The Web Generation?

The (De)Construction of Users, Morals and Consumption

Key Deliverable
The European Media and Technology in Everyday Life Network, 2000-2003

Maren Hartmann
(SMIT – VUB)
Free University of Brussels

Table of Contents

EMTEL - General preface

The European Media Technology and Everyday Life Network (EMTEL) was funded by the European Commission (grant number HPRN ET 2000 00063) under the 5th Framework Programme. It was constituted as a research and training network within the programme, Improving Knowledge Potential and oriented towards "creating a user friendly information society".

EMTEL conducted interdisciplinary social scientific research and training between 2000 and 2003. This report is one of 12 submitted to the EU in September 2003 as final deliverables for the project. Copies are available on www.lse.ac.uk/collections/EMTEL and a full list of the publications can be found as an Appendix to this report. Contributing partners were as follows:

- ASCoR, The University of Amsterdam
- COMTEC, Dublin City University
- IPTS, Seville
- LENTIC, The University of Liège
- Media@lse, London School or Economics (co-ordinating centre)
- NTNU, University of Trondheim
- SMIT, Free University of Brussels
- TNO, Delft
- SINTEF, Trondheim.

EMTEL sought to bring together young and experienced researchers in a shared project to investigate the so-called information society from the perspective of everyday life. It undertook research under two broad headings: inclusion and exclusion, and living and working in the information society. It then sought to integrate empirical work and developing theory in such a way as to engage constructively with on-going policy debates on the present and future of information and communication technologies in Europe.

Roger Silverstone
EMTEL Co-ordinator

Executive Summary

This EMTEL project and report is concerned with the relationships between young adults and ICT-use. The focus of the empirical study was the use and perception of ICTs among young adults aged 18-25 in Flanders.

However, both categories –youth and ICT use – were shown to be problematic in terms of existing research and analysis. "Youth" is challenging as a research category, because it aims to homogenise something rather heterogeneous. It is equally tricky to limit it to a life phase or an age group, since these definitions are in flux due in part to other social changes. The term is also problematic when the youth are described as a "web generation", because this implies a general and radical uptake of ICTs in the everyday lives of either a majority of current youth or a specific subculture and this has implications for the rest). "Web generation" is also problematic, because it is only one amongst many constructions of the relationship between young people and new media, but it is often portrayed as the necessary relationship. This particular discourse defines young users in certain ways, but not necessarily through their own forms of use, creation and consumption. The empirical findings of this project were used to question this prevalent academic and popular discourse. In final analysis, the "web generation" was seen to provide more hype than reality, but still to exist – albeit with nuances and primarily as an indirect, negative form of identity.

The question of the "web generation" also relates to the broader concept of domestication, which was chosen from a range of ICT use research concepts as the most appropriate. Here the researchers asked whether the new technologies are potentially domesticated in society overall or whether specific groups, such as these young adults, domesticate them in rather specific ways. This project made two adjustments to the domestication concept. First, an emphasis on the content of ICTs (as opposed to practices and discourse) was used. Second, the concept of the "moral economy away from home" was adopted to describe the rather specific ICT use (in terms of discourse), but also life situations of the youth researched here.

Methodology/Research Questions

The project was carried out with the help of students, who conducted interviews among their own age group. A selection of these 550 semi-structured, in-depth interviews provided the basis for the later analysis in the form of a thematic qualitative analysis (some of these interviews were self-interviews of the students).

The research questions that guided the interviews were as follows:

- How do young adults engage with new media and ICTs?
  (i) What do young adults do with media and ICTs and to what extent?
  (ii) Why do they do what they do?
  (iii) How do they perceive current and future changes?
- How is this engagement linked to consumption in terms of:
  (i) Consuming the technologies
  (ii) Consuming through the technologies
  (iii) Consuming identities and lifestyles?

The project as a whole concentrated on questions of use, that is, the how and "why (not)" of uses and perceptions and this raised two broader questions:

(i) Do young people (adults) domesticate technologies in specific ways?
(ii) Is there something that could be called a web generation?

Summary of findings and their implications

Youth

Defining youth has become increasingly problematic. A de-standardisation of the youth phase is taking place as a result of the increased recognition not all the markers of adulthood necessarily occur in everyone's lives and that some experiences are drawn out much longer while others start earlier. Some theories claim that youth is not a life-phase, but a lifestyle; others extend the existing markers of youth to an increasingly long period.

Traditional and current youth discourses

Definitions of youth have for a long time concentrated on a binary logic of either "youth as deviant" or "youth as a potential for societal change". Media studies of youth followed this line of analysis with most research concentrated on either media effects (especially of violence) or on education. The cultural studies approach (primarily from Birmingham) allowed the first concentration on everyday life and subcultures, in relation to questions of class, gender and race. This project took some inspiration from the cultural studies approach and tried to move beyond the binaries to look at youth overall.

In parallel to these earlier theorisations of youth, the relationship between youth and new media has also been described as dangerous or believed to provide hope for a different future society (but empirically substantiated analyses challenging such claims are now coming out although most of them relate to children or teenagers). One strand in this

research has given rise to the web generation discourse. This predominantly proclaims the current youth as using ICTs creatively and extensively to push existing boundaries of communication and interaction. It also describes youth as being at ease with the technologies and, in principle, living a very different kind of life.

These kinds of claims cannot be substantiated in this research project. While most everyday practices can by described as far-reaching and"naturalised", the assessment of different uses and the range of use of content turned out to be rather limited. Nonetheless, the negative image is used to define aspects of identity. Thus, a web generation with nuances has been detected.

Use, perception and domestication of ICTs

Most of the young adults in this study use ICTs in one form or another. Thus if we regard domestication as an incorporation of new technologies into everyday life, domestication of the technologies is taking place at least on some level. So for instance, computers have been given prominent places in the homes of interviewee and mobile phones are used according to personal rules.

The student interviewees mostly use ICTs every day from morning until night, but use them differently in the weekend. Among working young adults, use of ICTs depends very much on the job they do. Mobile phones are more widespread than computer and Internet use (or any of the other peripheral technologies). They can found nearly everywhere, while computer and Internet use are much more problematic and contested. However, not all respondents felt comfortable with the idea of mobile phones being used "everywhere" and "anytime". Here the concern was with issues of constant availability, of privacy, of communicative rules. In contrast, the Internet is used more consciously, especially when it comes to choosing the content.

Given that many of the young adults had recently changed their home environments (or at least radically changed their routines) and many of them were still in a period of transition, ICTs were not perceived to have disrupted routines or environments. Even so, strategies of dealing with the "intrusion" are being developed.

Thus, one of the most prominent findings was of an overall feeling among young adults that they *have to* use ICTs. It is not a matter of choice, but a matter of need particularly if they do not want to lag behind the rest of society. However, they want to keep control and they do this by making value judgements and describing other people's "bad" uses to declare

boundaries of their own use and make clear-cut distinctions between the "real" and the "virtual". In a similar line of argument, communication takes place primarily with people (family and friends) that are already known.

Those studied tended to limit or structure his or her own of content. Sites accessed online are mostly the same; chatting or other communication devices are only used to communicate with people one knows; and e-commerce is mistrusted. The content has to be personally relevant, which often means keeping in touch, finding information for hobbies or studies or catching up on news. Overall, play is not really allowed personally or with others nor were many actual games played. These findings present a stark contrast to the web generation discourse and to studies of younger users. Instead, a rather conservative "moral economy away from home" seems to emerge. Thus while everyday practice brings with it radical change, the underlying values are not easily adapted. This is more evident if a distinction is made between "content" and "practice" – a distinction the domestication concept has tended to use theoretically rather than apply.

Major Implications

- Policy has to address and deal with the notion of the rejection of developments more consciously. If only some of these young people carry their discomfort further, other ways of inclusion (in terms of democracy, education and others) have to be guaranteed. Opting out should remain an option.
- This means the individual user needs to be addressed more clearly as does the particular age group. Youth in Europe is too broad a focus.
- A distinction needs to be made between the impact ICTs on everyday practices and their impact on longer-term values. Although ICTs have been widely adopted into everyday lives, they have not been allowed to radically change communication and information patterns of behaviour.

Acknowledgements

As with most research projects, this one could not have been done without the help of many people. Firstly, I would like to thank Prof. Caroline Pauwels for welcoming me to and for her support from me personally and for the project over the last two years.

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Last, but not least, the students of the Werkcollege Informatietechnologie 2001/2002 have been invaluable. Without their work, this report would not exist. I cannot thank them individually for their contributions (and for their very Belgian bi-lingual efforts), nor can I thank the interviewees, but the thanks are heartfelt. Good luck in entering 'the real world'!

Introduction

The general framework of this research project is the long-term impact of the increasing number of information and communication technologies (ICTs) on the everyday lives of people throughout Europe. The increased number and pervasiveness of ICTs in different areas of social and cultural life, requires the attention as social scientists. These developments, initially labelled by theorists as the emergence of the *Information* (or *Knowledge*) *Society* (see Webster, 1995), have been widely recognised in different policy initiatives by the European Commission (for example, IST, 2002).

However, more recently, the concept of the Information Society has been questioned. Some have replaced it with the concept of the *Network Society* (Castells, 1997, 2000), a notion that – at least on first sight – seems to allow more flexibility and fluidity and begins to open up the debate to issues of identity and culture (which tended to be ignored by theorists within the Information Society tradition). The Network Society also adds a new way of thinking of relationships between people, that is, in terms of networks by asking whether these networks replace earlier known forms of connectedness. This question is also raised implicitly in this research project.

While both the Information and Network Society conceptualisations of recent developments are useful and open up a wide range of questions, neither satisfactorily addresses a wider range of cultural and social dimensions, most notably specific user groups in a changing society. Since the aim of the EMTEL project overall was to understand what "user-friendly" means in the context of an Information or Network Society, it was necessary to actually seek answers from users themselves in an everyday life context.

The SMIT Focus

The particular user group in question in the SMIT research project was *youth*. Implicit in both Information and that of the Network Society is the assumption that youth is the *key generation* in terms of ICT developments in terms of already living the future now.

However, this EMTEL project suggests that many theorisations of these trends offer a potentially over-enthusiastic picture.

> …the Net Generation claims the new technology as its domain, reporting that: 'It makes their lives quicker and less structured, it's a social organiser, it gives them freedom and control, it can make them lazy, it can overcome boredom and it's their stuff' (UniMelb, 2001).

Researching the obvious is not easy. For this research project, the obvious is this combination of young people and new media as the net generation. The notions of "young" and "new" suggest *development*, *change* and the *future* – quick and easy lives, made possible by "their stuff". Implicit in these views of recent developments are wider concerns with globalisation, increasing migration, changing social relations, mobility and flexibility, but also instability and insecurity. Both young people and new media are seen as expressions of, and the main bearers of, these changes. This project in researching what is currently happening with young people and new media needed to be open to these potential changes while simultaneously aware of the potential problems change might contain.

As already hinted at in the quote above, the combination of young people and ICTs raises a range of expectations among researchers, policy makers and marketing companies, and young people themselves. This project is not the first to question such expectations. Bingham is just one researcher who has tried to look behind the dominant stories with the help of empirical research material.

> …firstly, a dominant story concerning children's use of the Internet has emerged and is presently solidifying. Secondly, any serious empirical research on this issue … will reveal that this story is not adequate to the complexity of the things going on between young people and networked computing (Bingham et al, 1999, p.24).

This EMTEL study shares the desire to use the empirical material to show some of the complexity. Nevertheless, it differs from the Bingham research in that, rather than study children, it has focused on a seemingly forgotten group of "young" users, that is, Flemish young adults, aged between 18 to 25 years. This age group was chosen because of a lack of existing research as well as for practical reasons[1]. Semi-structured interviews were conducted with these young adults, in this case students, about their use and perception

of a range of ICTs including mobile phones, Internet, computer, etc. A substantially different story to that of ICT use by children emerged. With their particular socio-economic standing, their growing independence, and other specific attributes, the age group in the EMTEL study can be seen to differ from most others[2]. That in itself is an interesting finding and will be referred to in the concluding chapters.

The project methodology was two-fold. Firstly, it comprised a broad literature review to monitor and analyse the theoretical and empirical trends in research on youth, new media and consumption. Secondly, it involved a qualitative study based on interviews with individual young adult users and aimed to establish different kinds of uses and perceptions. The primary researcher later conducted a thematic content analysis of these interviews. Different contexts and experiences of ICT use emerged from the interviews and details of meaning and of value-judgements were detected. These will be referred to in detail in the analysis of the research material.

The Two Main Conceptual Approaches

In order to research ICT use by young adults, two main conceptual frameworks were used. The concepts of *youth* and *ICT use* formed the research focus, while the qualitative approach used the concept of *domestication* as a reference point. The latter helps the understanding of actual and individual ICT use in different contexts. Domestication is one of the more widespread conceptual frameworks to analyse ICT users and their relationship to technologies they use.

The concept of domestication signifies the ability of individuals, families, households and other institutions to make new technologies and services their own, to integrate them into everyday lives. In a dialectical process, skills and practices interact with and underpin the construction of meaning around the use of ICTs. Domestication also includes the idea of a "moral economy of the household". This report proposes that, in the group studied, a kind of "moral economy away from home" is emerging.

However, the research material itself highlighted the lack of consideration of "content" in domestication theory. That is, when discussing "use" there is a need to distinguish between the *content* used, *practice* and *discourse.*[3]

> "As 'early adopters' of new media, children and youth are, in many ways, the defining users of the digital media." (Montgomery, 2001, p.637)

The *web generation* discourse provided a major starting point for the research focus on youth. It is often assumed that this generation ultimately bridges the digital divide because it grew up in "post-modern" world of personal computers and the Internet and early wide-reaching adoption of technologies closes the existing gap between users and non-users of ICTs. These young people are seen not only as early adopters of the new technologies, but also as using ICTs *everywhere* and *anytime*. Thus, the web generation supposedly displays an innovative use of new technologies.

The idea of the web generation expresses an understanding that these behaviours and attitudes are actually taking place, but also adopts a normative expectation that this *should* take place. Young people are seen as leading the way as early adopters of new technologies who show "the rest of us" what the future will eventually look like. They are increasingly a main target group for technology developers and marketing specialists, not only as current early adopters, but also as main users in the future. In their role as early adopters, they are expected to display new patterns of use that can then be incorporated into the next design cycle. In their role as main future users, they are commercially viable. Thus, huge marketing campaigns are supposed to attract them as early as possible to a particular brand or product[4]. Young people increasingly feel the pressure to act accordingly – a pressure that stems not only from the commercial interests, but also from the older generation(s), their peers and the media.

One reason for the choice of this conceptual framework for the analysis is that although there are many constructions of the relationship between young people and new media, there is not one *necessary* relationship. The web generation discourse, however, has been rather dominant in the new media debate and tends to portray itself as the exclusive relationship. This discourse defines young users in very specific ways, but rarely through their *own* forms of use, creation and consumption. Instead, it mostly focuses on *assumed* forms of use and attitudes.

What is less clear is whether young people fulfil any of these expectations. Moreover, who are these young people? Where does youth begin and where does it end (if at all)? Little of the web generation discourse has been backed up with empirical research. This study aims to present a more differentiated and substantiated view on the relationships between young people and new technologies. This means the major claims of the web generation discourse will be analysed in a critical discourse analysis and then used as specific research questions.

Despite reservations about it the web generation concept does raise important questions about the specificity of new media as communicative devices and thus about the consequences of current ICT adoption for social relations. It also suggests questions about the specificity of this age group and the specificity of the current moment in time. These questions underlie the domestication approach.

Finally, there is a need to make two general points. Firstly, this project provides a critical view on the so-called "*cyberhype"*, that is, expectations that run in parallel with the emergence of the new ICTs, but which at the same time influence future developments. This paper presents a critique, based on qualitative empirical data, of the "hype" as it is centred on young people. (Parallels can be drawn here with other projects in EMTEL 2, such as Ward, 2003 and Berker, 2003). Thus, the technological change is regarded and analysed as primarily a social process.

Secondly, on a note of caution, youth – especially if discussed in relation to radical changes – is often a placeholder for wider societal debates. Similarly, youth research is generally a history of projections. Descriptions of "tomorrow's future" often say more about the current older "generation", their desires and fears than about the actual "generation" under scrutiny[5]. Youth research thus automatically engages with some of the underlying societal concerns of the moment in time that it analyses[6]. Overall, it should be remembered that the study is intended to be both critical and explorative in nature: it is meant to show some tendencies rather than provide final statements, but also questions ready-made assumptions about youth and new media.

2. Context of the Research

Clarification of fundamental concepts and analytical frameworks is necessary before they are expanded upon. As already pointed out, the research can be divided into roughly two major strands: the research category of youth and the concept of domestication. The starting point of this project was an attempt to define what "youth" is. This process of definition shaped the research design in major ways. The domestication concept, although it underpinned the research throughout, became more important towards the end when its theoretical implications helped to interpret the research outcomes.

2.1. Researching Youth

In researching youth, it is important not to assume meanings. Immediate associations are useful, but dangerous. These associations are usually applied first to certain ages and then extended to apply also to specific behaviours or attitudes. However, both are increasingly seen as in flux.

2.1.1. Youth as a Category

While it is still relatively easy to find common definitions of age categories for defining youth – usually from 12 or 14 onwards to somewhere in the mid-20s – it is more difficult to find broader coherent definitions. Confusion arises where youth is defined either a *life-phase* or as a *social category*. The latter has more recently been expanded to describe a *life-style* and suggests that the youth phase has potentially moved from a phase of "becoming" to a phase of "being". This raises the question as to whether there is anything left that is specific to the age group. Nevertheless, the difficulties of definition do not stop with the question concerning youth as life-phase, social category or lifestyle. Youth is also difficult to define, because it is potentially changing in terms of a lived reality and as a widely understood concept.

The concept of youth has primarily been defined in two major areas of research: (i) in psychology, and the field of psychology within media studies (ii) in policy research[7]. For a long time, the common denominator in different definitions of youth was the idea

of youth as "the period of transition from childhood to adulthood" (Eurostat, 1997, p.3). The end of the transition phase was seen as clearly identifiable (but only gradually achieved) through events or circumstances that signified adulthood. Youth was seen to take place before all these signifiers – usually responsibilities – were in place[8]. Youth was thus described as the "in-between" phase, in which certain types of "playing around" were still "allowed". This was generally accepted as a part of the process of becoming an independent and responsible social actor.

In terms of the changes in the practices that generally define youth, economic factors have made planning life-phases more difficult. However, it is also increasingly recognised that not all the markers of adulthood necessarily occur in everyone's lives. Some of these markers are drawn out much longer while others start earlier. Responsibilities and dependencies are also changing, because young people tend to stay longer at the parental home where they are financially dependent and in education (Eurobarometer, 2001). However, they also tend to start earlier on relationships, part-time work, etc., aspects that used to be regarded as indicators of adulthood (Eurobarometer, 1997). The extension of the transition phase has also been labelled "post-adolescence", a term that combines a youthful *habitus* with adult expectations or as social-cultural "adulthood" with parallel economic dependency (Ferchhoff, 1988, p.10). The overall idea is thus a new and unknown set of combinations as (and of) markers of adulthood and youth[9].

> "… a plurality of jobs, living arrangements, couple relationships, and so on, and thus build adult destinations which are less definite than they used to be in the past …" (IARD, 2001, p.36).

Youth has always been defined as different from some norm. In the cases referred to above it is the norm of adulthood, from which youth is distinguished while perceived to be developing towards. More commonly, the research on and the portrayal of youth concentrated on "non-average" conduct. This conduct differed from another kind of perceived norm, which was usually the dominant culture. In this case, youth is seen as a sub- or anti-culture. Another important definition as "non-average" is the notion of *deviance*, in which youth is seen as in need of protection from negative influences and, or, society in need of protection from youth. Deviance conveys the overall idea of youth as a problem (see Griffin in Roche and Tucker, 1997, pp.17-18). This has been a

dominant approach in definitions of youth (Murdock and McCron, 2000, p.204). The most common other example of the "non-average approach" can be detected where youth is seen as a factor in overall societal change and as such present the *hope for the future*, a notion that often contains an emphasis on education as the driving factor for this change[10]. Other core factors associated with youth are leisure, consumption and identity[11]. The primary approach in youth research, however, has been the binary logic of either "youth as deviant" or "youth as a potential for societal change".

This schematic distinction between deviance and hope, while it touches upon some existing problems and suggests some general characteristics of youth as an age group, tends to ignore the heterogeneity that youth actually represents. It also tends to ignore the majority of youth. Despite these limitations similar schematic debates emerged in research concerning youth and media, and more recently, youth and new media. One recurring theme here is media effects (primarily in terms of violence – see for example Liebert and Sprafkin, 1988). Work on ICTs has widely discussed the "dangers" posed to youth by explicit websites or has seen youth as representing danger in the form of hackers. In many of the accounts (for which the web generation discourse is also representative), youth are defined via its use of (new) media. However, the issue is whether youth define *themselves* via this media use.

2.1.2. Youth as a Subculture

An exception to the schematic approach can be found in cultural studies of youth. Here work by the University of Birmingham's Centre for Contemporary Cultural Studies' (CCCS) on youth subcultures from the 1970s has been influential. The CCCS researchers related subcultures to class and other socio-economic factors and analysed music preferences, fashion, consumption and behaviour patterns in relation to these factors. They focused particularly on leisure activities and identity. Thus, the CCCS research related youth cultures to society overall and managed to understand youth *in context*. In doing so the cultural studies approach moved beyond the binaries and underlined that researching youth as a general category is impossible. It also provided the first systematic conceptualisation of youth in terms of consumption patterns and of identities related to these patterns.

> "The particular version of subcultural analysis we are concerned with here focuses on the way in which the shared social experiences of adolescents in particular class locations are collectively expressed and negotiated through the construction of distinctive leisure styles" (Murdock and McCron, 2000, p. 203).

CCCS researchers were among the first – from a sociological rather than a psychological angle – to actually take youth cultures seriously and to empirically research and formulate theories on them. Their analyses have been informative and remain an important starting point for any analysis of youth cultures (see for example Hall and Jefferson, 2000 [1976]; Hall et. al., 1996 [1980]; Hebdige, 1979; McRobbie, 1991). The researchers originally concentrated on subcultures such as "mods", "skinheads" and "teds", but all within the wider frameworks of class, gender and race. More generally, youth styles – as in the outwardly visible signs of subcultures – have been characterised through an aestheticisation and exaggeration of the everyday. Youth lifestyles are expressed particularly through music and fashion, but also through sport and overall values as expressed in youth politics, religious engagement, etc. Language and gestures are more subtle defining characteristics. Technologies have now been added to this list (SPoKK, 1997)[12].

