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**Sosiale konsekvenser av mobiltelefoni:  
proceedings fra et seminar om samfunn,  
barn og mobiltelefoni**



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**Sammendrag**

16. juni 2000 arrangerte Telenor FoU seminaret ”Sosiale konsekvenser av mobiltelefoni”. Her var internasjonale forskere invitert for fremlegge sine forskningsresultater. Seminaret tok opp generelle sosiale konsekvenser av mobiltelefon, men flere av bidragsyterne konsentrerer seg mer spesifikt om barn og unge og deres forhold til mobiltelefoni. Forskernes egne resymeer fra foredragene er samlet i dette notatet.

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**Title**

The social consequences of mobile telephony: the proceedings from a seminar about society, mobile telephony and children

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**Abstract**

In the 16<sup>th</sup> of June 2000 Telenor R&D arranged a seminar with the title “The social consequences of mobile telephony.” International researchers were invited to present their results. The seminar examined the general social consequences of mobile telephony, however several of the contributors focused on more specifically on children, teens and their relationship to mobile telephony. The extended abstracts of the researchers are presented in this document.

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Det må ikke kopieres fra denne rapport utover det som er tillatt etter bestemmelsene i "Lov om opphavsrett til åndsverk", "Lov om rett til fotografi" og "Avtale mellom staten og rettighetshavernes organisasjoner om kopiering av opphavsrettslig beskyttet verk i undervisningsvirksomhet".

## **Innholdsfortegnelse**

<b>1 Sosiale konsekvenser av mobiltelefoni .....</b>	<b>1</b>
<b>2 The Social Consequences of Mobile Telephony: Framing Questions (Haddon)..</b>	<b>2</b>
2.1 Parent-Child Relationships and Mobile Telephony.....	2
2.2 The Changing Experience of Time and Mobile Telephony .....	4
2.3 Mobile Telephony in Public Spaces .....	5
2.4 Endnote .....	6
2.5 References.....	6
<b>3 Of maps and meanings Semantic dimensions of mobile telephones in the U.S. and Korea, with a minor note about Norway and Namibia (Katz et. al).....</b>	<b>8</b>
<b>4 The Mobile Phone: New Social Categories and Relations (Fortunati) .....</b>	<b>9</b>
4.1 The presence of those who are absent: an ever more frequent oxymoron.....	9
4.2 The metamorphosis of space .....	10
4.3 The search for lost time .....	11
4.4 The modal personality strengthened by the mobile phone .....	11
4.5 Cell democracy .....	12
<b>5 Om mobilsamtalets kulturhistoria och framtid (Garnert).....</b>	<b>13</b>
<b>6 Mobile communication of children and teenagers: case Finland 1997-2000 (Rautiainen and Kasesniemi) .....</b>	<b>15</b>
6.1 Introduction.....	15
6.2 Methods and material .....	15
6.3 Conclusion .....	18
<b>7 “It must be necessary, it has to cover a need”: The adoption of mobile telephony among pre-adolescents and adolescents (Ling and Helmersen) .....</b>	<b>19</b>
<b>8 Mobiltelfon som symbolsk kapital i ungdomskulturen (Skog) .....</b>	<b>24</b>
8.1 Innledning .....	24
8.2 Mobil og kjønnskoder .....	24
8.3 Mobil – et urbant fenomen?.....	24
8.4 Mobil – Trendy eller ”Harry”? .....	25
8.5 Mobil som identitetskoding .....	25
8.6 Mobil og IKT-kapital.....	26
8.7 Mobil som døråpner til IKT.....	26
8.8 Mobil og sosial kapital.....	26
8.9 Mobil som symbolsk kapital.....	27



## 1 Sosiale konsekvenser av mobiltelefoni

Mobiltelefonen har i dag funnet sin plass i samfunnet og i folks hverdagsliv. Den har gått fra å være en teknisk kuriositet på midten av 1980-tallet, til i dag å være nærmest allemannseie og et daglig syn i det offentlige rom. Det som er uvisst er hvilke sosiale konsekvenser mobiltelefonens inntog frembringer. Vi vet at den har innvirkninger på hvordan vi organiserer hverdagen, både på jobb og i fritiden. Mobiltelefonen har også influert hvordan vi samhandler med hverandre; hvordan vi samhandler med våre barn og de igjen med hverandre. Utgangspunktet for seminaret er nettopp ønsket om å se nærmere på de sosiale og kulturelle følgene av mobiltelefoni. De inviterte foredragsholderne har alle på en eller annen måte studert sosiale konsekvenser av mobiltelefoni. Det er ikke teknologien i seg selv de studerer, men teknologiens innvirkninger på vårt sosiale liv.

Leslie Haddon ser på mobiltelefonens innvirkninger på foreldre-barn relasjonen, og mobiltelefonens påvirkninger på vår opplevelse av tid. Haddon tar også opp diskusjonen rundt bruk av mobiltelefonen i det offentlige rom.

Jamez Katz viste i sitt foredrag betydningen av mobiltelefoni i et moderne samfunn (USA) og i et samfunn i en tidlig moderne fase (Sør Korea). Målet med dette prosjektet er å forstå den samsvarende strukturen mellom forestilte betydninger og den faktiske tilegnelsen av mobiltelefoni.

Lepoldina Fortunati ser blant annet på hvordan mobiltelefoni modifierer og forandrer individets mentale tilstedeværelse og fravær i det sosiale rom. I dette notatet tar hun også opp mobiltelefonens realisering av en demokratisk prosess og konstruksjon av den modale personlighet.

Jan Garnert diskuterer dagens mobiltelefoni utfra et kulturhistorisk perspektiv. Som kulturforsker tar han også opp det faktum at det i dag ikke finnes normer for hva som er sosialt akseptabelt i hendelser rundt bruk av mobiltelefoni.

Pirjo Rautiainen og Eija-Liisa Kasesniemi gir i dette resymet en god innføring i det tverrfaglige prosjektet: *Mobile Communication of Children and Teenagers: Case Finland 1997 – 2000*. De viser også til hovedtrendene i mobil kommunikasjon blant barn og voksne i Finland.

Rich Ling og Per Helmersen går inn i diskusjonen rundt barn og unges tilegnelse av mobiltelefoni. De ser på hvilke forutsetninger som må være tilstede før barn og unge kan ta i bruk denne teknologien.

Berit Skog presenterer resultater fra en studie som belyser ungdoms bruk av mobiltelefoni. Hun antyder også hvordan funnene kan reflektere tidstypiske trender og mobiltelefonens betydning som symbol i ungdomskulturen.

## 2 The Social Consequences of Mobile Telephony: Framing Questions (Haddon)

**Leslie Haddon, The London School of Economics**

This paper focus on the voice mobile telephony that has become widespread since the 1990s, rather than on the new generation of mobile data services that are now appearing. Rather than explicitly considering social consequences in terms of policy implications (e.g. social exclusion) it deals with the minutiae of how everyday life is changing and how this relates to mobile telephony.

Three challenges are considered in dealing with the question of ‘social consequences’:

1. The first is the common question faced by social analysts of what is of significance and why, what levels of analysis should we be dealing with, what types of phenomenon count as ‘consequences’?
2. Our living and working conditions, expectations and roles, experiences of time and space and the interrelationship of public and private are all changing, albeit over different time scales. So how important are the effects of a particular technology compared to those of other social forces and how, as well as how much, do we attempt to disentangle the consequences of a particular technology from all these other factors - or attempt to see them operating in conjunction?
3. New technologies like mobile telephony also arrive in a context where other information and communication technologies are entering into and changing our daily practices, and so to what extent should any account of the mobile be located amidst the influences of all these other ICTs?

In the discussion below three dimensions of mobile telephony are worked through to illustrate these how these challenges might be addressed and more generally to stimulate reflection for this workshop. These dimensions are:

- Parent-child relationships and mobile telephony, reflecting the interest in youth and children shown in some contemporary studies.
- The changing experience of time and mobile telephony, drawing upon some recent discussions within the field of time studies.
- The reaction to mobile telephony in public spaces, since these facet continues to figure highly in people’s evaluation of the mobile phone phenomenon.

### 2.1 Parent-Child Relationships and Mobile Telephony

In a historical perspective it must be remembered that both childhood and youth are social constructions. How they are experienced and lived out is not constant but changes over time, with changing expectations of these roles and of the options and constraints that accompany them. Sometimes change is gradual, over hundreds of years such as movement away from regarding children as simply small versions of adults (Ariès, 1973) or the emergence at the end of the 19<sup>th</sup> century of the concept of adolescence as a stage between childhood and adulthood (Gillis, 1981). Because such changes are relatively gradual it appears that successive generations have similar experiences. But there are also the more short to medium term changes. For example, there has been a lengthening of period of financial dependence on the family because of longer time spent in both education and training due to the pressures for

certification and from youth unemployment. Arguably these have had far more impact on youth's autonomy than any effects of mobile telephony.

