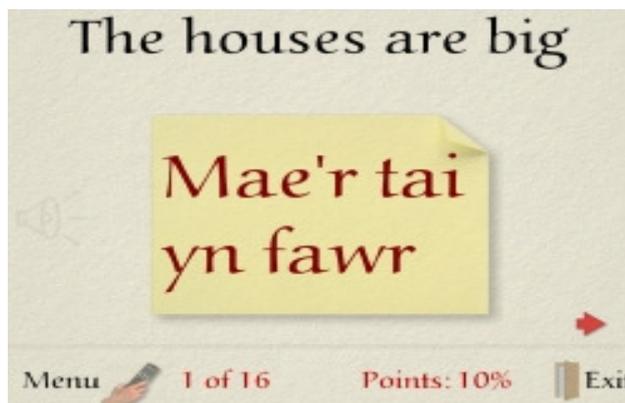


Illustration 8-7. Funny ways to learn Welsh

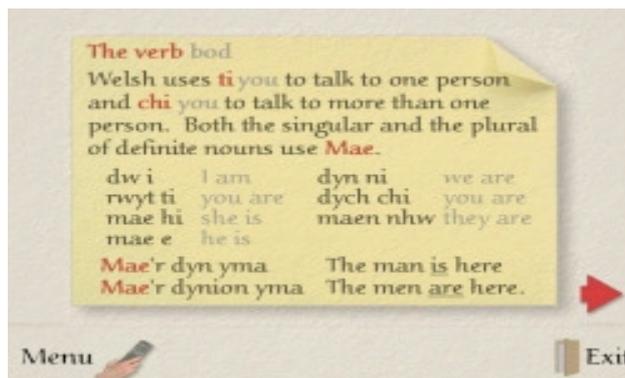


Illustration 8-8. Welsh grammar in a plain way

The description of *Teach Me! Welsh* CD-ROM shows that the technology encompasses a variety of elements, which not only shows how significant CD-ROM technology is for language learning, but also reflects a cool ideology in its display of images, which can be considered vital to increase the attractiveness of using Welsh among its speakers. Additionally, the translations of Welsh into English play a big role in highlighting the grammatical rules and vocabulary of the Welsh language, as the illustrations 8-6, 8-7, and 8-8 above show, and thus contributing to the assimilation of the structures of Welsh.

8.9.2. Other CD-ROMs in Welsh and the other minority languages

The other Welsh CD-ROMs as well as the CD-ROMs of the remaining minority languages have been listed in the appendix in its fourth section. The abundance of CD-ROMs for all minority language communities in the UK, except for Ulster Scots, can be taken as an argument to account for the crucial role of electronic media in promoting minority languages and displaying them in a new fashion.

8.10. Welsh language DVDs

In this section, I am going to analyze some Welsh DVDs and point to the ways they contribute to Welsh language modernization. I begin with the *Ding Dong* DVD and then turn to reveal the major characteristics of *Talk in Welsh* DVD.

8.10.1. Ding Dong

Concerning the *Ding Dong* DVD, it is a series of short programs, which aims at young children from non-Welsh speaking backgrounds on S4C digital, is often broadcast on 12.00 Friday afternoons. The DVD is considered appropriate for children who watch at home with parents who are engaged in learning the Welsh language. It can also be used by those who watch in playgroups or at school with their teachers. The major objective of the DVD is to display relevant chunks of language within everyday contexts, according to Acen (2006a). The story plot of the first series revolves around the characters of Beti and Bobi who

have just come into the house and are taking off their coats. as they hang up their coats they explain which is Bobi's [côt Bobi] and which is Beti's [côt Beti]. The doorbell chimes. Beti asks who's there [Pwy sy 'na?]. The milkman [dyn y llaeth] is there to deliver milk. They sing the milkman's song. The milkman leaves. Bobi goes to the coat hangers and picks up his hat, explaining that it is Bobi's hat [het Bobi]. Beti points to her head scarf which she calls Beti's hat [het Beti]. The doorbell chimes again. The postman [dyn y post] is there to deliver a letter. They sing the postman's song. He leaves and Bobi goes out. Beti reads her letter - it's from anti Carol. The doorbell chimes again. It's Bobi who's been locked out and is standing there shivering. (Acen 2006b: n.p.)

The table 8-1 below shows some of the keywords explored in the first series of the *Ding Dong* DVD. The purpose of this technique is to facilitate Welsh language learning and help children assimilate the structures of the target language. Indeed, Welsh is presented under some patterns of language chunks—a strategy which aims at the gradual integration of some linguistic items in the sense that they can be easily grasped by Welsh learners.

Pwy sy 'na?	Who's there?
Pwy sy 'na nawr?	Who's there now?
Da iawn	Very good
Diolch	Thank you
dyn y llaeth	The milkman
dyn y post	The postman
côt Beti	Beti's coat

Table 8-1. Keywords

8.10.2. Talk About Welsh

The DVD ‘Talk about Welsh’ is a popular series patterned in the style of a soap opera. The series introduces language patterns and vocabulary within work and community contexts. Gareth Roberts, the presenter of the story, is explaining new language matters throughout the whole series, according to Acen (2006c). *Talk About Welsh* is more than a language series. It is a drama and entertainment.

Even complete beginners will be able to follow the antics of Malcolm, Ann Jaci, Mici and their families and work colleagues. As in any good drama serial, the ups and downs of life are all present - the good and bad relationships, love, hate, acts of kindness and crime. The language throughout the programmes is fairly general but will be especially useful to those learning Welsh for work. (Siop DJ 2000: n.p.)

8.10.3. Interview with Sara Stevensons

As far as online lessons, CD-ROMs, and DVDs are concerned, Stevensons points out that the major motivation has been to get people interested in the language “*to make it exciting to learners of the Welsh language. The Welsh language is building up again. A lot of companies develop some Welsh stuff/resources by providing resources to stimulate the development of Welsh language resources.*”¹²³ With regard to the obstacles that have been encountered, she further mentions that processing the tools is indeed time-consuming. To make them available, there is a strong need for technical expertise in the field. Concerning attitudes, however, she explains that many users of the technological tools are very grateful since they are not aimed at fluent Welsh speakers. But, in general, the products seem to be appreciated.

8.10.4. The situation elsewhere

A DVD instance of the other minority languages is the Irish DVD called *Turas Teanga*, according to RTÉ (2007b). The DVD, which is produced and broadcast by RTÉ, is written by Éamonn Ó Dónaill who is the author of ‘Now You Are Talking.’ According to Oideas Gael (2007: n.p.), the course “*is*

¹²³ This personal communication (2006) was done at the Acen Center in Cardiff.

aimed primarily at those who have studied Irish and understand a great deal of the language but have few opportunities to speak it. Aims to give learners the confidence to speak the language and to help them understand speakers of the various dialects.”

The different descriptions of the *Ding Dong* and *Talk in Welsh* DVDs show that the multimedia products are another way of language promotion. In addition, they are modern instruments of Welsh language teaching, especially in the absence of a Welsh language teacher. Another aspect the Welsh DVD technologies reflect is that they are appealing to children, luring them in such an easy way to assimilate and learn the structures of Welsh, as they are spoken naturally by native speakers.

8.11. Videoconferencing

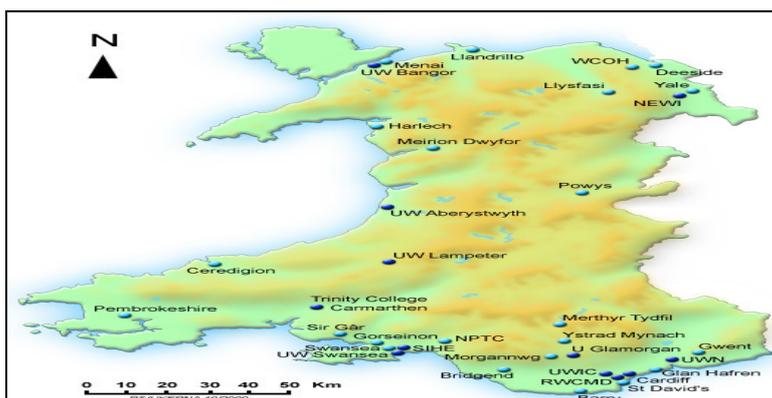
Recently, videoconferencing technology has been used by several global corporations for business meetings as well as by many educational institutions for lectures. Nonetheless, recent developments in telecommunications technologies

such as ISDN and compressed videoconferencing systems have lowered equipment and transmission cost, making two-way video feasible for small colleges, businesses, classrooms and libraries. Videoconferencing has been used by schools to enrich the classroom experience by connecting them to learning parks, museums, experts and even other schools worldwide through television monitors and video cameras. Videoconferencing is a means through which less commonly taught languages could also be presented in colleges and universities. (Tuncer Can 2006: 448)

8.11.1. The Welsh Video Network

According to the JNT Association (2007), the major role of the Welsh Video Network is to distribute and provide support to videoconferencing studios and other video facilities to all Further Education and Higher Education institutions throughout the country of Wales. The equipment can operate via the H.320 (ISDN) and H.323 (IP) network systems. As a matter of fact, the Welsh Video Network can be viewed as one of the sophisticated videoconferencing networks in the world. The project is

managed by the United Kingdom Education and Research Networking Association (UKERNA), who are under contract to Education and Learning Wales (ELWa) and the Higher Education Funding Council for Wales (HEFCW). It is one of the largest UK projects involving collaboration between the Higher and Further Education sectors. The project was part-financed by the European Regional Development Fund (ERDF) and was the first project to receive ERDF funding via the Objective 1 programme. (The JNT Association 2005: n.p.)



Map 8-1. The locations of videoconferencing facilities¹²⁴

In 2004, six new studios joined the Welsh Video Network. The Welsh Video Network, in collaboration with the famous *Cymdeithas Ysgolion Dros Addysg Gymraeg* (The Society of Schools for Welsh Medium Education), developed videoconferencing technology in six bilingual and Welsh Medium schools across Wales to provide them with a wider choice to sixth form pupils. The major target of the equipment will provide the schools with expertise and resources as well as develop skills in flexible teaching.

8.11.2. Case study ‘How the World Plays’

‘How the World Plays’ is a continuous project where children are treated as researchers of their families and communities, and connect through the videoconferencing technology to a partner research team from another place of the world.¹²⁵ During their videoconferences, they teach one

¹²⁴ This active map illustrates the approximate locations of the 23 Further Education Colleges and 12 Higher Education Institutions in the Welsh country.

¹²⁵ This has been taken from The JNT Association (2003).

another about their families, their traditions, as well as about themselves. The aim of the ongoing videoconferencing project has been mirrored by this:

It is our hope that the children will interview older family members and seasoned individuals in the community (which will also give the children a connection with the keepers of the story). We also hope that by connecting with children from other cultures they will begin to cross the barriers we adults have put so firmly into place and that the children involved in the project will see the similarities and not allow the differences that cause fear of the unknown to build barriers in their lives. We believe so strongly that 'Kid to Kid' they will find solutions to problems through understanding and stop responding to violence with violence. (The JNT Association 2003: n.p.)

Reflecting on the meaning of the concept of diversity as well as the specific use of technology, the designers of the project have argued that there is a danger

that we see diversity as referring to 'people who are different to us' without recognising that each individual has a cultural heritage. Each of us lives in a family and community that draws on what Moll and Greenberg refer to as a wealth of 'knowledge' and 'skills' to help us function. The collaboration also allows research into the impact of the Internet on the multicultural understanding of Key Stage 2 pupils. The use of Information and Communications Technology (ICT) has made education far more interactive and the pupils in this project had the opportunity to 'meet' pupils from another area of the world rather than base their research on written material alone. (The JNT Association 2003: n.p.)