The cultural studies approach provided both the wider societal reference (of class, gender, etc.) and located youth cultures in the context of everyday life. This is also a concern for this project. Some proponents of the web generation concept support the idea of a subculture (in terms of some youth as early adopters of ICTs – see discussion on Hebecker below), while others clearly claim that the web generation concerns the whole generation and as such applies to the mainstream. Both views differ from the original cultural studies' approaches. The same applies to this research project.

The research methodology used here clearly differs from the CCCS projects insofar as this project did not choose a particular sub-group to begin with, but started out with *all youth* in principle. The existence of a subculture was not presumed. This has been outlined as a problem within the Birmingham subculture approaches and elsewhere, where the focus has been mainly on deviant or even delinquent subcultures. The result is

that the research does not necessarily overcome the schematic distinctions outlined earlier:

> "A comprehensive analysis of youth however, must necessarily be capable of accommodating and explaining not only deviancy and refusal but also convention and compliance" (Murdock and McCron, 2000, p.206).

Thus, for this project the cultural studies approach served as an inspiration and also as an underlying research question, but not as a general recipe. That is, this research used a similar emphasis on everyday life and on youth in context, but it also raised the question as to whether the web generation as generally portrayed could and would be an equivalent to a subculture in the cultural studies' sense.

2.1.3. Youth as a Web Generation

2.1.3.1. Generation – The Basic Concept

Any generation is broadly defined firstly as an age group in relation to a specific historical period. The German sociologist Karl Mannheim distinguished between a generation *a sich* and a generation *für sich*. His 1928 publication was the basis for many generation theories and it has been described as a Marxist version of generational theory, since it refers to a common consciousness amongst young people. Mannheim outlined how each generation differs in detail, but can in principal only develop in two major ways. It can either pass without any significant historical and social experiences based in time and place – be a "lost" generation, the generation *an sich* – or it can go through significant experiences and thus be a true generation, a generation *für sich*. Only the latter kind of generation lives with a collective consciousness and thus has a greater impact on society.

A generation *an sich* does not suffice in relation to the impact, only a generation *für sich* can be an actor of significant social change. In addition to the "common impulse" of the significant experience, other aspects are also seen as important for the formation of a generation. These include innovative access to cultural resources and the own style of the generation (see Winkels, 1997).

The common consciousness is developed by smaller groups in reaction to the social situation they find themselves in and from these small units attitudes can expand to similar groups in similar situations. These attitudes thus form the basis for a general generational "style", which is often opposed to that of the parental generation. The relationship of these generational units to their potential class origins remains primarily unexplored in Mannheim apart from his suggestions of the possibility of antagonistic generational units existing in the same generation (Murdock and McCron, 2000). The underlying question is one of the "generational consciousness and its relation to social change" (Murdock and McCron, 2000, p.196).

This generational label has been used in the experience of the Second World War, which has been seen to create a specific generation (or, in fact, several different ones); as have the events around 1968 (in Europe and in the U.S.A.). More recently, there has been talk about the "Generation X", teenagers in the 1980s, who were described as a generation without much hope or aims[13]. More recently, some articles have claimed that the current younger generation is beginning to define itself through the experience of the (second) Gulf War in Iraq in 2003 and through their – albeit apolitical – resistance to it. Within this claim, an element of the web generation discourse remained prevalent: the resistance of this "Gulf Generation" was supposedly organised with the help of ICTs, in particular the Internet and the mobile phone (Haberl, 2003). However, this label will probably not last, since new generational labels are applied rather quickly these days. The one that has lasted longer is that of the web generation.

2.1.3.2. Net-, Cyber- and Web Generation@

As was already hinted at in the last chapter, web generation theories assume that young people today use ICTs extensively, innovatively and without problems. The idea of the *web generation* as the *fundamental generation* of the Information Society is exemplified through terms such as *net generation* (Hebecker, 2001; Tapscott, 1998), *generation@* (Opaschowski, 1999) and *cybergeneration* (Kellner, 1997)[14]. This generation is seen as connected to the world, adopting new technologies early and using ICTs easily as well everywhere and anytime. All this, they supposedly do, while their parents watch helplessly, because for them it all develops too fast. Under the eyes of their parents, the web generation creates its own culture or lifestyle through and with the help of ICTs

(Opaschowski, 1999, p.18)[15]. Thus new forms of use, new forms of content and connectivity are meant to surface, with a new relationship to the world, to knowledge and even to the emergence of oneself. This also implies that youth culture today "is transmitted via media- and computer culture" (Kellner, 1997)[16]. Many of the authors promoting the concept of web generation assume that this ICT use will have long-term consequences for society overall and these are mostly interpreted as positive (people will connect differently with each other; they will live in a global world full of possibilities; they will be creative). The web generation is treated as a current *Leitbild*, expressing hope not only for the future, but even for a "here and now"[17].

Within this "here and now" of the web generation discourse, ICTs are seen as being used "everywhere" and "anytime". Everyday life is characterised by ICT use and the boundaries between technologies and self are meant to increasingly disappear (for technological developments pushing this point see Punie, 2003). A general notion of increasing *connectivity* underlies this image. This notion goes beyond the technological (where one is networked and mobile) to assume a social-cultural meaning. The focus of this analysis shifts from stability and permanence to the ephemeral, that is, to brief, but intense encounters, which are organised around specific and changeable social networks and interest groups. The kind of access and use of ICTs that the web generation is meant to have is not only problem-free and smooth, but also confident and playful. They are meant to push technological and social-cultural boundaries rather than accept limitations. This pushing of boundaries is – at least in theory – often linked to playing games. Work and play are supposedly no longer clearly differentiated anymore. Thus the web generation (discourse) develops the idea of a generational culture that defines itself via ICTs. This identification is taking place in a fairly conscious and "positive" way, that is, this generation supposedly defines itself in terms of the crucial and positive role of ICTs in their lives.

When many of the web generation theories were first promoted in the late1990s, this generation was also seen to push e-commerce, that is, to consume not only the technologies as such, but to also consume goods and services via the technologies. These perceptions lead to the web generation being heavily targeted by marketing strategists. Since then, e-commerce as a *Leitbild* has mostly disappeared and has thus

not featured much in later versions of the web generation discourse either. Most of the promoters of the idea – often part of a half-academic popular discourse – promote the web generation as widely understood in terms of behaviours, events and other developments that are relevant for and widely influential. Thus these authors speak of *the* young people today, about majorities, but at the same time, one also finds the idea of the net generation as a subculture.

2.1.3.3. Net Generation as Subculture

This section begins with an outline of the subculture stream within the web generation reflections, in particular, the work of the German sociologist Eike Hebecker (2001). Hebecker also defined the new generation via its technology-uses, but he researched generation building is researched in terms of the discourse around young people and ICT use rather than *actual* ICT usage by youth. He claims that it is not the number of people using the technologies, but *how* some of them use it and how they *are seen* to use it, which creates a common horizon. Hebecker implicitly combines the subculture approach with concept developed by Everett Rogers of the early adopters without acknowledging this link.

Hebecker's uses discourse analysis of both academic and popular discourses to see how this generation is constituted[18]. His main conclusion is that the current flood of information requires technical competence and selective concentration that only some people – even amongst the young – can deliver. Hebecker's major contribution was to divide those who have the ability to do this into different *user typologies* comprising: the *otaku* (for whom information becomes fetish); the *cyberpunk* (for whom technology is lifestyle); the *hacker* (who is part of a hierarchically organised subculture); and the *cyberflâneur* (who differentiates him-/herself via aesthetics and extroversion)[19]. Hebecker concludes that the current generation is *not yet* a net generation and adds that whether the current generation will actually become a net generation depends primarily on whether these young people will use the media according to the typologies he devised. In principle, however, he declares that the generation would be "made" through the actions of the small group of elite users, of the early adopters, rather than through adoption of these approaches to ICTs by the majority. Thus, he does not deliver what the CCCS set out to do – to locate subcultures within a context. Since he refers primarily to

the discourse about use rather than the actual users, the location is more within a framework of the general hype around new technologies than anything else is.
While Hebecker provides a useful analysis of the hype surrounding the web generation concept, he does not compare the results of his detailed analysis of the net generation as a public discourse with empirical research on what young people do with new media. This, however, would have substantiated his analysis and made the typologies, which he develops for different approaches to new media, seem less artificial. It also might have helped an understanding of how such small, specific but diverse technological subcultures can come to represent a whole generation. Thus, in generating these typologies Hebecker, partly repeats what he first accused others of, that is, he simplifies complex and diverse approaches and so repeats what some marketing research is also doing – to make the current generation manageable and marketable[20].

This trend towards a segmentation of youth into different user and lifestyle categories takes place more generally in the web generation discourse[21]. While segmentation seems to acknowledge the diversity and heterogeneity in a large group such as "youth", it also closes this diversity down and covers it up through new definitions. It allows some diversity but it also ignores the individual and the dynamics of behaviours and attitudes. Finally, it also rules out the idea of events that shape all young people's lives despite all other differences (as Mannheim suggested).

Nonetheless, Hebecker's analysis confirms many aspects of web generation discourse analysis that emerged in this project and also underlines how problematic such generational labels are when they are imposed from the outside. Hebecker also stresses how closely a web generation discourse is related to wider societal concerns, especially the notion of the emerging Information Society. He highlights the relevance of an analysis of these discourses beyond simply showing what youth is expected to behave like. In addition, he implies that the web generation concept generalises the behaviour of a few specialists to the whole range of young people. Thus, his material helps to point out a flaw in the overall web generation approach.

To sum up, the idea of the generation offers a way of analysing the specificity of the relationship between a certain age group, a specific historical moment and the potential

social consequences of this combination. It thus moves beyond a schematic description of youth and allows the describe youth as a set of complex social actions and actors. The web generation has both been portrayed as the mainstream current youth and as some specific subcultural groups, which display characteristic ways of using the new media. In either case, the web generation is seen as having far-reaching consequences for the structure of social and cultural life in the future. These consequences stem from the ICT use.

2.2. Researching ICT Use

2.2.1. Common Approaches

The kind of empirical research into youth delivered here, is part of a wider field in media and technology studies that could be very generally labelled "user research"[22]. This field has developed over several decades in different directions and with different research approaches. Punie (forthcoming) labels the two main areas, "diffusionism" and "domestication". The former began with the idea of the diffusion of innovations amongst consumers and the latter has taken detailed in-depth studies of what users do with the technologies. Both approaches share a certain distrust of technological determinism, that is, the idea that technology shapes society and/or social interactions. Instead, user research introduced the user as an important agent in this shaping process.

One of the first, and still widely used, theoretical-empirical models within the study of technology use has been Everett Rogers' diffusion research (the basis for the above-mentioned distinction between diffusionism and domestication). This model was – until the mid-1980s – more or less the only model. Rogers (1962) researched and later schematically portrayed the adoption of innovations by individuals[23]. He combined the adoption of the innovation and the role of the actors in the adoption process, hence the idea of different kinds of adopters (the best known being the "early adopter"). His scheme is still being used today to illustrate a likely S-curve within technology adoption processes. However, it assumes that innovations will be successful and ignores instances where this was not the case. As Punie suggests, diffusionism can be seen as a specific form of communication theory, which analyses the way in which specific ideas about products are communicated (and subsequently the product bought or rejected). This process of innovation-diffusion highlights the idea that the new product will only be

adopted if there is an added value for the adopter over time.

However, this is a linear and behaviouristic claim about the adoption and diffusion process. Rogers' scheme does not allow for changes in behaviours over time nor does it explain the diverse forms of use that develop after the innovations have been acquired. Nor does this mostly quantitative research approach adequately explain individual decision-making processes and adoption mechanisms. However, the focus by Rogers on the user and his remarks about the influence of opinion-leaders within the adoption process has been useful in explaining the uptake of new technologies. Thus a first step in the conceptualisation of the initial use (and non-use) of technologies was achieved but other approaches are needed to account for the complexities of ICT adoption and use.

From the late 1980s, alternative concepts started to be developed in response to the perception that existing ones were reductive and deterministic. The differentiation that emerged (partly based on research into "failed" technologies) stressed the interrelationship between technologies and markets and suggested that "push" and "pull" could be factors on both sides. Users were seen as having some agency in the process of use and design and innovation and this notion is developed in this paper.

The further theorisation of adoption and use processes, the "social shaping of technology" and other constructivist approaches within sociology have represented the other side research into ICT uses (Bijker and Law, 1994; Bijker et. al, 1989; MacKenzie and Wajcman, 1999). Here, users are perceived to take part in the process of shaping technologies through making meaning of or with them, integrating them into their everyday lives, their social networks, their ideas about themselves, their value-systems. One specific theoretical strand within this tradition is *domestication* concept.

2.2.2. Domestication

The term "domestication", when applied to ICTs, refers to a process of "adoption" of ICTs into people's lives, particularly into households or similar structures like organisations (Ward, 2003). Based originally on reflections about consumption in general, the domestication concept was developed within the sociological end of media studies (amongst other disciplines) to find a way of researching media use in the context

of domestic everyday life[24]. This context-sensitivity was to get away from the concentration on media texts, which at some stage dominated media studies, at least within the UK[25]. Thus the domestication concept enabled researchers to understand media use in the complex structures of everyday life settings, with attention to interpersonal relationships, social background, changes and continuities, but also to the increasingly complex inter-connection between different media, the convergence of different media technologies and media texts. Few other media use concepts manage this level of complexity. The approach has also been useful for feminist research as well, since it focused attention on the under-researched domestic context. Domestication traces the creation of meaning in media from its inception (when the producers and advertisers create certain meanings for new media) to its later use (or non-use) and the meanings that emerge here. Thus the emphasis is on consumption as well as use (see Haddon, 2001, p.3). It is also important that this be seen as a continuous process rather than a one-off event. Furthermore, the process is problematic.

Domestication focuses on individual media use and the socio-cultural situation in which it takes place. Human agency is generally favoured over technological agency. However, some domestication theorists do return to the agency of technology, albeit not in a technological determinist way. Knut Sørensen, for example, in the tradition of actor-network-theories (ANT) notes that the *tinkering* with technologies "is a multi-dimensional process of negotiation, involving humans and non-humans, being conflict as well as collaboration" (1994, p.6). Thus the technology is also given a role (see also Law and Hassard, 1999).

The domestication concept contends that some attributes of the ICT adoption processes, which have – at least in the context of the web generation discourse – been portrayed as typical for a particular age group, can be seen to refer to different steps in a domestication process of ICTs more generally. Thus, the domestication concept allows a closer analysis of the particularities of the adoption processes of ICTs *by* young adults, but not necessarily *as* young adults. It also facilitates an understanding of the reasons for particular uses, the ways these uses (and users' perceptions and understanding of their use) change over time, what role other people play in these uses, what role social and cultural capital plays and many other aspects of use.

This paper contends, in an extension of the domestication concept, that ICT use has both material and symbolic expressions, but also consequences. It also underlines how problematic newness and otherness (primarily of technologies, but also of other users) are. The "new" and the "other" cannot remain thus – they need to be integrated into everyday life in order to preserve an existing balance – or at least create a new one. This integration process can be shown with the help of the domestication idea. It is suggested here that for young people these integration processes are no smoother than for their parents' generation. They might more easily adopt the technologies but that does not mean they are comfortable with the content of these technologies and, or, with the challenges that these technologies offer to their existing life patterns and value systems.

2.2.2.1. Domestication Concept

Domestication concept suggests that the adoption of ICTs into everyday life should be understood as a form of "integration career" of the technology. The artefact is fitted into existing patterns of everyday life, of technology use, and embedded into social patterns. Thus, domestication should not be seen as a linear process of harmonious progress. Conflicts are common hence the idea of "taming" the technology which the term domestication suggests. Dynamism is part of it all in the sense that is there is no permanent fixture and closure of meaning in relation to the artefact (Sørensen, 1994, p.7). Skills and practices have to be learned in order to deal with ICTs, while meanings are constructed in the same – dialectical – process. Symbolic reasons for adoption include identification and differentiation.

Two major directions of research can be detected. Roger Silverstone and Leslie Haddon (following on from David Morley and Eric Hirsch) have developed this concept in the UK context, both theoretically and empirically (for example 1992, 1994, 1996). Similarly it has also been developed by Merete Lie, Knut Sørensen and others in the Norwegian context (for example 1994, 1996 and 2000) and taken up by other, mostly European, researchers elsewhere[26]. The emphasis in these two strands is, however, quite different. Silverstone and his colleagues looked at the household and technologies primarily in the sense of ICTs, that is media technologies.

Sørensen and his colleagues, on the other hand, while also interested in ICTs, never limited themselves to this kind of technology and looked at other domestic appliances as well, like the car. Another crucial difference between the two approaches is the Norwegians' willingness to research domestication outside of the household context. This report draws more heavily on Silverstone and colleagues because of its focus on ICTs and because the household, in this project, served as comparative point of analysis.

Silverstone and Haddon concentrated primarily on the household as the place for this integration career and followed the technology from the point at which it is initially brought into the household until it is simply taken for granted in everyday life. (Another version of domestication could look at its non-use, its disappearance into some cupboard is taken for granted.) Throughout, the users play a role in how the technology is adopted not only into the household as a physical space, but also into the everyday routines of the household members and their perception of the technologies. This finally leads to a communication to the outside world in which the technologies form a part of the status of the household in question. Silverstone and others also suggest that appropriation is not only significant in relation to the transactions that transform an object from a commodity to possession, but also as a process that allows a household to create its identity.

> "Yet the Appropriation of an object is of no public consequence unless it is displayed symbolically as well as materially. But equally, the conversion of the experience of the appropriation of meanings derived from television, for example, is an indication of membership and competence in a public culture, to whose construction it actively contributes" (Silverstone et al, 1992, p.26).

The conversion process is, however, only the last step in the manifold process. Silverstone and his colleagues developed a six-stage model of integration, which comprises: commodification, imagination, appropriation, objectification, incorporation and conversion[26].

In simple terms, commodification" refers to the initial production of the artefact in terms of both industry and commerce. The "imagination" refers to the part of the technology

entering the consciousness often in a series of steps (Ling, 2001a). "Appropriation" is the acquisition of the object and its initial introduction into the household. "Objectification" refers primarily to space-issues, to the location and integration of the object into the household. "Incorporation" is primarily concerned with time-issues: it refers to the active use of the technology (either in the intended form or in others). "Conversion" is concerned with the relationship between the household and the outside world in both material and symbolic terms and the public acknowledgement of the ownership and use of the technology. Svendberg (2002 – referring to Ågren) adds what she calls "virtualisation" to the list, that is, the point at which objects or activities from our physical worlds are put on an equal level, in terms of value, as the symbolic world created by technologies. However, her implementation of this argument does not convincingly place it on the same level as the other parts of the process as just outlined.

The overall process is not a linear or closed one. Re-negotiations are common and assessments and uses can change over time. In addition, there are three dimensions of domestication: the practical, the symbolic and the cognitive, which all have to be taken into consideration when researching this. Methodologically, many of the projects used ethnographic approaches. The emphasis on an appropriate methodology to research this complex (and dynamic) structure was important in the beginning and ethnography seemed the answer as it allows the researcher to locate and understand media use in terms of its ritual and symbolic meanings.

The Norwegian researchers mentioned above developed these ideas to concentrate on structures outside the household for the integration and/or on other technologies than ICTs. Others have concentrated primarily on new ICTs. Some go as far as claiming the need for further fluidity of the concept, accusing it of being too rigid (Ling and Throne, 2001). Despite the potential problems with the concept, it is one of the only theoretical approaches that helps to explore the complex processes of the adoption and especially the use of technologies into and in everyday. Like other theories in media studies that emphasise the partial power of the audience in the interpretation of media content (for example Ang, 1991; Morley, 1992, 2001), domestication adds a similar element of partial (and ambivalent) power to the user of technologies in general (and shifts the emphasis from the content to the technology). The theory thus adds perceptions

concerning the artefact in question to the process of appropriation and use of technologies (including the idea that only parts of the technology are sometimes adopted or rejected, even after the acquisition). Furthermore, it stresses how through the processes of adoption, cultural claims can be made with the technologies.
The problem with the domestication concept is the difficulty it poses when trying to draw wider conclusions from the often rather specific user groups that are researched (as is the case here). This should not, however, not prevent the use of some of the more general statements in the theory (see Morley, 2001, p.2). Particularly useful is the idea of negotiations between what is considered the private sphere and what the public sphere[27].

More recently, Leslie Haddon (2001) has tried to adapt the concept of domestication to theorise about mobile technology use. He referred primarily to existing material to point out how far this already uses aspects of the theory and, or, could be used to open up certain aspects of the concept to new directions. He rightly claims that "developing this framework to deal with technologies such as mobile telephony and social networks beyond the home presents something of a challenge" (Haddon, 2001, p.2). However, the focus in domestication theory on social processes means some wider societal trends – which might be closely related to the emergence and use of ICTs – cannot necessarily be clearly seen in this kind of research. Social network analysis, albeit on a less quantitative level than currently common, could be one version of thinking through the non-domestic (see Haddon, 2001, p.8). Questions that could be asked in relation to mobile technologies, are outlined by Haddon as

> "What … leads mobiles or particular mobiles to become fashionable (or not), what forms of negotiation take place within social networks and how do collective practices (…) emerge? Are there rules about use and if so how are they policed? … In general, how is consumption shaped by the collective and shaping in its influence upon it? (Haddon, 2001, pp.8-9)"

Many of these questions are also part of this research project. Haddon also suggests, and this is raised in the conclusions to this report, that the biographies of technologies develop in relation to the age cohort, that is, for those for whom the technology was first

introduced when they were young, use might change more substantially than for other age cohorts.

2.2.2.2. Moral Economy

Another aspect that domestication theory introduced is the idea of the *moral economy of the household*. Here the household is understood as a transactional system, in which it needs to create both autonomy and identity for itself – as an economic, social and cultural unit. This is done in order to create and sustain "ontological security", that is, a confidence in the world "as it seems to be" (Silverstone et. al, 1992, p.19). It is based on the premise that a household is indeed an economic unit – it consumes, it produces, it exchanges. Nevertheless, the activities of the household are also defined through its perceptions and values, through particular aesthetic and other choices, which are defined via the household's history, through the biographies of the individual members and through the overall politics of the household and its members. This combination of economic aspects and values constitutes the moral economy of the household.