One area of change, which is relevant for understanding ICTs, in general is children's mobility in everyday life, and more specifically, their presence in public spaces. There are claims that more generally social activities that in the past took place in public, are increasingly taking place in the home, which is itself becoming more public, more open to outsiders (Wellman, 1999). Children also experience this, having their friends around to interact with in their homes, in their own rooms. But the last decade or two has also seen the process, perhaps true more in some countries or areas more than others, whereby there has been a growing concern for children's safety in public spaces. A recent UK study of children and ICTs noted how parents felt under pressure to keep their children indoors (Livingstone, 1999). And there has been a shift to a situation where the vast majority of children in Britain are now driven to school because of safety concerns.

Such changes have evoked some ambiguity. In certain ways it is an infantilising experience for children and reflects some loss of independence. Parents also acknowledge that their children then miss out on the experience of playing out of doors (Livingstone, 1999). At the same time there is an added pressure on the parents to create a home environment that is stimulating and keeps the children occupied. Finally children's mobility is also more complex in that there are also some studies suggesting how children's and youth's participation in organised activities away from home and visiting friends in their homes have increased, requiring them to be ferried around by their parents.

Apart from this changing experience of mobility, over many years children have increasingly gained access to various personalised ICTs. In the 1960s (to take the dates relating to Britain) children, especially teenagers increasingly acquired their own record players and radios, which in later years evolved into music systems. Since then many children have been provided with or acquired their own TVs, VCRs and PCs. Some had their own phone handsets and more recently we see more examples of children accessing the Internet from their own rooms. This multiplication of ICTs within their home and their individual possession is at one level a solution to issues around competition for communal resources - when different people, including children, want to watch different programmes, to access computers at the same time, or to use phone simultaneously. But in relation to the previous observations about mobility, in more recent years granting children access to a range of personal ICTs also reflects the need to provide alternatives if children are to be kept off the streets.

A third consideration is the history of discourses about what counts as 'good parenting' which involves parents monitoring what children do and what they have access to. The issue of the surveillance of children by parents is more clearly seen in the history of what type of and how much domestic television could be watched by children - but similar issues have re-occurred with the arrival of videos, video games, home computing and more recently the Internet. Specifically in relation to telecommunications we also see on the one hand surveillance in terms of parents showing an interest in who their children call and about what, and on the other hand children's interest in avoiding such surveillance and seeking privacy. The dilemma raised by the personalisation of ICTs described above is that it can make monitoring of children by parents more difficult. Providing personalised ICTs is in some senses, then, a gesture offering children more independence.

The way in which children and youth have been allowed to have access to mobile telephony in recent years has to be seen in the light of these three processes. Through the mobile phone, telephony has at last joined the list of ICTs that many children no longer need to access as a communal resource - and that is almost as significant as the fact that the mobile is portable. Practically, and symbolically, it can give children and youth more independence in certain respects. It can give them an area of life over which they have control<sup>1</sup>. And at times mobiles provide more freedom from surveillance, more privacy in terms of making and receiving calls<sup>2</sup>. But mobile telephony also has a bearing upon children's changing mobility both in terms of facilitating the logistics of moving children around when they are outside the home and offering parents some peace of mind when children are out in unsupervised spaces (Klamer, et al, 2000).

In these small ways, mobile telephony has a bearing on children's lives, but this has to be understood in the context of complex patterns of children's mobility in everyday life, their increased access to personal resources and issues around and changes in parental surveillance.

## 2.2 The Changing Experience of Time and Mobile Telephony

Researchers examining changing time patterns have noted the paradox that while time budgets show that on average the amount of leisure time has increased, many people perceive that their lives have become busier. They experience a faster pace of life mainly because they try to fit in more activities, which in turn reflects the greater options open to them (Garhammer, 1998). Obviously this is an uneven process across countries, areas (e.g. rural-urban) and social groups. Some people have time on their hands and make use of time-fillers. But at the other extreme research has shown just how busy households can be - for example, in dual career households, where the children are also following their own agendas (Frissen, 1997).

People's ability to manage this more intense living is aided by those options that provide flexibility in the management of time. In other words, the ability to time-shift activities can be as important as finding ways to save time. For example, the move to longer shop opening hours has allowed some households to change the time when shopping takes place, and for some a certain amount of flexibility in the timing of work has also facilitated the time shifting of activities. It has been argued that technologies such as the freezer are used for time-shifting labour in terms of buying food in advance of use (Shrove and Southerton, 2000). Indeed one modern meaning of the word 'convenience' (goods) is that they allow us to change the scheduling of activities (Warde et al 1998).

ICTs, too, offer further means of making our time flexible: from VCRs allowing us to watch programmes when we want, through answering machines and e-mail for receiving messages at the time of our choice to tele-everything enabling us to access facilities 24-hours a day. The mobile phone is another addition to this arsenal of tools. On the one hand, the mobile clearly enables additional communication that we might not have made before (as does e-mail) - for example, phatic calls where the point is not so much the message but the gesture of getting in touch. And those extra calls may help us be better able to be a good parent, thoughtful partner, or dutiful

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<sup>1</sup> And in some cases autonomy and responsibility through allowing them to manage the financing of their own communications.

<sup>2</sup> Although in other senses being required by parents to carry mobile phones in order to be contactable when out of the home, introduces a different level of parental surveillance.

child to parents living elsewhere. But research shows how the mobile phone also enables us to shift calls themselves in both time and also space as we are no longer required to be in proximity to fixed lines. And through those calls we can re-schedule activities, changing plans when underway or at the last minute, more finely re-ordering the temporal structure of our lives to lead just-in-time lifestyles.

But once again, if mobiles have this ‘impact’ on our lives this has to be seen in the context of all other changes offering more temporal flexibility - which may be beneficial in some senses but can also have their downside. For example, there are the domestic co-ordination problems when individual household members are all flexibly following their own agendas, passing through the home at different times, eating at different times etc. What happens to time spent together? Then there are the problems of scheduling in times for face-to-face contact with members of wider social networks if many of them are also leading with flexible lifestyles. Some respondents in a recent study noted, regretfully, that they had to increasingly book appointments in advance because of this tendency (Klamer et al, 2000). Finally, if we become busier, what happens to personal time for such things as reflection?

Perhaps this all paints too gloomy a picture - people still make ‘family time’ happen, they make time for friends, they make time for themselves. But they sometimes observe that it is becoming more difficult to do so. The point is that while in specific ways the mobile phone may contribute to our temporal flexibility, when taking a wider view the mobile is only part and parcel of a whole range of technological and non-technological forces allowing us to alter our experiences of time.

### **2.3 Mobile Telephony in Public Spaces**

By now the ‘friction between mobile users and co-present others’ (Cooper, 2000) has been noted by a range of observers and is well documented in both qualitative research (Ling, 1998) and in quantitative surveys. For example, in a 1996, in Italy, the UK and Germany over half of those surveyed had some form of negative reaction to mobile phone use in public (Haddon, 1998).

Public use of the mobile phone has been the subject matter of debates on TV chat shows and mobile phone etiquette handbooks. There have been both formal attempts to regulate use creating mobile free zones in a variety of public spaces (on some parts of trains, in some restaurants, in theatres) and informal strategies of social control have been exercised against users (Ling, 1998). We have a range of technical features and options that offer to alleviate some of the problems (vibrator, voicemail, SMS) and there are examples of strategies used by mobile users to be more discrete. Yet still in European focus groups conducted last year (Klamer et al, 2000) this experience of mobiles being used in public was the factor that continued to evoke strong negative emotional responses, especially by non-users, and active resistance to adoption.

Some recent writers have gone back to Simmel’s account of the urban experience and the way in which we cope with the ‘inflicted co-presence’ of others by creating our own private spaces in public (Cooper, 2000) avoiding the gaze of others and avoiding interaction. Mobile ICTs have played a role in this respect, where the Walkman (Bull, forthcoming), the laptop or palmtop, handheld games and now SMS can all serve to cut us off from those immediately around us - and indeed using a mobile telephony can also be used to give a message to others concerning the user’s non-availability to those physically present (Cooper, 2000).

However, it is way that mobile telephony disrupts the constructed spheres of privacy of others in those public spaces that is the issue. The two dimensions most usually

picked out by various observers are the disruptiveness of the attendant noise in general (the ringing, the loud talk - Ling, 1998) and the content - the inappropriateness of discussing some private issues in public. But if look at some of actual comments of interviewees airing critical views on mobile use in public (Klamer et al, 2000) as well as at comments of various social observers, part of the 'impact' of the mobile may also be in that leads to reflecting on wider issues.