The project has involved children from Year 6 at Ysgol Gymraeg Aberystwyth as well as a group of children from Avery School, Webster Groves, Missouri, USA. It is to be mentioned that the pupils discussed matters of diversity as well as common threads in their lives. Their preparation for the conference included a short video along with shots of their school, town, and houses. The Welsh children collected details about Aberystwyth and Wales as well as made a Microsoft PowerPoint presentation. Moreover, the children prepared a short biography about themselves, which included details about their families, pets, as well as interests. The videoconference

began with all the children introducing themselves. Then each group presented the information they had gathered about their neighbourhood. This was followed by each of the children presenting their own biography. Finally, there was a chance for the

children to ask each other general questions on topics ranging from Harry Potter to music and sports. The session concluded with an impromptu Welsh lesson, as the children from Aberystwyth taught their American counterparts some basic Welsh! (The JNT Association 2003: n.p.)

According to Schnieders et al. (2002), the 'How the World Plays' project provides an opportunity for pupils from Aberystwyth in Wales to get in touch with children from Webster Groves in Missouri through the appropriation of videoconferencing technology at local universities. This is a multicultural program designed to bring cohorts of children together from around the world—a program which has paved the path for building highly solid bridges and developing a strong feeling of connectedness between the Welsh and American communities. In addition, it shows that new technology deployment can maintain linguistic diversity—a dominant concept which has characterized the speech of Matsuura, in which he proclaimed that 2008 is the Year of Languages, according to UNESCO (2008), as I will further expand on in section 11.

8.11.3. Interview with Frank R. Hartles

Commenting on the use of videoconferencing, Hartles mentions that Swansea, Aberystwyth, and Cardiff have relied heavily on the modern tool of communication.¹²⁶ They are also deeply involved in the setting up of videoconferencing activities and the use of new technology in the medicine area. The driving force he expresses is encapsulated in this:

With regard to Wales, it is time-saving and travelling to remote location. Not easy to travel from one place to another in Wales. No motorways. Instead of travelling for 3 hours for a one-hour meeting. It is far simpler to use this facility in Cardiff. That is the main driving force. It makes it easier to have specialists in the fields (interview by videoconference...). Some people think it is very good and use it over and over again. Other people prefer face-to-face meeting. Given the constraints of time and travel, people will opt for videoconferencing.

With regard to some linguistic dimensions, Hartles claims that Cardiff University uses videoconferencing for teaching the medium of Welsh (not only Welsh but also other languages).

¹²⁶ This interview was conducted in the Summer of 2006 with Frank R. Hartles.

Schools in the UK and Wales regularly link with one another or with schools abroad. They may also experience some use of Welsh.

According to him, the major obstacles are that the equipment is expensive. It is not set against the costs of travelling and it needs somebody to facilitate the conference. It is also difficult to find appropriate versions for people. The logistics becomes then more difficult than it should be. With regard to the frequency and uses of videoconferencing, Hartles says that there

are 3-8 conferences per week, sometimes more than 8. The Cathays is busy.¹²⁷ Now it is quiet. Yet, it does booking for the Cathays. It is used for teaching and interviewing staff. It is also for graduate and postgraduate studies. Not only dental or medical. There are some uses for administrative managements and board meetings. People can also attend these conferences. 6 universities can be connected at once. It is also possible to stream a videoconference over the Web.¹²⁸

8.12. Language software

Before focusing on the situation of Welsh, I am going to highlight the need for language software for minority languages. Then, I turn to reveal some insights into the different forms of Welsh language software. In a workshop on NLP of Minority Languages and Small Languages entitled 'HIZKING21: Integrating language engineering resources tools into systems with linguistic capabilities,' the designers of the project have pointed out that¹²⁹

[a] language that seeks to survive in the modern information society requires language technology products.¹³⁰ Human Language Technologies are making an essential contribution to the success of the information society, but most of the working applications are available only in English. Minority languages have to make a great effort to face this challenge. (Diaz de Ilarraza et al. 2003: 2)

¹²⁷ The Cathays is the location of the videoconferencing facilities of Cardiff University.

¹²⁸ I have not found other instances of videoconferencing in the UK with regard to Cornish, Manx, Scottish Gaelic, Ulster-Scots, and Irish.

¹²⁹ These are A. Diaz de Ilarraza, A. Gurrutxaga, I. Hernaez, N. Lopez de Gereñu, and K. Sarasola.

¹³⁰ This idea has been further explored in Petek (2000) and Williams et al. (2001).

The lesser-resourced languages of the world are confronted with considerable pressure from the major languages (particularly English), and many of them do not have full political recognition. Some minority languages have been well documented linguistically, but a lot of them have not. Nevertheless, the huge bulk of these languages do not possess basic speech and language resources (such as text and speech corpora, lexicons, etc.,...) which would facilitate their developments. If the situation were to keep the status-quo, the minority languages would lag behind the major languages as far as speech and language materials are concerned. This in turn will accelerate the decline of the languages that are already struggling to survive. To find concrete remedies to the present situation of minority languages, it is important to encourage the development of basic language resources as a first step (SALTMIL 2004).

8.12.1. Welsh language technology

According to WLB (2006: 15), many surveys have revealed that a significant percentage of Welsh speakers believe their confidence levels in their Welsh language skills is lower than their skills in English. Therefore, one of the initial priorities of the Welsh Language Board in the domain of Information Technology was the facilitation of Welsh language software. The major emphasis was placed on spellcheckers and grammar checkers to increase the level of confidence of users. In addition, dictionaries would allow them to find fast and simple translations of words.

Several spelling and grammar checkers as well as computerized dictionaries have been commissioned by the Welsh Language Board. *Cysill*, which was commissioned from the University of Wales, Bangor, was revolutionary in the sense that it made some corrections with regard to Welsh's initial consonant mutations. Later, the Board funded *Cysgair*, a computerized dictionary which interacted with Word processing applications. These tools were updated in 2004 and included on a single CD of Welsh language computer resources under the name *Cysgliad* (Canolfan Bedwyr 2007a). The package is updatable via the Internet, according to WLB (2006). Among the other spellcheckers in Welsh, I can mention these:

- A free Welsh language spellchecker for Microsoft Office XP¹³¹
- A free Welsh language spellchecker for OpenOffice¹³²
- A free Welsh language spellchecker for Microsoft Office 2003 as part and parcel of the free

¹³¹ Microsoft Corporation (2007a) describes the free Welsh Spellchecker.

¹³² This is available in Canolfan Bedwyr (2004).

Language Interface Pack for Microsoft Office 2003¹³³

The absence of the ‘ŵ’ and ‘ŷ’ from the standard character set was another instance of Welsh language software, which brought about some significant difficulty for computer users in the past, according to WLB (2006: 16). At first, specialist Welsh language fonts were developed to cope with the issue. In addition, the fonts were similar to the system fonts integrated as standard on PCs, though they comprised the circumflex on ‘w’ and ‘y.’ Set for a period of time, the characters have been incorporated in the form of a standard in the Unicode (UTF-8) character. Thus, rendering the need for the purchase or download of specialist fonts for PC users unnecessary.

It should be remembered that the way individual end users should access the diacritics in a standardized form has not been made clear. Now, solutions to the standard diacritic keystroke problem have been provided for PC users. These are in the following ways:

- Microsoft Windows XP Service Pack Two (XPSP2) includes a *locale* for Welsh,¹³⁴ which involves date format support and a UK Extended Keyboard, offering standard keystrokes for all the accent marks used in Welsh as well as in the other Celtic languages.
- Draig Technology Ltd, the famous Wales leading house, has developed a free utility called To Bach (the Welsh for ‘circumflex’),¹³⁵ which allows standard keystrokes for diacritics to be used in the Welsh language.
- Since 1999, support for ŵ and ŷ has been integrated in the Linux Kernel. Besides, the main Linux, KDE, and GNOME desktops are totally compatible with UTF-8. What this indicates is that the Welsh language is completely endorsed in the systems of KDE and GNOME along with interface language, character map, keyboard, and fonts.

8.12.2. Translation

WLB (2006: 17) highlights the fact that Computer Aided Translation (CAT) is the largest expression resorted to to describe a domain of computer technology applications that assists the process of translating text from one language to another. The different applications play a big role in the amelioration of translation productivity whereby they facilitate quick translation of repetitive source

¹³³ This has been taken from Microsoft Corporation (2007b).

¹³⁴ Microsoft Corporation (2007c) highlights some issues about Welsh language technology.

¹³⁵ Draig Technology Ltd (2006) provides some insights into its new technology.

texts. A detailed Welsh language guide pertaining to such software has been published by *Canolfan Bedwyr*, according to *Canolfan Bedwyr* (2007b). In addition, translation memory software, it is claimed, is

already used by a range of public institutions in Wales, amongst them, the Welsh Assembly Government and the Welsh Language Board itself. One of the main virtues of such technologies is that translators can share each other's translation work, regardless of geographic location, via central databases of translation memories served to individual PCs via corporate networks or even the internet. (WLB 2006: 17-18)

When discussing Welsh, translation, and IT issues, Machine Translation (MT) or automatic translation, which is reminiscent of Maori software technology, is a topic that is often mentioned. MT has benefitted from many years of research and some significant advances have been accomplished. However,

MT technology can not yet offer translation quality to match that of human translators. Nevertheless, usage of free on-line MT systems indicates that for certain types of text, MT can provide a useful and usable level of translation. Furthermore, in combination with controls on the language used for example in technical authoring, MT can provide an excellent quality of first-draft translation needing little revision, and offering great savings in translation costs. It can also provide gist translation from Welsh, enabling access to the international community, and enabling non-Welsh speaking staff to deal with written correspondence from Welsh speaking colleagues/members of the public. (WLB 2006: 20)

Professor Harold Somers of Manchester University and editor of the *International Journal of Machine Translation* conducted a study into Machine Translation, according to WLB (2004). In his investigation, he reveals that the state-of-the-art of Machine Translation and the needs of the Welsh-speaking community reflect the strong drive to invest in the development of MT.

8.12.3. Speech technology

What speech technology does is the development of a synthetic voice or recognition of a human voice by a given IT system.¹³⁶ Indeed, such technology has started to affect many segments of the lives of Welsh people. For examples, many call centers have improved their processes through speech synthesis and some mobile phones offer a speech technology to read e-mail messages aloud. Facilitating data access and speeding data entry are among the ways whereby speech technology can work as a useful tool to any given IT program. In addition, it has serious implications for the people who suffer from visual impairment.

The WISPR project has developed an initial SAPI compliant (Speech Application Programming Interface) speech synthesis engine for Welsh—something which will transform a free text-to-speech (TTS) facility. The use of speech synthesis engines can also be made to convert words from a computer document or interface into audible speech—an activity which would help people who wish to aurally verify what they are seeing in print form.