This economy is carefully balanced and protected, yet constantly in flux. New technologies are one of many potential "disturbances" that the household has to deal with and to integrate into the existing balance. There the process of appropriation plays a role. Sometimes, however, the balance cannot be restored and a household is fundamentally changed via ICTs. This can even take place without their appropriation, that is, where imagination can bring about a fundamental shift in attitudes. This process is reciprocal, in the sense that technologies can change after entering the household, but the household also changes (see Aune, 1996). However, this is not without pre-given limitations or directions. In what is called "affordance", the technology suggests certain ways of how it should be used (Sørensen, 1994, p.4; Sørensen et. al, 2000, pp.239-240). It has perceived properties that are usually not ignored, but one first needs to be aware of what these properties are.

In terms of the moral economy, the domestic context is defined as a "clearly identifiable case of a situated reality in which the norms of economic and social behaviour are defined, not by abstract principles, but by the particularities of private and personal values" (Silverstone and Haddon, 1996, p. 71). Thus the theory can be applied to other

cases of situated reality, as in the case of the youth researched here, who often live in more than one household and also use the technologies outside of these households (and where ICTs potentially allow a "home" outside of a physical home). Unfortunately this implies that the case of situated reality is less clearly and easily identifiable.

2.2.2.3. The Question of "Content" versus "Practice"

What the domestication concept lacks is an emphasis on the reception aspects of the "audience" in media use, that is the making sense of media *texts* and their *reception*. It lacks this not so much in theory (rather this was a major emphasis, at least in the beginning), but in terms of the application of the theory (potentially as a methodological question). Thus, it is underestimated rather than absent. This deficiency is a far-reaching claim (especially in the light of the original aims[27] of the theory) that can here only be declared as an impression, but – because it appears especially problematic in the light of the inherent use possibilities in ICTs – as necessarily in need of discussion. The claim is that this has been acknowledged by domestication theory, but not finally addressed.

In the original formulations of the domestication concept in relation to ICTs, the dual nature of these technologies played a major role. Silverstone (1994) argued that many domestic technologies were seen as objects (and provided discourses about the object) and as part of consumption processes, but they were at the same time discussed as meanings and texts. ICTs are thus not only objects, but also media, and as such, they are doubly articulated.

> "... these technologies are not just objects: they are media. ... communication and information technologies have a functional significance, as media; they provide, actively, interactively or passively, links between households, and individual members of households, with the world beyond their front door, ... in complex and often contradictory ways... [They] are …doubly articulated into public and private cultures" (Silverstone et. al, 1992, p.15)[28].

The technology is interpreted as a semiotically complex text, which is open to be decoded by its users. The double articulation clearly states that only the consumption of both – the technology and its content – defines the significance of the technology as an

object of consumption (Silverstone, 1994, p.123). They are articulated into public and private cultures, into economy and culture.

At the time of its first formulation, the domestication concept within the media studies framework quite crucially shifted the emphasis away from a concentration on texts and reception to the practices of use. This was an important step in recognising and researching the embeddedness of media consumption in wider social practices, in everyday lives. The domestication concept also offered the engagement with the whole media environment and not just one medium or even one text[29].

This mostly meant that media content was researched *as practice.* That is, for instance, when the relationship between media and boundary-maintenance is "expressed through decisions to include and exclude media content and to regulate within the household who watches what and who listens to and plays with and uses what" (Silverstone et al, 1992, p.20). An analysis of this provides a hint of the importance of individual content and the extent to which such content is embedded in much wider household and societal structures (as audience practices, which are situated within micro-social environments), but the *content* as such does not feature directly. These micro-social environments are sites of struggle in the small and the wider sense of the word. In Sørensen's eyes, the micro-networks of everyday life (like housing, work, spare time) are the locations of potential counter-power, the sites where change should or could take place (1994, p.19). On the other hand, everyday life only emerges from these struggles. "And it is in this struggle with or against the commodities – both objects and texts – of the mass market, that many of the structures of everyday life are revealed" (Silverstone, 1994, p.175).

It is not just practices, but also knowledge and the results of learning that are a focus in these struggles. As Sørensen et al argue: "When knowledge is domesticated, when it is locally embedded and embodied, it is made relative to local culture and practice" (2000, p.253). However, this knowledge refers primarily to the knowledge about the technology, about learning how to use it. Although this relates to content of the technology in its own way, it still concentrates on the artefact as such. Most of the application of the domestication concept seems to regard texts (as equalling "content") as such as a relevant part of the practices of use, but not as a primary part. Overall, the

double articulation clearly addresses this problem in theory, but most of the application of the domestication concept seems rather to have stayed with the use practices. These practices are never disconnected from the content (and content is practice as well), but differentiating between the two is a matter of emphasis or focus and does often come up with different results. It is also possible to look at the importance of the combination of the two in terms of media consumption as doubly articulated as both a *ritual for domestic life*, but also as the *participation in the national community and the general ideology* (Morley and Silverstone, 1990, p.45). Media content thus provides an important basis for everyday communication. Again, while this links content and practice, it does not fully engage with content as such.

Even if this carries the risk of retro-theorisation, this lack of concentration on the media texts themselves appears repeatedly as a problem throughout the analysis within this research project – especially in the context of new media. This it will be addressed in the analysis of the interview material and reflected on in the conclusions.

2.3. Summary

Researching youth and researching ICT use means engaging with two sets of complexities. One is primarily complex on the level of definition, the other on the level of actions and motivations. Looking at previous attempts to deal with these complexities revealed first of all a tendency for schematic approaches (both in terms of youth, in the deviance versus hope debate, and in terms of ICT use, in the sense of Rogers' diffusion concept). It also showed that other concepts have began to approach these questions from a different angle and been rather successful at finding ways of describing and analysing the complex relationships.

This report uses the following concepts to guide us. In terms of ICT use:

- The idea of domestication as a way of analysing the process of adoption of ICTs into everyday life.
- The notion of the moral economy of the household to see whether this might help to analyse some of the specificity of ICT use by young adults (since their household situation changes radically).

- The suggestion that content and practices might appear as separate aspects of the ICT use in question.

The latter also feeds into reflections about youth research:

- The importance of the discourse about use (in this case in the form of the web generation) for the actual use and perception by young adults.
- The question as to whether current ICT usage by young adults is a mainstream or a subcultural activity (and how this relates to the general perception of use).
- The emphasis on the diversity that youth offers in principle, but which has often been overlooked in research.

3. Methodology

3.1. Literature Research and Quantitative Material

The research methodology split into two major areas: the desk research and the empirical study. For the desk research, a large literature study was combined with a survey of existing quantitative material that covered the field of youth and ICT use, which subsequently served as a backdrop to the analysis and has briefly been referred to in this report. The literature search itself was rather extensive and covered many different subject areas (ranging from psychology, sociology and media studies to law and policy). This part of the research also included readings on methodology and incorporated both traditional media (books and journals) as well as online sources. It mainly fed into the research context as outlined in the last chapter and thus also into the later analysis of the research material.

In terms of quantitative data, both on ICT use in general and on youth, mostly publicly available (or affordable) data was used. In this area, the quantitative study of ICT use is mostly covered by sources such as the European Commission (for example Eurobarometer, 2002; Eurostat, 2002), the OECD (2002) and the ITU (2003). Quantitative data on youth in general (covering attitudes and behaviour) is less commonly found as publicly available material, although the Commission remains one of the best sources (for example Eurobarometer, 2001, 1997; European Commission, 1997; Eurostat, 1997). However, one can find many references to existing commercial

research on youth (a growing focus). Within the framework of this study, however, most of this material was considered too expensive and too far removed from the primary concerns of the study. In terms of the more specific combination of youth and ICT use, quantitative material does not (yet) exist in abundance, but is beginning to be covered more widely (a growing area of interest for policy makers amongst others). On this level, the field is covered mostly by commercially financed research (for example InSites, 2000; Deutsche Shell, 2000 and 2002). Some of this data will be referred to in the following chapter.

One outcome of the combination of literature search and quantitative data survey was the impression that youth research is often not empirical enough – instead it tends to build a theory without backing it up (see Farin, 2001, pp. 13-1413/14). In addition, while the quantitative side, as just outlined, has increasingly been taken care of, the qualitative side remains marginal. Quantitative research, however, does not offer the same possibility for an insight into the *thinking* of the young adults, thus a qualitative approach was chosen as the primary research strategy in this project. It allows the researcher to sketch some of the complexity of the inter-relationship between technological and social change that was hinted at in the last chapter.

3.2. Qualitative Study

> "Qualitative researchers ... always think reflectively, historically, and biographically. They seek strategies of empirical inquiry that will allow them to make connections among lived experience, larger social and cultural structures, and the here and now" (Denzin, 1994, p.199).

A qualitative approach tries to analyse the motivations of young adults for using (or not using) ICTs and their perceptions concerning uses and technologies, plus ideally locating this in a wider socio-cultural and socio-economic framework, making connections to the lives of these young people overall.

Qualitative research tends to engage with a small number of people in a more in-depth manner. Thus qualitative research within media studies (and generally) often draws from anthropology (as mentioned in the domestication approach), using ethnographic research methods (such as fieldwork, observations, long-term placements in the research

field, in-depth interviews, focus groups, etc.). The ethnography of ICTs examines the use of different media and communication devices in a socio-cultural context. It thus combines use as well as the ICTs as such, since it is in the actual uses and the communication situations that the meanings of ICT use emerge. It takes into consideration the everyday environment of the user and is able to locate use within interactions.

Qualitative research in general tends to be more descriptive rather than immediately explanatory, which quantitative research tends towards. Ideally, the two are combined to provide a more complete picture. One of the criticisms of qualitative research usually voiced that it is only a small number of researched (people, objects, etc.) and that it provides only a rather subjective interpretation (something that is not controllable). In the case of this project, the depth of the potential answers found in qualitative research seemed worth the "risk" of a smaller number of researched and a less "objective" interpretation. It should also be noted that the numbers of interviews in this project turned out to be rather large, thus the interpretation is based on an unusually broad range of interviews.

One drawback that should nevertheless be mentioned is the fact that ICT use was not researched via observations or field research of another kind, but simply derived from the interview material. This is a lack insofar as that whatever is claimed to be ICT use is already mediated via the perception of what the young people in question think they do and or what they want the researcher to know about.

3.2.1. Method

Since interviews would provide both a deeper insight, but also an overview over current trends, it was decided to use these as the primary research method. Once this decision had been made, the research design had to react to the "specific circumstances" of the research project. Ideally, the researcher should have conducted these interviews personally. Due to the nature of the European research network within which this project is based (and which expects mobility of the researchers in question), this was not possible (due to language issues)[30]. The eventual answer to this problem was to use local students to perform the interviews[31]. The students in question were third year students of

Communication Science at the Vrije Universiteit Brussel (VUB)[32]. The teaching introduced the students to the overall research project (EMTEL), to the general theoretical framework of the research (youth and (new) media) and to the specific methodological framework of the research, they were expected to conduct.

The students were then given the task to perform semi-structured interviews with young adults between 18 and 25 years of age[33]. They each had to do one so-called self-interview, in which they interviewed themselves[34], and six other interviews. The interviews were conducted between December 2001 and February 2002 in different locations (most often the interviewees' home (primarily flats shared with a partner or a student home), without other people directly present. Most interviews took between 45 minutes and an hour and all were recorded and later transcribed by the students. The software NUD*IST (4) was used to aid the analysis, since it allows the classification of qualitative research material according to self-created categories. This helped to deal with the rather large amount of material.

Altogether, there were nearly 550 semi-structured interviews (a selection of which forms the basis for this report). In order to limit this number, a selection approach was chosen that kept an element of randomness. Thus, the two largest identifiable groups of interviews were chosen for further analysis. One of them was the set of self-interviews that were mentioned above, another part was provided by the interviews conducted with non-students[35]. The two groups were not chosen to afford a comparison, but simply in order to limit the number of interviews for the analysis and still allow some variety.

The research questions (see below) were kept rather general in order to allow the students to fill in the topic lists (that is the interview guide) and especially the question lists. The interview guide roughly covered topics such as youth, technologies, daily practices, consumption, gender-related issues, identity and subculture and the future. That is, usage patterns of new media, perceptions of new media, understandings of the concept of youth in relation to such usage, and similar issues. A particular focus was the idea of consumption of and through new technologies. The students were advised to cover most topics from the topic lists, but were asked to cover these topics with their own questions[36].

The analysis of the data was carried out by the primary researcher and consisted of a qualitative content analysis. A random selection of interviews was initially analysed to get an impression of emerging topics. These topics were then used as the basis for the later interpretation of the remaining interviews. More topics were also added throughout the analysis (and the existing ones refined). The web generation discourse analysis proved to be rather informative and helped to further structure the interview analysis in its later stage.

3.2.2. Research Questions

The research questions were designed to be broad and open. Students were also given a list of topics to cover. This approach was chosen in order to allow some flexibility in the questions that the students were designing for their interviews. The self-interview was an encouragement to reflect on the usefulness and clarity of their own questions.

The chosen research questions to guide the interviews were formulated as follows:

1. How do young adults engage with new media and ICTs?

a) *What* do young adults do with media and ICTs and to *what extent*?

b) *Why* do they do what they do?

c) *How* do they perceive current and future changes?

2. How is this engagement linked to consumption? (that is, consuming – what? how? why?)

a) *Consuming* the technologies

b) *Consuming* through the technologies

c) *Consuming* identities and lifestyles

Underlying these were more general research questions, which only emerged throughout the project (guided by both the research findings and the literature search results). These are the questions that have been outlined in the earlier chapters (and will be returned to at the end):

- Do young people (adults) domesticate technologies in specific ways?
- Is there something that could be called a web generation?

4. Empirical Findings

4.1. Youth in Europe in 2003

A brief overview of some basic trends, both in terms of youth in general and in terms of media use by youth will now be provided in order to locate youth in the wider framework of European societies at this moment in time. These trends have primarily been derived from the analysis of the quantitative material that was referred to in the last chapter. Some of the data includes illuminative qualitative insights (Deutsche Shell, 2000 and 2002; Oksman and Rautiainen, 2001).

Generally speaking, the percentage of youth (commonly defined as 15-24 year olds) throughout the EU currently ranges from 10% to 18% of the population. Forecasts predict that this will fall to between to 10% to 13% by the year 2010 (IARD, 2001). Another general characteristic is a change of "youth attributes":

> "...first, regardless of how youth is defined, the percentage of "young" people in the population is slowly but surely falling in every Member State of the European Union. Secondly, the characteristic stages in the transition from full-time education to employment are slowing down: young people are staying longer in education, taking more time to cross over from training to work, and waiting longer before starting families of their own" (Eurostat, 1997, p.1).

Despite (or because of) these changes, youth overall seems to show a tendency to be generally optimistic, but rather pragmatic in their approach to life (Deutsche Shell, 2002; IARD, 2001). A general tendency in (Western) Europe is for youth to agree with mainstream society and its primary values. Instead of rebelling against the existing system or authorities, youth today are quite content with society overall (Deutsche Shell, 2002; IARD, 2001).Therefore, they tend to deal with concrete problems, which stem from their personal goals, more than with abstract and impersonal aims. Far-reaching social engagements are part of these personal aims, but not in the form of traditional politics[37]. The lifestyle of these young people often reflects that of their parents and they tend to be happy with the way that they have been brought up[38]. They themselves want to combine a career and family, but are also prepared for compromises. A combination of security and hard work, but also fun and enjoyment, are high up on their agenda (Eurostat, 1997).

Media use in general, and new media use in particular, has become commonplace amongst most European youngsters, including the younger ones (but less so in the Southern European countries). The mobile phone, the computer and the Internet are all media that these young people have grown up with to some extent and use either daily (the mobile phone) or at least once a month (the Internet – see ARD-Forschungsdienst, 2003). In Northern Europe the mobile phone tends to be seen as indispensable or even as simply an extension of one's body (Oksman and Rautiainen, 2001).

Despite huge differences between youth in different countries, a 1997 youth survey by the European Union (European Commission, 1997) stated that even then (in 1997) on average nearly half of the European youth regularly used a computer. In terms of their motivations, later job success was a driving factor[39]. The Internet, however, was far less commonly used. More recent numbers from Germany suggest that 65% of the 12 to 25 year olds had access to the Internet in 2002 (Deutsche Shell, 2002) and some go as far as claiming that 93% had Internet access at some point in the last month (ARD-Forschungsdienst, 2003). The degree of uses differs depending on country, gender and often in terms of the social background of the young people, but the general trend is clearly towards use that is more widespread. Mobile phone use is even more widespread and not related to social status in the same way as Internet access still is (Deutsche Shell, 2000 and 2002; Eurobarometer, 2001).

In terms of the images related to ICT use, the Shell research contradicts some common prejudices about computer users. They found in their study that the heavy ICT users – the "nerds"[40] – are actually communicative and have more social contacts and general success than the average youngster (Deutsche Shell, 2000, p.214). In also seems that young people who are already socially well-integrated use the net to reinforce their existing communication patterns and to communicate with those they know. Those who are lonely, on the other hand, use the Internet to combat the loneliness and communicate with people they do not know (see Gross et al. in ARD-Forschungsdienst, 2003, p.197).

On the level of motivation for ICT use in general the new media are seen by researchers to provide a forum for teenagers to develop their personalities. The Internet in particular

seems to provide support and orientation at this particular period in their lives. This does not necessarily mean that their engagement will continue to be as close-knit as it sometimes is at that point in their lives. Instead, research suggests that dependency is based in particular situations rather than constituting a continuous phenomenon. Generally, the new media do nowadays play a significant role in youth cultures and are partly used by young people to define themselves as individuals. Thus, for example, ICT competence is sometimes used to differentiate oneself from others[41]. Generally it can be said that increasing familiarity with the Internet leads youngsters to see the technology more positively and to see less dangers (ARD-Forschungsdienst, 2003, p.194).

Belgium is on the medium scale of general Internet access and use as well as mobile phone ownership within Europe (Eurobarometer, 2002; Eurostat, 2002; OECD, 2002; ITU, 2003). A similar trend has been detected in relation to youth and ICTs. According to the commercial research institute InSites, 43% of young adults (here defined as 18-24 year-olds) were regular Internet surfers in 2000 (InSites, 2000)[42]. For these surfers, information searches and e-mailing are the main Internet activities. Over 60% of young adults (but mainly young men) in this study download software and music; 45% of them were already experienced in buying over the net. While different payment methods might attract more and new customers online, over 80% preferred the high street shops to an Internet shop. Of the girls, contacted online 84% had their own mobile phone. A similar percentage of young adults in this study believed that the Internet could expand their knowledge considerably, but at the same time one in three found the Internet badly organised (InSites, 2000).

All these numbers seem to suggest quite a radical uptake of ICTs by youth in Western Europe in recent years. What this data does not tell us is how far this increasing access and use leads to new communication patterns, since especially the communication aspects of the Internet (email, chat) and the mobile phone (SMS) have gained increasing importance (next to the information and entertainment functions). Changes at this level can ultimately lead to drastic changes of social and cultural habit overall. Thus, it is important to analyse these changes as and when they occur.

This report will provide a more detailed exploration of the research findings, substantiated through interview quotes. The analysis is structured around the distinction made between *practice of*, *content of* and *discourse about* use. This rather problematic distinction emerged out of the analysis of the interview material. All three notions are clearly interlinked and often overlap and thus the distinction is partly artificial. Furthermore, the differentiation between them contradicts a lot of recent social theory (such as Butler's (1997) notion of the *performative* or Laclau and Mouffe's discussion of *discourse* (see Torfing, 1999). However, the subtle differences that appeared in the material as tendencies that went beyond individual experiences seem to suggest that there is a difference in: (i) The way that the technologies were allowed to enter everyday life (this has been called, "practice of use"). (ii) The way certain forms of communication, interaction and information were allowed (or not!) to take place via these new technologies (the "content of use"). (iii) The way that both of these "practices" were discursively dealt with (the "discourse about use"). These different aspects will help to explore the notions of domestication of ICTs, of the web generation and of subcultures more clearly, while at the same time summarising the major empirical findings.

4.2. "Practice" of Use

4.2.1. General Practices

The interview material suggests that new media are generally allowed to greatly influence or even dominate everyday life routines of the young people in question. Both temporally and spatially the new technologies are accepted to "intrude", to be present a lot of the time and to take up a permanent (but not necessarily fixed) space in their lives. The mobile phone can be said to take such a role across the board, that is, amongst different social groups, different occupational patterns, etc. There are variations, but they are based primarily on individual experiences rather than general social aspects. This is quite different in the case of computer and Internet use. However, access to and uses of both seems to be increasing across the range of socio-economic backgrounds, but are problematic in relation to the computer.

Students are given access to computers and Internet at the university (and use of these technologies is part of their general education). Even here clear differences emerge

amongst those students who only have university access; those who have access in their parents' home as well; and those who access at university, in their (student) accommodation and in their parents' home (few have it in their student home, but *not* their parents' home)[43]. The university offers rather cheap Internet access to students in student accommodation, thus the price is not seen as a major obstacle. In terms of the mobile phone, parents (who want to keep up a link to their children who could not otherwise afford a mobile phone) fund many students, while some have to pay the running costs themselves. Having ICTs and having access to certain services in the case of the young adults mostly means using them as well. Internet (or other) "dropouts", that is people who once had access and now do not have it anymore (see Katz and Aspden, 1998), are rare[44].

In terms of domestic arrangements, most of the students tend to have a computer in their room in the student accommodation (which also often their main living space). Sometimes, but less often, the computer is in a shared room in the house. At least during the week, this computer is often switched on from morning until night when they are actually at home. Quite different rules apply to computer and Internet use in the weekend, when most of these students visit their parental homes and computers are shared. Those who have plenty of access during the week often switch to little access at home, while others do the opposite and use the chance to surf the broadband connection at home (and often to switch to less serious matters).

4.2.2. Work and Private Lives

Among the working young adults, differences emerged between those who use computers at work and those who do not. The latter often tend to be less interested and less active in terms of computers and Internet access overall. Those who work with computers again can be split up into a group that simply see computers as necessary tools for their work and those whose work centres around computers not just as tools, but as the major focus of their work (quite a few of those interviewed). The latter often tend not to make a clear distinction between the computer at home and at work and, or, between work-related and private uses. Young adults who have to use computers at work (but in jobs that are not focused on computers), tend not to want to have a computer at home (or at least not to want to use it much in the evenings and/or over the

weekends). They tend to see computers as an expression of work that they would like to get away from in their spare time.

> Q.: "... is there a reason for that [for not having a computer at home]?"
> A.: "I see enough of computers at work! I could never really rely on myself to operate the thing correctly if I didn't have a PC support desk, or computer people, or network support people on the end of the phone, because there's a unit in London and if I have a problem all I have to do is ring up and say, so I probably wouldn't be able to operate the thing on my own. I'm sure I could work it out but I don't have the interest and I don't have the need because I have a computer at work" (WP1, female, 24, trainee solicitor)[45].