The first issue is the question of appropriate communication - 'Is that particular call really necessary'. 'Couldn't it wait', 'Isn't it trivial', 'Could not things have been organised differently so that he or she didn't have to make the call?' To put such critical comments into context, there has been an on-going, and historical, debate concerning especially social calling, and different perceptions of what counts as unnecessary calls. This has been a gender issue but also an age one, as the worthwhilness of calls made by youth has been called into question. Mobiles, in part through the extra calls that they can engender and in part through making calls in new public settings, raise such questions yet again.

The second issue is the extent of contactability on the phone by others. This is a question raised by mobile users themselves, as they have to decided and negotiate with others about when and when they are not available (Ling et al, 1998). But some comments suggest that this issue may also be an issue for those co-present - what price is the greater reachability of people in general if the cost is the discontent of other members of the public?

Thirdly, and despite Simmel's discussion of strategies for maintaining urban anonymity, some people express a concern for the potential loss of any remaining sociability through this process of mobile users cutting themselves off from those co-present. In another guise we see something related in concerns that Internet users being on-line and interacting with distant others may reduce interaction with those immediately around them, such as the family.

The general lesson is that while we can attempt to understand the reactions to mobile telephony in public spaces, one 'consequence' is that the experience touches upon or raises broader, sometimes existing, reservations about how social life is developing.

## 2.4 Endnote

The aim of this paper has been to look beyond question of 'social consequences' in term of what we do differently because of mobile telephony by supplying a discussion of the wider social contexts and issues in which mobile telephony intervenes.

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### **3 Of maps and meanings Semantic dimensions of mobile telephones in the U.S. and Korea, with a minor note about Norway and Namibia (Katz et. al)**

**J Katz, M Aakhus, H D Kim, M Turner, P Alexander Stepman, Mobile communication research project, Department of Communication, Rutgers University**

We examine the meaning of the mobile telephones in a modern (USA) and a modernizing society (South Korea). We apply several multivariate statistical techniques to convenience samples of communication students; the samples included respectively more than 300 American students and 100 Korean students. One question in particular we sought to understand was the correlational structure between conceptual meanings and adoption of mobile telephones. We also explore how these meanings vary across types of personal technologies (e.g., email and game players).

We take as our departure the work of Batt & Katz (1998), Katz (1999) and Schenkman (2000) who used perceptual mapping techniques to explore telecommunications services along the dimensions of luxury/necessity and entertainment/non-entertainment. In the present study, we apply multiple regression techniques and multidimensional scaling to understand the mobile phone in detail. Although the US and Korean students were our main focus, we were also fortunate enough to have two small convenience samples of Norwegian and Namibian students; these latter two small groups provide some interesting points of comparison with the larger Korean and U.S. samples.

Among our conclusions are that multidimensional scaling techniques can yield some provocative insights that help us understand the mental models and maps of users and non-users. Moreover, some of these conceptual categories help us understand cultural interpretations of technology in general, and the cell phone in particular. Finally, we can make some informed guesses about the evolution of future understandings of mobile technologies based on this preliminary investigation

## 4 The Mobile Phone: New Social Categories and Relations (Fortunati)

**Leopoldina Fortunati, University of Trieste**

Today, it is already well known that the mobile phone is profoundly transforming interpersonal relations. It is changing family roles, rewriting the boundaries of communicative possibilities, re-building the logic of running institutions such as hospitals and schools, and the strategies of crime organisations intensifying work flows and the performance of more actions at the same time, making the organisation of work relations more rational, and so on. Here we wish to see how the mobile phone modifies the presence and absence of individuals in social space, the social configuration of space and time, the implementation of the democratic process and the construction of the modal personality.

### 4.1 The presence of those who are absent: an ever more frequent oxymoron

With the spread of the mobile, the phenomenology of the presence of individuals in social space has changed, in the sense that the individual apparently present in a given place is actually only half-present. One is present in body, but their attention, their mind and senses can at any moment after a ring of the mobile phone be drawn elsewhere. If until yesterday the presence of an individual in flesh and blood in social space meant material and immaterial accessibility to one's person on the part of those present, today this accessibility has become more limited. On the cultural plane we observe that the binary opposition presence/absence has undergone the same effect as the opposition life/death, in the sense that in both these oppositions the boundaries between the two concepts are no longer clear. In respect to the opposition that we are interested in here, the individual today, when one is present, is present in the continuity of his physical part, but there is no continuity in the immaterial part. As a vampire he/she is alive but not living, or if we prefer, the dead person who returns to life in certain conditions, so present in space, but potentially also absent.

But how is it that we have managed to accept the emptying of our presence in space? How is it that artificial communication can have the better over natural communication? We can find an answer to this question. With the advent of the small screen, we had already shifted attention away from natural communication, fragmenting it with TV consumption. And so initially we learned to talk while we were watching TV at home; later, we learned to answer a call, brusquely interrupting an already ongoing conversation with somebody. That is, what we do in this case is divert attention from interpersonal communication in favour of a virtual conversation, over a distance. In the same way as we hushed our family members to be able to follow the TV program, in the same way in the case of the mobile, we make our flesh and blood interlocutor helpless while we talk into the mobile and give the person at the other end more importance than the person in front of us. So, it is the previous devaluation of natural communication that is the element that has implicitly permitted the emptying out of our presence in space, both as standers-by and as users of the mobile.

The ambiguous dimension of presence/absence in space also means the restructuring of the sense of belonging to a place, one of the four classic poles of the sense of belonging (apart from belonging to the family, one's country, and one's race). It is actually transformed into the sense of belonging to one's communicative network. Those emotional elements that are lost in the relation with space are transferred to a

social level, that is loyalty, the sense of identification, familiarity, stability, security, and so on. However our partial mode of adhering to a single place is translated at the same time into a sense of potential belonging to a host of different places. Space widens out, of course, only at a virtual level, but the widening out is inexorable beyond the horizon that we see and the dimensions of the sense that we can feel. And it widens out both horizontally and vertically. On the horizontal plane space widens out on the surface, not easy to read, and with a limit. In reality, rather than being a real widening out, it is a bouncing back and forth from one place to another. The most interesting widening out is perhaps what happens on the vertical plane. In fact, mobile communications travel in the space above us, in the air, so that we end up by occupying the ether, if only at a communicative level, detaching from space as materialness, as brute material. Which means that at the mass level we are taking possession, secretly, of the sky, leaving behind the anchorages of worldly reality. This wrapping up of space in a vertical sense means that as the sky is a space of light consistency, even more difficult to decipher, but even more, to perceive, public social space loses on the whole in consistency, becoming more rarefied. We could say that we are trying out at a mass level a kind of living, at least as far as communicative means are concerned, half way up. In a certain sense, we are creating a bridge between living in an earthly way and living in space, in orbit. If the Internet is really creating the conditions for humanity's taking on a planetary consciousness, the mobile creates the conditions for the acquisition of a really widespread cosmic consciousness. With the consequence that the crisis of the sense of belonging to one single place leads us perhaps to develop a sense of belonging to the planet, even more, to the cosmos. This restructuring of our sense of belonging to a place is not without its pain, because the change in such an important psychological structure inevitable causes a sense of uncertainty, insecurity and confusion. The vast spread of mental problems and panic attacks has its roots also in these social phenomena that are really of the age.

## 4.2 The metamorphosis of space

The space around us has been transformed, developing its technological aspect, informative, multicultural, mobile and relational aspects. In short, it has become a complex space, not immediately easy to understand. The growing difficulty in our immediate relation with it is an important element that is basic to the spread and success of the mobile phone. This instrument, in fact, has made it possible to somehow overcome the psychological difficulties produced in us by this new quality and dimension of space. But at the same time we have reacted to the lack of informative immediacy of the place, strengthening as we have seen, by means of the mobile communicative immediacy with our social networks. The space has obviously been emptied of it, devalued.

Public space, where we meet other people, the stranger or acquaintance, is furthermore becoming with the introduction of the mobile phone less and less univocal. Today we can in fact choose between this and the space of "intimacy", our network of relations, that is, the chosen sociality. It is more and more evident that between chosen and chance sociality interest is much more on chosen, even if this is virtual. The possibility of choosing the kind of sociality we wish to express often leads us to create greater distances or anyway of not creating closeness with strangers or partial strangers. The public space is no longer a full itinerary, lived in all its aspects, stimuli and prospects, but is kept in the background of an itinerant "cellular" intimacy. Thus, the possibility of a nomadic intimacy is achieved, but at the same time there is the refusal to discover and directly experience everything that the social

space can offer. In this way, the aspects of predictability and uniformity of existence are emphasised.

In reality, we are in a situation of communicative stalemate, as we continually lose the capacity for social negotiation. The mobile represents a way of escape, of recuperating new communicative modes (the somewhere else, ubiquity, the just in time), in other terms of giving greater value to communication, which remains however lacking on the plane of meaning, which remains irremediably an element of dissolution.