As defined by the WISPR Project team, speech recognition, or speech-to-text, includes the capture and digitization of sound waves stemming from a microphone. The technology involves the conversion of sounds into basic language units or phonemes as well as the contextual analysis of words in order to guarantee correct spelling for words. Therefore, the output is displayed on the screen as text. It is to be noted that such technicalities may not be grasped by the lay person. As many electronic networks provide voice recognition facilities as standard, the importance of the facility should be taken into consideration and this is likely to increase over time. It is not inconceivable

that we will order food, do our banking and a whole host of other services via speech recognition in the future. We should therefore also consider ‘natural user interfaces’, and ‘natural language commands’, i.e. rather than using a set of *specified* commands, one would speak naturally and the computer system would act appropriately. We should also have as a long-term target ‘speaker independence’, i.e. to use a strange computer and tell it what to do, without having had to train it previously in the peculiarities of one’s own voice and accent. (WLB 2006: 22)

‘Adaptive technology’ is a speech technology, which offers a lot of opportunities for visually and hearing impaired people. In Wales, there are 100,000 people with serious sight loss and 450,000

¹³⁶ The description of Speech Technology is taken from WLB (2006: 21-23).

people who are deaf or hard of hearing.¹³⁷ The Disability Discrimination Act 1995, which can be considered a matter of social inclusion, made it clear that Welsh adaptive technology is at the disposal of this group of people. Screen readers

are used to replace the visual display traditionally viewed on a monitor for those with visual disabilities. The speech engine described above produces synthesized voice output for text displayed on the computer screen, and/or for keystrokes entered on the keyboard. Talking web browsers use the same technology as screen reading software, but the reading functions are limited to Internet use. It is vitally important that such technologies exist in Welsh. (WLB 2006: 22-23)

In comparison to TTS, adaptive technology in Welsh has not reached a high developmental stage. It seems that the technology is important for people who have movement difficulties, people who suffer from RSI (Repetitive Strain Injury), as well as for people who are subject to circumstances, which would not enable them to use keyboards, mice, and other input devices.

8.12.4. Issues surrounding Welsh language software

The field of end user training and capacity building through Welsh in the field of IT requires some special attention and further insight. A wide range of training suites are available in both electronic and paper format. The European Computer Driving License, which is partly financed by the Board, is now considered one of the major Welsh language IT training resources, according to the University of Wales (2005). The Welsh Language Board explains:

As the world of IT moves so quickly, updates to this type of training will regularly be needed, and the Board is eager to cooperate with this, especially to encompass the many computer systems which now offer Welsh language interfaces. To this end, ELWa are carrying out a scoping study of the future avenues for Welsh medium IT training. (2006: 24)

Increasingly, Welsh has made profits in the domain of IT because of the benevolence of many special individuals and institutions. The Welsh Language Board has been eager to carry on with its methodical strategy to facilitate the usage of language technology. It is argued that sufficient

¹³⁷ Further pieces of information can be found in RNIB (2007) and RNID (2007).

linguistic and technological expertise is needed to improve the status of Welsh in the field. Furthermore, there is an increasing demand for bilingual or multilingual IT solutions. This means that highly developed skills, knowledge, and research would pave the way for export opportunities for Welsh companies. If this technological expertise takes place, many beneficial effects will then result. Indeed, many individuals with linguistic and IT skills will then be distinguished. Thus, the Welsh economy will be further developed by drawing economic benefits through its support for technology.

According to WLB (2006: 25), despite the fact that other organizations are responsible for Welsh learning and teaching provision, the Board is largely committed to the success of Welsh for Adults System as well as the provision of courses to better the written Welsh of fluent speakers (*Gloywi Iaith* classes). That is why the Board has collaborated with BBC Wales to facilitate the reading of Welsh language Webpages by learners. Stage one of the BBC Vocab project was first made available on the BBC Website. An increase in the Board's involvement with the project has been noticed with its second and third phases. This has encapsulated the Board's gradation of some vocabulary items on the BBC Online Welsh language news Website, which have been organized according to their frequency counts. What characterizes the system is its simple nature since it is ahead of other methods of vocabulary aid in so as it does not affect the flow of reading. The BBC Vocab facility has been included on the Board's suite of Websites. In addition, the Board will encourage all organizations and people dealing with Welsh language Websites to follow suit.

Nowadays, there are about 300 organizations, which have a Welsh language scheme. There are also many others, which provide Welsh language services through voluntary Welsh language schemes or without a scheme. According to the Board (2006: 26), enhancing services "*in many of these organisations, and others, is dependent on ensuring that their back end database systems, such as those which hold UK wide information on individuals in Wales, support the offering and implementation of language choice.*" Occasionally, it is often thought that some organizations can not afford without spending a lot of money or subjecting their systems to some risks. The world of IT develops

at breakneck speed. Only a few decades ago, most would not have believed that computing would have affected so many areas of our lives and that office work, and a large amount of personal correspondence would now be completely dominated by e-mail and the PC—not to mention the all-pervasive influence of the World Wide

Web. Just as the typing pool has become a thing of the past, even today's 'modern' technology will quickly evolve—successors are already being proposed to the Web itself. (WLB 2006: 29)

It is important to develop a clear-cut understanding about the direction that the developments will take. The Welsh language needs to be considered at the developmental stage so that bilingual services and communication can be easily promoted in the future. Yet, what will take place in the long term in the domain of IT is still unknown.

8.12.5. Interview with Ifor Gruffydd

In an interview about Welsh language technologies, Ifor Gruffydd argues that the major motivation behind the development of software tools has been to enable Welsh speakers to have the same opportunity on the same resources as English.¹³⁸ Then, he goes on to say that their reception is good because of the good standards they display. The following quotation further clarifies some aspects of Welsh language technologies:

Ireland and Scotland do not have the same resources as Welsh has. Thus, Welsh seems to be in a very fortunate position, compared to the other minority languages in Europe. This has been influenced by neo-liberalism. There has been some strong demand for it. Pressure from population has paved the path for government to introduce some new requirements.

8.12.6. Situation of software in the other minority languages

A collection of Websites of the available software in the other minority languages in the UK can be found in the fifth section of the appendix. What can be noticed, though, is that the collection of Websites shows that the provision of software of the other minority languages is not as much developed as that of Welsh. Hence, the uniqueness of the Welsh situation as far as software provision is concerned.

¹³⁸ This personal communication was conducted at Cardiff University in 2006.

This section has highlighted the different forms of technologies, which have been used by the Welsh community, revealing the position of Welsh in a larger framework. The investigation has been both comprehensive and comparative. The comprehensive side has involved a scrutiny of the Welsh technological tools and explored the contexts in which they thrived. But the comparative aspect has attempted to look at the media provisions of the other minority languages and contrasted them with that of Welsh. Yet, what remains to be explored is whether the tools are being used by the Welsh minority. This is something that I am going to investigate in the coming section where the data about the consumption of Welsh language media will be analyzed from my online questionnaire. For practical reasons, the different tools have been categorized under four rubrics, which are Internet technology, electronic technology, broadcasting media, and videoconferencing.

9. Data analysis

This section analyzes the data I have collected with regard to the Welsh language devices in light of my questionnaire, which is available at (Ben Slimane 2007). The first point I would like to mention is that I have received 75 responses, including 56 male and 19 female participants in the online questionnaire. Moreover, I would like to stress that the number of e-mails sent has reached 966. One can thus see how hard my investigation is if the number of answers received is taken into consideration. The percentage of this amounts up to 7,76%. In the coming parts, the levels of analysis will focus on information about the participants, the purposes of using the tools, the frequency of use, as well as some attitudes towards them.

9.1. Information about the participants

The investigation of the e-questionnaire yields several insights. Indeed, I have attempted to primarily target people from different areas of Wales as well as from different backgrounds. The following tables and diagrams will highlight the situation of Welsh participants as well as reveal some information about them. The situation of the different age groups of the participants has been captured on this table:

<u>Age groups</u>	<u>Number of participants</u>	<u>Percentage</u>
20- 30	14	18,67%
31- 40	24	32,00%
41- 50	19	25,33%
51- 60	18	24,00%

Table 9-1. Age groups of the participants

With regard to the locations of the participating people, the diagram 9-1 below shows that different areas of Wales have been identified:

Aberystwyth, Bangor, Caerphilly, Capel Madog, Cardiff, Llangefni, Lampeter, Pontardawe, Pontypridd, Swansea, Wrexham.

Diagram 9-1. Locations of the participants

Apart from the professions mentioned in the e-questionnaire such as media expert and teacher, I have attempted to visualize a wide range of other professions on the basis of responses received, which can be exemplified by diagram 9-2:

Author, Biochemist, Charity worker, Consultant psychiatrist, Department administrator, Graphic designer, Finance administrator, Manager, Language planner, Playwright, Service manager, Skills assessor, Student support officer, Terminologist, Translator, Urdd Eisteddfod organizer.

Diagram 9-2. Professions of the participants

9.2. Role of Welsh

To have a clear understanding of the tools, I have classified all the technological tools under four major rubrics. It is to be noted that Internet technology has been divided into three subcategories.

* **Broadcast media** (e.g, BBC Webradio Cymru, S4C digital television,..)
* **Electronic media** (CD-ROMs and DVDs)
* **Internet technology**
- Internet Websites (bilingual Websites, electronic newspapers and magazines, digital library, online lessons)
- Language software (spellcheckers, grammar checkers, online dictionaries)
- Speech software (e.g, computer aided translation, machine translation, speech synthesis,...)
* **Videoconferencing**

Diagram 9-3. The Welsh language technological devices

In this part, I have focused on the role of Welsh in the lives of Welsh participants to visualize if there is any use that is being made, the way it is conducted, as well as the different fields in which Welsh is used.

- a) Do you use any of these tools to get information on any local events, shopping...?
b) Do you use any of them for entertainment?
c) Do you use any of them to learn Welsh or improve your Welsh ?
d) Do you use any of them to practice Welsh ?
e) Is Welsh important for you for social reasons ?
f) Is Welsh important for you for professional reasons ?
g) Is Welsh important for you ?

Diagram 9-4. Questions about the role of Welsh

The underlying motivations are to understand if the participants are really interested in using their minority language as well as the appropriation of Welsh language media to fulfill particular purposes. The situation will be clarified in the diagram 9-4 above. The selection of the questions in the e-questionnaire is highly purposeful because of their direct contributions to develop a clear understanding about the role of Welsh in the lives of Welsh participants. Yet, my focus on the questions in table 9-2 below is specifically based on the immediacy of the figures and percentages attained as well as their relevance to discuss the actual use of the tools.

a) Do you use any of these tools to get information on any local events, shopping...?		
<u>Answer</u>	<u>Number of Answers</u>	<u>Percentage</u>
Yes	52	69.33%
No	22	29.33%
No opinion	1	1.33%
b) Do you use any of them for entertainment?		
<u>Answer</u>	<u>Number of Answers</u>	<u>Percentage</u>
Yes	47	62.67%
No	28	37.33%
No opinion	0	0.00%
c) Do you use any of them to learn Welsh or improve your Welsh?		
<u>Answer</u>	<u>Number of Answers</u>	<u>Percentage</u>
Yes	30	40.00%
No	44	58.67%
No opinion	1	1,33%
g) Is Welsh important for you?		
<u>Answer</u>	<u>Number of Answers</u>	<u>Percentage</u>
Yes	59	78.67%
No	14	18.67%
No opinion	2	2.67%

Table 9-2. Questions about the role of Welsh

For example, in questions (a), (b), and (g), there are high percentages, which are respectively 69,33%, 62,67, and 78,67 of ‘yes’ answers that reflect how significant Welsh is for the Welsh participants. Question (c), however, shows that the percentages are divided between 40% of ‘yes’ answers and 58,67% of ‘no’ answers. These statistics clearly reveal that the Welsh participants are

more interested in using the technological tools for specific purposes (entertainment, getting information on local events, etc.,...) than for educational reasons.