This differentiation applies mostly to those who have to work with computers a fair bit, but for whom the computer is the not the content of the work. Others tend to the opposite direction and do not only use the computer at work (or university) and at home, but they also merge the idea of work and relaxation or fun while actually using the technologies (especially the computer and the Internet). With some students, the computer is used for university work and to look for information for both work and pleasure; it is used to communicate both with the university, but also with friends; it is used to download things, but also to play games[46]. These things are often intermingled and, or, run parallel.

> "Obviously the computer doesn't stand here only for work, I am also, well I shouldn't say passionate player, but I do once in a while like to play a computer game" (W1, male, 24, student).

The above quotes could give the impression that games and curiosity rule. This, however, is less the case than these quotes suggest.

4.2.3. Daily Life

A significant proportion of those interviewed used computers (mostly the Internet) for a large amount of their time and in different settings (both home and work or university). Not many talked about mobile computer technologies (laptops), but this could potentially increase the scope of use for some. The daily routine described by one of the students below is not atypical for many of those interviewed.

> "Usually, my typical day is to get up … and then, yes, then I switch on my computer, check my mail, I also get the online version of the 'Standaard'[47]. I begin to read the paper, drink my coffee, smoke my cigarette, that is my day, and then I reply to a few emails or I have to go to the university, but usually I stay home in front of the computer to look for information for my university tasks and to work for these, yes, then in the evening I come home, check my mail, look whether there are friends of mine online. If they are online, well, then we have a brief conversation or we play a game online…" (W1, male, 24, student).

The mobile phone even stays on even during the night or at least throughout most waking hours. It is used nearly everywhere, nearly anytime.

> "Well … the first thing I do when I get up is to switch my mobile on. Then I am immediately available and I can be called" (O1, male, 20, student).

This ubiquitous use is also expressed in the idea that work and pleasure merge mentioned above, but more for either students or those whose work centres on ICTs.

4.2.4. Early Adopters?

It is often assumed that young people have early and easy) access to new technologies. Youth are described as "early adopters" (Rogers, 1962, p.19) of new media, as first buyers and users, of setting the future trends. However, the description by young adults of their own adoption processes sounds rather different. Instead, in terms of the Rogers' diffusion model, they would more likely fit the early majority description (that is, people who adopt technologies later than the early adopters would and only when a considerable number of others are adopting them). Although these young adults often already own technologies, they have not necessarily been bought immediately when they came out. Instead, in many cases the technologies were not bought by these young people themselves, but given to them by their parents, relatives or friends (sometimes as second-hand hand-downs). Not always is the present entirely wanted. Quite a few respondents also mentioned a marketing campaign by Coca-Cola, which provided a number of first mobile phones[48].

> "My mother once in a while presents me with ICTs, she thinks I should partake in this, I don't know why. And I still have the interest. I used to read a lot

about it, thus I know quite a bit about it, but really on top of things, on top? No." (D1, male 21, student)

"How long do I have my mobile? [Thinks about it] I think that I now had a mobile for 2 or 3 years. It began with my ex-boyfriend, who also had a mobile. He won one from Coca-Cola – that was through that campaign. And, well, in some way or another he had two, then I took over one of them and that's how it all began. That was still with a card, but actually it didn't take very long before I took out my first contract. And then I also immediately bought myself a new mobile" (WD5, female, 20, administrative work).

Parents often are at least as much aware as their children are of the discourse that dictates social participation via new technologies (see Ward, 2001)[49]. The acquisition of ICTs is often seen as part of the necessary upbringing, as a part of providing the educational basis for later life. Another reason for providing ICTs to their children is the desire to stay in control. Parents thus often buy a mobile phone for their grown-up child – and not just computers and/or Internet access. The acquisition of the mobile phone is not driven by the discourse of "keeping up", but by the more immediate and pressing need to stay in touch. Most Belgian students live at home over the weekends and in a special kind of student bed-sit during the week. They tend to have relatively close links to their families during their study-time. They also use trains and cars a lot to combine these homes and this is used as another reason for the mobile phone use.

"My mother wanted foremost that we could reach her if we were going to be home late or if we had a break-down with the car … It is thus foremost functionalistic, it was not meant to be used for calling extensively and I did not phone much at all in the beginning" (D1, male, 21, student).

When it comes to their own acquisition of ICTs, the interviewees tended to adopt a clear-cut "wait and see" perspective, usually underlined by a certain scepticism concerning new aspects of new media. Some of the scepticism can be explained through the lack of finances, but most of it goes beyond that.

"I wait patiently to see how it works out. New technologies cost usually a lot in the beginning. After a little while the price goes down and usually it also gets better on the technological front. Thus I rather wait until it is cheaper and worked out. (laughs)" (F1, female, 22, student).

> "... I can wait until the price falls, that I do. I am not a freak in that respect. I would really like to have them, but I suppress my desire for new ICTs and wait until I can justify to buy them. (WO1, male, 22, accountant).

> "I also waited a few years to buy my first mobile phone, normally because they were so expensive in the beginning. My computer I also bought second-hand. My idea is that you can better wait for a while to see whether the technologies succeed and when the prices fall, to buy them then. There is always a great price difference" (D4, female, 20, student).

Most of the interviewees asked themselves whether they were part of the early adopters and then denied they were. A question about "keeping up with the trends" was also often answered negatively. This, however, is a matter of perception in that it depends on what the interviewee is comparing them to. Even one of the most knowledgeable amongst the interviewees hence seemed to think he did not know enough:

> "On top of the new developments – maybe not, but I know approximately what is in the shops. … However, it does move quite fast now and the prices change rather quickly. … Look, I now have an AMD Huron 850 with 128 RAM and a hard-drive of 40 gig [sic]. That's not the latest and the best, but that is what I need. … I read everything I can find about it: magazines, newspapers, websites, to name a few. And then I look for the prices…" (P1, male, 23, student).

One aspect of this knowledge about the technologies is the increasing influence teenage children (as well as those in their twenties) have on their parents' spending behaviour. This process goes both ways. While the earlier mentioned cases indicated that parents tend to buy technologies for their children, they also sometimes consult the children for ICT acquisitions for the whole family. The expertise might lie with the young people, but not always the buying power.

Rick Ling has affirmed in his research on mobile phone use amongst adolescent girls and young adult men (2001b) that the social context of adoption of new technologies is shaped by the ideological argumentation of non-adoption. Ling mentions, for example, the mobile phone *holdouts*, that is those that clearly assert non-ownership with different

reasons from health to costs and social standing issues (Ling 2001b, pp.8-9). As far as young adults are concerned, the picture is slightly more complex. While there are some cases of holdouts in relation to mobile phone ownership, there are many more cases of 'holdouts' in terms of certain content or services on the Internet. The issue here is thus not so much ownership, but forms or content of use.

4.3. "Content" of Use

4.3.1. Information and General Content

The focus of this research project was not to see whether the new media have replaced the older media and/or are in the process of doing so. Nonetheless, there does appear to be a slight tendency to replace some traditional media with new media plus an overall increase in time spent with media. This reflects findings in other research projects that have looked at the relationship between new and old media use (see Ward, 2003). Another trend is to allow a *convergence* to take place – to listen to radio programmes online or to at least consult the Internet about other media programmes. Sometimes different media are engaged with in parallel.

> Q.: "What are your favourite Internet addresses?"
>
> A.: " ... Yes, my favourite are my friends: friends and communication. I mostly send emails. What I also access regularly is, for example, ... well, TV1, radio, listening to programmes … well, such stuff" (WL1, female, 25, works in the administration within the public sector).

There is a general tendency not to "surf" the Internet, but to visit certain sites that one is already familiar with. This is a *limitation of engagement*, a lack of "playfulness" while at the same time a tendency to *personalise* the medium. The medium is designed as to fulfil specific and personal information needs. Limiting the number of sites is also a way of dealing with the perceived *information overload*. Usually the personalisation applies to mobiles phones in much more explicit ways than to the Internet. The phone offers a different communicative element in the personalisation, since this is visible and audible to the outside world (see Höflich, 2001, who describes the mobile as the "personal medium").

> "I currently use maybe four or five different ring-tones. And what do I use them for? Yes, well, I can put the telephone numbers on my phone into

> different groups, as, for example, one group under which I classify my friends, one group for example for my family and one group for work and each group gets its own ring-tone" (WP3, male, 23, worker – shelf stocking).

This kind of personalisation is part of the process of domestication. The new media are made to belong to one, to fulfil specific and not only general needs. This brings the discussion back to the work/play distinction. For some, the technologies (or services) are clearly labelled as either work or pleasure and are used accordingly to suit the specific interests of the individual.

> Q.: "For what purposes do you use the Internet then?"
> A.: "Pure amusement. Sometimes it is for photography. Usually ... to search for 'rockrallies' [a form of music competition], music" (WR1, female, 21, works in a photography shop).

For many, however, there is no clear-cut line in their perception of what these technologies represent nor is there a clear-cut line between different applications in their daily use. This might be partly intrinsic to the technologies (or rather the way they have been programmed and how the services are sold), but it also seems a fundamental shift in attitude concerning the nature of the technologies and their function in everyday lives. There is a blurring of boundaries in terms of time and space, but also often in terms of content. Multi-tasking is becoming increasingly the norm.

> "And I look at several sites every day. News as well as sports and relaxation-sites. A sites with games, for relaxation" (G1, male, 20, student).

The Internet nonetheless poses a challenge. While people "personalise" websites, they need to learn how to do so first. For most, this is not necessarily a smooth process. Thus when the interviews moved away from the communicative aspects of the Internet and mobile phones to a concentration on information and potentially interactive services, mechanisms for access became the central point. While the information and communication possibilities that the Internet offers are generally seen as positive and useful, a feeling over "being overwhelmed" in terms of the information load is often present. "Coping" mechanisms have to be developed.

> "One can actually speak of an 'information overload', but if you only type in the right search term, then you usually find what you are looking for.

> Obviously it often takes time, because one has to get through an awful lot of junk and one does not always know whether one has found something academic or not" (D3, male, 22, student).

Not everyone agrees, however, that information is to be found so easily.

> "Ahem, you get much too many answers to your search term. Well, much too many sites to be able to deal with. And then you don't know what you're looking for. Thus you have to look at all of them and maybe there is nothing. Then you have to start again and yeah, well, sometimes that's not useful, but you do find a lot of information, actually. Once in a while you have to search a whole day until you know under what search term your information is to be found" (D2, female, 20, student).

Finding information is one important aspect, but providing information was hardly ever mentioned as an activity. Thus the initially promoted advantage of the Internet – the ability to produce one's own media message without either great cost or skill – does not feature much in those interviews here. So for example, even where websites are built, they seem to be aimed more at existing networks of friends than to increase or widen the circle and provide information to the outside world.

> Q.: "What Internet applications, apart from MSN, do you also use?"
> A.: "... not much actually. So far, I have not had to search much on the Internet and ... maybe that will still come, but not until now. But what I do is to access sites from my friends. People who made their own site – there I go and have a look once in a while to see what has changed and what they've done with their site" (WO1, male, 22, accountant).

This concentration on existing circles of friends is also very common in terms of other communicative modes, as will be outlined below.

The interviews also indicated that not everyone could use ICTs whether due to a lack of access and, or understanding. Thus, there is a certain awareness of the social problems related to ICT use. This awareness, however, is rarely perceived as a problem that could be directly addressed by these young adults themselves – even by those who could be seen to be the "victims" of this digital divide. The only notions of their own *agency* were limited: (a) Materially, that is, when more money is earned, certain technologies

can be acquired. (b) The transition from the home of parents to one's own home and this was seen to allow more freedom to decide what is needed and wanted[50].

Not every kind of content or application, however, is "allowed" for personal or other people's use (especially in terms of the Internet – the mobile is regulated rather in terms of extent than content). Furthermore, not all of the possibilities that the Internet offers have been tried or are used regularly. This implies that only certain websites are regularly checked; that brands are trusted more than sites of unknown origin; that applications, which are extensions of the existing (rather than new ones) are used more often; and that new communicative patterns are not often allowed to emerge. Thus little content is added to existing ones and even this is accessed in limited and regulated ways. These rules and limitations imply a lack of *playfulness* in the overall approach to the new media.

4.3.2. Playfulness

Playfulness is used to mean curiosity-led encounters, of trying out the unknown, of taking the risk of getting lost or encountering something radically new. Few young adults suggest this as an overall approach or even a desired one. On the whole, the use of creativity (to create one's own media), of playfulness (to "play" with the possibilities of the medium) and even of games is limited.

There seem to be two different kinds of users, often related to two different biographies of the play/work relationship. The people who had ICTs early on in their lives are moving away from the playful towards more work-oriented use. These young adults mention sometimes that their behaviour has changed over the years and that the concentration now was increasingly on the work and communication aspects and less on the playful ones. However, the playful aspects are still seen as important. Those, however, who have only come in contact with ICTs through the university or work, often discover the potential for play only later on – or, especially common amongst the female respondents, not at all. Their initial use is often driven by university or work requirements and thus perceived as pure necessity. The more personal and playful aspects of the media use only come in at a later stage. Most often, the communicative aspects are seen as the most important[51].

> "I came in contact with it [Internet] when I came to study at university, because there it is very easily accessible thanks to the computer rooms. You begin to use the mail system now and then to make arrangements or to get specific information. After using email and the Internet I then learned to use ICQ, what, by the way, I find a rather useful medium" (D10, male, 22, student).

So while playfulness is lacking, so is actual playing. Other research has noted gaming decreases drastically from the late teens to the early 20s (Deutsche Shell, 2000; InSites, 2000)[52]. The Internet potentially "grows up" with the youngsters in the sense that it becomes less of a toy and entertainment device more a tool and information device[53]. This suggested that gaming was not a major pastime for many interviewees. Instead, some claimed that they used to play much more, but now did not find the time anymore (the same potentially applies to using MUDs and similar chat-/-VR-world creation programmes)[54]. The research also indicated that gaming is still perceived as primarily a "boys' thing" in this age group, even by female respondents:

> "[Referring to a specific game] That is really purely male. I mean that there is nothing female in this game and also when you see this on TV, well, that is definitely aimed at men" (WV2, female, 21, works at bank (counter).

However, there is also the particular engagement that male friends or family members display when engaging with or discussing about games or even technologies in general.

> "I mean, I've seen male friends of mine having incredibly in-depth conversations, sort of really excited conversations about inanimate objects that sit under their TV. It does mystify me a bit.
>
> [Referring to the ownership of Playstation] No…no…I wouldn't say that I'd never buy one but it's quite low on my list of priorities. In the various student houses that I lived in, we always had a Playstation… in 5 out of 6 cases it was always the property of a male rather than a female. But I don't personally have one, no" (WP1, female, 24, trainee solicitor).

The reference to in-depth conversations about machines highlights another point, which has begun to be raised by other research into games; that is, many games can be used in social ways. In contrast to the idea that games replace friendships, they often become shared spare-time entertainment.

> "So it was more relaxation, and then it was also more social with the Playstation, it meant making arrangements to meet people at home so that we

were playing with four, five or sometimes six people. And we did our own competitions..." (WP3, male, 23, worker – shelf stocking).

Again, this is a male dominated field, but these social aspects are important to keep in mind when describing how games are used. Gender differences are most pronounced in this field, but other technologies were also perceived to be used differently by different men and women. Often, differences have to be explicitly asked for – they are not stated as a characteristic of one's own behaviour or of the new media as such. Only rarely does one find self-descriptions such as the following:

> "I'm a typical man on the phone… 'Yeah…ok…see you there … by.' [laughs]" (WP4, male, 25 software engineer).

The mobile phone is often perceived – by both sexes – to be too expensive for longer calls, instead, sending text messages (SMS) was seen as offering similar clarity and brevity. As other research has also suggested, text messaging is rather widespread amongst this age group (Höflich and Rössler, 2001) – partly due to the already mentioned costs, partly due to the unobtrusiveness of messages. Overall, these changes are seen as positive.

4.3.3. E-commerce

When the project originally began, there were predictions that applications and services in the field of e-commerce were set to take off in a major way. These expectations have not been fulfilled and this clearly reflected in the findings of this research project. Reasons given for this lack of take-up include not only the obvious limitations (goods that cannot be judged via a computer screen, lack of credit cards, etc.), but also more subtle fears about the technology and lack of trust emerged. These touch on a fundamental question of *control*. Here, even (or especially) young users are much less willing to "give in" than was initially suggested.

> "[Referring to online transactions] I don't really trust this yet, I'd rather do it myself. Then I'd rather go to a bank and do it there. … it doesn't strike me as really secure yet. ... The risk is simply too great? Yes. Yes, it's still in its infancy, isn't it?" (WP3, male, 23, worker – shelf stocking)

> "And on top of that, I would not like to give the number of my credit card on the Internet. It is … well, I'd rather do it myself. Such money-matters via the

> Internet, this is something that does not really appeal to me yet" (H1, female, 20, student).

Thus, just as the interviewees often adopted a "wait and see" attitude towards the acquisition and use of ICTs, they are hesitant and sceptical about the commercial aspects of ICTs themselves (that is buying goods and, or, services via ICTs). E-commerce was particularly mistrusted. This problem is partly exacerbated by the fact that most of the young adults do not have a credit card and so can only access a few sites where they could actually buy something[52]. Even so, they remained sceptical.

> "I don't trust it. Someone then knows your account number and that, well, ... I don't want to risk it. I'd rather see the things and buy them immediately" (WL1, female, 25, works in public sector administration).

> "Now about the Internet, I have not yet bought anything online and I think that it will still take a while before I would actually do it. I am still afraid, actually, of the financial transaction, paying with credit cards … that I order a book and I pay a few thousand franks for it and then I never get to the book into my hands" (F2, male, 21, student)[53].

Interviewees also expressed the more general fear about the unknown in terms of the data
getting lost, manipulated or misused. The Internet is for many still the unknown and thus is made familiar via trusted aspects.

> "...that those details could be accessed by people just on the basis that they're on the look-out for credit card numbers so I'm a bit sceptical about that but everybody I know seems to use their credit card over the Internet and I haven't heard of any horror stories personally so if I was on a sort of reputable website, for example, I don't know, British Airways or something, I'd probably be quite happy to put it in there" (WP1, female, 24, trainee solicitor).

This last quote indicates that brands might play an important role in the overcoming of the reluctance concerning online transactions[54]. Only those that have already established a name offline will – at least initially – change the image of "danger". Positive experiences by friends or families helped to soften the views, but did not erase the doubts.

Another differentiation emerge from the interviews concerns the different goods or services on offer. There seemed to be less reluctance to buy non-material goods such as tickets (concert, airline, etc.) than there was towards material goods. Well-established e-commerce products such as books and CDs also received a less negative reading (especially when they offered a good deal or were not otherwise easily available). However, the topic of clothes was highly problematic. These are seen as goods that need to be seen, touched and tried on. Any "virtual" representation was simply not good enough (nor the guarantee that they could be returned).

One final point about e-commerce raised mostly by female interviewees was that some see shopping as fun, as a leisure activity). This they perceived to be threatened by online commerce. Since it is a pastime for young people, this aspect cannot easily be ignored.

4.4. "Discourse" about Use

As outlined above, discourses can be performative in the sense that they can create or hinder certain uses, influence the practices and the way content is seen (or produced). Nonetheless, an emphasis on *resistance* to some aspects of the new media emerges from a differentiation of different aspects of use. On first sight, uptake seems widespread and relatively straightforward but on a deconstruction of some of the things that have been said usage is more problematic that at first appears. Problems emerged at the level of the discourse about use, both on the part of interviewees and others. The project did not start from the premise that such a differentiation would be necessary, but differentiation emerged as an outcome of the research.

4.4.1. Real versus Virtual

One of the more surprising outcomes of the research is the relatively clear distinction and evaluation between real" and "virtual." In contrast to many early cyberspace-theorisation and web generation discourse, there this research found no particular articulation of virtuality as desirable and, or, a blurring of boundaries between the two. Instead, mistrust towards anything "virtual" tends to dominate in that applications that actually try to implement a "virtual" world are hardly mentioned. Instead, the virtual is mostly condemned in terms of communication modes.

> "And also I don't see anything, for me personally, in online-friendships. You can't trust it, it is more superficial, it is usually not 'the real thing' … " (J1, female, 22, student)

The most important differentiation here is between the real and the "not real" and this distinction is value-laden. A distinction is made between *real* life, *real* emotions, *real* friendships and engagements with unknown people or other online phenomena. Clear-cut distinctions are repeatedly made between "real" and "not real", between unmediated and mediated communication, between truth and lies. The real is mostly seen as inherently better than the other, partly because the "not real" is perceived to be dishonest.

> "… I did come in contact with people online, but I don't regard them as my friends, because it always remains superficial. And, pff, yes, here and there people lie" (D6, female, 20, student).

> "No, I might be small-minded but no, I don't have an awful lot of interest in going into a chat room with a bunch of people I don't know … yeah, it's great to meet new people but I have no idea who those people are, what their backgrounds are, what their motivations are for being in this particular chat room, whether they are who they say they are, and I don't feel I need a forum where I can express my opinions in a situation of anonymity, I'm quite happy to do it with the people I know, or people I meet through work, whatever" (WP1, female, 24, trainee solicitor).

Thus, most of the respondents know and use chat and instant messaging programmes, but not with strangers. It is used to stay in contact with friends (and family) networks. Strangers that one has seen face-to-face are allowed into the circle of friends[55].

> "But it has happened that I knew people from seeing them around and that I then got to know them better via the Internet, yes, that has happened.... But to get to know someone online who I didn't know at all, that hasn't happened" (D5, female, 20, student).

This getting to know procedure is not abstracted and potentially applied to real "strangers" though. However, the overall impression is of an interesting possibility but to be taken up by others. An "other" is used to describe behaviours that indicate this distinction and its evaluation.

> "I can imagine people who like to chat, that it is quite nice to get to know people this way, that it maybe is very pleasant to chat with people all over the world and via a certain network … I prefer personal contact, I don't think I will get to know someone through the Internet … well, I know people who got to know their boyfriend/girlfriend through chat, but I don't think that that will happen in my case" (D7, male, 21, student).

These are programmes and applications that cyberculture theorists have viewed as potentially redefining human relations, opening possibilities for role-play and identity experiments. Even if the hype has died down and second generation theorisation has asked for more research in the "real" life setting of the virtual worlds (potentially reinforcing the split), the doubts expressed here surprise in their extent and frequency[56]. These doubts can lead to the denial of possibilities for online encounters by those people who have actually experienced them:

> A.: "I actually met my girlfriend on the Internet, too … I hate to admit this." [laughs]
> Q.: "Why do you hate to admit it?"
> A.: "Well, it's got this whole stigma attached to it, you know? I think we only emailed each other a couple of times, it turned out we lived very close..." (WP4, male, 25, software engineer)[57].