### **4.3 The search for lost time**

The mobile in a certain sense agrees with social heedlessness about time. Time is socially perceived as something that must be filled up to the very smallest folds. The mobile has certainly given a lot to this communicative dimension. Therefore work in both its emotional and psychological dimensions, can be carried out all the time; in motorway traffic jams, in bank or post office queues or in public offices. In fact we waste less and less time, as we are always using this instrument, if only to activate the umbilical cord that helps us to reduce anxiousness and uncertainty. However, in another way, the use of the mobile has made us lose the positive aspects of lost time. There also exists a time of physiological disconnection that has, up to now, regulated the communicative flow inside social relations. These moments of non-connection were very precious, because they structured the web of relations inside the rhythm of presence/absence. At the same time, these moments could also fill up with reflection, possible adventures, observing events, reducing the uniformity of our existence, and so on.

The possibility of perpetual contact that the mobile offers risks shaping time into a container that is potentially always open, on the model of connecting times guaranteed by the world of information, which tend to be 24 hours out of 24. But, in the case of interpersonal communication managed by the mobile, this expansion of time could have very harmful effects on social relations and especially love relations. In the same way as communication feeds also on silence, so also seduction feeds on absence: if we eliminate absence and silence, we expose relations to early deterioration.

### **4.4 The modal personality strengthened by the mobile phone**

As Alberoni (1999) correctly points out, it is wrong to call the mobile a status symbol. From a sociological point of view in fact the mobile has not been a status symbol right from the time of the TACS boom, which was born with a clear mass diffusion tendency. So if mobiles are not status symbols, what are they? We can call them "mass goods", or better "citizenship goods." That is, they are a must for modern citizens, in which the prestige of those who were the first to use them has long been dissolved by time. Those who use its capacity and power know that its magical aspect is reduced as it becomes standardised abilities and potentially available to any human being. Given its vast spread, this process of strengthening the personality takes place on a large scale.

The modal personality strengthened by the mobile is a personality, that has the capacity to govern space in a different way, overcomes its inertia and thickness. Secondly, it is a personality that has the power to construct a communicative network to its own measure, and to run it independently of the place where it happens to be. So, it is a personality that manages to calm anxiety better than previously, as now it is able to re-establish contact with the world of security. If it is true, in fact, that

mobility and the journey in general involve a certain precariousness, temporary loss of autonomy and insecurity, it is just as true that the mobile makes it possible to compensate for them through the immediate regaining of one's own stability. Finally, it is a personality that manages to reduce uncertainty. In this regard, it is never stressed enough how the phatic function of communication (that is, pure contact), perhaps even more than information, manages to produce this miracle. The mobile phone brings with it the possibility of contacting, at any moment, our communicative network and thereby reducing uncertainty. This is not so much what we say, that is, the semantic aspect of communication but merely the act of communication. In conclusion, the modal personality strengthened by the mobile, halfway between the actual and the virtual, takes on the positive dimension of very strong dynamism, but on the negative side is exposed to the dangers, as has been said, of mental confusion.

#### **4.5 Cell democracy**

Our hypothesis here is that the mobile favours the development of democratic relations less than the fixed phone has and continues to do. Rather, it favours the development of individualism. The mobile has a weaker role than the fixed phone in the development of democratic society, because the recognised possibility of the fixed phone to enter every home, in every place, without differences of race, language and social class. This is lost with the mobile. In fact the mobile leaves it up to individual choice when, how and who to give one's mobile phone number. There does not yet exist a mobile phonebook (if ever there will be one). This means that the mobile allows us to find and be found by those closest to us, those who are allowed to call, but not all owners of mobiles or fixed telephone.

There are, however, democratising aspects associated with the mobile phone. In a world in which mobility is quite sustained, mobile technologies (especially the mobile) have given the same communicative rights to nomadic persons as well as to the sedentary. Before mobile telephony, persons who did not move were forced to lose contact with persons moving. In fact, if only a small part of the population moved and the rest was stable, those who moved could use public telephones to connect with stable persons. But only those who moved could contact others, because only who had a fixed telephone could be reached. Besides, the persons moving also couldn't contact one another. These two great obstacles, added to the fact that public telephony presented certain rigidity and difficulty in being handled, have been overcome by mobile telephony. It is in this sense that the mobile has spread the right to communication in the democratic sense.

The other democratising aspect of the mobile phone is that it counteracts the disappearance of household members who "hide" behind the personal data of the person who signed the fixed telephone subscription. Now other members of the family have access to their own number and the possibility of managing their own communicative networks. They remain untraceable on the whole, or traceable with indications given at a personal level, but at least they have their own number. In this sense too mobiles are "citizen goods", that is, democratic instruments, able to widen out direct access to communication.

## 5 Om mobilsamtalets kulturhistoria och framtid (Garnert)

### Jan Garnert, Kungl Tekniska Högskolan

I mitt paper diskuterar jag dagens mobiltelefoni utifrån ett historiskt perspektiv. Utgångspunkten är att ny viktig teknik i samhället, som telefonen, elektriciteten eller bilen, inte primärt ska förstås som teknik. Det perspektivet är alltför snävt. I stället bör telefonen i första hand betraktas som en apparat med kulturella och sociala betydningar.

Att det förhåller sig så kan kanske bäst tydliggöras om vi går tillbaka i tiden, till telefonens första år i Skandinavien. Om detta handlar mitt paper, där jag bland annat utifrån ett par av författaren August Strindbergs samtidsromaner ("Röda rummet" från 1879 och "Svarta fanor" från 1907) visar att telefonen en gång i tiden förändrade förutsättningarna för hur människor skapar och upprätthåller sina yrkesmässiga, privata och andra sociala nätverk.

På 1880-talet kunde ingen med säkerhet säga hur telefonen skulle komma att användas i samhället och av vilka. Däremot vet vi att de som planerade den tidens telefnät tänkte sig att telefonen skulle användas främst av män i yrkeslivet. Verkligheten blev annorlunda.

Idag, år 2000, kan ingen veta hur mobiltelefonen kommer att användas i framtiden. Kommer mobiltelefonen i första hand att vara en apparat som används i yrkeslivet? Eller kommer den mer att användas privat och till vardags? Kommer mobiltelefonen framför allt att vara en apparat som används av ungdomar? Kommer det främst att vara män/pojkar eller kvinnor/flickor som samtalar på mobiltelefon? Frågorna är många, svaren ligger förborgade i framtiden. Vad kommer begrepp som tid, rum, avstånd och närhet att betyda i framtiden?

Vi kan inte slå fast någonting bestämt om mobiltelefonens framtida roll i samhället. Vi kan inte ens trovärdigt uttala oss om hur mobiltelefonen år 2010, bara tio år framåt i tiden, kommer att användas och av vem.

Insikten om att vi inte vet något bestämt om framtiden, det är paradoxalt nog det främsta historien lär oss: vi vet inte hur framtiden blir.

Varför då ett historiskt perspektiv? Jo, därför att historien kan hjälpa oss att bli bättre på att ställa frågor som är angelägna och centrala för den tid vi lever i. Ett historiskt perspektiv kan sätta in nutidens virrvarr av parallella händelseförlopp, motstridiga tendenser och förvirrande komplexiteter i ett förklarande sammanhang. Historien kan fungera som ett slags tänkt referenspunkt för oss, historien är bra att ha för den som vill begrunda och förstå nutiden.

Den viktigaste lärdomen som telefonens kultur- och socialhistoria kan ge oss, det är att telefonen är en teknik som givit nya förutsättningar för hur vi som människor kan uppfatta och använda tid och rum. Denna nya tids- och rumsuppfattning har i sin tur förändrat förutsättningarna för hur vi skapar och upprätthåller våra sociala nätverk. Man skulle kunna säga att en viss teknik eller ett tekniskt system, som telefonen, utgör en väsentlig kontext eller miljö, som ger förutsättningar för hur vardagliga attityder, rutiner och vanor, levnadsideal och levnadsmönster kan utformas.

Ny teknik är därför inte enbart teknik utan lika mycket en dynamisk kraft som kan initiera kulturella och sociala processer. Ny teknik ger nya förutsättningar, innebär nya premisser för hur vi kan utforma vårt sätt att leva. Så är byggnadsteknik och arkitektur, elektroteknik, bilen, flyget, tåget, telefonen osv. alla exempel på olika

slags teknik som också kan förstås som kontexter med sociala och kulturella innebörder.