9.3. Frequency and tools

An investigation of the results of my online questionnaire has shown that the percentage of participating people using the tools, which is by the way very variable, can be taken as an argument to account for the deployment of the technological devices as strategies for language revitalization. In addition, it is an indicator that the tools are indeed being used.

* Parents		
The most used tool: Internet technology		
Frequency (in terms of hours per week)	Answer	Percentage
1	11	14.67%
The least used tool: Videoconferencing		
Frequency (in terms of hours per week)	Answer	Percentage
0	35	46.67%
* Media/technology expert		
The most used tool: Broadcast media		
Frequency (in terms of hours per week)	Answer	Percentage
2	9	12%
The least used tool: Videoconferencing		
Frequency (in terms of hours per week)	Answer	Percentage
0	33	44.00%
* Teachers		
The most used tool: Broadcast media		
Frequency (in terms of hours per week)	Answer	Percentage
2	5	6.67%
The least used tool: Electronic media		
Frequency (in terms of hours per week)	Answer	Percentage
0	19	25.33%
* The other participants who included another profession		
The most used tool: Broadcast media		
Frequency (in terms of hours per week)	Answer	Percentage
1	9	12.00%
The least used tool: Videoconferencing		
Frequency (in terms of hours per week)	Answer	Percentage
0	17	22.67%

Table 9-3. Questions about frequency and tools

The strategy I have followed here is to account for the most and least used tools in the frame of the major four rubrics by the different categories of respondents, as demonstrated in table 9-3 above. In terms of frequency, the most used tool is broadcast media by both categories of media/technology expert as well as teachers who use this technology for 2 hours per week. The percentages of their uses are respectively 12% and 6,67%. Then, they are followed by the category of the other participants who included another profession and who use broadcast media for only one hour per week. These participants have thus 12% of media use. With regard to Internet technology, parents are the most users of the device. They only use it for an hour per week—something which represents 14,67% of Internet use.

9.4. Attitudes

Before attempting to study the attitudes, which have been provided by the Welsh participants, I am going to mention some theoretical assumptions, which will be used to explore some of the issues that relate to the attitudes towards the Welsh technological tools. According to Hughes (2001: 210), the assumption

that cultural and social phenomena can only be fully understood if they are studied from the viewpoints of the participants. This means the researcher must try to view the social world as it exists for those under investigation through a process of what Znaniecki (1969) calls ‘imaginative reconstruction.’ To this end subjects of study are encouraged to talk and/or write freely about their thoughts, feelings, aspirations, and experiences.

In the context of my study, this theoretical standpoint can be used as an introductory insight to highlight the answers and comments, which have been provided with regard to the attitudinal part of my e-questionnaire. The second theoretical stance that Hughes (2001: 210) claims is that the notion

that within the range of distinctive elements which constitute the culture of a group there are definitive or core values... the maintenance of which is the sine qua non of the group’s survival as a separate cultural entity. Among these quintessential markers of identity, language is usually (but not always) the most manifest- it is certainly the most readily identifiable and is, in the most literal sense, the group’s public voice and

face to the world. For Welsh speakers, and increasingly for non- Welsh speakers, it is the Welsh language that has become the rallying point of cultural survival, the last ditch of authentic *Cymreictod* (Welshness).

In the fourth part of my e-questionnaire, I have formulated some questions to investigate the attitudes of the participants towards the aforementioned tools, as can be seen in diagram 9-5.

- | |
|--|
| a) Do these tools facilitate the use of Welsh in everyday life?
b) Do these tools provide learning materials?
c) Do these tools facilitate language learning?
d) Do you support the promotion of Welsh?
e) Do these tools provide didactic teaching aids?
f) What is your attitude towards these tools in general?
g) Are these tools? entertaining to use? interesting to use?
h) Are these tools able to contribute to the identity of the Welsh people?
i) Do you think these tools should be improved? |
|--|

Diagram 9-5. Attitudes towards the technological tools

A close look at the statistical data from the responses provided with regard to the attitudinal section expressed in table 9-4 below shows that the Welsh people have a good impression of the technological tools, as can be clearly seen with the high percentages 74,67% and 80% achieved in responses to questions (a) and (b) of the online questionnaire.

a) Do these tools facilitate the use of Welsh in everyday life?		
<u>Answer</u>	<u>Number of Answers</u>	<u>Percentage</u>
Yes	56	74.67%
No	8	10.67%
No opinion	11	14.67%
b) Do these tools provide learning materials?		
<u>Answer</u>	<u>Number of Answers</u>	<u>Percentage</u>
Yes	60	80.00%
No	7	9.33%
No opinion	8	10.67%

Table 9-4. Questions about the attitudes of the Welsh people

My choice of analyzing the questions on table 9-4 not only shows the clear results of the responses received, but also aims at confirming some theoretical aspects of my hypotheses, which

center around the roles of technology deployments. This can be interpreted in terms of the practical as well as the economic dimensions, which have been brought to the Welsh community. The contributions will be further elucidated in section 10.

9.5. Further comments and suggestions

In this part, I am going to analyze some of the comments and suggestions, which have been provided. I attempt to clarify this by referring to what the participants have suggested with regard to the nature of the technological tools as well as the ways they have opted for to improve them. Some respondents have argued that it is good to have the capability to keep the language alive. They have mentioned that the best current tools are the spellcheckers and dictionary in the *Cysgair* package. In addition, they have said that there are some good resources for schools and pupils on the *BBC Cymru* site.

Another participant has mentioned that the “*availability of things like Welsh language radio, BBC online news in Welsh and the BBC Website Vocab tool are very useful to me as a second language Welsh speaker. It helps me learn and develop my use of Welsh.*” Other views have revealed that Welsh language Websites are more than being educational. They provide a way to globally extend Welsh identity and solidarity as well as promote the Welsh language and Welshness such as the digital library. The ‘imaginative reconstruction’ in Hughes’s first stance can be concretized by the diverse attitudes formulated by the participants where they have expressed their opinions about the technological tools. One aspect of the second stance of Hughes is that it is an attempt to point out that the Welsh language stands at the center of Welsh identity—something which the section on ‘comments and suggestions’ truly confirms.

Many participants have pointed out that they also need ways of promoting the tools, so that more people can find out how good they are. This, in turn, will help improve the quality of future tools. Additionally, some participants argued that most Welsh speakers are unaware of the existence of the resources that are already available. Arguing about the situation outside Wales and Britain, another Welsh respondent has pointed out that “*you are in need of using Internet tools since in the European Continent you hardly find helpful devices for practising or even learning Welsh... Therefore, I regard Internet language tools very important, especially for future generations because they are very helpful.*”

This section has revealed the practical side of my thesis because it has embarked on an analysis of the data with regard to the responses provided by the Welsh participants in the online questionnaire. The investigation has also led to many implications, which are of great importance to confirm some aspects of my hypotheses. The complete confirmation of hypotheses will be carried out in the next section. It is to be mentioned that the variety of insights attained has provided empirical and concrete evidence about the actual use of the Welsh language tools and pointed out that the devices can be further improved despite the fact that they have already reached a high level of sophistication.

10. Evaluation

Before embarking on an evaluation of the tools, I cite this quotation by Grahame Davies where he points out that the

digital communications revolution and the explosion in the use of what is known as ‘new media’ have created a sense of fundamental and unprecedented change in the way in which human beings communicate. However, it might be worth considering the paradox that revolutions in of themselves are not new things, even in the world of communications. All media were new at one time, and the pioneering work, innovation, disturbance and excitement were the same each time a new communication method emerged. With that perspective in mind, we can find a pattern of continuity even in this time of rapid change. (2005: 1)

To assess the success of the technological devices, I make use of some models that have been displayed in 1.3. The models can be taken as orientation tools to have a richer understanding of the situation of the Welsh language, as promoted through the different forms of technologies, and visualize the implications they have led to. The models have been proposed by three famous linguists, namely Fishman, Giles, and Tsunoda. In terms of the first model, I assess the achievements of the Welsh language devices. Giles’s concept of ‘ethno-linguistic vitality’ articulates the main socio-structural features defining a group’s position relative to others in society vis-a-vis three principal components. Largely derived from factors found indicative of language maintenance, these are: status (e.g., economic, historical), demography (e.g., numbers, birth rates), and institutional support (e.g., representation of the group and its language in the media and education). In his book *Language, Ethnicity and Intergroup Relations*, Giles says this:

It is suggested that a linguistic minority is vital to the extent that its language and group members are well-represented formally and informally in a variety of institutional settings. These domains of usage include the mass media, parliament, governmental departments and services, the armed forces, and the State supported arts. (1977: 316)

In Giles’s model, the measure of mass media is part and parcel of the institutional support variables, pointing to the extent to which Welsh language groups receive representation in this activity. Giles argues that high vitality groups are likely to maintain their language and distinctive

cultural traits in multilingual settings (Giles and Viladot 1994). Furthermore, one can notice that the appropriation of mass media has contributed to the normalization of the status of Welsh, as has been shown in sections 8.7.1 and 8.7.3. This idea will be further elucidated through the application of Tsunoda's theory. In this case, there is some cross-referencing of the mass media element from the institutional support variables with the language element from the status variables—something which is an indicator of the maintenance of the Welsh language.

Joshua Fishman (1991) and other scholars have noted the deep impact of mass media as a major factor in language choice in the contemporary world. In Fishman's model, the mass media component is classified at the first stage of his Graded Intergenerational Disruption Scale (GIDS), which posits a stage-by-stage continuum of disruptions to a language's existence and continuity. The further the stage number from stage 1, the greater the disruption to the prospects for the language being passed on from one generation to the next. Fishman's stage 1 refers to the role of media in language revitalization. By applying it to Welsh, this stage involves several broadcasts on Webradio and digital television tools as well as an array of diverse programs reflected through new media technologies. Indeed, Welsh television and radio stations as well as new media have played a significant role in maintaining the Welsh language because of the programs they broadcast in Welsh, as I have highlighted in sections 8.5 and 8.6. Therefore, one can say that all the different forms of technologies have variously contributed to the modernization of Welsh.

Tsunoda (2006: 214) has developed a different kind of theory where he argues that whether a given language revitalization program

is considered a success or not depends on the definition of language revitalization and the aim of that particular program. Also, a given program may be considered a success if it brings concomitant benefits to the community, e.g. enhancement of the sense of self-esteem and identity, and the community members's involvement in the education process.

As will be shown in the coming paragraphs, it is quite clear that the Welsh technological tools have brought about concomitant contributions to the Welsh community. Now, I turn to explore the outcomes achieved in connection with the first hypothesis that claims that technology plays a role in Welsh language revitalization. The role of technology is going to be accounted for in economic, linguistic, as well symbolic terms.

Concerning economy, Grin and Vaillancourt (1999) wrote at length about media and they both examined the case of S4C in their investigation of the cost-effectiveness of policies whose target was to revitalize Welsh. They concluded that part of the success of the S4C channel is attributed to ‘a more general Zeitgeist,’ including “*the notion that diversity, linguistic, cultural or otherwise, can generate commercial as well as non-commercial value*” (1999: 50). They also pointed out that about 3,000 jobs were produced in addition to the 140 people employed directly by S4C.