Despite his positive experience of establishing a "real" relationship with the help of the machine, this interviewee immediately justifies his own experience and proclaims it to be limited (they met face-to-face soon after the initial online contact, that is the online contact was soon replaced with "real" contact). Even the combination of "real" and "virtual" encounters – as exemplified here – is rarely mentioned as an option[58]. Instead, most of the interviewees put a great stress on their social life offline. "Social" means personal, which again is supposed to be based on face-to-face contact (if not regularly at this moment in time, at least in the past). The technology, and its "extreme" users, is seen as a danger to a good social life.

> "… But these are always people I already know. … but even then, I don't really like to do this ... Thus not that it is really useful for friendship or so. ... I

> really like, well, I actually prefer face-to-face" (WD2, female, 23, personnel assistant in the local community).

In this differentiation, the possibility to play with identities is indirectly acknowledged, but dismissed as unsuitable. The playful is not seen as either another aspect of one's personality or a useful space for trying out other identities, but simply as "not the right thing".

> "[About chat programmes] I think they are very impersonal, although it can be very pleasant. ... You can present yourself as someone else than you really are ... After a while it's a bit boring. …
> [About online friendship] Well, pff, why it should be impossible? ... [Because] as I said: you present yourself differently from who you actually are" (WV2, female, 21, works at bank (counter).

The same respondent even goes as far as proclaiming that ICTs enable a new form of mis-communication in the sense that they are used to hide behind.

> "I think that more and more people will use their mobiles to hide themselves behind them. So, well, so they don't see the person and then the confrontation is less hard or actually less" (WV2, female, 21, works at bank (counter).

Rather than as an extension of the self, ICTs are seen as limitations of the self – as screens (literally and metaphorically) to hide behind. In the above quote, quite a radical shift in communicative behaviour thanks to ICTs is predicted for the near future. Thus, while these possibilities for playing with personal identity and communicative abilities are acknowledged as a potential part of ICT use, they are not chosen by this – and many other – respondent(s) as desirable for themselves.

Other interviewees detected a similarly radical shift in terms of virtual intruding on the real.

> "What happens there: you used to visit friends and began to talk. Now you see mostly that a PC is on, or they are playing a game. And this stops everything a

> bit. In the past, we usually sat together and had a chat and now there is always a third medium present" (WR1, female, 21, works in a photography shop).
>
> "... in the past it was more social. Nowadays we sit in front of our computer and ... we have less contact with our age group" (WL1, female, 25, works in public sector administration).

Few interviewees proclaim such radical changes. Instead, they suggested the possibility of protecting the existing communicative structures against such potential (perceived) threats.
Proclaiming the "real" to be more important, truthful and desirable than the "virtual" is one such coping mechanism, one strategy to defeat the changes.

4.4.2. Defining and Judging ICT Uses

> A.: [About mobile phones] "I hate them…I really don't like them. But I can see they're useful."
> Q.: "And why do you hate them?"
> A.: "I think a big part of it before I got one is the image, you know … You see these guys going (shouting) 'Yeah, I'll be home in ten minutes!' Well, why not wait? You're clearly showing off. Or people who walk around with their mobile phone in their hand when they have pockets, or a bag. It was such a status symbol that for me that seemed to eclipse the immediate usefulness of it. But certainly, it's really showing itself useful… even just meeting friends. ... just the ability to reach somebody else immediately. And of course on the other hand the ability of that person to acknowledge your call or to refuse it" (WP4, male, 25, software engineer).

Generally, these young adults define their own behaviour by describing that of others, often negatively, and this was one of the most consistent and striking features throughout several interviews. In the above quote this is done via the "then" and "now" differentiation, while mostly they refer entirely to the "now".

The distinction between their own behaviour and that of others allows them to label different behaviours as *unacceptable*. This is especially the case where the behaviour contains elements of the *new* rather than simply *extensions of the already existing* are

often labelled as "bad". Identity is here defined both individually and negatively, that is via non-use rather than use. An individual's own style is only acknowledged indirectly (which is a clear distinction to earlier or other youth sub-cultures, but is clearly underlies it all. The social is yet again an important feature, as is the idea of the "freak", that is the one who uses ICTs differently to most "normal" people (including the interviewee).

> "Now for other people's use. You obviously get these Internet-addicts. People who sit in front of their computer the whole day and don't do anything else but Internet and looking for things. Those I do find a bit wacky. According to me, they don't really have a social life anymore" (F2, male, 21, student).

> "...I don't think you can attach an age group to it, but I think that there are enough people who constantly sit in front of their computer and who do nothing else. One hour after the other using the Internet. ... The same applies to the mobile" (WD5, female, 20, administrative worker).

> "Obviously there are also disadvantages. There I am thinking especially of the computer freaks who have less social contact, but these are especially people who never really had an exciting social life" (G1, male, 20, student).

The appropriation of technologies is done indirectly and the "borders" of behaviour are set discursively, rather than shown through use itself. Use of the computer and mobile by others is seen to be "wrong", that is, too much, too loud, too strange. Thus, the young adults' own behaviour is seen in relation to these "wrong" uses. They clarify how they do not want to use the technologies, often in a rather normative manner). Thus, a kind of "fear of the machine" is expressed in the rules that are drawn up to keep it under control. However, these rules are not mentioned as such. The only concession made is that these unacceptable uses are not specific to the new ICTs, but happen with any new technology.

> "They always say that about PC-freaks [that they isolate themselves through their computer use], and that's probably true, in every field you have people who are fanatic ... and this will also be the case in relation to the computer" (WD9, female, 24, personnel administrator in plastic production company).

> "... Obviously, there are a few people who use the Internet wrongly. But that happens with all new things that you introduce. There will be a group of people who take it the wrong way, who totally mess up their social life, because they

> sit the whole time and use chat programmes and I personally think that chatting is actually not a good way to communicate" (WP2, female, 25, works in a socio-cultural organisation in the education section).

The last interviewee is equally mistrustful of extensive mobile phone use and the related costs[59]. Thus, the assessment is not technology-specific. People are seen to depend on the Internet as much as on the mobile phone. Technologies are not seen as bad *per se*, but in this case, the extent of use is considered outrageous[60]. It also highlights how the interviewees perceive themselves as having an exciting social life (or similar positive attributes), since they know how to use ICTs "in the right way". Others, however, are seen as dependent on ICTs for their social life. Thus the possibility of ICTs to change patterns of communication is acknowledged, but not experienced by the interviewee directly.

> "My brother is a bit dependent on it all. Like in the Christmas holidays: between the soup and the starter with half an hour spare time, what does my brother do? He went upstairs and chats a little. He depends on it for his social life actually" (WR1, female, 21, works in a photography shop).

While most of the interviews presented thus far describe other people's behaviour as unacceptable or "wrong"[61], the next section is meant to show that other people are also used to describe one's own ICT use as insufficient. This is, however, the less prominent strand in defining oneself against the backdrop of others' behaviour: to define oneself through reference to others' *better use*. Some young adult's thus describe their own use and ability in relation to other people's better uses.

> "[Referring to use of new technologies] I think that other people use them much more professionally than me" (WD7, female, 20, stewardess).

Insecurities of a more explicit kind are expressed in this remark. Other people are seen to use the technologies "better" but this interviewee does not give any further explanation of why other people's use should be seen as more professional, although she elaborates on her own mobile phone use as primarily based on work calls. However, here the mobile phone seemingly does not count as useful and professional in the same way that other technologies do. A similar problem appeared in another interview where the interviewee gave a contradictory account. Overall she gave the impression of not

knowing much about ICTs and not using them much at all, simply because ICTs do not contain that much of interest for herself. In some remarks, however, she clearly showed that she knew what she was talking about (she knew the right jargon in the right context).

> "[Referring to the difficulty of using the Internet] I don't think it's difficult, because, well, because I personally don't know well how you should look for something quickly, find something. When you just have the URL, that's good, then you can simply go there, but actually, well, actually I don't think it's that good" (WD10, female, 21, hairdresser).

More problematic is the implicit self-image of the following interviewee, who proclaimed simply to be not clever enough for ICT use – and does not use it much. Here a very general "other" is used to describe the individual's own behaviour.

> "Well, a computer, that was always my opinion, that is for clever people, I think. At home, no one really has much understanding of it, only my father. I know a little bit, but I think you have to be really clever for this. To get to grips with this, I find that difficult" (WD4, male, 20, works in supermarket).

The respondent repeats this claim about CD-writers[62] – even this technology is too clever for him. However, he uses the mobile phone with ease and naturalness, but only after some initial distrust was overcome. He did suggest that the CD-writer could be very useful indeed, but that all these technologies are simply for "other kinds of people". It was unclear where he got this idea.

One suggestion as to the origin of such ideas was provided by another interviewee – the same one quoted above about her insecurity over the "professional" use of ICTs. When asked about the possibility of ordering coffee by mobile phone while on the way to a café, she replied:

> "I think it is actually a good idea – as long as you have a strong personality. People ... who do not think about it – I'm thinking here of people with little schooling[63] – they maybe have no resistance to this, seeing that they can easily buy something and do not have to pay, but then they still get the bill at the end of the month" (WD7, female, 20, stewardess).

Education is seen as closely related to understanding the pecuniary dangers of using ICTs. The possibility that part of the problem might be a digital divide in terms of perceptions about a lack of abilities that then translates into actual (non-) use is not recognised. This perception-divide, however, might have important policy consequences because it suggests that next to the basic skills a general perception of differences should also be addressed.

4.4.3. Media Image

The process of domestication is not only highly complex in itself, but also interwoven with the use of other, traditional media and their description of the new media and their uses. The so-called "digital divide" shows that potentially not much is known in the wider public not only about what *can* be done with ICTs, but also what is *actually* being done. The media image, which is the reference point for many, does not seem to allow for a middle ground in terms of usage.

> "[Referring to people's Internet use] I think that some, well, pfff, I shouldn't say easy, but ... they use it exactly as if their life depended on it, while others don't use it at all and there is not much middle-ground" (WD10, female, 21, hairdresser).

The traditional media play a large role in the distribution of such ideas, as exemplified in the next quote in relation to above-explored mistrust of e-commerce.

> "You hear it daily that sites are broken into and about viruses and similar things. Therefore, I don't trust it yet. I don't want to pay for something and a month later I get a bill that is five times the amount that I paid" (F1, female, 22, student).

This suggestion of rumours about what might happen and how people are supposedly using online technologies plays a big role in other stories about use as well. One interviewee claimed that the newspapers had exaggerated in their portrayal of the Internet and that this made many people afraid.

> "They thought they would be left behind and then they gave it up, although they normally wouldn't have…" (D1, male, 21, student).

Many people who had not had a chance to encounter the new media were already constantly confronted with it via other media. The digital divide is thus not only "real", but also "imagined". The recognition of this media power does not usually lead to a

more general media critique amongst the respondents. Instead, the interviewee above added that he personally knew more about ICTs now and thus felt more in control, wherefore he also felt that he now understood the media message better.

> "And yes, hey, the world is a big village – [that's] an advantage of the Internet" (WO1, male, 22, accountant).

Much research has shown the practices, rather than the discourse, operate in a middle ground and there are few extremes). Instead, as can be seen in the earlier example, part of the discourse actually contributes to the non-emergence of certain practices. Another brief example of the latter is the notion of "inevitability" that seems to prevail in these interviews. Little notion of agency is expressed. Instead, the idea that the developments are inevitable rules. The individual cannot *not* partake – or at least feel the pressure. In order to belong, the individual has to go with the general flow, that is, they have to use these technologies – willingly or not.

> "[Referring to relationships online] I think that in the beginning, I will not really partake in this, but in the long run you can probably not avoid it and you have to go with the technology" (WD2, female, 23, personnel assistant in the local community).

4.4.4. Younger and Older Users

One indirect way to define the behaviour and attitudes of the individual is to define and value other people's behaviours in relation to ICTs. The definition and "evaluation" applied to the ICT use and users of all age groups, but on occasion specific groups were mentioned especially people younger than the young adults appeared in many interviews. This was rarely triggered by a specific question, but seemed to be something that the interviewees felt the need to say themselves.

> "There is a lot of exaggeration, like in case of small children who run around with a mobile phone. That's usually a toy, but not because they really need it" (WD9, female, 24, personnel administrator in plastic production company).

The normative becomes very pronounced in this debate, more than in relation to others of their own age. Similar reactions to the younger users have also been detected in other research projects in relation to mobile phone use (Höflich, 2001, p.10). Mostly, mobile phone use is seen as unacceptable, while computer-related activities seem to count as more "useful".

> "That children go online and write emails, that, well I think it's good that they learn to use the technologies, but a mobile phone, no, that I think is wrong" (W1, male, 24, student).

The potentially playful and "useless" use of new technologies tends to be judged as wrong and only acceptable for young children as long as it teaches them future skills. This could be a reference to the interviewees own understanding that they themselves should not "mis-use" ICTs and have their behaviour is judged in similar ways. Some envy also seems to be present as well, since these technologies were not widely available when the young adults were the same age.

The young adults also tended to be softer in their reaction towards ICT use in the older "generation", that is, their parents and grandparents. Here, the normative is replaced with sympathy and pity – or with respect when their parents are more active or knowledgeable users than they are and in some cases, they appear uncomfortable with their parents' ease of use. Thus, the overall picture here is quite diverse and ambivalent. Nonetheless, this discourse about other users is used to clarify the young people's own uses. As indicated in the quote below, this clarification may take place through reference to peers as a group rather than as individuals, but this is rarely the case[64]. Mostly, they define only themselves through reference to other behaviours.

> "Well, I see it now in my own reaction, when my parents come to ask things like 'can you help me with this?' Then I always say... euhm, well, I say yes, but internally I then think 'oh no, not again'. It is so easy for us and so difficult for them and sometimes it is very difficult to understand and it can lead to small conflicts" (F1, female, 21, student).

In this case, it is not clear what the alternatives to the existing behaviours should be, while these alternatives are much clearer in reference to the younger generation where the idea is to stop them from having mobile phones before a certain age. Sometimes, the differentiation of parents is similar to that made for smaller children – parents are described as using the Internet too much or for "suspicious behaviours", for instance, getting to know a new partner online. Thus, the generation role models are sometimes turned upside down in this debate and this potentially contributes to the blurring of distinctions between the different generations. In terms of the debates about children, the general understanding that ICTs are necessary nowadays and that everyone should be

taught how to use them, also keeps cropping up – as does the feeling that there is little choice in that matter.

> "But especially when I have children later, then I would want to help them to get ICTs as quickly as possible. I would want to introduce them and that they could work well with them and I would feel really bad if my children wouldn't know how to use a computer, Internet, DVD and all the other things we just talked about" (WO1, male, 22, accountant).

> "…You obviously have to go along with the times a bit" (D4, female, 20, student).

> "Maybe they [the youngsters] will use ICTs more and more, because I think you are pushed more to use the computer and the Internet when you are younger" (WV2, female, 21, works at bank (counter).

4.4.5. Easy lives

> "Well, yes, changed – it has become easier, that's for sure" (J2, female, 22, student).

Despite social pressure to use ICTs and the lack of agency expressed in many interviews, the overall assessment of ICT developments is very positive and most of the young people interviewed seem to think that the technologies create an easier life. As mentioned above, they often acknowledge that this might not be the case for everyone, but generally they trust the technologies to have a very positive impact particular in terms of speed and quantity of information that is easily accessible.

> "Oh yes, everything goes quicker and easier. … To look for something on the Internet, quickly forward something per mail, type everything nicely and print it out without mistakes, ring someone whenever and wherever you want, send an SMS so that the person can also read it later … A lot has changed. It is also luxury that we have" (D9, female, 20, student).

The difficulties of searching are acknowledged, but the information provision as such is not questioned. The earlier mentioned fact that hardly any of them seem to feel the need to *provide* information rather than simply *get* information, confirms this. Most do not

adhere at all to the idea of the gift economy as the basis of the Internet, that is the idea that they should give something back in return for things they receive for free[65].

In terms of availability and distance, control mechanisms are developed to protect choices of when and where the respondents want to be contacted. There is often an awareness of the discourse around availability as potentially problematic, but this is consciously dealt with as a choice and not a problem. Thus, constant availability is seen as problematic, but usually also described as a choice to be made.

> "That you can be constantly available for someone else. That has negative aspects. Because you become the slave then, not of your mobile, but of your company" (WV1, male, 23, works in tourist sector).

> "One cannot imagine our society without the Internet anymore. I think whoever doesn't have Internet within ten years – that's pre-historical. I can't imagine that not at least ninety percent of the population will have Internet" (WO1, male, 22, accountant)[66]

The overall developments are thus seen as both inevitable and positive. This assessment dominates the interviews so much that their own criticism of the developments – as specific as it might be in the following interview exert – does not get recognised as a contradiction anymore.

> Q.: "Do you also think that it has an influence on the quality of life?"
> A.: "Yes, sure, there's an influence on the quality of life. Life always becomes faster and faster and well ... well, you can't quietly do something, you will constantly be disturbed by phones, mobiles phones that ring. Seems that everyone now has a mobile, thus everyone's quality of life is surely better."
> Q.: "How do you experience the developments? Positive or negative?"
> A.: "Very positive, extremely positive" (WL1, female, 25, works in public sector administration).

4.5. Summary

Is the pressure important in creating and forming use? It seems to be. The uses that emerge seem to suggest some hesitance about newness and playfulness, while they nonetheless stress that it is all very useful and one cannot but must participate. Thus, the

discourses that shape the imagination, the first step in the domestication process, seem to lead to an eventual appropriation of the technologies. However, the practices in the sense of the objectification and incorporation of ICTs into everyday life, are more carefully chosen. Here, a selection process takes place particularly with content. This is primarily conveyed through the description and partial condemnation of other people's uses, in rather explicit terms. Thus, this indirect conversion process is not necessarily smooth, but underlines the conflict that seems to exist in relation to ICT use by these young adults. This will be expanded upon in the next chapter.

5. Theoretical Implications

5.1. Re-Defining the Web Generation

The topic of this research project is the current relationship between young adults and new media, an area of study that has been neglected. Those that have looked at this combination have tended to re-apply older youth categorisations (such as deviant youth versus future-shaping youth) instead of regarding youth and ICTs as a potentially new phenomenon. Thus, they rarely allow new ways of thinking about youth and ICTs. One of these analytical frameworks is the web generation discourse. This discourse also repeats the mantra of "youth will change everything" and thereby displaces the fears of the older generation concerning their own use of ICTs. The web generation discourse assumes certain uses and specific behaviours and attitudes concerning ICTs by young people. These assumptions subsequently exert expectations and pressures that are not necessarily matched by actual behaviours and attitudes. However, the web generation discourse does point to the specificity of ICT use by current youth and also asks about the relationship between ICT use and changes in social relations overall. It thus opens a crucial debate and offers some insightful claims. This paper will now consider web generation attributes in detail.

Generally, everyday lives of young adults are widely structured by ICT use. This is most obvious for students, but also for many other interviewees (either at work or outside of work, often both). For many of these young adults, it is impossible to imagine a life without ICTs, especially the mobile phone, but also the Internet. ICT use is thus

widespread and far-reaching in terms of temporal and spatial consumption. However, the interviews have also shown that for many of these young adults, ICT use is associated with doubts and fears, with very explicit norms, at least for other users. Partly, these norms are strategies to deal with the insecurities. What can be found less than usually assumed is the idea of a playful engagement with new media, that is of trying things out, using ICTs to play with identities, etc. Even games were less common than one might think[67]. Here a clear gender bias also emerged. Overall, confidence and playfulness was often greater in male than in female respondents. Both, however, tended to have changed their behaviour and attitudes in recent years towards a more "responsible" approach to ICT use.

Most interviewees drew a clear line between the "real" and the "virtual", highlighted through specific value-structures. The same applied to another problematic issue: e-commerce. Here the mistrust appeared in nearly every interview. It was simply not regarded as safe to use online transactions. Some interviewees indicated that in future, once more people used e-commerce they may change their attitude. Here they clearly referred to their own attitude and ICT use, while it was striking that in relation to many other questions, they defined their own behaviour only indirectly – via the description of how other users use the technologies "wrongly".

Overall, there was either total enthusiasm for the technologies (in a minority of cases), while a certain feeling of powerlessness, of having to "go with the flow" was dominant. That is, ICTs were seen not as a choice, but as a requirement. Thus, the young adults' lives were very much dominated by ICTs, even if only indirectly, but not always consciously and not always in terms of their actual use. Few defined themselves and their culture directly via ICTs (and would thus not use the web generation label to describe them). However, the boundaries they build around their own (non-) uses suggest the importance of these ICTs in their lives. In some sense an "unwilling" web generation emerged in the interviews with these 18 to 25 year olds in Flanders, implying that ICTs played an important part in their lives whether they chose this to be the case or not. The overall discursive and media environment, that is the common shared culture, is very much concentrated on new media and this generation has grown up with these media, using them to identify themselves "negatively" (as "not like this"). This

particular age group seems "caught in between": not entirely "naturalised" into use, but quite massively confronted with it and with the corresponding expectations.

Many of this age group first came into contact with computers (and even mobile phones) at school or university (the mobile in the sense that they were given one when they moved away in order to stay in touch with home and in order to organise life in two homes). Thus, a certain expectation concerning uses that exclude playfulness ruled their introduction to ICTs and still rules their thinking. They allow themselves to use ICTs to stay in touch with existing networks of friends and family, but not to extend this network widely. The "immediate" environment is kept in touch with rather well and some distant contacts are kept, which potentially – without ICTs – would have disappeared. There is also a tendency to ensure more flexibility n terms of arrangements and contacts. Less change though is evident in family relationships, identity, gender, consumption and politics. Here, the new media play a smaller – or at least less directly acknowledged – role than often claimed.

Some versions of the web generation discourse equate the whole age group with a particular subculture of innovative users. There are examples of these uses among these young adults – for "early adopters", even "innovators" – but only a few. While the few might indeed be important users (and uses) for future technology developments, they do not seem as relevant when it comes to social issues. In contrast to the claim in some web generation discourses, most young adult users do not behave and think like this nor is this potential subculture setting an example to the rest. This happens only indirectly, again via the negative identification. This makes "web generation" inappropriate as a general label for those who are currently young adults. In the case of generational discourses that declare that the overall experience of the web generation does not mean individual use, but simply a general understanding of the importance of ICT use, then this label might be appropriate after all. One could assume that although the "experience" is not shared, a general discourse concerning the experience is shared. In

that sense, the dominance of ICTs in current discourses can be seen to underline an idea of the "web generation". This papers, argues though, that the more common use of the term suggests the common behaviours and attitudes for the mainstream and thus goes too far.