Något som vi också kan lära av historien är att det inte är en viss teknik i sig som förändrar hur t.ex. kontorsarbete, skolundervisning eller matlagning organiseras i ett samhälle. Det är alltid ytterst sett människor som från olika sociala, ekonomiska, politiska och kulturellt präglade utgångspunkter avgör hur tekniken skall användas och tillämpas i ett visst samhälle. Tekniken är med andra ord socialt konstruerad.

Så innebar t.ex. telefonen på 1880-talet en ökad frihet att kunna sätta sig i förbindelse med andra människor. Men de som vann denna frihet kunde använda den på olika sätt. I den för kulturvetenskaplig forskning om telefonen centrala idéskriften ”The Social Impact of the Telephone” (1977), skriver dess redaktör Ithiel de Sola Pool att:

”Rather than constraining action in any one direction, the telephone is an agent of effective action in many directions. The conclusion does not imply that the phone has no impact or that there is nothing to study. On the contrary, it implies that the study of the telephone’s social impact belongs to the important and subtle class of problems in the social sciences which demands a logic more complex than that of simple causality — a logic that allows for purposive behavior as an element in the analysis.”

Telefonen måste därför uppfattas som ”a facilitating device with a myriad of uses for a myriad of people and has thus magnified whatever processes were taking place in society at a given time. Since societies are neither unified nor consistent, the telephone often contributed simultaneously to quite opposite developments.”

Detta citat handlar om den fasta telefonin och orden formulerades i samband med telefonens hundraårsjubileum 1977. Idag, bara några decennier senare, är det inte den fasta telefonin utan mobiltelefonin som expanderar. Mobiltelefonen är som bekant en relativt ny gjenstand/föremål. Den är till och med så ny att det ännu inte finns några starka generella normer eller regler för vad som kan sägas vara ett gott socialt beteende i mobiltelefonsammanhang.

Detta uppfattar jag som kulturforskare som något mycket spännande: varje gång jag ser någon lyfta sin telefon mot örat för att svara i en butik, på trikken, på en restaurang eller någon annanstans, så befinner jag mig mitt uppe i en situation som samtidigt är ett slags social förhandling. Den som använder sin mobiltelefon på exempelvis en restaurang hävdar att det är socialt acceptabelt att samtala i mobiltelefon om kanske mycket privata spörsmål i ett offentligt sammanhang. Andra kan tycka det är opassande och tydligt visa sitt ogillande.

Dessa frågor diskuterar jag i mitt paper, med utgångspunkten tagen i telefonens kulturhistoria.

## **6 Mobile communication of children and teenagers: case Finland 1997-2000 (Rautiainen and Kasesniemi)**

**Ms Pirjo Rautiainen, University of Tampere, Information Society Research Centre**

**Ms Eija-Liisa Kasesniemi, VTT Information Technology, Human Interaction Technologies**

### **6.1 Introduction**

Finland has in several articles been called the laboratory for mobile communication. The claim is probably at least partly justified. The penetration level in the spring 2000 was as high as 69%, and 85% of Finnish households have at least one mobile subscription. An increasing number of Finnish families are giving up the fixed line subscription and acquiring personal mobile phones for each family member. Mobile communication does not consist of simply calling: the use of written mobile communication, SMS, is also significant. The development of SMS has surpassed all expectations. In 1999 the 5 million inhabitants of Finland sent nearly 650 million text messages. In the year 2000 the figure is expected to exceed one billion.

*The Information Society Research Center, INSOC*, has studied the mobile culture of Finnish children and teenagers since the year 1997 in cooperation with the teleoperator Sonera Mobile Telephone Services, the device manufacturer Nokia Mobile Phones and The National Technology Agency, Tekes. The research aims to produce an account of the early stages of the new communication culture, to describe its current state and, based on this information, anticipate future developments of the field. The subject of the research is not only the individual (the child, or the teenager), but also the community (family, youth groups) and the society (change/resistance). The research also aims to establish what it is in the new technologies that fascinates the young, or in other words, which aspects serve to develop, support and maintain the culture and what elements may have an adverse effect. This approach will also uncover the concrete aspirations and needs projected by the young to the new technologies.

During the research period in the years 1997–2000, the field of mobile communication has changed immensely. The spreading of mobile phones and the increase in use volume has taken the focus of mobile communication away from mere professional use towards acquiring everyday information and maintaining the social networks of small communities (family, circles of friends, hobbies). This change has been especially remarkable within teenagers.

### **6.2 Methods and material**

The researchers in the project have their backgrounds in social sciences and in the humanities. The fields of anthropology, cultural studies, linguistics, sociology, information studies and marketing are all represented. All of the researchers in the project have in common an interest in the methods of qualitative cultural research. The research is based on material collected in the field, in co-operation with the informants. The researchers enter the everyday life of the interviewees: home, school, work or free time. In its most reduced form fieldwork is thematic interviews. At best, fieldwork is based on participant observation, where the researcher takes part in the everyday activities of the informant for a period of time. The research also utilizes material collected by the participants before or during the research period. It incorporates the following types of popular writing material produced by the young:

mobile communication journals, collected short messages, and e-mails and short messages and their cover letters sent to the researchers.

The qualitative research conducted at INSOC aims at diminishing the gap between the researcher and the researched. The interviewed teenagers and adults are thought of as informants, experts of their own lives and living environments, not as passive "subjects" or "respondents". The young have the right to ask and get answers. In this project we see the informant as a co-researcher or a research partner, as someone who interprets the material in co-operation with the researcher.

Since the launch of the project in 1997, we have interviewed nearly 700 children, youths, parents and teachers from all areas of Finland, both in the cities and the countryside. Some of the teenagers have been interviewed alone or with their friends, some with their families. The duration of the individual interviews is 1 to 6 hours. The interviewees have been recruited through several different channels: advertising in newspapers, the Internet, schools via teachers, day-care centers, directly from the families and via snowball technique, i.e. the young have told their friends about the research. Most of the teens offer to continue their participation in the research after the interview.

The material from the years 1997–2000 is divided into different types: tapes from the interviews and word-for-word transcripts of them; field notes of the researchers and contacts with the interviewees; mobile communication journals of the teenagers; SMS collected by the teenagers; two surveys; picture material consisting of photographs by the researchers and children's drawings. All of the material has been analyzed with software designed for qualitative data analysis.

A significant change took place in the spring of 1998. Suddenly, instead of talking about calling and changing color covers on their mobiles, all the teenagers wanted to give their views on text messaging. In a few months the number text messages sent attained the number of calls made and surpassed it. It is important to talk about the messages in research interviews, but it is the messages themselves that shed light most effectively on the phenomenon. In the summer of 1998 the research was expanded by beginning to collect text messages. By the spring 2000 an SMS research-bank of 5000 messages had been collected, and the number of messages will rise by several thousands during the year 2000. I have adopted conflicting views about children's use of mobile phone. The element of safety is not contradicted, but part of public discussion has denounced mobile phones as unnecessary or even dangerous for children. Some consider current terminal devices and their user interfaces too difficult for use by children. A 7-year-old is not believed to be mature enough to look after technical devices. However, the parent's also believe in the pedagogical effects of the device: e.g. text messaging is hoped to motivate the children to read and write. At the same time the device is believed to enhance the child's ability to critically seize control of other new technologies, such as computers and the Internet. The mobile is perceived as the key to the information society and new social networks. However, some critics are asking if existing mobile communication culture creates forced consumption for poorer families.

**Gender and mobile.** No major differences exist in the frequency of use and the level of penetration between different regions or between the countryside and the towns and cities. Nor are there differences between the genders in mobile-owning frequency. Mobile communication is undisputedly a phenomenon that girls also participate in, when in other contexts boys are often said to have greater interest in technical and electronic devices, such as cars, motorcycles and computers.

The manner in which mobile phones are *used*, however, creates differences. Boys use the mobile for recreation, playing games for example. Girls emphasize actual communication. In particular, girls are large-scale consumers of short message services (SMS). For girls, using the mobile phone is part of conversation culture, whereas for boys, in addition to its communicational properties, the device has been an indication of social superiority. For example, in the beginning of the research the boys kept and carried the mobile somewhere where it could be seen, whereas for girls, the awareness of carrying a mobile phone was sufficient.

Furthermore, girls are more prone to vary the use of calls and short messages depending on the use situation. The boys' use of mobile phones is often based on collective action made possible by the device. Boys tend to emphasize the technical functions that make the mobile phone a means of entertainment comparable to a Walkman, or computer games. The phones are thus closely linked to the different sectors and hobbies of boy culture.

**The financial positions of the user groups' families are increasingly varied.** The financial situation of the family no more seems to be the most significant factor affecting development of the mobile communication of children and adolescents. The trend has clearly been towards *a communication device for every family*. In 1997, whether a young person became a mobile phone user, still often depended on the financial position of the family or the young person in question. Lower prices of both the mobile phones and services have enabled a rise in penetration level in every income group. Another explaining factor for this is the current period of business prosperity in Finland.