The development of local expertise in broadcasting, film-making, animation, acting, etc. means that talent can develop locally and in the language. In other words, the establishment of S4C allows Wales to export animation, films and drama series, generating revenue at the same time, instead of losing talented individuals to foreign (and non-Welsh-speaking) companies (Grin and Vaillancourt 1999: 50).

This shows the extent to which the development of an audiovisual industry in a minority language seems to be vital for the Welsh language community. The wide range of employment opportunities that industry development brings to the economically depressed areas, where the Welsh language remains relatively strong, are high—something which prevents Welsh speakers from leaving their environment to look for jobs in other locations.

With regard to the linguistic outcomes, Jones (2004) argues that experience in Wales reveals that Welsh media has played a facilitating role in the dissemination of new linguistic terms, as I have highlighted in section 8.5.4. Due to the absence of other linguistic organisms, it has often been left at the hands of media staff to coin neologisms, stressing the fact of effective communication and understandability. The fact that viewers will be exposed to the use of different dialects other than their own and to the standard language is something which can not be avoided. The effect of an audiovisual presence on the status of a minority language is also another element to be taken into account. Public and voluntary bodies will also be driven to recruit people who can speak on the minority language media on their behalf. Although this has not been confirmed, it is probable that television in a minority language will better the attitudes of majority language speakers towards minority languages.

Furthermore, minority language media in general permit speakers or learners who may live in areas where the geographical base of the language has been deeply eroded to maximize their

connections with the linguistic community—particularly when programming has an interactive element. Increasingly, as media develop their global reach by means of devices such as television on the Internet, this also applies to speakers who live outside of the country altogether. Indeed, the effectiveness of broadcast media for language learners is very clear. This can be exemplified by these ideas. First, by providing for learners such as the simplified screen subtitles available on S4C to facilitate the use of Welsh. Second, the corpus of speech, which is manifested in multiple registers and offered to learners who lack access to other sources of natural speech, is another argument to be taken into consideration.

A major point my study highlights is symbolism: the idea of *liminality*, which means threshold in Latin, is a 21st century characteristic of language use, according to Brumfit (2006). This notion, if applied to the Welsh case, would reflect an insight into the so-called psychology of the Welsh language community to appropriate technology to revitalize its language. This means that Welsh language media provision serves to represent the sophistication of the Welsh community and how far it can cope with the contemporary world rather than being simply part of an old-fashioned heritage. It is also considered a new mode of representation in the post-industrial society.

In addition, it is through the different platforms of Welsh media that the Welsh culture of virtuality is conveyed. For example, through my investigation of the digital library, I have come up with several insights with regard to this form of technology, as shown in section 8.3. The major idea that revolves around the availability of the digital library is that it is an attempt by the Welsh community to foster its Welsh image and propagate its symbolic identity. The Welsh identity is reflected through the visual artifacts and historical pieces, which have been digitized on the Website of the digital library. Another point that relates to the symbolic dimension of my investigation as well as confirms an aspect of Tsunoda's theory is the continuous building of bridges between the Welsh and American communities, as has been explored in the videoconferencing project in section 8.11.

With regard to my second hypothesis, there is no doubt that the use of the Welsh language can be facilitated in people's everyday lives through the use of new technology. Indeed, this is still taking place through the deployment of the different kinds of technology devices that have been categorized under four headings. In the case of broadcast media, subtitling can be regarded as one of the potential ways to promote the language and facilitate its use and comprehension to the program viewer. Concerning Internet technology, as has been elucidated in section 8.12, there are many

avenues in which visually and hearing impaired people in Wales could benefit from the software technologies, and especially with adaptive technology—something which is reminiscent of one aspect of the language revitalization theory formulated by David Crystal (2000) when he says that a minority language will flourish if its speakers can deploy electronic technology. Other things from which the Welsh people have electronically benefitted are e-commerce, employment opportunities, and service delivery. Thus, information technology could be viewed as a community resource. Turning to electronic and videoconferencing technologies, they have multidimensional facets. While the electronic tools reveal that the knowledge, which is displayed on its various platforms, is captured and maintained for future generations, videoconferencing epitomizes the idea of interconnectedness as well as enhanced communication. The other roles of both electronic and videoconferencing technologies are going to be explored in the coming paragraphs with a specific emphasis on language pedagogy.

Fundamental concepts such as learning and teaching a minority language can also be deduced as a result of my investigations of appropriating technology for the revitalization of the Welsh language. Online lessons have shown that they can contribute to language learning through the wide range of grammatical topics they display. This is of paramount importance with regard to the systematic assimilation of Welsh structures by language learners. The DVDs and CD-ROMs are another clear way of learning and teaching a minority language. Gareth, the famous comedian, explains ways of using particular grammatical structures and expressions in the DVD. This method fosters language learning and has therefore some implications for language teaching as well as language pedagogy.

Through videoconferencing, it has also become clear how the Welsh language can be used and learnt, though this is being carried out to a certain extent. It is still regarded as a tool that can fulfill educational and economic purposes, as has been pointed out in the interview in section 8.11.3. The digital library of Wales is viewed as a medium that helps Welsh learners get a close insight into works of Welsh literature and other linguistic references. In this way, it provides access to academic resources and also saves time, as the physical library is located in Aberystwyth—a place which is not easy to come to due to the specific nature of roads in Wales. Therefore, through the appropriation of the Welsh electronic library, it becomes evident how facilitating it is in the sense that it helps learners assimilate the structures of the Welsh language as well as access a huge body of Welsh literature and visual artifacts.

The evaluative section has attempted to make use of the theoretical frameworks and apply them to the situation of Welsh. In addition, it has attempted to confirm the hypotheses and clearly revealed the diverse and concomitant contributions of the deployments of new forms of technology by the Welsh language community in linguistic, economic, as well as symbolic terms.

11. Conclusion

I start first by summarizing briefly the major points that my thesis has centered around. An exploration of factors leading to language decline has revealed that this goes through several stages, which describe the acceleration of the erosion of minority languages. Welsh seems to be affected by social, linguistic, economic, political, and cultural factors. The categorization of language revitalization programs, which have been accounted for in both non-technological and technological terms, has shown that they do not all apply to Welsh because they have specific features, which are not found in the Welsh context, and because there are unusual situations where some language revitalization programs have developed.

The description of the Celtic languages has revealed that an integrative approach needs to be developed to account for the concept of Celticity and clarify what is meant by a Celtic language. Then, my dissertation has resorted to investigate the position of Welsh within the context of minority languages in the United Kingdom, revealing that Welsh is supported by various legislative pieces, although it has been alternating between decline and survival. The exploration of Welsh language planning initiatives has prepared the ground for an understanding of the issues that revolve around the phenomena of language endangerment and language revitalization.

Later, the technical section has embarked on a scrutiny of some issues relating to minority language media. It has revealed that new media can be approached from various angles along with a wide range of issues that have been highlighted, such as identity as well as globalization. It has also shown the sophisticated nature of projects, which are being undertaken not only in the Welsh environment, but also in different parts of the world. This has provided a basis for discussing different technological cases. Throughout my exploration of various scenarios beyond the UK context, I have been able to understand the mechanisms whereby the technological tools work and the contributions they have brought about. In fact, the examples of technology appropriations have disclosed specific characteristics like the interconnectedness between language and culture, the role of technology in revitalizing lesser-used languages and identity preservation, and the circulation of a particular discourse.

My study visualizes the position of Welsh media provision within the broader frame of the other minority languages in the United Kingdom. I have explored the major role that technology

plays in revitalizing Welsh and have accounted for this in terms of different models. This has revealed a multiplicity of outcomes that highlight the linguistic preservation of Welsh, the financial gains achieved, and the economic contributions to the minority language community. In addition, it has led to methodological implications, which pertain to language pedagogy as well as language learning and teaching. Thus, minority language learning and teaching can be improved and facilitated. Moreover, the features identified in section 7.8 apply to the situation of Welsh.

As far as the innovative aspects of my work are concerned, I try to elaborate on this by considering the following points. The dissertation is in itself comprehensive because of the high spectrum of perspectives it touches upon and the various insights it reveals. It shows many outcomes with regard to the major idea, which pertains to technology use and which stands at the heart of my dissertation. In addition, the hypotheses tested confirm what I have been searching for. This has also been complemented by the online questionnaire and the personal interviews conducted during my visit to Wales. Although there are many matters that still need some awareness about the tools themselves, the resulting outcomes of technology deployments are tangible and straightforward, as I have explained in the evaluative section. It is at this level where the value of my work lies, especially because I have found a way out of the plethora of technical issues.

A second innovative aspect of my dissertation is the comparative work carried out by studying six minority languages along with their diverse technological provisions. Cormack (2004: 5) argues that previous writings on minority language media “*tended to look at single language situations, rather than more general comparative work. They have been concerned with very specific circumstances and so there has not been much since Riggins and Browne which has taken an overall view of minority language media.*” Moreover, the recent book called *Minority Language Media* (2007) is very informative because it is a collection of articles that pertain to different domains of language revitalization and provides many examples from different places of the world without having recourse to compare languages along with their media provisions.

My scrutiny of the different cases has revealed that the Welsh language is ahead of all the other minority languages in the United Kingdom in terms of media provision. Indeed, my comparative work has not focused on single situations, but rather on different minority language situations such as Welsh, Cornish, Manx, Scottish Gaelic, Ulster Scots, and Irish. In addition, I would like to underscore the fact that many other places with similar linguistic situations to Wales have technologically progressed in the field of IT (WLB 2006). These include the Basque, Galician,

as well as Catalan autonomous communities. The interchange of perspectives between the different areas plays a big role in the areas of language planning.

A third aspect that my dissertation highlights is that it encompasses insights from media experts such as Grahame Davies (BBC Wales) and Owain Pennar (S4C). In contrast to previous works, minority language media studies were only written by linguists, sociologists, and anthropologists rather than academics in media studies or cultural studies departments. This is an indicator of the institutional fragmentation of the field of minority language media studies. My investigation of Welsh technology leads to understand minority language media practice, as has been shown above. Since the aim of media studies is not only to understand how media function and provide a criticism of its mechanisms, but also to contribute to media practice, according to Cormack (2004).

The idea of bridge building between non-indigenous and indigenous communities is another innovative dimension of my work. This has been considered a perspective lacking in previous studies on minority language media. Yet, my study, through the specific exploration of videoconferencing activities between the Welsh and American communities, has highlighted the issue of interacting with non-indigenous communities through different forms of linguistic as well as cultural exchanges. This has thus resulted in opening a room for dialogue between different cultures. It should be pointed out that the contribution of my thesis is that it tackles a variety of issues such as linguistic imperialism, globalization, media and politics, the Internet—areas where Welsh language technology could be useful. In addition, my study attempts to contextualize these issues within the postmodern cultural trend.

My investigation is genuine in the sense that it revolves around various issues, which have not been thoroughly explored previously and present them in a unified framework. In terms of theoretical orientation and geographical focus, this adds to my work a specific dimension—a dimension which shows the depth of my dissertation. In addition, it is supported by a detailed investigation of minority language phenomena that touches on the actual consumptions of Welsh technological tools from a variety of angles, as has been explained in section 9. In this sense, the data collected about Welsh give more credibility to my research as well as a sense of confirmation about the use of the technological devices. Another famous work by Eisenlohr (2004), which is a comprehensive study on the phenomenon of language revitalization and the response to it through recourse to media technology, does not include videoconferencing in its investigation. In that sense,

it remains limited to a certain extent because videoconferencing is a very recent phenomenon. My thesis, however, does not ignore the use of videoconferencing since it is a highly sophisticated technology to revitalize minority languages in general and Welsh in particular.