Instead, the label can be used to illustrate the social pressure these young adults are under (or perceive themselves to be under). This social pressure in its consequences for the ICT adoption processes deserves further attention. The research material here presented seems to suggest that this pressure increases the general uptake of ICTs, but does not necessarily involve a form of engagement that explores the full potential of the new media. While this form of engagement represents a normative and unrealistic expectation (which partly repeats the web generation mantra), it is relevant as a warning about potential unwanted limitations of use, a content-related "digital divide". It can also offer a guiding vision of engagement with ICTs.

5.2. Domestication Away From Home – Constructing Identities

Technology is not the driving force behind the adoption of ICTs into everyday life. As so often, technological and social processes mutually shape each other. One motivation behind the adoption of these technologies by young adults is social pressure in the form of expectations that young adults find difficult to resist. This resistance is only towards using the technologies in radically new ways (one of the expectations of the web generation discourse). Instead, many of them use the technologies "conservatively". This clearly dampens the idea of a radical shift in web generation discourse towards a new society; new forms of communication; new values. Instead, these young users mostly do not acknowledge their own agency within the existing structures[68].

Nonetheless, those who use the technologies can be said to be in the process of *domesticating* the technologies[69]. Domestication in the simple sense, that is, as an incorporation of new technologies into one's life, into everyday life – using them, abusing, misusing them, ignoring them – is taking place. The technologies, at least the mobile phone, are not seen as technologies anymore, but have become naturalised to the

extent that they signify other notions, such as an extension of oneself. Furthermore, the young adults have given the ICTs actual spaces in their lives in the "kot", the Belgian student accommodation, and in their bedrooms at their parents' home or in their own home. The students use ICTs nearly every day from morning until night, but use them differently in the weekend. Many of those working also use them daily and extensively. The technologies are discussed with friends and family and are in many ways found to be useful[70]. Temporal and spatial boundaries to use are not always rigid[71]. The young adults in this study use the technologies quite extensively and thus have seemingly domesticated them in a smooth process.

However, what emerged strongly from an analysis of the interviews were aspects of the moral economy of these young people. The public/private relationship – that Silverstone et al. (1992) argue gets negotiated into the family-household via ICTs – has a different structure in the young people's lives. More emphasis placed on the peer-group or partner than on the family. Furthermore, there is a range of households and locations where ICTs are used. The integration of the ICTs into everyday life patterns is only necessary up to a point, because a major shift in these patterns has occurred anyway and is still in the process of occurring. Technologies are often used, at least partly, to negotiate the complexity of such arrangements. However, specific to these young adults, is the fact that they live in-between the known and new structures for some years before they move on to develop entirely new ones once they finish their studies, move in with their partner or similar events. This is, at least to some extent, culturally rather specific[72].

This overall complexity in life situations where boundary management becomes even more crucial than before, but less clearly related to temporal and spatial boundaries, seems instead to result in moral boundaries of a moral kind. These young adults lead – in household terms at least – a life in *transition*. ICTs are partly used to keep stability during this period of transition, but at the same time, they are not seen to disturb an existing balance of everyday life structures because this is disturbed anyway. Other structures, more fundamental and relating to general attitudes and values, are, however, potentially threatened by these ICTs and are thus carefully guarded.

The strictness of the "moral economy" might also be because these young adults are for the first time developing their own moral code. Parental links are strong – financially, emotionally and in terms of values – but at this point in the lives of the young adults, these links are beginning to weaken. ICTs, especially mobile phones, are partly used by parents to extend their "moral economy" for a while into the new patterns, but the more aware these young people become of their economic independence - sometimes only as a future-prediction - the more they begin to develop their own moral framework as well. This can be a replication of their parents' framework, or resemble that of their peers, but it can also be quite different to both. It seems, however, that the newness of this moral framework – in combination with their transitory positions and the challenge that ICTs pose to existing communicative and interactive patterns – often leads to a rigid boundary management in terms of their own behaviour and that of others. The *moral economy away from home* – reliant as it is on the individual – displays different characteristics (especially in terms of flexibility) than the one at "home". This has as much to do with *content* as with the *practice* of and *discourse* about use. Potential applications like the change of identities, that is the "content" of ICTs, is potentially upsetting the moral economy and this is what needs to be regulated most. It is not separable from the practices of use, but it nonetheless differs.

These young adults, maybe because they live in several households and are in transition in several senses of the word, seem to have a greater need to define what is acceptable and what is not in relation to ICTs. They do not define this in relation to themselves directly, but primarily through defining the behaviour of others as unacceptable. They tend to be more protective of their values than those of others are, partly because of the insecurities stemming from their own, transitory life situation. So, much of the potentially new is rejected. Everyday life patterns are possibly changed, but the underlying value patterns, that is, the moral economy are not radically changed, or at least not immediately. Rather they seem to become more rigid, more clear-cut even.

A claim proposed here is that the challenge to these value patterns stems more from the "content" than from the technologies or practices *per se*, while still being closely related to the discourse about use. Thus, the use of ICTs by the young adults in this study tends to be radical in its extent and its practice, but not in its dealings with the content. Many

of the young adults indeed want to keep control of their lives, but a lot of that is changing[73]. Overall, the behaviour these young people display can be characterised as anti-risk: an ontological security evident in the need to uphold and protect their beliefs in the world, as it appears to be. The slight threat posed by ICTs, is dealt with through these morals. The technologies cannot always be "hidden in the cupboard", but they can be regulated in this discursive way. The young adults thus conserve existing ways of thinking and social behaviour that might otherwise be threatened by use of the technologies (for instance, they resist for example new circles of contact; different forms of interaction; new content). Most of their own use is far from radical, but has been adapted to social needs for communication in general and for job skills in particular. These are tendencies, not final findings set in stone but they were found across a range of socio-economic backgrounds.

These findings highlight the fact the focus on youth, people for whom identity, even if only subconsciously, is a major issue. For them, identity is often negatively expressed in relation to ICTs, via the notion of defining oneself through the "other" and through a notion of "this is what I am not". Identity is necessarily defined in relation to an "other", but not always in the way it appears here, that is as indirectly expressed, as "what *they* do is wrong", as a strict moral economy. An active proclamation of one's own definitions would look different and it appears most often as a "I couldn't live without my mobile".

Encounters with strangers online were often dismissed as not "real", untrustworthy and therefore undesirable. Instead, the technologies are used primarily to reinforce existing networks of friends and family and not to extend it towards something new. Other research also stresses the emphasis in the use of mobile phones and many online communication programmes, which are used as a general tool for reassurance of social networking (see also Höflich, 2001). Social belonging is expressed in use, in a performative act of using these communication devices and of declaring what is wrong and what is right. This is done conservatively to protect existing values rather than has been generally assumed especially in discourses such as the web generation discourse. It is worth noting that the domestication concept had already implied that to find something radical in ICT uses might simply be the wrong place to look – young adults or not.

> "As such, domestication is fundamentally a conservative process, as consumers look to incorporate new technologies into the patterns of their everyday life in

> such a way as to maintain both the structure of their lives and their control of that structure…" (Silverstone and Haddon, 1996, p.60).

The concept of the moral economy has thus been added to in the sense that the conservatism of these young adults is partly related to existing structures – primarily of values, but not of everyday life structures. The strength of this moral economy away from home was an unexpected outcome and one that clearly points to limits or changes in the domestication process of new technologies.

The other challenge to the domestication concept – the idea that content does not feature enough in the research – has not been addressed quite so clearly. The methodology in this project did not specifically deal with the practice/content/discourse split as it only emerged from the analysis of the interview material. It has only asked, but not answered the question on how to do justice to all aspects (discourse, content, practices) plus their intricate connectedness methodologically. This is a great challenge, but well worth considering. After all, domestication theory opened this path in the first place[74].

5.3. Playing With Playfulness

New media are not necessarily radically new in themselves – so why expect radically new uses? One reason why new media are portrayed as radically new in the web generation and other such discourses is that they have the *potential* to be used in new ways. This is a crucial point since the young adults studied did not give this potential a chance. Their resistance towards those aspects of the technologies that have generally been regarded as potentially new is strong. This potential for the new, however, should be explored if a real change in communicative and informational patterns is to be achieved. Here the notion of playfulness emerged as important. This research also reinforced the suggestion of Douglas Kellner (1997), who early on stressed that young people need to be taught *technological* knowledge, but also the *cultural* aspects of new media and the *critical* approach to these contents.

Another point of differentiation needs to be made. The age group researched in this project was highly specific. They have not entirely grown up with ICTs in the way that the current generation of children and teenagers will. Other research into the attitudes and behaviours of these younger ones suggests that indeed a fundamental shift is taking

place in which ICTs are beginning to reach a state of "naturalness" that far exceeds the attitudes of those researched here. In the case of the younger ones, the presence and use of ICTs is potentially not questioned, but taken on board as a normal part of everyday lives today, which cannot be missed anymore. More importantly, ICTs are not primarily associated with education and work – which still applies to these young adults in terms of computers – but very much with play and social contact. These children might indeed grow up to be a potential "web generation", while the current young adults could remain "caught in between". These differences can partly be explained in terms of the transition to an increasing ubiquity of ICTs in everyday life, but they also say something more specific about a shift that occurs once these youngsters cease to be teenagers.

Although the young adults in this project emerged as a user group/s with different usage patterns and cultures than those of children and teenagers, the increasing number of currently emerging research projects on children and new media share many of the concerns that emerged within this research project[75]. In popular discussions children's uses of new media, for example, is often presented as a scapegoat in which the new media are blamed for more general problems and where wider social debates are played out through this issue. There is a need to move away from the general focus on extremes (hype versus condemnation or the potential of ICTs versus their harmful content) and a need to challenge generalisations about "children" and youth" often made in advertisements and by the media. A lot of this debate, and the "moral panic", depends on a distinction between the *educational* value of new media, in particular computers, and the *entertainment* content. The latter is mostly condemned, while the former is promoted. It is important to note, as David Buckingham has done, that these two are mutually dependent:

> "... there is a much more negative account of the impact of these new media on children's lives. This account focuses not so much on their educational potential, but on their role as a means of entertainment – and it depends upon making an absolute distinction between the two" (Buckingham, 2000, p.78).

This distinction also plays a major role in the interviewees' perceptions of use. Here the emphasis has partly shifted from education to work and in the process certain types of entertainment, of fun, or at least the extent of their use, are labelled negatively.

> Q.: "But chatboxes in itself, no interest in that?"

> A.: "No, not really. To be honest, I don't have time … I mean, when I was in university – sure … I'd use them. Normally about two am when I was drunk … and there's the ability to just go on and talk complete crap to strangers and …. But … nah, I mean… on a general level I don't have time and if I did have time I'd probably wouldn't anyway" (WP4, male, 25, software engineer).

This goes hand in hand with a general perception among young adults that social contact and work-related activities are generally permissible, but other content-uses have to be justified. These findings would therefore suggestion an extension to the question posed by Sonia Livingstone as to whether we should not "learn from how children have fun with ICT in order to understand how they might also learn from it" (2002, p.229). This could be applied to young adults, who in fact might not allow themselves that fun to the necessary extent. Livingstone explicitly refers to computer games in this question and encourages us to take a closer look at children's engagement with these specific technologies and applications[76]

Others have also called for research on computer games (Buckingham, 2002) and, or, changes in our understanding of literacy (Kellner, 2002). It is important to stress that playful aspects do not necessarily mean games, nor does playfulness necessarily suggest creativity[77]. The underlying suggestion in the interviews is that young adults were more likely to adopt computers playfully into their later lives if they had had a chance to play with them in their earlier years or to use computers at an age before any serious engagement was expected. They tended to try out different applications and were more open towards the idea that ICT make possible new forms of communication and information access. This is only an impression and it would require further research. Nevertheless, if it were true, it would have quite substantial consequences not only for the assessment of gaming, but also for the pedagogical and educational thinking around ICTs[78]. Only if these challenges are taken up will there be the potential for a fundamental shift in connectivity.

6. Conclusions

The young adults in Flanders interviewed for this project do not provide an easy answer

to the question of the existence of a web generation. What seems to emerge from the results is an "unwilling" web generation with nuances and with resistances. In terms of their everyday life practices, the lives of these young adults are indeed widely touched by ICT use. Practices are radical, but content use is mostly not instead reinforcing existing communicative networks and informational patterns. There is a need, therefore, to differentiate between practice and content. Thanks to the lack of content, the identities of the young adults are not directly linked to ICT use. Instead, they converse freely about other people's uses and their assessment of these use(r)s. Thus, their identities are partly defined through new media, but only negatively. Another aspect of this identity is that they feel under pressure to use these technologies, since the general discourse assumes both that they should do so (in order to keep up), but also that they already are using such technologies. The discourse about use is a rather important element of the general notion of youth and ICTs.

In Mannheim's generation concept, the generation *für sich* is characterised by a common consciousness, despite the antagonistic elements that exist within each age cohort. In this project there seems to be this hint of a common consciousness in relation to ICT use thanks to the awareness of the general discourse. However, this kind of consciousness is not useful for achieving common social goals – which were what Mannheim was primarily interested in. Thus, there is a web generation, but only in the experience of the discourse rather than the actual experience. The innovative use of cultural resources (another Mannheim criteria) is limited amongst these young adults. It is even seen as negative, described in the "others do" discourse. There is no particular common style related to ICTs and not even much of individual styles that can be described as such. Thus, the symbolic resources found in the new media are limited. Generation is here only an outside label – there are certain shared characteristics, but the generation in question is not radically new (unless one chooses a small subculture to represent the newness). Therefore, while a sophisticated form of technological determinism drives the web generation discourse, since it assumes that society will change thanks to ICT uses by a particular user group, the young adults do not show the "necessary" behaviour.

Nonetheless, they are a rather specific user group. These young adults highlight the impact of transition, which the particular life phase offers, on a particular moral

economy. They also reinforce the important role of imagination aspect of the domestication concept. Thus the discourse surrounding the new media is a vital aspect of their integration into everyday life, but can also, as the moral economy here underlines, pose a threat to the ultimate domestication. Instead, it can set the tone for the resistance. This resistance finds its expression not only in the discussion of other people's uses, but also in terms of their own limited use of content. The web generation seems rather tame – domesticated.

7. Research Recommendations and Implications

The research on ICT use of young people does not stop here – and it should not stop here. This project could easily have been extended to allow for a full analysis of the all the interview material or it could have been designed differently if more time or resources had been available. This might, for example, have been through the introduction of a quantitative aspect into the design of the project. The point here, however, is to learn from this project for any potential future projects.

There are several consequences, which emerge from the research outcomes. The first central theme is something that has already been hinted at throughout the report, that is that *youth as such* does not exist. Thus, research projects that try to research "youth" will necessarily run into problems of definition unless they are suitably large-scale. Large-scale projects are thus one option for future research, that is, projects that try to map youth widely enough in order to be able to say something about "average youth" and, or, to compare data throughout Europe. Examples for these kinds of projects underway are the University of Tampere's research on mobile phone use (see Oksman, 2003; Oksman and Rautiainen, 2001) and the LSE-led research on children's media use (Livingstone and Bovill, 1999).

This leads onto another point: future research should also continue to monitor youth in Europe on a quantitative level. The Commission regularly publishes the Eurobarometer and other such data, but the questionnaires could be extended to include issues raised by the Shell research. Another version of tackling the problem of "youth as such" is to

acknowledge the specificity of different youth sub-groups by being more specific in who (and what) is researched and/or talked about. This research project took a first step in that direction (but would choose to take two more if designed anew). In some sense the specificity is a return to the cultural studies approach without, however, the emphasis on subculture and deviance.

It also seems appropriate to fund more long-term qualitative studies – potentially in combination with the existing quantitative research. This would make it easier to say something about actual – rather than perceived – changes. A closer co-operation of such research with youth organisations as such (and/or the youth section of the Commission) would also be useful if one wants to avoid a top-down approach.

Another potential avenue for further research could be to involve the young people in the technology development and design itself – especially in terms of content. While such a combination can always be misperceived as a marketing idea, the point is to design future technologies and especially applications that are socially more inclusive and more interesting for youth.

Another aspect in terms of future research is that Europe – just like youth – has to be regarded as too broad a category for research (unless, again, large-scale projects are possible). Especially at this moment in time, when the EU is close to becoming much larger, it should be stressed that it is difficult to say something sensible about Europe as such. Thus the quantitative monitoring and the comparative projects (for example Oksman, 2003) are increasingly important.

Last, but not least, the social context of ICT use should be taken into consideration more in future research. The research outcomes of this project already stress how far the perception of other people's uses plays a role in defining one's own. This could potentially be linked more closely with the social and cultural capital that the individual youth bring to the use situation, but this would need to be researched in a multi-method approach. Wider social trends (such as changes in family structures and general social mobility) also play an important role in ICT use, but these could only be incorporated via such multi-method approaches.

If researchers wanted to move beyond an understanding of what is currently taking place, they could introduce playfulness and games as another aspect of the research. This could be offered as a form of content that is not necessarily in use already, but might be interesting for the user group in question.

Thus, overall, the suggestion is that this line of research be continued and be broadened to include large-scale, longer-term, comparative projects that use multiple methods. The aim then is to try locating ICT use in a wide social context plus offer alternative use than the ones already known.

8. Policy Recommendations and Implications

8.1. General Policy Remarks

As with the implications for further research, policy needs to begin with different premises since youth as such does not exist and nor does a coherent Europe. Youth is fragmented and would need to be acknowledged as such by policy. Just as the web generation discourse leaves little option for this diversity, so does much of the current European policy in relation to youth and ICTs. Most of them address the ABC (access, basic skills and content) but other aspects need to be added and these need to be refined to suit more specific user groups. Thus, B and C needs to be combined as basic skills of content-creation, for example. This is lacking until now. Thus EU policy has recently shifted from "European youth into the digital age" (eEurope, 2000) to "eLearning" (eEurope, 2002b). In terms of their aims, these programmes are similar. Both are primarily concerned with *access* (via schools and other education bodies). They also refer to *skills* and *digital literacy* and point to some necessary *content*-provision[78]. Both they rarely combine all of these. Thus, *e-Europe* tends to be technologically determinist. The interchange between the technological and the socio-cultural needs to be stressed instead.

8.2. Implications for Youth Policies

The European Commission has recently started to take an interest in young people and their relationship to new technologies. A much more substantial programme on youth – with the simple title "Youth" – has been developed under the auspice of the Directorate General for Education and Culture. This programme focuses primarily on the exchange of youth between different countries and youth work, but new media is also mentioned as important. Most of this refers to access and education. Thus much of the approach to youth and new media remains instrumental and concentrates on better jobs in the future or similar issues. A broadening of this approach would be useful. Thus, ICTs and ICT use should become an integral part of youth policies in general, rather than a separate issue. It could then be more demand-driven than policy-pushed. A general idea would thus be to have youth and ICT policy makers work more closely together.

As suggested earlier, the specificity of the different age groups combined under a heading such as youth needs to be taken into consideration and differentiations implemented. This is particularly relevant in terms of the content-provision and content-creation as well as skills involved in working with content. The individual user needs to be addressed more clearly – and in this case the particular age group, which differs clearly from teenagers or older people.

In order to work properly with content, some more fundamental questions concerning the general *image of participation* in the Network Society need to be answered first. While quite a few young people are connected to the world technologically, their skills could still be improved, their fears could be softened, their techno-social networks could – and should – be broadened. Thus the work of the Commission should not stop at the point where every current child receives some kind of ICT-instruction in school, but should look intensely at content, at social pressure, etc. – to connect more than currently are connected, but also (and especially) to broaden the world of connections. A work- or education-only policy is too limited – including the role of playfulness would our understanding of general use and specific skills.

Hence, in terms of the content the first step would be not to presume certain uses as "useful" and others as not (see debate about playfulness). The young people might also need to be encouraged to be more involved at the content-input side. Research projects,

which incorporate user research in the actual design phase, might help with this[79]. Here a differentiation between the impact ICTs have on daily lives and the impact they have in terms of new forms of communication and new ways to access information needs to be made. As has been shown above, ICTs have been widely adopted into everyday lives, but they have not so radically been allowed to change communication and information patterns of behaviour. Overall, ICTs should not only be seen in functionalistic terms, but focused more towards content and even the playful, the cultural, identity-issues – especially when it is aimed at younger users.

Another aspect of the content provision and creation is the ability to critically engage with such content.

> "In principle, media literacy should also include aspects of media ethics, for example questions relating to content evaluation, as well as cover the social consequences of the use of new media, aesthetic design and the experiential dimension of media. All users of the new media need to acquire appropriate skills to enable them to understand and handle the social, ethical and, of course, political dimensions of these media" (Aufenanger, 2003).

One example for this seems to be the 'EDUCAUNET' which at least promises "innovative educational techniques" that are meant to help citizens to develop a more critical approach of the Internet (Internet Action Plan, 2003).

8.3. Implications for ICT Policies

Similar issues as those just mentioned also apply to ICT policies. Too much concentration has been on access and basic skills and content development primarily from a top-down perspective. The latter needs to be expanded to bottom-up, but coupled with an introduction to the possibilities and varieties. Basic skills need to be expanded to critical skills, that is an understanding of ethical, social and other issues that might stem from certain content or practices. This can also include awareness training about non-use. Thus, the opting out should always remain an option. It is a good as absent from most policies, on the European, but also on other levels.

In other parts, some new directions in the general thinking can be detected. Thus, the Commission recognises that:

> "The promotion and use of ICT have never been as such a specific objective of the work done by the Commission in the Youth field. ... It's also obvious that young people are very interested in ICTs. Most of them think that 'digital literacy' is nowadays (...) one of the keys to have a good job. Unfortunately, between expectation and reality, there is a gap. ... Technology in itself is not a panacea" (eEurope, 2001).

Overall, there is a huge stress on education by the Commission. The funded research primarily reflects this emphasis (see IARD, 2001). This is partly an expression of the earlier mentioned expectations concerning youth changing society, but now with the emphasis on technologies as the particular tool to bring about the required results. Entertainment falls into the trap of not being recognised as such a potential tool and, furthermore, it is usually assumed that the private companies take care of this. A combination of entertainment and education, however, could produce fruitful results. The young people in particular might benefit from spaces where non-utilitarian ICT-uses are welcomed and furthered. It is important to keep in mind that:

> "Interactivity and choice are not universal benefits; many people do not have the energy, desire, need or training to engage in such processes" (Rice, 1999).

The training part can be taken care of, but the need for use does not always automatically arise from that. Therefore, policy has to address and deal with the notion of rejection of developments more consciously. If only some of these young people carry their discomfort further, other ways of inclusion (in terms of democracy, education and others) have to be guaranteed. Opting out should remain an option.