**From novice users to communication routine.** According to the research material a new *mobile communication generation* has emerged in Finland. It is characterized by a very close integration of the new communication technology into everyday life. The phenomenon also has a negative side. Sometimes signs of addiction can be detected: life would not be as complete without the new technologies.

**Usage is connected to making use of other information technology.** Mobile communication of the youth has not remained a loose phenomenon in the field of communication. Use is often connected with cross-media surfing and the phenomenon cannot be studied without taking into account the field of new media, e.g. chat sites, IRC channels, e-mail, surfing in the Net or interactive radio and TV channels.

**Massive increase in use volume.** The amount of both absolute online use (use time in minutes/day) and use costs (FIM/month) are increasing constantly. At the same time the fields of use have diversified: the use of content services has arisen alongside personal communication. Offline use of mobile phones, e.g. games, memo functions, alarms, timers and other reminders, calendars, is also very popular in this age group. In the fall 1999 WAP (Wireless Application Protocol) phones and services entered the market. In the near future teenagers are expected to constitute a significant WAP user group alongside adults.

**Use differs from the use of adults.** The use profile of the young differs from that of adults. Instead of voice functions (calls, voice mail) it is clearly centered around new, text-based messaging (short messages). The spreading of new, more developed wireless communication that enables use of the Internet (mobile phones with WAP qualities) is likely to increase the gap even more. The change will probably continue when the third generation mobile phones enter the market.

### **Mobile communication culture and subcultures specific to the young prosper.**

The adolescents have embraced the possibilities offered by mobile communication in a very versatile way: new cultural meanings have established themselves around the phenomenon and their folklore (prank calls) and special terminology (text message conventions) do not necessarily open up to an outsider. The culture is partly invisible or hidden from adults.

## **6.3 Conclusion**

The participants of the research are part of the first mobile generation, for whom mobile culture is a near self-evident fact of life. Mobile communication has been part of their lives for a relatively long period of time and they have embraced it as a natural, fixed and stable part of life. The use of a mobile terminal device has integrated itself into the way they manage their lives and communicate with others. The Finnish mobile generation is extremely versatile in its use of the modern communication channels, such as e-mail, IRC channels, chat sites and conversation via teletext (television with text services).

The young have developed a new Internet and mobile communication culture that, instead of passive acceptance of a commodity, is based on its active, sometimes very critical utilization. Adults have by no means been entirely excluded from teenagers' mobile communication: the communication has, for example, introduced new forms of family culture, where technology is harnessed to serve as an aid in day-to-day problem solving.

Finnish researchers from the field of social sciences and humanities have had an ideal opportunity to live in the midst of a mobile laboratory. Researchers have had the opportunity to simultaneously be on the inside and on the outside of the phenomenon: acting both as an onlooker and a participant, being a part of both *us* and *them*. Anthropological research has pondered over researchers' capacity to observe their own culture and to examine the familiar in an unbiased way. Being familiar with the subject requires becoming sensitive to the routines of one's own life and the surrounding details that may seem obvious.

A research report by INSOC will be published in July 2000. A more extensive publication is due out in the fall 2000. A dissertation in the field of cultural research about the SMS material is also in preparation.

The project's home page:

<http://www.info.uta.fi/winsoc/projekti/mobileco.htm>

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## 7 “It must be necessary, it has to cover a need”: The adoption of mobile telephony among pre-adolescents and adolescents (Ling and Helmersen)

**Rich Ling and Per Helmersen, Telenor R&D**

When does a child or teen “need” to have a mobile telephone? We examine this question by looking into various aspects of mobile telephone adoption by pre-adolescents and adolescents. We are interested in examining the issues, criteria and the social context that must be in place before a mobile telephone “makes sense” for persons in this phase of life.

Age	Own	Loan regularly	Loan on occasion	No access
13	38.9	4.17	17.36	39.58
14	54.11	4.11	13.70	28.08
15	68.8	4.83	8.28	18.62
16	75.52	4.90	5.59	13.99
17	72.52	5.34	3.05	19.08
18	73.08	7.05	5.77	14.10
19	82.14	3.57	2.38	11.90
20	82.46	7.02	1.75	8.77

*Table 1 Percent of Norwegian teens with access to mobile telephones, Nov-Dec 1999.*

An analysis of mobile telephone ownership among Norwegian teens shows that among certain groups the penetration is nearly complete. Indeed, it seems that adoption is so widespread – particularly amongst the older teens – that only those with some type of well thought through ideological opposition to the device are without (sLing 1999a). Analysis also shows that as many girls as boys have access to a mobile telephone.

Coming to the point of this clear age based differences in the ownership and use of the mobile telephone. The mobile telephone is almost ubiquitous among the 18 to 20 year-olds. One can also see that 90% of Norwegian 20-year-olds report having some form of access to a mobile telephone. Looking at the other end of the age range, about 60% of the thirteen-year-olds have some form of ownership. Indeed, in data gathered by Statistics Norway one sees that about 11% of 9-10 year olds and 26% of 11-12 year olds indicate that they own a mobile telephone (Vaage 2000).

The data shows that more and more teens gain access to and ownership of a mobile telephone in the period up to their 16<sup>th</sup> year. After this, the penetration is quite high and there are only marginal increases in adoption beyond this point. Another trend is that after the children reach the age of 18 they do not loan a mobile telephone “on an occasional basis” as often as the younger teens. This is likely a reflection of the fact that many teens move away from their parents’ home during this period and thus lose access to the mobile telephones of their parents.

The fact that pre-adolescents and adolescents own and use mobile telephones has sparked discussion. Issues of control over the children, the legitimacy of marketing products to minors, the role of parents and the innocence of childhood are all aspects of this discussion.

Specifically one can look into the prerequisites for the adoption of telephony itself and also one can examine the aspects of maturation and social interaction that

contribute to the adoption and use of the mobile telephone. The prerequisites associated with telephony include the following:

- **Simple physical access and the ability to understand and manipulate the apparatus.** Physical access is simply being able to reach the telephone, obtaining permission to use it and being able to dial the number. Purpose vis-à-vis the telephone is, of course having the need to talk to another. The need may be either functional coordination, or it may be the need for some type of social interaction. Regardless of how this is defined the need must be formulated into the desire to use the telephone. After the child arrives at the telephone terminal, they must understand the functioning of the device itself, i.e. the dialing of the number, the meaning of the various tones and sounds, i.e. the dial tone, ringing and the busy signal etc. One must, for example, understand that one needs to lift the handset before one speaks.
- **Voice modulation.** Finally one must understand the special need to modulate the voice when speaking on the telephone. Given the background noise within the telephone system and also possible noise in the location of one's telephonic counterpart there is a need to speak slightly louder than in normal face-to-face conversation and also articulate somewhat better.
- **The ability to take the role of one's interlocutor.** One of the elements that needs to be in place before a child can carry out any conversation, in a fuller sense of the word, is that they need to be able to take the position of the other and to understand their perspective. This is perhaps even more critical in telephonic interaction where one can not see the other and thus must make assumptions where face-to-face interaction provides one with a range of gestures that fill out the conversation. According to Piaget, as one approaches and moves through adolescence, one moves from a more ego-centered to a decentered understanding of the world. In addition, one moves from a more concrete to a more abstract comprehension of relationships. He suggests that by age twelve to fourteen one is able to deduce ideas about things that they have never seen.
- **Linguistic competence.** There are the issues of conversation management. In addition to the central conversation, i.e. the exchange of words, there is a secondary level of interaction that is indeed quite complex. It contains all the signaling needed for the management of the conversation. Other elements include groundings, i.e. the nods and small utterances that indicate that the listener is paying attention, the signals of one's intention to speak, the clearance signals indicating that one is approaching the end of a conversation turn, the timing of speaker transition, and the management of topic transitions. Moving into the management of telephonic interaction there are three areas of particular interest. These are: 1) the various routines associated with a standard tele-phone conversation, i.e. the opening and the closing, 2) the speaker timing, that is the pauses and overlaps between turn taking in a conversation and 3) the management of topic transitions

These are the elements that must be in place before one has the ability to interact on the telephone. In addition there are a set of issues that come into the adoption of the mobile telephone. Some of these points encourage the use of the mobile telephone by teens while others have the opposite effect. These issues include:

- **Moral and ideological issues vis-à-vis the mobile telephone.** One of the things that arose in the focus groups is a simple morality regarding adoption of the MT. Many of the focus group respondents offered categorical, and almost visceral

responses to the ownership of mobile telephones by pre-adolescents. Several of the informants simply thought that it was wrong for young teens to have a mobile telephone. They did not feel the need to justify their argument or provide elaborate lies of thought. It was simply wrong.