A recent study shows that the future of Welsh is endangered. According to EurekaAlert (2006), Dr Delyth Morris, the conductor of the study, says that she found that many Welsh-speaking parents were not transmitting the language to their children. She further argues that this is particularly the case in families where only one parent speaks Welsh. The research is considered to be vital for language policy within Wales as well as for language planning for European minority languages.¹³⁹ Through the study, researchers have identified some factors, which affect children's learning of the language. These are

the amount of time spent with the Welsh-speaking parent, the amount of contact they have with grandparents who speak Welsh, and whether the family's friends and neighbours speak Welsh or not. In addition, it appears that the power relations within a family can have a significant influence. (EurekaAlert 2006: n.p.)

There were also other factors affecting language learning. Indeed, it was revealed that the number of Welsh speakers in the surrounding community as well as the use of television, DVDs, computers, and books deeply affected the success of children in learning the Welsh language. According to the study, it is argued that the choice of parents with regard to childcare provision is very important. Therefore, the availability of Welsh-speaking childcare is essentially required. Likewise, the function of Welsh-speaking schools in language learning needs to be acknowledged by the education policies of local authorities.

To reveal the discourse that is being circulated and transmitted as a result of technology appropriation with regard to minority languages in general and Welsh in particular, I refer to this insight provided by Davies:¹⁴⁰

Well, I can't speak for minority languages as a whole, although I do come across practitioners in those languages at conferences and so on. I would say that the

¹³⁹ It is part of an (ESRC) sponsored study whose aim was to find out the reasons why some parents in Wales are successful in the transmission of the language to their children and others are not.

¹⁴⁰ This piece of information was received via email in 2007.

general discourse around this subject is that new media is a great opportunity for minority languages, as the publication and distribution costs are so low. The use of traditional media in minority language communities is often hindered by the fact that small numbers of speakers make the use of expensive technology unviable. Cheap technology makes it possible to provide for small audiences. So, on the whole, new media is seen as a great opportunity. In Welsh, certainly, there's a combination of legal requirement (the requirement for all public bodies to provide their public material in both languages, including on the web), of state provision (such as the BBC's site for which I was responsible) and private and community enterprise, (such as the maes-e forum site). Taken together, those different elements make up a vibrant, viable and growing new media world in the Welsh language. So that's the general discourse about those technologies, and that's more or less the consensus regarding them... Although it should be noted that most of those who are engaged in the provision of Welsh-language media tend to be doing it from the standpoint of political commitment, so the general political discourse in Welsh tends to be dominated by the opinions of the committed nationalistic minority of Welsh speakers rather than the broader spectrum of opinion represented by all Welsh speakers.

According to Prys et al. (2004: 3), the WISPR project is regarded as the beginning of a much larger enterprise encompassing the broader Celtic speech community. It is hoped that the project will set up a foundation that can then be extended to include the other Celtic languages such as Cornish and Scottish Gaelic. The developers of the project have already established a Celtic Speech Group, and are in contact with colleagues working with Breton and Scottish Gaelic so that they might reap benefits from the current work and collaborate on future joint initiatives. In another personal communication, Gruffydd (2006: n.p.) says that *“if Welsh has to continue as a strong language, then it has to embrace technology because people need to use it. Technology has to be available in Welsh. Provision of technology in public sector/local government can ensure that much technology can be promoted.”*

According to Davies (2008),¹⁴¹ the corpus of Welsh-language Web material is increasing, with the provision of ever more content from the public and private sectors, from the blogosphere and from the digitization of archived material. For instance, all the 20th century's Welsh magazines are currently being digitized by the National Library of Wales. Digitization of Welsh cultural products is likely to be increasingly incorporated at the point of development rather than

¹⁴¹ This information was also provided by Davies via email in 2008.

retrospectively, leading to a further growth in the Welsh-language Web universe. This increase of material, coupled with the continued innovation of both public and voluntary sectors (but less so from the private sector, where there is a lack of commercial incentive for investment and innovation), provide a solid base from which Welsh Webtechnology applications can be developed. Davies (2008: n.p.) further maintains that the convergence of technologies will

also lead to a closing of the gaps in technical capabilities of applications designed for different platforms. Generally speaking, the Welsh-language world is likely to always be playing catch-up with technologies devised for larger markets, principally English-language ones, but as long as its adherents continue to show the same keenness to adopt new technologies as they have shown with every other technological media innovation throughout history, then there is no reason to suppose that there will not be an adequate range of all basic media applications available in Welsh, even if their adoption for Welsh is delayed compared to other languages.

I would like to mention that as long as the cause of minority languages continues to attract the endeavors of some speakers, the defense of diversity will likely go on. According to Ostler (2004: 8), L. Frank Manríquez, an activist who has been preoccupied with the revitalization of the threatened Tongva language in California, says these words: *“How can it be hopeless, when there is so much hope?”* Furthermore, Koïchiro Matsuura, Director-General of UNESCO, has proclaimed that the year 2008 is the ‘International Year of Languages’ and revealed that languages are essential to the identity of groups and individuals as well as to their peaceful coexistence. According to him, they represent a strategic factor of progress towards sustainable development and a harmonious relationship between the global and the local context. Highlighting the issue of linguistic diversity, Matsuura says that

[b]y encouraging and developing language policies that enable each linguistic community to use its first language, or mother tongue, as widely and as often as possible, including in education, while also mastering a national or regional language and an international language. Also by encouraging speakers of a dominant language to master another national or regional language and one or two international languages. Only if multilingualism is fully accepted can all languages find their place in our globalized world. (UNESCO 2008: n.p.)

A technological approach to Welsh language revitalization is to be taken into consideration. Even though my study has been eclectic at times, it opens up avenues on many interdisciplinary

fields that involve translation studies, distance teaching, computational linguistics, as well as postmodern literature and culture. Research still needs to be developed in these fields in connection with technology and minority languages to fully visualize the trajectory that minority language media is taking, optimize the insights into the scope of language modernization, and explore the effects of these technologies on traditional modes of communication, since they constitute a new frontier in human interaction.

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13. Appendix

Section 1: Bilingual Websites of minority languages

*Cornish

Govel Geryow [<http://www.govel.net/>, 01 May 2007]

*Manx

Gaelg [<http://www.gaelg.iofm.net/EMENU.html>, 01 May 2007]

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Ulster-Scots Agency [<http://www.ulsterscotsagency.com/>, 08 February 2007]

*Irish

An Chrannóg [<http://www.crannog.ie/>, 09 February 2007]

An Cumann Gaelach, DCU [<http://www.redbrick.dcu.ie/~cumann/>, 08 February 2007]

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Foras na Gaeilge [<http://www.forasnagaeilge.ie/>, 08 February 2007]

Muintearas [<http://www.muintearas.com/>, 08 February 2007]

OISÍN [<http://www.oisin.ie/>, 03 May 2007]

Section 2: Online newspapers and magazines

*Welsh

Acen [<http://www.acen.co.uk/cylchgrawn/>, 12 February 2007]

Ninnau Publications, Inc [<http://www.ninnau.com/>, 12 February 2007]

BBC [<http://news.bbc.co.uk/welsh/>, 25 February 2007]

***Cornish**

European Bureau for Lesser Used Languages [<http://www.cornish-language-news.org>, 11 February 2007]

Skwardya [<http://www.geocities.com/cornishnews/>, 11 February 2007]

***Manx**

Manxradio [<http://www.manxradio.com/newsinGaelic.aspx>, 11 February 2007]

***Gaelic**

Scotsman.com [<http://news.scotsman.com/gaelic.cfm>, 11 February 2007]

***Ulster Scots**

Ulsterscotsagency [<http://www.ulsterscotsagency.com/theulsterscot.asp>, 28 April 2007]

***Irish**

Gael-Image [<http://www.gael-image.com/doras/>, 10 February 2007]

Sabhal Mòr Ostaig [<http://www.egt.ie/lghlin/bnag/saol/saol9701.html>, 10 February 2007]

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Lá nua [<http://www.nuacht.com>, 12 February 2007]

Ireland.com [<http://www.ireland.com/newspaper/anteangabheo/2007/0425/index.htmlm>, 25 April 2007]

Section 3: Online lessons

***Welsh**

BBC [<http://www.bbc.co.uk/wales/learnwelsh/>, 10 February 2007]

Jones, N.W. [<http://www.siaradcymraeg.com/>, 10 September 2007]

Swansea University [<http://www.swan.ac.uk/dace/e-wlpan/>, 25 April 2007]

***Cornish**

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Smith, Stephen [<http://www.kdlcornish.freemove.co.uk>, 20 February 2007]

Kernewek 101 [<http://geocities.com/kernewek101/>, 20 February 2007]

***Manx**

Teare, Rob [<http://lughtynsagh.blogspot.com/>, 11 February 2007]

***Scottish Gaelic**

BBC [<http://www.bbc.co.uk/scotland/colinandcumberland/>, 11 February 2007]

Sabhal Mòr Ostaig [<http://www.smo.uhi.ac.uk/gaidhlig/ionnsachadh/bgfp/>, 16 February 2007]

***Ulster Scots**

University of Edinburgh [http://www.maths.ed.ac.uk/~s9905488/other/ullans_main.html, 28 April 2007]

***Irish**

BBC [<http://www.bbc.co.uk/northernireland/irish/blas/index.shtml>, 11 February 2007]

Gaeltalk.net [<http://www.gaeltalk.net>, 17 March 2007]

IrishPage.com [<http://www.irishpage.com/irishpeople/>, 25 April 2007]

INA [<http://www.inac.org/irishlanguage/>, 18 February 2007]

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Eo Feasa [<http://homepage.eircom.net/~eofeasa/>, 25 April 2007]

EÓC (Ireland) [<http://www.irishgaelictranslator.com/lessons/>, 25 April 2007]

Eirefirst.com [<http://www.eirefirst.com/lessonintro.htm>, 20 February 2000]

Erin's Web [http://www.erinsweb.com/gae_index.html, 17 March 2007]

Section 4: CD-ROMs

***Welsh**

-Talk Now! Welsh, World Talk (Welsh), Welsh ~ 101 languages of the World, The Rosetta Stone CD ROM (Welsh)

Great Journeys [http://www.maps2anywhere.com/Languages/Welsh_language_course.htm, 14 August 2007]

***Cornish**

-Talk Now! Cornish

Great Journeys [http://www.maps2anywhere.com/Languages/Cornish_language_course.htm, 14 August 2007]

-TeachMe! Cornish

Linguashop [http://www.linguashop.com/en/learn-cornish.php?partner_id=0, 10 February 2007]

***Manx**

-TeachMe! Manx and Talk Now! Manx

Great Journeys [http://www.maps2anywhere.com/Languages/Manx_language_course.htm, 11 February 2007]

-Talk Now! Manx

Linguashop [http://www.linguashop.com/en/learn-manx.php?partner_id=0, 10 February 2007]

***Scottish Gaelic**

-Talk Now! Scottish and Scottish ~ 101 Languages of the World.

Great Journeys [http://www.maps2anywhere.com/Languages/Scottish_language_course.htm, 11 February 2007]

-TeachMe! Gaelic.