A lot has been said in this report about the pressure that young adults seem to be under or feel to be under. There is no lack of perception on their part that they "should" be partaking in ICT use if they do want to remain or become a fully functional member of this and any future society. Policy itself creates – or at least can create – pressure. Thus it is often not the user's choice alone to adopt certain technologies (Frissen and Punie, 2001, p.28)[80]. Policy should make sure that full participation in society is still possible without ICT use. This non-use should be seen as a valid choice.

Notes

[1] The age limit is not seen as an indicator for "youth" but as a necessary practical limitation of the research project. This limitation was chosen, however, to go hand in hand with official definitions of "youth" by the UN (15-24 years inclusive) and the EC (15-25). Nonetheless, the project tried to question how far young people are pre-constructed. This prior categorisation needs to be questioned.

[2] The 18 to 25 age bracket suggests a radical shift in the lives of many young people, for instance, leaving home, starting work or further study, increasing financial independence, etc. The break itself often takes place at about 18 with subsequent changes and repercussions of these emerging in the following years.

[3] This is to some extent an artificial distinction and one that cannot be sustained as clear-cut in the interview material. Discourse is also a kind of practice and vice versa as is the content. However, the distinction helps to differentiate crucial, and often subtle, changes in attitude and behaviour, however, and is thus analytically necessary.

[4] Consumers are well known to be "conservative" when it comes to changing long-used brands.

[5] New media technologies are always discussed within the current value system and the current cultural context, which are, however, usually based within a different technological environment (see Hebecker, 2001:89). This is an inevitable, but nonetheless problematic framework for the debate.

[6] At the same time, youth is dismissed as not fully responsible – youth is often seen as an *"as-if period"* (Hebecker, 2001, p.43), with both the freedom and the limitations that such a definition contains. This entails a prediction of what would happen once "as if" became "as is".

[7] Although the concept of youth first emerged in the 19th century it only became widely used from the 1950s onwards when it started to apply to an increasing number of people as part of the overall modernisation of Western societies. The surfacing of the concept was part of a wider tendency to institutionalise life-phases in which individual stability could be achieved via a "normal" biography, which substituted for earlier life forms, primarily household and family. These processes went hand in hand with economies that could afford to spend money on prolonged education. More recently, a general crisis in many welfare states and a trend for de-institutionalisation brought with it renewed insecurity and can be seen as one of many reasons for changes in the definitions of youth.

[8] The signifiers of adulthood were - not necessarily in this order - a) finishing school/college, b) leaving the parental home, c) starting a job, d) financial independence from the parental home, e) the formation of a (heterosexual) couple, f) the subsequent formation of a family.

[9] The young people researched here can be most accurately described as "young adults" since they do not identify with youth much, but do not see themselves as adults either. The term "young adults" has elsewhere also been used to signify a new life-phase equivalent to post-adolescence (Ling, 2001b, p.4), but is used here simply as a descriptive term.

[10] In the last century youth was thus seen as the life-phase in which to implement successful reform programmes, that is more overall social equality would be achieved through better education. Society was meant to benefit from the resources spent on these youngsters. This view partly remains, but with a less obvious 'reform' character.

[11] This aspect has been researched particularly and very fruitfully by cultural studies (see later discussion).

[12] In terms of researching youth, categories such as music and fashion are nowadays often combined to produce youth typologies (helped through data on media use, socio-graphic data, consumption affinities). While these typologies seem similar to subcultures, they mostly lack the political edge of subcultures. In addition, the emphasis on the overall societal framework is often missing, while commercial aspects are emphasised, since it is easier to market products at specific sub-groups. This report will briefly return to typologies in the web generation discussion below, because it is one of the most common approaches in youth and media use research.

[13] The term "Generation X" comes from a novel of the same title by Douglas Coupland (1991).

[14] They have also been named after specific technologies, like the Atari-generation, the Nintendo-generation or even the 486-generation. These differentiations are marginal to a wider debate. Despite the differing terminology, these authors are all talking about nearly the same age group, that is, current teenagers with a possible extension into the mid-20s and/or childhood.

[15] A similar expectation underlies many writings about young people and new technologies, both popular and academic.

[16] The networked computer and related technologies are not the first media technologies to have seen to have helped the formation of a generation (see Hörisch, 1997). However, they have seen the most extensive use as a generational label.

[17] A *Leitbild* is a German term, which consists of "lead" and "image". It has been translated as vision. It usually refers to a societal vision of a desirable future, often linked to technological developments and mostly with consequences for policy decisions (see Dierkes, 1996). *Leitbild* discussions appear in a specialist, but also in popular discourse, especially in the media.

[18] This paper agrees that these discourses (and thus specific uses) fulfil a Leitbild-function, but argues that the actual uses are at least as relevant especially since they often reveal a behaviour which chooses to act in defiance of such common ideals. This discourse analysis also does not acknowledge the anxieties that some of the discourses create.

[19] The latter refers to this author's own analysis of the cyberflâneur concept (see Hartmann, 1999). However, this report does not see this user typology as limited to youth cultures, nor necessarily to clearly defined actual uses. Rather, it is a discursive construct to project a particular image of use onto the new cultural sphere.

[20] One example of the use of segmentation as a marketing (research) tool is in MuSeg (2003). The increased interest of marketing companies in young people and ICTs is not only because of buying power and brand binding, but also because increasingly young people influence not only their cohort's buying patterns, but also consumption decisions in families. This is especially the case since the expertise is supposedly on their side, they are consulted on major decisions concerning technologies. This enables them to influence wider societal trends.

[21] One example for this segmentation is the simple differentiation between the optimist/fan, the pragmatist and the pessimist/resistance (Feierabend, 2000, pp.322-323). Others use terms like dreamers, big babies, good kids, independents, searchers and no-hopers (Ford and Philips, 1999).

[22] The term *user* implies the (active) individual (in contrast to the audience, an often undefined mass of people). The user terminology also puts an emphasis on technology (here ICTs) and not just the media output, primarily focused on the function of the individual *in relation to technology*. In the context of this study, the user is seen as someone who can potentially (but not necessarily) be a *producer* of his/her own content and distribute it. But the user can also be part of an audience – or rather several audiences – and thus receives and interprets media products (which are in this case partly produced by other users). Equally the user can be a *participant*, someone who partakes actively in programmes or content-creation or else. The user has a wider range of options for behaviour and action in relation to media output and especially to technology use (for another differentiation see Zeldman, 1999).

[23] He has throughout the years used the same approach for different innovations, including ICTS (see Punie, forthcoming).

[24] Thus there is a parallel to the Birmingham subculture research.

[25] It was in the UK that the media studies version of domestication was first developed

[26] For example, Simone Bergman and Valerie Frissen in the Netherlands (for example 1995, 1996, 1999, 2001), Yves Punie in Belgium (1997, 2000 and 2001), Maria Bakardjieva and Richard Smith in Canada (2001).

[26] Not all six stages are always referred to in all texts, depending on the framework. Sometimes the first two are left out (when the emphasis is on the household), sometimes they are summarised as three major steps).

[27] Morley, for example, issues a warning concerning the potential fragmentation of household members thanks to an increasing number of personalised ICTs (Morley, 2001:3).

[28] Another question is how far the public/private distinction is problematic in the context of new ICTs and potentially refers to a primarily modern distinction. These dichotomies are maybe overcome by ideas of networks and connectivity (or at least problematised). But the interviewees still stick to these distinctions, which might be a reminder that the concept is not one that is necessarily experienced in everyday life, even if contains important theoretical tools to work through current developments.

[29] Sørensen et. al outline that the domestication concept applies both to artefacts and facts, with which they mean science (1996, p.241), but which could maybe also refer to ICTs as "facts".

[30] While communication with the colleagues was never an issue, the research topic needed to adapt to this lack of language (it did not seem to make sense to conduct research in the UK and/or Germany - the academic home community and the country of origin of the researcher respectively - while the researcher was based in Belgium).

[31] Later the Dutch lessons had progressed far enough to allow the analysis of the Dutch interview material.

[32] The degree is usually a four-year degree, split into two years each for the "Candidature" and the "Licentiate". Third year communication science students always have to do a "practice seminar" (Werkcollege), in which research methods that were taught elsewhere are supposed to be put in practice. Thus the topic chosen for the 2001/2002 session was "youth and new media" and it was taught in combination with an introduction to qualitative methodology.

[33] There were around 70 day students and around 10 evening students - numbers kept fluctuating slightly. They interviewed young people from Flanders or Brussels and were encouraged to recruit their interviewees from a wide range, preferably not from their immediate circle of friends. They were told to look for neighbours, relatives, friends of friends, acquaintances or to recruit their interview partner from youth clubs or other hobby activities. Most of them seem to have taken this advice on board. The age range, occupational range, gender division and social background suggest a fairly wide (but obviously not in any sense representative) range of interviewees.

[34] I am grateful to Anne-Jorunn Berg for suggesting this research method at an early stage of the project.

[35] There were 81 self-interviews and 117 non-student interviews in total. Since the overall number of interviews was too big for a qualitative analysis (carried out by one researcher), this selection - consisting of the self-interviews and the non-students interviews (together 198 interviews) - is the basis for the analysis in the project overall. All of them were read for the analysis, while 50 of these were randomly chosen for study in more detail. The material was categorised into themes.

[36] The students were asked to cover most of the topics, but to adjust their questions to the given situation and to add new questions while they went along. Many students found this the most difficult part, but most improved over time. They were also told to stress anonymity and to cover the "social context" first - a kind of brief questionnaire of basic questions about the interviewee's age, their living situation, parents' background, their employment (or study) as well as an encouragement to the interviewee to introduce themselves and thus settle into the interview situation.

[37] The latest edition of the Shell study claims that the new media can be relevant for young people's engagement with politics, albeit on a non-traditional level. In an additional, qualitative part to their study, the interviewed twenty young people (16-25) in semi-structured interviews. These twenty were chosen for their particular engagement with and on the Internet in relation to a wider societal engagement. The study does not see this as representative for youth in general, but as relevant for an expression of the social engagement that seems more common than the traditional party-political engagement amongst young people today (for example, engagements with Attac, Indymedia, anti-racism, an alternative music platform, youth work, etc.). (See also Cammerts, 2003).

[38] Reasons for this could also be that young people today tend to live at home longer than those a few years ago.

[39] Young people see ICT knowledge as an important aspect of job skills (Eurobarometer, 2001). Eurobarometer 1997, which had a special part on youth, young people were increasingly seen to refer to a *need* to use ICTs, primarily for reasons of employment. Interestingly though, their actual use at that moment in time was not always matching their perception of the necessity of use (that is they did not use ICTs very much). The Eurobarometer 2001, which again included a special part on youth, shows that this gap has begun to close. Differences, however, remain amongst member states and according to social status.

[40] The term suggests an image of the sad loner in front of the computer screen.

[41] In terms of the arrangement of the research results, often use(r) typologies are developed. Thus there is a differentiation between the pragmatic user, the enthusiastic user and the inexperienced user (Baumgartner and Jäggi in ARD-Forschungsdienst, 2003:195).

[42] InSites combined telephone interviews with online questionnaires.

[43] Belgian students mostly live in two homes at the same time. That of their parents, what is most generally called "home" and the student home, mostly a "kot", a rented room in a shared house which is used only for the purpose of student accommodation (some students remain entirely "at home"). Most students spend the weekends and the holidays at their parents' house. Distances in Belgium are relatively small, so there is no extensive travelling involved.

[44] The suggestion is that they can probably be found primarily amongst those who left university not too long ago and who have not found any work (or any work with Internet access).

[45] This and all the following interview quotes have been translated from Dutch (Flemish) into English by the author of this report (the primary researcher). In order to keep the interviews anonymous a code (such as "D1") replaces the name. This code indicates "who" is quoted without using their real name, but the code also serves to more easily administer the large number of interviews.

[46] Another kind of "game" was described by one of the respondents as follows: "In the chatbox! That's really funny, but maybe not for the others who are online, probably not! That goes like: one of us gets to know someone and then tries to collect as much information about them as possible and then another one of us goes online (to the chatbox) and then this person says: 'hi, how are you?'. And then says the first person: 'but I don't know you' and then you say something like: 'well, yes, you do - you have this kind of hair and brown eyes' and then this person says: 'how do you know?' and then: 'I'm standing behind you' and such things ... or… 'I can see you' (WV1, male, 23, works in tourist sector).

[47] The 'Standaard' is one of the most highly regarded Flemish broadsheet papers.

[48] This fits with many current trends to enhance traditional marketing tools and to use peer groups and communities constructively as part of marketing strategies and to come up with specific deals that combine the marketing of different products.

[49] This is a clear case of the practice/discourse overlap that underlines how certain discourses can lead to certain practices. The emphasis here is on the practices, because for the young adults in question their parents' acquisition of the ICTs is only the beginning. They develop their own practices (and also discourses) in and around their subsequent ICT uses.

[50] "All the information you need can be found on the Internet. According to me everyone should have Internet. I don't have it, because at home they don't want it. My parents are not really interested in buying that. And my opinion is not so important at home. Later, when I live alone, the first thing that I will buy is Internet on the computer, it is very important for me" (WO1, male, 22, accountant).

[51] The relationship between the playful and the communicative changes substantially from teenagers to young adults (see also InSites, 2000).

[52] The Shell study shows that while 68% of German youth between 15 and 17-year olds play computer games very often, only 41% of 22 to 24-year-olds still do so (Deutsche Shell, 2000:202). The Belgian study states that for youth the *playful* aspects of ICTs are very important. More *communicative* aspects are also important, but interestingly the relationship between the two changes substantially from teenagers to young adults (InSites, 2000).

[53] Carsten Winter mentions that in the on-going research project about children (10 to 14 years old) and new media that he and his partner recently conducted in Austria, a euphoric and uncritical attitude to new media prevails (2003, p.48). This seemed one precondition for a playful approach.

[54] One of the few interviewee to have used MUDs) stated: "There was a time when I MUD-ed real intensely, maybe six or seven hours a day or sometimes even throughout a whole night. … You have a feeling of belonging. … When there is no one to chat to, you simply begin to research the world of the MUD" (P1, male, 23, student).

[52] Many youth-oriented sites in Belgium offer the chance for bank transfers.

[53] The interviews were conducted during the transition from the local currency (Belgian Franks) to Euros. Many interviewees were still thinking in Franks.

[54] The tendency is towards push-marketing (otherwise called "relationship marketing"), that is, marketing which aims more specifically at the individual and wants to get this individual to develop a relationship to the brand or the website. The technological developments could enable an increase in the targeting of marketing ploys. For example: "…a nightclub owner spots that things are not very busy that night and so pays to send an SMS to all known youngsters within five miles telling them that drinks are half-price for an hour" (GBDirect, 2001). The mobile future that commercial developers are dreaming off is to provide localised, partly individualised up-to-date information, which will lead to increased consumption of different kinds.

[55] One interviewee also said that she chatted with someone who she had only seen before, but since chatting online she interacts with him offline much more frequently. This initial face-to-face contact seems to have made a crucial difference. If it were a necessary precondition for trust, it would limit the chat to a localised context.

[56] The idea of being interviewed by peers was supposed to get rid of inhibitions about behaviour that parents, etc. allowed or did not allow.

[57] The same interviewee also showed a more differentiated (albeit less common) view concerning the advantages and disadvantages of online encounters. "Friendship at the end of the day is interaction between two people and yeah…maybe you don't get to go to the movies but you can both go to a movie and discuss it online. It hasn't got all the benefits. For sure you can't go out for a quiet drink and have a chat. But on the other hand it kind of divorces the physical world from …you know, what you look like or who you are to how your mind works and how your personality is. So I think a lot more people have a lot more confidence on the internet and as such it allows them to develop themselves and their friendships in a way it couldn't in real life" (WP4, male, 25, software engineer).

[58] Early virtual community research already suggested this combination as fruitful (Rheingold, 1994).

[59] It was clear from the interviews that the mobile phone is used more for SMS than for actual phoning. This well-known phenomenon was explained primarily through costs, but also through the fact that it was usually arrangements or little messages that one wanted to get across and not much more than an SMS was needed to convey this. "I use my GSM nearly only for sending messages, I like it and it is cheap. Calling someone - I do it rarely, and I find it easier to send messages and then arrange something and then talk face-to-face" (A2, female, 22, student). In relation to text messaging, the notion of addiction appeared a few times, often mentioned in a rather mocking manner.

[60] Rich Ling and Kristin Thrane (2001) show how explicit rules are used in families with teenagers to establish a certain ideal of ICT use. Discourses around personal usage and by others is therefore rather informative.

[61] Sometimes, one also finds very "generous" ideas concerning what other people are allowed to do or not: "[Referring to using mobiles in public] You see people walking down the street and banging into other people. I went to a concert before, where we got into a car and I was in the passenger seat and the driver got in … keys in the ignition, mobile phone out … hand-break off … and started sms-ing as we rolled down a slight slope and I pulled the hand-break on just in time to stop him crashing into the wall of the venue where the concert had been held. .... But I mean…who's to say what's too much, huh?" (WP4, male, 25, software engineer)

[62] A CD-writer (or burner) is a technology that is usually attached to a computer in order to burn CDs (often music, but can be other data). This has been one prominent way of storing and distributing music downloaded from the internet.

[63] The Dutch/Flemish expression she uses here suggests people who leave school at the age of 15 or 16.

[64] In a presentation about teenagers and mobile phone use in the UK and the USA, presented by Nina Wakeford and Nalini P. Kotamraju at the AoIR conference in Maastricht in October 2002 the presenters suggested less understanding towards parents' lack of knowledge in this age group. This would be interesting to analyse in more detail, but they are still working on their research report.

[65] The idea of the "gift economy" is that the giving of one's expertise is the basis for society – if this giving becomes a reciprocal behaviour, as some claim the Internet suggests, then a very different kind of society can be imagined (Barbrook, 1998; Hyde, 1983; Mauss, 1990).

[66] A slightly less serious comparison between "then" and "now" was also found: "Through the technologies the whole world has changed directions. Thus, when you have a look, in the past

you had the hippies where everything was still calm and peaceful and festivals and now you have the cyberpunk - you see?" (WP3, male, 23, worker - shelf stocking)

[67] This is surprising, given the fact that quantitative analyses seem to suggest that 40% of this age group use games regularly (Deutsche Shell, 2000:202).

[68] The shift might be radical in the long-term, but this cannot be deduced from the existing data, which points at most to an evolution, not a revolution.

[69] The "imagination" phase of domestication has been reached by all young adults in this study – even those who use them least, know and talk about these technologies and see their own non-use often as a problem of some kind.

[70] The mobile is seen as crucial for a social life while for work the Internet and the computer are seen more as more important.

[71] Here there is a clear difference between students and others as well as between different jobs. This difference, however, is not the emphasis of this study.

[72] The geography of Belgium supports strong links to the parental home allows at least in principle exactly this kind of gradual removal from the existing structures into new ones. In another setup the cutting off might take place in different ways. Here a comparative analysis would help.

[73] Those who let themselves be drawn into softening their existing boundaries and experiencing the new, often share lifestyle trends with people in different age groups, who might share other characteristics (such as a nomadic lifestyle - see Berker, 2003). Again, this is a suggestion rather than a finalised claim.

[74] One potential counter-argument against my insistence on media content in domestication is that meanings are described as equivalent to currencies, that is only some meanings are exchangeable with the outside world, some remain private. Only those that can be exchanged have an impact outside of the home (Silverstone et al, 1992:25).

[75] In parallel with this research project, many of the children and new media research projects also share the focus on computers (Internet) and/or mobile phones.

[76] Some research suggests that computers are used to play around, but not to create directly. Instead, a passive creativity emerges, which Sefton-Green calls "…'lego-creativity': it was possible for them to make things, but the building blocks were factory made" (Sefton-Green, 1998, p.71).

[77] This is in line with Margrethe Aune's differentiation of different types of domestication strategies of PC users as well as different learning strategies in relation to computers. Among these, "experimentation" – a more playful approach – was common amongst certain types of young men, while "training" – a much more pragmatic and task–oriented approach – was more

common amongst women. There were other styles also, but these two illustrate best what also seems to come out of my interviews.

[78] One example of how this is supposed to be envisaged is via the introduction of the 'Euro Computer Driving Licence' (ECDL).

[78] An example here is the IST (2002) programme's YOUNGSTER project, where content was seen as crucial and users were involved from early on. But, even here, content was commercially driven and largely pre-designed rather than developed by the users themselves and/or at least participation driven.

[79] Next to opting out a variety of possibilities to 'opt in' should remain open. The last version of the eEurope Action Plan already acknowledges that services "especially online public services" should be available "over different terminals such as TV sets or mobile phones" (eEurope, 2002b, p.3). This allows opting out of the need to buy a PC, which is also crucial.

References

- Ang, I. (1991) *Desperately Seeking the Audience.* London: Routledge.
- ARD-Forschungsdienst (2003) 'Jugendliche und neue Medien', in *Media Perspektiven*. No.4/2003, pp.194-200.
- Aufenanger, S. (2003) *Media Literacy as a Task for School Development*. URL (consulted April 2003): http://www.elearningeuropa.info/
- Aune, M. (1996) 'The Computer in Everyday Life: Patterns of Domestication of a New Technology', in M. Lie and K.H. Sørensen (eds.) *Making Technology Our Own? Domesticating Technology into Everyday Life*, pp.91-120. Oslo: Scandinavian University Press.
- Bakardjieva, M. and R. Smith (2000) 'The Internet in Everyday Life: Computer Networking from the Standpoint of the Domestic User' in *New Media and Society.* 3(2):67-83.
- Barbrook, R. (1998) *The Hi-Tech Gift Economy.* URL (consulted June 2003): http://www.firstmonday.dk/issues/issue3_12/barbrook/
- Bergman, S. and L. van Zoonen (1999) 'Fishing with false teeth: women, gender and the Internet', in J. Downey and J. McGuigan (eds.) *Technocities*, pp.90-107. London, Thousand Oaks, New Delhi: Sage.
- Berker, T. (2003) *Boundaries in a Space of Flows. The Case of Migrant Researchers' Use of ICTs*. EMTEL Key Deliverable – unpublished report. Trondheim: NTNU.
- Bijker, W. and J. Law (eds.) (1994) *Shaping Technology / Building Society*. Cambridge, Mass. and London: MIT Press.
- Bijker, W. et al. (eds.) (1989) *The Social Constructions of Technological Systems*. Cambridge, Mass. and London: MIT Press.
- Bingham, N. et al. (1999) 'Bodies in the Midst of Things: Re-locating Children's Use of the Internet', in S. Ralph et al. (eds.) *Youth and the Global Media*, pp.24-33. Luton: University of Luton Press.
- Bourdieu, P. (1991) 'Meanwhile, I have come to know all the diseases of sociological understanding' – An Interview by Beate Krais, in P. Bourdieu et al. (eds.) *The Craft of Sociology – Epistemological Preliminaries*, pp.247-259. Berlin and New York: Walter de Gruyter.
- Bourdieu, P. (1984) *Distinction: a Social Critique of the Judgement of Taste*. Cambridge, MA: Harvard University Press.
- Breunig, C, (2003) 'Onlineangbote für Jugendliche' *Media Perspektiven*, No.2/2003, pp.50-66.