- **The need for a mobile telephone.** One of the basic forms of argumentation against their use was a type of needs test. This formed a type of mantra through the various focus groups. A common refrain among the informants was to ask if the child needed the mobile telephone. In the words of one informant, *“It must be necessary, it has to cover a need.”*
- **Money and payment.** Another issue that commonly arose in the focus groups was the ability of the adolescent to pay for the mobile telephone. The ability to pay for one’s mobile telephone use was seen as a criterion for ownership among the informants in the focus groups.
- **The mobile telephone and coordination within the family.** The use of the mobile telephone for coordination with pre-adolescent teens is generally seen as being unnecessary since they have a limited range of interaction. As the children become older and their schedules and interactions become more complex it seems that the mobile telephone is more acceptable. There are, however gender differences between parents when considering the acceptability of using mobile telephony for the resolution of everyday coordination issues.
- **Parental control and the social network of the child.** When communications are routed through a centralized channel, such as the family telephone, there is the opportunity for the parents to develop a certain overview over their children’s social group and its interactions. The mobile telephone – and the mobile answering service that is usually combined with these subscriptions – was seen by the adolescents in the focus groups as being more private. This allows the adolescent to develop a parallel social world that is outside the direct overview of their parents.
- **The mobile telephone as a link between parent and child.** One of the main “functional” justifications for ownership of a mobile telephone was that it provided a security. This argument was not made in the case of smaller children but rather for those teens that had begun to have a broader range of movement.
- **The emancipation of the adolescent.** During this period the adolescent takes on greater responsibility and moves further from their parents’ sphere. The parents are also involved in this process in that they have an ever-loosening control and responsibility for a child. As the emancipation is played out between the parent and the child, the mobile telephone tips the interaction in certain directions.
- **The expanding social network of the child.** The social world of the adolescent expands rather dramatically from the immediate neighborhood to the larger “catchment” area of the school eventually to include large portions of the city or district in which they live. Given this expansion and also given their relative mobility there is a similar need for them to coordinate their social interaction. The mobile telephone has played into this. In all of this coordination was seen as one of the major uses of the mobile telephone. The mobile telephone has been found to allow them quick access to information on the peer group’s whereabouts and thus allow them quick mobilization for various social interactions.

- **The symbolic meaning of the mobile telephone.** The mobile telephone is a particularly powerful symbol for adolescents and their emphasis on peer interaction. It shows that one is accessible, and also in demand. Within the economic constraints, it allows expressive integration and it allows one to participate in "gifting" as seen in the sending and receiving of telephone calls and text messages. The mobile telephone indicates that the individual has reached a certain level of economic wherewithal and perhaps a level of technical competence. Finally, the mobile telephone, and in particular the consumption of the appropriate type of mobile telephone allows one to declare their identity. The ownership of the "correct" type of mobile telephone also shows that they are aware of the current trends in consumption and that they are active in the creation and maintenance of their own identity.

In our analysis we have reviewed these cross-cutting issues that both promote and retard the adoption of mobile telephony by adolescents. In summary we find that there are a set of transitions, i.e. from elementary school at age 12-13, confirmation at age 14, the beginning of high school at age 15-16 and the conclusion of the obligatory schooling at age 18-19. During the latter part of the 1990's the mobile telephone was a common confirmation gift for children. Coming as it does during their middle school years, and also given the relatively high cost of the device, it was often seen as a good gift for the child at this point.

More recently, however, it has lost its currency in this capacity. The actual social transition from the local milieu of the primary school to the larger middle school experience comes somewhat before the traditional age of confirmation. Thus, the child is socially active in a much broader geographical area, there is a stronger need for coordination both within the family and within the peer group. In addition, the child has mastered all the basic linguistic and social skills needed for telephone use. Psychologically, they are able to take the position of the other and thus are more able to carry on a conversation in a fuller sense of the word. It is also during this period that the teen is in the process of establishing their adult identity and their sense of their role in the adult world. Finally, the symbolic currency of the mobile telephone is extremely high in the period leading up to the beginning of middle school. There is an intense pre-socialization that is taking place as the child tries to arrange their symbolic plumage for their coming debut as a middle school student.

There are also several things that weigh against the adoption of the mobile telephone in the period between the beginning middle school and confirmation. Parental control is often an issue of active negotiation. On the one hand the parents are often still asserting their control over the child while at the same time the child is both asserting their independence and also finding loopholes in the parents' network of control. Further, monetary issues are still not settled though teens are starting to have their own incomes and are able to finance some of their own activities. Finally, the moral issues of mobile telephone use are still open for many though the teens are often in the process of establishing various arguments for the functional need of the device.

The data presented at the start of the paper shows that indeed the period between 12 and 16, that is the middle school period, is the time when ever larger numbers of adolescents adopt the mobile telephone. The specific time varies of course but the theoretical dimensions considered here are in fact supported by the empirical research. The next question is: will the adoption of the mobile telephone continue further and further down the age scale? It is clear that there will be a certain adoption of the device by pre-adolescents. However, it seems that this is a more difficult case

to make. The symbolic value is clear, the social, psychological and functional issues are however less clear.

Finally, the material also shows that a certain percent of all teens, about 10 – 15%, have resisted adoption of the mobile telephone. Like those adults who do not purchase a television, these teens often have clear ideologies against ownership and use. This decision is a part of their identity in just the same way that the mobile telephone itself is a part of the adopter's identity.

## 8 Mobiltelefon som symbolsk kapital i ungdomskulturen (Skog)

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### 8.1 Innledning

Bruken av mobiltelefon har økt sterkt de siste årene, spesielt blant ungdom. I dette innlegget vil jeg:

- Presentere resultater fra en studie som belyser ungdoms bruk av mobiltelefon.
- Antyde hvordan funnene kan reflektere tidstypiske trender, og vise mobiltelefonens betydning som symbol i ungdomskulturen.

Jeg tar utgangspunkt i aktuelle samfunnstrekk (fleksibilitet, individorientering, forandring), og belyser ungdomskulturen i lys av dette. Unge utformer og definerer sin identitet gjennom forbruk, moter, stil, symboler, koder og interesser, og i mindre grad enn tidligere gjennom sin familiebakgrunn eller sosial klasse. Jeg fokuserer på mobilens plass i ungdomskulturen innenfor dette paradigmet.

I innlegget presenteres resultater fra en statistisk representativ spørreundersøkelse blant elever i 9.klasse våren 1999 (2980 elever fra 70 skoler, svarprosent 84). Formålet med undersøkelsen ("Analoge og digitale læremidler. Elever og lærere i informasjons-samfunnet") var å studere bruken av ulike typer læremidler i skolen og hjemme, som lærebøker, leksikon, PC, Internett, CD-rom m.v. I spørreundersøkelsen ble det i tillegg lagt inn et spørsmål: "Har du egen mobiltelefon?" Dette er inntaket til den følgende diskusjonen. Data er et år gamle, men sier noe om mønstre og trender i utviklingen på feltet.

### 8.2 Mobil og kjønnskoder

Om lag like mange jenter som gutter har egen mobil. I 1999 gjelder dette 42% av jentene og 44% av guttene i 9.klasse. Det er viktig å merke seg at så vidt mange jenter har anskaffet seg mobil, ettersom færre jenter enn gutter bruker annen type informasjons- og kommunikasjonsteknologi (IKT), som PC, Internett, CD-rom m.v.

Jeg ser dette i sammenheng med at mobilen som kommunikasjonsmiddel fanger opp sentrale aspekter ved jentekulturen. Jenter vektlegger vennskap og nærhet. Mobilen som gir mulighet til samtaler og tekstmeldinger, oppfyller dette sosiale behovet. Tekstmeldings-funksjonen appellerer spesielt til jenter, og flere jenter enn gutter sender slike meldinger. Her finnes en utstrakt bruk av symboler ("Bamse"-hilsen) og språkkoder. Gutter foretrekker ofte andre typer tekniske finesser ved mobilen, som å programmere ringe-melodier. Farge og form på mobilen velges ofte for å signalisere og understøtte kjønnsidentitet, og også hvem en vil være innenfor jente- og guttegruppa. "Babes" med rosa telefon og "Nerden" med sort Wap-telefon med alle tilgjengelige tekniske funksjoner representerer ytterpunkter i et slikt tankekart.

### 8.3 Mobil – et urbant fenomen?

Mobilmoten blant unge varierer med region og kommunestørrelse. Flere unge i Oslo-regionen har mobil enn i Trøndelag og på Vestlandet. Behov og økonomi varierer mellom ungdomsmiljø, og kriteriene for å være trendy kan være forskjellige. Reklamekampanjene har ofte vært rettet mot urbane grupper, og de fanger dermed først opp av denne målgruppen. Datamaterialet viser videre at jenter i små kommuner i minst grad har egen mobil. Dette antyder et ruralt etterslep i kjønnsrolle-mønsteret,

noe som understøttes av andre resultater i undersøkelsen: Jenter i bygdekommuner bruker i mindre utstrekning IKT enn andre jenter.