Linguashop [http://www.linguashop.com/en/learn-gaelic.php?partner_id=0, 11 February 2007]

***Irish**

-Talk Now! Irish and Irish~101 Languages of the World

Great Journeys [http://www.maps2anywhere.com/Languages/Irish_language_course.htm, 11 February 2007]

-Teach Me! Irish

Linguashop [http://www.linguashop.com/en/learn-irish-gaelic.php?partner_id=0, 10 February 2007]

-Learn Irish Now

Aramedia [<http://store.aramedia.com/product.php?xProd=6955>, 10 February 2007]

-World Talk (Irish)

Saversoftware [<https://ssl.saversoftware.co.uk/details-1208.htm>, 11 February 2007]

Section 5: Language technology

***Cornish**

Evertime [<http://www.evertime.com/software/mackernspell/>, 12 February 2007]

***Manx**

Evertime [<http://www.evertime.com/software/macmanxspell/>, 12 February 2007]

***Scottish**

Evertime [<http://www.evertime.com/software/macgaidhealspell/>, 12 February 2007]

***Ulster Scots**

Liberation Philology [<http://members.aol.com/libphil/ullans.html>, 01 May 2007]

***Irish**

Evertime [http://www.evertime.com/software/macgaelspell/index_en.html, 12 February 2007]

Cruinneog and Kevin Scannell [<http://www.cruinneog.com/ceart/index.htm>, 12 February 2007]

14. List of participants in direct interview or via email correspondance

Grahame Davies (BBC Wales, Cardiff)

Ifor Gruffydd (Corporate Services, Cardiff University)

Frank Hartles (Media Resources Center, Cardiff University)

Carol Myers-Scotton (University of Wisconsin, Madison, USA)

Owain Pennar (S4C, Cardiff)

Siwan Rosser (School of Welsh, Cardiff University)

Sara Stevenson (Acen, Cardiff)

John Wells (Department of Phonetics and Linguistics, University College London)

15. Summary

Das Thema meiner Dissertation ist die Bereitstellung der Technologie für die Revitalisierung der Walisischen Sprache—eine keltische und Minderheitssprache, die verschiedene historische Entwicklungen im Laufe der Zeit erlebt hat. Ich habe dieses Thema ausgewählt, weil es ein interessantes Thema ist, das heutzutage oft diskutiert wird, besonders weil rund 6000 gefährdete Sprachen in der ganzen Welt existieren. Der zweite Grund ist, dass ich andere spezifische Aspekte der Revitalisierungsaktivitäten vertiefen möchte, auf die ich in meiner Magisterarbeit eingegangen bin und analysiert habe. Allerdings benutzte ich dieses Mal andere Beispiele, die ich nicht in meiner Magisterarbeit verwendet habe. Es ist zu bemerken dass, wenn eine Sprache stirbt, weil sie nicht mehr gesprochen und benutzt wird, die Menschheit damit nicht nur linguistisches Wissen verliert, sondern auch kulturelle Kenntnisse über bestimmte Minoritäten oder Menschen.

Im ersten Teil meiner Arbeit habe ich mein Thema eingeführt, indem ich die wichtigsten Aspekte erwähnt habe, die ich im Laufe meiner Arbeit erklären möchte. Am Anfang habe ich auch angegeben, dass es innovative Programme gibt, die in der letzten Jahrzehnten erschienen sind und die als Ziel die Revitalisierung der bedrohten Sprachen haben. Obwohl es grosse Unterschiede zwischen den Methoden und Gründen für die Revitalisierung von Sprachen gibt, gibt es momentan hunderte von bedrohten Sprachen. Und es gibt wenige Orte in der Welt wo man keine dauernden Versuche der Sprachrevitalisierung findet. Ausserdem habe ich versucht bestimmte Konzepte wie Minderheitssprache, *Digital Age*, die Umkehr des Sprachverlustes, und *Globalization* zu definieren. Darüber hinaus habe ich technische Begriffe wie z.B. CD-ROM, DVD, Webseite, und Videokonferenz erklärt. In diesem Kontext, was die Computer Technologie angeht, ist zu erwähnen, dass Computer eine Rolle bei der Transmission von Informationen spielen. Im allgemeinen sind sie als neue Strategie betrachtet durch die Leute ihre Wünsche ausdrücken. Man kann allerdings bemerken, dass nicht jeder urbane Ort an dieser digitalen Revolution teilnimmt. Diese Konzepte sind wichtig, weil ich davon Gebrauch machen möchte, um bestimmte Phänomene und Kontexte zu erklären.

Die kapitalen Hypothesen, die ich erwähnt habe und die ich am Ende meiner These bestätigen werde, sind drei. Erstens, die Technologie spielt eine grosse Rolle bei der Revitalisierung der Walisischen Sprache. Zweitens, die Technologie erleichtert den Gebrauch der Sprache im täglichen Leben. Drittens, man kann pädagogische Schlussfolgerungen ziehen, wenn die

technologischen Geräte für Walisisch bereitgestellt werden. Nachdem ich die wichtigen Begriffe erläutert habe, die ich auch anwenden möchte, habe ich theoretische Modelle gezeigt und deren spezifische Dimensionen beschrieben. Diese Modelle werden von Fishman, Giles, und Tsunoda entworfen, und ich werde sie am Ende meiner Arbeit benutzen, um die diversen technologischen Methoden zu bewerten, die von der Walisischen Gesellschaft bereitgestellt worden sind. Darüber hinaus habe ich einen Fragenbogen hinzugefügt, um bestimmte Daten über die Walisische Sprache und deren Gebrauch zu sammeln und zu analysieren. Diese Studie ist eine praktische Dimension meiner Arbeit.

Der zweite Teil beschäftigte sich mit dem Thema *Language Endangerment and Language Revitalization*. Zuerst werden in diesem Kapitel die verschiedenen Gründe für die Bedrohung der Sprachen ausführlich gezeigt. Hier habe ich fünf Aspekte erwähnt, um zu zeigen wie das Phänomen des Sprachverlustes stattfindet. Diese sind sozial, linguistisch, ökonomisch, politisch, und kulturell. Ich habe versucht, Beispiele zu zeigen, die sich auf Walisisch beziehen. Danach habe ich die zahlreichen Nutzungsmöglichkeiten gezeigt, die aus der Revitalisierung der bedrohten Sprachen gezogen werden können. Später habe ich die verschiedenen Programme erklärt, die eine Rolle dabei spielen, den Sprachverlustes umzukehren. In diesem Fall wird nicht bei allen Methoden Walisisch erläutert, da es seltene Situationen in verschiedener Orten der Welt gibt, wo man bestimmte Programme benutzt. Es ist zu bemerken, dass ich alle Strategien in zwei Gruppen aufgeteilt und beschrieben habe. Diese sind nicht technologisch und technologisch.

Ein Beispiel der technologischen Methoden ist die *Multimedia Methode*. Mit der Beschleunigung in der Entwicklung von Informationstechnologie wird *Computer Technology* viel benutzt. Heutzutage interessieren sich viele Leute für Multimedia Quellen und glauben, dass diese Methode eine Rolle dabei spielen kann, Sprachen zu revitalisieren. Durch Multimedia Materialien wird behauptet, dass junge Leute ein grosses Interesse an der Minderheitssprache haben, weil es ihnen Spaß macht. Es gibt allerdings einige Hindernisse, besonders wenn es keine Finanzierung dafür gibt—ein Problem, dass es schwer macht, sich einen PC anzueignen. Es wird auch gesagt, dass die riesigen technologischen Entwicklungen, die stattgefunden haben, für die kommenden Generationen als ein grosses Geschenk betrachtet werden können. Allerdings wird Erfahrung und Training in diesen Bereichen benötigt.

Im dritten Teil meiner Dissertation habe ich mich auf die Keltischen Sprachen konzentriert. Diese Sprachen sind ein Teil der Indo-Europäischen Sprachfamilie. Hier habe ich ethnologische,

genetische, und typologische Perspektiven erklärt, um zu sehen, wie man eine Keltische Sprache definieren kann. Am Ende dieses Teils habe ich diverse Perspektiven erwähnt, die sich auf die Keltischen Sprachen beziehen, um weitere Phänomene zu erklären. Zum Beispiel habe ich erklärt, wie die Keltischen Sprachen Englisch beeinflusst haben. Es wird auch gesagt, dass in der Modernen Periode wesentliche Kontakte zwischen Englisch und den Keltischen Sprachen in Wales, Cornwall, Irland und Schottland stattgefunden haben. Es gab auch ein grosses Interesse an den Dialekten, die in diesen Orten gesprochen werden. Daher wurde ein neues Konzept benutzt, das *Celtic Englishes* heisst.

Das vierte Kapitel meiner Dissertation gibt eine Einführung in die Minderheitssprachen, die in dem Vereinigten Königreich gesprochen werden: Walisisch, Irisch, Cornisch, Schottisch-Gälisch, Ulster Scots, und Manx. Hier werden die historischen Entwicklungen, die Zahlen der Bevölkerungen, die Lagen der verschiedenen Sprachen und legislativen Massnahmen erläutert. Schliesslich habe ich die aktuelle Lage der Walisischen Sprache gezeigt. In Bezug auf die anderen Minderheitssprachen habe ich die Position vom Walisisch erklärt und versucht diese Sprache in einem grossen Rahmen zu beschreiben. Zum Schluss habe ich dieses Kapitel mit Bemerkungen beendet, wo ich nämlich erwähnt habe, dass bestimmte Massnahmen ergriffen worden sind, die den Gebrauch vom Walisisch fördern, und die als Beispiel für die Erklärung der Walisischen Position betrachtet werden.

Im fünften Teil habe ich spezifische Themen erläutert, die mit der Sprachplanung zu tun haben. Diese Themen beschäftigen sich mit der Planung von Bild and Prestige in Bezug auf die Walisische Sprache. Bevor ich den ersten Teil vom fünften Kapitel beendet habe, habe ich den Unterschied zwischen Bild und Prestige Planung gezeigt. Ich habe nämlich gesagt, dass es zwischen den Konzepten einige Nuancen gibt. Ausserdem werden auch Massnahmen von Sprachtransmission in der Familie und deren diversen Aspekten beschrieben. Hier habe ich über Bildung gesprochen, und wie diese Methode eine kapitale Rolle bei der Sprachrevitalisierung spielt. Allerdings, es ist zu bemerken, dass Joshua Fishman der Meinung ist, dass man sich nicht sehr auf diese Methode verlassen kann. Stattdessen behauptet er, dass die Familie bei diesem Prozess aktiv sein soll, da Schulen nicht die einzigen sein können, um Verantwortung dabei zu übernehmen. Ausserdem habe ich über das *Twf Project* und seine diversen Facetten gesprochen. Ich habe auch erwähnt, dass jede Revitalisierungsaktivität eine Ideologie hat. Die Stärke vom Projekt besteht darin, die Theorie mit der lokalen Situation zu verbinden. Es wird hier betont, dass die Förderung von promotionalen Materialien zum Bilingualismus führt. Im Vergleich zu den Sprachen von weiterer Kommunikation,

glauben viele, dass Minderheitssprachen altmodisch sind. Schliesslich ist zu bemerken, dass die Form und der Inhalt der Werbung wichtig sind, um negative Einstellungen zu konfrontieren.