- Buckingham, D. (2002) 'The Electronic Generation? Children and New Media', in L. Lievrouw and S. Livingstone (eds.) *The Handbook of New Media*., pp.77-89. London, Thousand Oaks, New Delhi: Sage.
- Butler, J. (1997) *Excitable Speech: A Politics of the Performative*. NewYork and London: Routledge.
- Cammaerts, B. (2003) *ICT-Usage's of Transnational Social Movements in the Networked Society*. EMTEL Key Deliverable – unpublished report. Amsterdam and Delft: ASCoR and TNO.
- Castells, M. (2001) *The Internet galaxy: reflections on the Internet, business, and society*. Oxford: Oxford University Press.
- Castells, M. (2000) *The Rise of the Network Society. The Information Age: Economy, Society and Culture. vol. 2nd edition*. Oxford: Blackwell.
- Castells, M. (1997) *The Power of Identity. The Information Age: Economy, Society and Culture vol.* Oxford: Blackwell.
- Coupland, D. (1991) *Generation X. Tales for an Accelerated Culture*. New York: St. Martin's Press.
- Deutsche Shell (eds.) (2002*) Jugend 2002. Zwischen pragmatischem Idealismus und robustem Materialismus*. Frankfurt a.M.: Fischer Taschenbuch Verlag.
- Deutsche Shell (eds.) (2000) *Jugend 2000*. Opladen: Leske + Budrich.
- Dierkes, M. et al. (1996) *Visions of Technology. Social and Institutional Factors Shaping the Development of New Technologies*. Frankfurt and New York: Campus Verlag and St. Martin's Press.
- Durieux, D. (2003) *ICT and social inclusion in the everyday life of less abled people.* EMTEL Key Deliverable – unpublished report. Liège: Lentic.
- eEurope (2002a) *e-education. European youth into the digital age.* URL (consulted May 2002): http://europa.eu.int/information_society/eeurope/action_plan/eeducation/index_en.htm
- eEurope (2002b) *eEurope 2005: An information society for all*. Brussels: CEC Communication and Action Plan.
- eEurope (2000) *eEurope 2002: An Information Society For All*. Brussels: CEC Action Plan.
- Eurobarometer (2002) *Flash Eurobarometer 125: Internet and the Public at Large*. URL (consulted June 2003): http://europa.eu.int/comm/public_opinion/flash/fl125_en.pdf

- Eurobarometer (2001) *Young Europeans in 2001. Results of a European opinion poll*. URL (consulted May 2002): http://europa.eu.int/comm/education/youth/studies/eurobarometer/eurobarometer.html
- Eurobarometer (1997) *The Young Europeans.* Eurobarometer 47.2. DG XXII.DG EN/22/97/01550000.WOO (FR)
- European Commission (2001) *Youth*. URL (consulted May 2001): http://europa.eu.int/comm/education/youth.html
- European Commission (1997) *The Young Europeans. Eurobarometer 47.2.* Brussels: DG XXII.
- Eurostat (2002) *Information society statistics – Pocketbook 2002*. Luxembourg: Office for Official Publications of the European Communities.
- Eurostat (1997) *Youth in the European Union – From Education to Working Life*. Luxembourg: Office for Official Publications of the European Communities.
- Farin, K. (2001) *generation kick.de – Jugendsubkulturen heute*. München: Beck.
- Förnas, J. et al (1992) *Youth Culture in Sweden – Presentation of a Research Program*. URL (consulted July 2002): http://www.niwl.se/home/fornas/Research/JFFUSpamphlet.html
- Ford, R. and A. Philips (1999) 'Media may be global, but is youth?', in S. Ralph et al. (eds.) *Youth and the global media*, pp.143-150. Luton: University of Luton Press.
- Frissen, V. and Y. Punie (2001) *Present users, future homes – A theoretical perspective on acceptance and use of ICT in the home environment*. TNO rapport STB-01-30a. Delft: TNO.
- Frissen, V. (ed.) (1996) *Gender, ITCs and everyday life. Mutual shaping processes*. Proceedings from COST A 4 and GRANITE Workshop Amsterdam, February 8th –11th, 1996, Luxemburg: Office for Official Publications of the European Communities.
- Frissen, V. (1995) 'Gender is Calling: Some Reflections on the Past, Present, and Future Use of the Telephone', in K. Grint and R. Gill (eds.) *The Gender-Technology Relation: Contemporary Theory and Research*, pp. 79-94. London: Taylor and Francis..
- Gauntlett, D. (1999) 'Losing Sight of the Ball?: Children, Media and the Global Environment in a Video Research Project', in S. Ralph et al. (eds.) *Youth and the Global Media*, pp.35-50. Luton: University of Luton Press.
- Georgiou, M. (2003) *Mapping Diasporic Media across the EU: Addressing Cultural Exclusion.* EMTEL Key Deliverable – unpublished report. London: LSE.
- Green, B. et al. (1997) 'Teaching the Nintendo generation/ Children, computer culture and popular technologies', in S. Howard (ed.) *Wired Up: Young People and the Electronic Media*, pp.19-41. London: UCL Press.

- Haberl, T. (2003) 'Peace ist Pop.' *Der Spiegel*. No.14/2003, 31 March 2003.
- Haddon, L. (2001) *Domestication and Mobile Telephony*. Unpublished paper presented at the 'Machines that Become Us' conference at Rutgers University, NJ, 18th-19th April.
- Haddon, L. (1994) 'Studying Information and Communication Technologies in Teleworking Households' in A.-J. Berg and M. Aune (eds.) *Domestic Technology and Everyday Life – Mutual Shaping Processes*, pp.59-82. Brussels: COST A4 – EU DG 'Science Research and Development'.
- Hall, S. and T. Jefferson (eds.) (2000 [1976]) *Resistance through Rituals. Youth subcultures in post-war Britain*. London: Hutchinson and Co.
- Hall, S. et al. (1996 [1980]) *Culture, Media, Language*. London: Routledge.
- Hartmann, Ma. (forthcoming) 'Young People = 'Young' Uses? Questioning the 'Key Generation', in N. Carpentier et al. (2003) *Het On(be)grijpbare Publiek: een communicatiewetenschappelijke exploratie van publiekonderzoek.* Brussels: VUBPress.
- Hartmann, M. (1999) 'Cyberflâneur und Cyberflâneuse – Zur Entwicklung der Netz-Nutzer-Metaphorik', in E. Hebecker et al. (eds.) *Neue Medienumwelten zwischen Regulierungsprozessen und alltäglicher Aneignung*, pp. 236-245. Frankfurt/New York: Campus Verlag.
- Hays, S. (2002) *Pepsi Embraces the Web Generation*. URL (consulted May 2002): http://www.imediaconnection.com/content/features/022102.asp
- Hebdige, D. (1979) *Subculture. The Meaning of Style*. London: Methuen and Co.
- Hebecker, E. (2001) *Die Netzgeneration. Jugend in der Informationsgesellschaft*. Frankfurt a.M. and New York: Campus.
- Hebecker, E. (1997) 'Generation@ – Jugend in der Informationsgesellschaft', in SPoKK (eds.) *Kursbuch JugendKultur*, pp.334-345. Mannheim: Bollmann Verlag.
- Höflich, J.R. (2001) '"Das Handy als 'persönliches Medium" – Zur Aneignung des Short Message Service (SMS) durch Jugendliche' *kommunikation@gesellschaft*. Vol.2. URL (consulted June 2002): http://www.uni-frankfurt.de/fb03/K.G/B1_2001_Höflich.pdf
- Höflich, J.R. and P. Rössler (2001) 'Mobile schriftliche Kommunikation – oder: E-Mail für das Handy.' *Medien- und Kommunikationswissenschaft*. 49(4):437-461.
- Hörisch, J. (ed.) (1997) *Mediengenerationen*. Frankfurt a.M.: Suhrkamp.
- Howard, S. (ed.) (1997) *Wired Up: Young People and the Electronic Media*. London: UCL Press.
- Hyde, L. (1983) *The Gift: Imagination and the Erotic Life of Property*. New York: Vintage Books.

- IARD (2001) *Study on the State of Young People and Youth Policy in Europe*. URL (consulted June 2003): http://www.europa.eu.int/comm/education/youth/studies/iard/iard.html
- InSites (2002) *België telt 3,2 miljoen regelmatige internetgebruikers.* URL (consulted May 2002): http://www.insites-consulting.com
- InSites (2000) '*An expanding Belgian web generation' – Youth Online Survey 2000*. URL (consulted May 2002): http://www.insites.be/Freeff/press/yol2_eng_051200.asp
- Internet Action Plan (2003) *EDUCAUNET*. URL (consulted April 2003): http://europa.eu.int/information_society/programmes/iap/projects/awareness/educaunet/index_en.htm
- Ipsos-Reid (2002) *Reconnecting Government With Youth V*. URL (consulted May 2002): http://www.ipsos-reid.com/ca/sectors/products/dsp_youth.cfm
- IST (2002) *IST – The overall vision*. URL (consulted February 2003): http://www.cordis.lu/ist/about/vision.htm
- ITU (2003) *ICT – Free Statistics Home Page*. URL (consulted June 2003): http://www.itu.int/ITU-D/ict/statistics/
- Katz, J. E. and P.Aspden (1998) 'Internet dropouts in the USA' *Telecommunications Policy*. 22(4/5):327-339.
- Kellner, D. (2002) 'New Media and New Literacies: Reconstructing Education for the New Millennium' in L. Lievrouw and S. Livingstone (eds.) *The Handbook of New Media*, pp.90-104. London, Thousand Oaks, New Delhi: Sage.
- Kellner, D. (1997) 'Die erste Cybergeneration', in SpoKK (eds.) *Kursbuch JugendKultur*. URL (consulted May 2002):http://www.uni-giessen.de/fb03/vinci/labore/gen/kellner.htm
- Kellner, D. (1997) 'Jugend im Abenteuer Postmoderne' in SpoKK (eds..) *Kursbuch Jugendkultur. Stile, Szenen und Identitäten vor der Jahrtausendwende*, pp.70-78. Mannheim: Bollmann 1997.
- Kubicek, H. et al. (eds.) (1997) *The Social Shaping of the Info Superhighway: European and American Roads to the Info Society*. New York: St Martins Press.
- Law, J. and J. Hassard (eds.)(1999) *Actor Network Theory and After.* Oxford: Blackwell.
- Lie, M. and K.H. Sørensen (1996) 'Making Technology Our Own?: Domesticating Technology into Everyday Life' in M. Lie and K.H. Sørensen (eds.) *Making Technology Our Own?: Domesticating Technology into Everyday Life*, pp.1-30. Oslo: Scandinavian University Press.
- Liebert, R.M. and J. Sprafkin (1988) *The Early Window – Effects of Television on Children and Youth*. Third Edition. New York: Pergamon Press.

- Ling, R. and K. Thrane (2001) *"It actually separates us a little bit, but I think that is an advantage": The management of electronic media in Norwegian households*. Telenor FoU Rapport 8/2001.
- Ling, R. (2001a) *The diffusion of mobile telephony among Norwegian teens*. Telenor RandD Rapport 11/2001.
- Ling, R. (2001b) *Adolescent girls and young adult men: Two sub-cultures of the mobile telephone*. Telenor R and D Rapport 34/2001.
- Livingstone, S. (2002) *Young People and New Media*. London, Thousand Oaks, New Delhi: Sage.
- Livingstone, S. and M. Bovill (1999) *Young People, New Media*. London: LSE Research Report. URL (consulted June 2003): http://www.lse.ac.uk/collections/media@lse/pdf/young/acknowledgments.pdf
- MacKenzie, D. and J. Wacjman (eds.) (1999) *The Social Shaping of Technology. 2nd ed*. Buckingham: Open University Press.
- Mannheim, K. (1970 [1928]) 'Das Problem der Generationen', in K.H. Wolff (ed.) *Karl Mannheim. Wissenssoziologie. Auswahl aus dem Werk*, pp.509-565. Berlin: Luchterhand.
- Mauss, M. (1990) *The Gift: the form and reason for exchange in archaic societies.* London: Routledge.
- McKie, D. and U. Bunz (2001) 'Contesting the future of e-commerce: Cyberspace strategy, marketing approaches, and net generation consumers.' *Australian Journal of Communication.* 28(1):19-31.
- McRobbie, A. (1991) *Feminism and Youth Culture: From Jackie to Just Seventeen*. Macmillan: London.
- Montgomery, K.C. (2001) 'Digital Kids – The New On-Line Children's Consumer Culture', in D. Singer and J. Singer (eds.) *Handbook of Children and the Media*, pp.635-650. London, Thousand Oaks, New Delhi: Sage.
- Morley, D. (2001) 'Familienfernsehen und Medienkonsum zu Hause.' *TelevIZIon*. 14(1):1-10.
- Morley, D. (1992) *Television, Audiences and Cultural Studies.* London: Routledge.
- Morley, D. and R. Silverstone (1990) 'Domestic communication – technologies and meanings'. *Media, Culture and Society*. 12:31-55.
- Murdock, G. and R. McCron (2000 [1976]) 'Consciousness of Class and Consciousness of Generation' in S. Hall and T. Jefferson (eds.) *Resistance through Rituals. Youth subcultures in post-war Britain*, pp.192-207. London: Hutchinson and Co..

- MuSeg (2003) *MuSeg*. URL (consulted June 2003): http://www.a-und-b.de/Studien/Studien/studien_museg.htm
- Network Business Exchange (2002) *Relationship Marketing Resource*. URL (consulted July 2002): http://www.relationshipmktg.com/
- OECD (2002) *Measuring the Information Economy 2002*. Paris: OECD.
- Oksman, V. (2003) *Wireless Kids - Mobile Communication Cultures of Teenagers 1997-2003*. Unpublished presentation. The EMTEL conference, London: LSE, 23rd-26th April 2003.
- Oksman, V. and P. Rautiainen (2001) *'Perhaps It Is a Body Part' – How the Mobile Phone Became an Organic Part of the Everyday Lives of Children and Adolescents. A Case Study of Finland*. Unpublished paper. The 15th Nordic Conference on Media and Communication Research. Reykjavik, 11th -13th August 2001.
- Opaschowski, H.W. (1999) *Generation@ – Die Medienrevolution entläßt ihre Kinder: Leben im Informationszeitalter*. Hamburg: British American Tobacco.
- Punie, Y. (forthcoming) 'Een theoretische en empirische benadering van adoptie, gebruik en betekenis van Informatie-en Communicatietechnologie in het dagelijkse leven.', in Carpentier, N. et al. (2003) *Het On(be)grijpbare Publiek: een communicatiewetenschappelijke exploratie van publiekonderzoek.* Brussels: VUBPress.
- Punie, Y. (2003) *A social and technological view on Ambient Intelligence in Everyday Life: What bends the trend?* EMTEL Key Deliverable – unpublished report. IPTS: Sevilla.
- Punie, Y. (2000) *The domestication of Home Computing. A long and turbulent way to go*. Press conference comments on 'The future of Home Computing', a study done by the 'Packard-Bell European Institute of Home Computing', October 2000.
- Punie, Y. (1997a) 'Created or constrained consumption? An assessment of the demand for new media technologies in the home'. *The Communication Review*. 2(2):179-205.
- Punie, Y. (1997b) 'Imagining non-uses: rejections of ICTs in Flemish households', in *Conference Proceedings of "Penser Les Usages". First International Conference*, Bordeaux, 27-29 May, organised by SEE, IREST and ADERA, pp.165-176.
- Rheingold, H. (1994) *The Virtual Community. Finding Connection in a Computerized World*. London: Minerva.
- Rogers, E M. (1962) *Diffusion of Innovations*. New York: The Free Press.
- Sefton-Green, J. (ed.) (1998) *Digital Diversions: Youth Culture in the Age of Multimedia*. London and Bristol: UCL Press.
- Silverstone, R. (1994) *Television and Everyday Life*. London: Routledge.

- Silverstone, R. and Haddon, L. (1996) 'Design and the Domestication of Information and Communication Technologies: Technical Change and Everyday Life', in R. Mansell and R. Silverstone (eds.) *Communication by Design. The Politics of Information and Communication Technologies*, pp.44-74. Oxford: Oxford University Press.
- Silverstone, R.; Hirsch, E. and Morley, D. (1992) 'Information and communication technologies and the moral economy of the household', in R. Silverstone and E. Hirsch (eds.) *Consuming Technologies. Media and information in domestic spaces*, pp.15-31. London and New York: Routledge.
- Silverstone, R. and E. Hirsch (eds.) (1992) *Consuming Technologies: Media and Information in Domestic Spaces*. London: Routledge.
- Sørensen, K.H. et al. (2000) 'Against linearity: on the cultural appropriation of science and technology', in M. Dierkes and C. von Grote, Claudia (eds.) *Between understanding and trust: the public, science and technology*, pp.237-257. Amsterdam: OPA.
- Sørensen, K.H. (1994) *Technology in Use. Two essays on the domestication of artifacts*. Trondheim: Senter for Teknologi og Samfunn.
- Sussex Technology Group (2001) 'In the company of strangers: mobile phones and the conception of space', in S. Munt (ed.) *Technospaces – Inside the New Media*, pp. 205-223. London and New York: Continuum.
- Svedmark Ikonomidis, E. (2002) *Domestication through Virtualization. In memory of Johannes.* In *Proceedings of IRIS-25*, Bautahøj, Denmark, August 10-13, 2002.
- Tapscott, D. (1998) *Growing Up Digital: The rise of the Net generation*. New York: McGraw-Hill.
- Taylor, A.S. and R. Harper (2001) *Talking 'Activity': Young People and Mobile Phones.* Unpublished paper. CHI 2001 Workshop 'Mobile Communications: Understanding Users, Adoption and Design.' Seattle, Washington: 1st and 2nd April, 2001.
- Torfing, J. (1999) *New Theories of Discourse: Laclau, Mouffe, and Zizek*. Oxford: Blackwell.
- UN (2002) *Fourth Session of the World Youth Forum of the United Nations System, Dakar, 6-10 August 2001*. URL (consulted May 2002): http://www.un.org/esa/socdev/unyin/forum/index.html
- UN (2001) *Youth at the United Nations*. URL (consulted August 2001): http://www.un.org/esa/socdev/unyin/qanda.htm
- UniMelb (2001) *Net Generation 'plugged in' 'turned on'.* URL (consulted June 2003): http://www.unimelb.edu.au/ExtRels/Media/UN/archive/2001/628/studynet.html

- van Eimeren, B. (2003) 'Internetnutzung Jugendlicher.' *Media Perspektiven*, No.2/2003, pp.67-75.
- Ward, K. (2003) *An Ethnographic Study of Domestic Internet Consumption in Coastal Town*. EMTEL Key Deliverable – unpublished report. DCU: Dublin.
- Ward, K. (2001) *The Domestic Internet: A Research Note*. Unpublished paper presented at the EMTEL Research Fellow meeting in Brussel, December.
- Wartella, E. and B. Reeves (1985) 'Historical Trends in Research on Children and the Media: 1900-1960'. *Journal of Communication*. 35:118-133.
- Webster, F. (1995) *Theories of the Information Society*. London: Routledge.
- Winkels, H. (1997) 'Gleiten und Stottern', in J. Hörisch (ed.) *Mediengenerationen*, pp.130-150. Frankfurt a.M.: Suhrkamp.
- Winter, C. (2003) 'Die konvergente Re-Artikulation von Kinder- und Jugendkulturen zwischen spielerischen Taktiken und kommerziellen Strategien', in M. Karmasin and J. Bug (eds.) *Telekommunikation und Jugendkultur. Eine Einführung*, pp.47-75. Opladen/Wiesbaden: Westdeutscher Verlag.
- Wyatt, S. (forthcoming) 'Non-users also matter: The construction of users and non-users of the Internet', in N. Oudshoorn and T. Pinch (eds.) *How Users Matter: The Co-Construction of Users and Technology*. Cambridge, MA: MIT Press.
- Zeldman, J. (1999) 'Design Your Audience'. URL (consulted Sept. 2002): http://www.alistapart.com/stories/who/

Appendix 1: EMTEL Deliverables

Final Deliverables

- Brants, K. and Frissen, V. (2003) 'Inclusion and Exclusion in the Information Society', University of Amsterdam (ASCoR) and TNO Strategy, Technology and Policy.
- Pichault, F. and Durieux, D. (2003) 'The Information Society in Europe: Methods and Methodologies', LENTIC, University of Liege and ASCoR, University of Amsterdam.
- Preston, P. (2003) 'ICTs in Everyday Life: Public Policy Implications for Europe's Way to the Information Society.
- Punie, Y., Bogdanowicz, M., Berg, Anne-Jorunn., Pauwels C. and Burgelman, J-C. 'Living and Working in the Information Society: Quality of Life in a digital world', IPTS-JRC, European Commission, Sevilla; Centre for Technology & Society, Norwegian University of Science and Technology, Trondheim; SMIT, Free University of Brussels.
- Silverstone, R. (2003) 'Media and Technology in the Everyday Life of European Societies', Media@lse, London School of Economics and Political Science.

Key Deliverables

- Berker, T. (2003) 'Boundaries in a space of flows: the case of migrant researchers' use of ICTs', NTNU, University of Trondheim.
- Cammaerts, B. and Van Audenhove, L. (2003) 'ICT usage among transnational social movements in the networked society', ASCoR/TNO, University of Amsterdam.
- Durieux, D. (2003) 'ICT and social inclusion in the everyday life of less abled people', LENTIC, University of Liege and ASCoR, University of Amsterdam.
- Georgiou, M. (2003) 'Mapping diasporic media across the EU; addressing cultural exclusion', Media@lse, London School of Economics and Political Science.
- Hartmann, M. (2003) 'The Web Generation: the (de)construction of users, morals and consumption', SMIT-VUB, Free University of Brussels.
- Punie, Y. (2003) 'A social and technological view of Ambient Intelligence in everyday life', IPTS (JCR-EC), Seville.
- Ward, K. (2003) 'An ethnographic study of internet consumption in Ireland: between domesticity and public participation', COMTEC, Dublin City University.