#### 8.4 Mobil – Trendy eller ”Harry”?

1999-materialet viser at unge med egen mobil skiller seg ut fra ikke-mobilbrukere på en rekke felter: De bruker mindre tid på lekser daglig (22% av unge med mobil bruker mindre enn 15 min. til lekser daglig, mens dette gjelder 14% av unge uten mobil). Videre er det en sterk og signifikant sammenheng mellom egenvurdering og det å ha egen mobil ( $p < 0.001$ ). De som definerer seg blant de dårligste i klassen, har egen mobiltelefon i langt større grad enn unge som definerer seg blant de beste i klassen. Dette gjelder henholdsvis 61% og 34% av de nevnte gruppene. Førstnevnte gruppe planlegger i større grad yrkesfaglig utdanning enn sistnevnte gruppe (31% vs. 22%). Relativt flere uten mobil planlegger universitets-utdanning. Jeg kommer tilbake til den alternative kompetansen mobil-gruppa representerer.

Resultatene over understøttes av andre funn: Undersøkelsen viser at det er sosiale forskjeller mellom unge som har egen mobil. 46% av unge med arbeiderklasseforeldre har egen mobil, mens dette gjelder 39% av ungdom med akademikerforeldre. Dette er interessant, sett i forhold til at høystatusungdom vanligvis er trendsetterne, og at de også har råd til å anskaffe seg egen mobil. Mønsteret kan dermed reflektere et bevisst bortvalg, eller at sistnevnte gruppe har interesser, hobbyer, en livsstil der egen mobil ikke er et "must". Når "alle" har egen mobil, er den ikke lenger et statussymbol, og en potensiell trendsetter må finne andre måter å vise eksklusivitet på. En strategi kan være å anskaffe nyere og dyrere mobiltelefoner.

Det kan imidlertid ha skjedd endringer etter at 1999-materialet ble samlet inn. Nye mobilfunksjoner kan ha appellert til denne ungdomsgruppen: En ny undersøkelse kan belyse om de siste mobil-typene eies av den tradisjonelle trendsetter-gruppen med høy kulturell og økonomisk kapital.

Vi ser at mobilens popularitet har variert mellom ungdom. Dette kan reflekteres i kjørereglene for bruken av mobil. For sterk synlighet ("beltespenne-varianten"), for høy ringetone og bestemte ringesignaler kan være "Harry". Kodene for korrekt mobil-føring varierer, og en må kjenne disse kodene og også de øvrige kulturelle kodene for klær, smak og stil for å defineres som "inne" i bestemte ungdomsmiljø.

#### 8.5 Mobil som identitetskoding

Gjennom mobil søker mange unge å underbygge sin identitet. Farger og deksler til mobilen velges bevisst, og en finner typer som understøtter personlig stil og væremåte. En ser at reklamen søker å treffe slike segmenter. Unge orienterer seg gjennom sine mobiler mot de tidstypiske normer for et korrekt ungdomsliv:

- på farten
- informert (tekstmelding: "Hvor er du?" og "Hvor er du nå?")
- frihet - men kontroll og oversikt over arenaene skole/hjem/fritid
- "in" (få mange tekstmeldinger) og tilgjengelig
- en felles språkkode (tegn/smiley) som gir tilhørighet til signifikante andre.
- eksklusiv. En bør også skille seg litt ut. Mange oppfyller kravet til distinksjon gjennom å designe sin egen logo, i tillegg til å velge mobil av bestemt type/farge/design

Bruken av tekstmeldinger har vært eksplosiv, og det kommuniseres i koder/stamme-språk, som er betegnet som et grafisk anglifisert forkortelsesspråk. En tekstmelding kan ikke inneholde mer enn 160 tegn, og en kommuniserer med språk av bokstaver og symboler. Mange utvikler egne språkkoder som er forståelig bare for vennekretsen, dette signaliserer også eksklusivitet. Her benyttes språkkodene som signal for identitet og tilhørighet. Språkkode-produksjonen viser også mobilens potensiale som kreativ arena for ungdom.

## 8.6 Mobil og IKT-kapital

Ungdom med egen mobil er i større grad enn andre bruker andre typer IKT, som Internett, CD-rom m.v, både på skolen og hjemme. Eksempelvis programmerer de større grad (31% vs. 19%), de bruker Internett oftere (48% vs. 43%), og de bruker CD-rom oftere (46% vs. 42%). Unge med mobil har i større grad opparbeidet seg en generell teknologisk kompetanse fremfor en skoleorientert kompetanse, som verdsettes i utdanningssystemet (se over).

Dette mønsteret reflekterer viktige trekk i samfunnet. Det ser ut til å ha utkrystallisert seg et digitalt arbeidsmarked der en ansettes ut fra IKT-kompetanse. Vi gjenkjenner dette gjennom "hacker"-fenomenet. Selvlært kunnskap innenfor IKT er blitt et alternativt inntak til yrkeslivet, og har erstattet lang formell utdanning. Mobiltelefon er på denne måten en del av og uttrykk for en teknifisert kultur som genererer jobbarenaer med egne strategier, regler og kompetansekrav.

Også andre deler av studien viser at mobil fanger opp de generelt teknisk interesserte. Hele 72% av unge med egen mobil har playstation, mens dette gjelder for 28% av unge uten egen mobil. En kan dermed ane en overgang fra Nintendo-generasjonen til en begynnende multiteknologisk WAP-generasjon. Innenfor dette bildet sorterer unge med siste modell mobiltelefon med avanserte teknologiske funksjoner (Internett Access) i tillegg til ordinære samtaler/tekstmeldinger.

## 8.7 Mobil som døråpner til IKT

Langs mobilens teknisk-sosiale akse ligger potensialet for at jenters interesse for mobil kan overføres til andre områder. Jenter har vanligvis vært opptatt av de sosiale aspektene ved teknologi. Innenfor PC-sfæren har jenter etterlyst bruksområder som de synes er interessante, og reagert på at for eksempel spill har vært rettet mot gutters interessefelt. Mobiltelefon fanger som nevnt opp denne sosiale dimensjonen, via tekstmeldinger kan en kommunisere, holde kontakt, være sosial. Dette betyr at mobilbruken blant jenter kan bidra til å fjerne teknologifrykt, skape interesse for og gi en overføringsgevinst til andre typer teknologi. Mange utdannings- og arbeidsfelt bygger på kunnskap om IKT, dette er områder der jenter er sterkt underrepresentert.

Mobilbruk kan gi jenter kompetanse i bruk av og interesse for IKT. Sammenhengen mellom mobilbruk og bruken av Internett understøttes i dette materialet. Signifikant flere jenter med egen mobil bruker Internett hjemme sammenlignet med jenter uten egen mobil. Mobil kan derfor være en viktig læringsarena for jenter, og generere en orientering mot andre typer teknologi.

## 8.8 Mobil og sosial kapital

Ved siden av å betjene "friends"-dimensjonen hos unge og på den måten være en viktig kontaktbygger, kan mobil ha andre funksjoner. Materialet viser at unge med lese- og skrivevansker i større grad enn andre unge har egen mobiltelefon (60% vs.

41%). Mobilen tilbyr en annerledes kommunikasjonsform for den førstnevnte gruppen.

### **8.9 Mobil som symbolsk kapital**

Mobilens innpass i ungdomsmiljø kan ses i lys av at den søkes tilpasset ungdommens behov. Unge skaper sin identitet bl.a. gjennom språk, klær og symboler, og mobilen benyttes ofte i et stilbyggingskonsept. Med mobilen posisjonerer de unge seg i forhold til en rekke tidstypiske trender: er tilgjengelig, på farta, kommuniserer lett, er informert og oppdatert, men kan usynlig og hurtig bevege seg mellom ulike arenaer: skole, hjem, fritid. En har frihet, men samtidig kontroll og oversikt. På den måten blir mobilen et symbol på en livsstil. Mobilen muliggjør ulike typer kommunikasjon (muntlig, skriftlig, teknologisk avansert), og finnes i ulike farger og design. Den appellerer derfor til ulike typer brukere, og representerer fleksible løsninger for fleksible identiteter. Et alt-i-ett-medium tilpasset modernitetens dynamiske ungdomsideal.

De negative aspektene ved unges mobilbruk er utelatt her (reklamekampanjer med konstruerte behov ("mobildyret må mates flere ganger i døgnet"), bruken av mobil i skoletimer, økonomiske aspekter, mulig helserisiko m.v). Formålet har vært å bidra med forklaringer på mobilens utbredelse blant unge, og også peke på positive trekk ved mobiltelefoni.