Im sechsten Teil habe ich über das Thema der Entwicklung der neuen Technologie gesprochen. Zuerst habe ich einen detaillierten Überblick über Sprachtechnologie gegeben und deren historische Geschichte beschrieben. Es werden vier verschiedene Phasen identifiziert. Die Phase der handschriftlichen Überlieferung, die der Drucktechnologie und Schriftsätze, die moderne Phase der Kommunikationstechnologie und die Technologie im *Information Age*. Ausserdem habe ich ökonomische, regulatorische, und kulturelle Argumente gezeigt, die eine wichtige Rolle beim Gebrauch von Medien für Minderheitssprachen spielen, wie viele Autoren behauptet haben. Die Punkte über den Einfluss von Medien und die Mechanismen der Globalisierung, die in den Medien reflektiert werden, werden auch betont. Diese Aspekte werden von den Verfechtern von Minderheitssprachen nicht als akademische Themen angesehen, die in Konferenzen diskutiert werden, sondern als Themen, die linguistisches und kulturelles Überleben einer Minderheitssprache reflektieren.

Der Kontext für elektronische Technologie wird auch ausführlich erklärt und seine diversen Dimensionen beschrieben. Neue Forschung über Medien von Minderheitssprachen hat einen Akzent gelegt auf die grossen Konsequenzen, die sich aus der Bereitstellung von Technologie für die Revitalisierung von Minderheitssprachen ergeben. Patrick Eisenlohr behauptet, dass sich der Gebrauch der Computer Technologie mit dem Unterrichten von Minderheitssprachen befasst. Ganz spezifisch ist die Suche nach praktischen und nicht teuren Methoden, um Unterrichtsmaterialien in Minderheitssprachen zu entwickeln wie z.B. Lernsoftware. Die elektronischen Formen sind dann sehr effektiv dabei, Bildung zu verbreiten. Danach werden wichtige Themen eingeführt und erklärt, die sich mit der Technologie befassen. Beispiele sind die schnell anwachsende Zahl von Webseiten in bedrohten Sprachen und deren Rolle bei der Sprachrevitalisierung. Ausserdem werden Themen wie Sprache und Identität in der digitalen Zeit, und digitale Kluft und Minderheitssprachen beschrieben.

Es wird auch betont, dass diese Technologien ein Teil des Globalisierungskontextes sind und ein Instrument, dass die Minoritäten zur Verfügung gestellt haben, um ihre linguistischen Wünsche auszudrücken. Die Globalisierung der Medien öffnet Türen für Minderheitssprachen, die unter traditionellen Regierungen nicht verfügbar waren. Die Sphären, die von digitalen Übertragungen eröffnet werden, haben für die Präsenz von Medien den Weg vereinfacht und Minderheitssprachen

in einem internationalen Kontext gelegt. Daher haben sich Minderheitssprachen eine Position auf dem globalen kulturellen Markt angeeignet. In diesem Kapitel wird auch behauptet, dass diejenigen, die Minderheitssprachen verteidigen, als neue globale Bürger des 21. Jahrhunderts angesehen werden.

Im siebten Teil habe ich eine grosse Anzahl von Revitalisierungsmethoden aus verschiedenen Orten der Welt analysiert. Mit dieser Studie möchte ich zeigen, wie die Bereitstellung von Medien zur Revitalisierung der gefährdeten Sprachen beigetragen hat. Die Beispiele, die ich ausgesucht habe, sind die Lushootseedsche Webseite aus Nordamerika, die Maorische digitale Bibliothek und Software aus Neuseeland, die Baskische digitale Television aus Spanien, die Mohawkische CD-ROM aus Kanada, die Warlpirische Videokonferenzierung aus Australien, und die Khasische elektronische Zeitschrift aus Indien. Es ist auch zu bemerken, dass ich bei jeder Methode einen kleinen Überblick über die bedrohte Sprache gegeben habe, bevor ich die respektive Methode studiert habe.

Nachdem ich die verschiedenen Strategien studiert habe, habe ich versucht, sie zu bewerten. Ausserdem habe ich die diversen Ergebnisse erklärt, zu denen ich gekommen bin. Im Fall der Lushootseedschen Multimedia Webseite—eine neue Form von Technologie—werden viele Aspekte erklärt. Die linguistische und kulturelle Rekonstruktion von Lushootseed führt dazu, dass die Revitalisierung von Lushootseedsche Sprache und Kultur ein Resultat vom Gebrauch dieses Mediums ist. Das zweite Beispiel ist, dass die Khasische elektronische Zeitung die Verbreitung von Informationen als Ziel hat. Ausserdem hat diese E-Zeitung eine erziehende Rolle, indem sie das Bewusstsein der Leser erweckt. Die Verbreitung von Informationen durch die Technologie der Khasischen Minderheitssprache gibt einen klaren Hinweis, dass es ein Beispiel von Sprachrevitalisierung ist. Diese erreichten Ergebnisse werde ich anwenden, um zu sehen ob sie relevant sind für die Diskussion der Walisischen Medien.

Der achte Teil, welcher ein wesentlicher Teil meiner Dissertation ist, beschäftigte sich mit den diversen technologischen Medien, die die Walisische Gesellschaft bereitgestellt hat, um ihre Minderheitssprache zu revitalisieren und modernisieren. Es gibt ein ganz breites Spektrum von Methoden: bilinguale Webseiten, digitale Bibliothek, digitales College, digitale Television, Internet Radios, elektronische Medien wie E-Zeitschriften und E-Magazinen, Online- Kurse, CD-ROMs, DVDs, Videokonferenzierung, und Software. Diese Methoden habe ich eingehend studiert und mich auf ihre verschiedene Aspekte konzentriert. Ich möchte auch erwähnen, dass ich bei manchen Methoden

Gespräche hinzugefügt habe, die ich selbst in Wales geführt habe. Ich habe auch gezeigt, wie die Situation der anderen Minderheitssprachen im Vereinigten Königreich ist und ob sie ähnliche Methoden haben, um ihre Minderheitssprachen zu revitalisieren.

Im neunten Teil habe ich über den Online-Fragenbogen gesprochen, den ich entworfen habe. Er hat mir ermöglicht nicht nur zu neuen Perspektiven zu gelangen, sondern auch einige Hypothesen zu bestätigen, die ich am Anfang meiner Arbeit angegeben habe. Ich habe auch theoretische Perspektiven erwähnt, wovon ich Gebrauch gemacht habe, um die diversen Antworten, Kommentare, und Vorschläge zu beurteilen, die ich in meinem Fragenbogen bekommen habe. Die neuen Medien haben tatsächlich eine grosse Rolle gespielt, indem sie die Kommunikation zwischen den Leuten tief beeinflusst haben. Es ist auch zu erwähnen, dass es andere Medien gab, die in einer bestimmten Zeit neu waren. Mit dieser Perspektive im Hintergrund findet man tatsächlich ein Kontinuitätsmuster in dieser Zeit der schnellen Entwicklung.

Im zehnten Teil meiner Dissertation habe ich die Revitalisierungsprogramme anhand von drei Modellen bewertet, die von Giles, Fishman, und Tsunoda dargestellt worden sind. Diese Modelle können als Orientierungsstrategien betrachtet werden, da sie viele Sachen erklären können, damit man einen umfangreichen Einblick über die Bewertung der Walisischen Technologie und die zahlreichen Beiträge, die sie dazu geführt haben, bekommt. Die Methode von Giles hat gezeigt, dass die Bereitstellung von Medien dazu geführt hat, den Status der Walisischen Sprache zu normalisieren. Diese Idee habe ich weiter analysiert, als ich die Theorie von Tsunoda angewendet habe. Fishman hat allerdings geschrieben, dass der Einfluss von Medien ein grosser Faktor der Sprachauswahl ist. Es gibt viele Beiträge, die zu der Walisischen Gesellschaft erbracht worden sind, —ein Kriterium, das die Theorie von Tsunoda bestätigt. In der Tat gibt es nicht nur viele Arbeitsplätze, die in der audiovisuellen Industrie gebildet werden, sondern auch Neologismen, die aufgetaucht sind. Ich möchte auch erwähnen, dass das Publikum von der ganzen Reihe der Dialekten profitiert, die ausgedrückt werden.

Ein anderes Argument, wovon ich Gebrauch gemacht habe, ist, dass Medien für Minderheitssprachen den Lernenden, die in Orten, wo der Gebrauch der Sprache sehr selten ist, einen Zugang zu der Sprache zu ermöglichen und an der linguistischen Gesellschaft teilzunehmen, besonders wenn die Programme ein interaktives Element haben. Ausserdem haben Medien gezeigt, dass sie eine symbolische Rolle in einer Kultur der Virtualität repräsentieren. Sie entwickeln ihren globalen Empfang durch Methoden wie z. B. Television auf Internet und das bezieht sich auch auf

Sprecher, die im Ausland leben. Durch meiner Investigation der digitalen Bibliothek habe ich neue Perspektiven entdeckt: die Präsenz von dieser Strategie hat dazu geführt, das Walisische Bild zu zeigen und ihre Identität zu propagieren. Diese Identität wird durch die visuellen Artefakte und historischen Elemente reflektiert, die auf der Webseite zu sehen sind. Alle diese Beispiele haben sich aus der Bereitstellung der Medien für die Walisische Sprache ergeben.

Eine wesentliche Idee, die ich in diesem Teil von meiner Dissertation ausgedrückt habe, ist, dass die Sprache ein wesentlicher Bestandteil der Walisischen Kultur ist. Meine Arbeit hat zu vielen Konsequenzen geführt. Von den wichtigen Punkten, zu denen ich gekommen bin, ist einer, dass Technologie eine kapitale Rolle dabei spielt, das Lernen zu erleichtern. Diese Idee hat eine grosse Bedeutung für pädagogischen Gründe. Ausserdem wird gezeigt, dass die benutzten Methoden ernste Erhaltungsversuche in Wales sind. Sie haben nämlich eine sehr wichtige Rolle dabei gespielt, die Walisische Sprache aufrecht zu erhalten. Die verschiedenen Medienformen haben viele besondere Eigenschaften gezeigt: die Verknüpfung zwischen Sprache und Kultur, die Rolle von Technologie, bedrohte Sprachen zu revitalisieren und Identität zu propagieren. Diese Punkte sind auch von der Walisischen Gesellschaft ausgedrückt.

Weiterhin habe ich erklärt, was Medien als Botschaft vermitteln. Die Beispiele, die ich besonders erwähnen möchte, wenn ich mich auf die Zitate von Grahame Davies beziehe, sind viele. Zuerst, dass der Gebrauch der Technologie für Minderheitssprachen nicht teuer ist. Zweitens, Technologie ist ein Instrument, das neue Möglichkeiten für Minderheitssprachen öffnet, was Publikation und Distribution angeht. Drittens, eine Kombination von legalen Voraussetzungen, staatlichen Subventionen, und privaten und gesellschaftlichen Unternehmungen bildet eine wachsende Welt neuer Medien in der Walisischen Sprache. Viertens, die Verfügbarkeit der Walisischen Medien ist von den Meinungen einer nationalistischen Minorität politisch motiviert. Diese Argumente sind die Hauptbestandteile der allgemeinen Diskussion, die die verschiedenen Formen der Technologie reflektiert. Mit einem anderen Zitat von Matsuura habe ich meine Arbeit beendet, in dem er das Jahr 2008 als das „International Year of Languages“ bezeichnet.

16. Curriculum Vitae

Der Lebenslauf ist in der Online-Version
aus Gründen des Datenschutzes nicht enthalten

Selbständigkeitserklärung

Ich versichere hiermit, dass ich die Dissertation selbständig verfasst habe und dass ich keine anderen als die in der Arbeit genannten Hilfsmittel benutzt habe.

Berlin, den 14.10.2008

Mourad Ben Slimane