

“Nobody sits at home and waits for the telephone to ring:” Micro and hyper-coordination through the use of the mobile telephone¹

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Abstract

In this paper we outline the concepts of micro- and hyper-coordination via the use of the mobile telephone. The material is based on 10 group interviews carried out in Norway in the fall of 1999. The analysis shows that micro-coordination, largely an instrumental activity, was common for two-career parents. When examining the teens, however, we found that in addition to the instrumental use, they have adopted the expressive use of the device. This, in addition to the use of the device in the social presentation of self has lead us to call their use hyper-coordination. This adoption of technology follows from their specific life period where they desire access to peers and wish to distance themselves, to a certain degree, from their parents. The mobile telephone is a logical tool in this work. Other advantages are that it allows them new ways with which to develop intimate relationships and to remain abreast of social life.

1 Introduction

“The mobile telephone is a big part of my life.”

“A mobile telephone is actually an expression of your personality ”

These are the words of two teenaged female informants describing their relationship to the mobile telephone. Their use of the device is a recent phenomenon. None of the teens included in this analysis had had a mobile telephone for more than four years. That which is surprising is the degree to which the mobile telephone has been integrated into their lives. It is not simply a security device, nor is it only something used to coordinate everyday events on the spur of the moment. As the comments of these two informants indicate, and as we will see below, the device is used for a range of interaction and it is also important as a symbol in itself.

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This paper is an analysis of how the adoption of the mobile telephone has resulted in new forms of interaction. Using a healthy dose of poetic license, we have called these micro coordination and hyper-coordination. These two types of “coordination” have arisen as a result of the wide scale adoption of mobile telephony. In Norway, where the analysis has taken place, the mobile telephone has a well-entrenched position in society. With the exception of Finland, no other country has a higher per capita consumption of mobile telephony. At the time of this writing, slightly more than 50% of the population have at least one mobile telephone subscription. The penetration is even higher among certain groups. In one of the focus groups five of nine boys had two mobile telephones. For example, as many as 80% of the oldest teens have a mobile telephone (Ling, forthcoming).

This technology has not simply passed into the population unnoticed. Since about 1993 and the introduction of the GSM standard in Europe, the use of mobile telephony has risen rapidly. Thus, its adoption is a change that is taking place before our very eyes and because of that the mobile telephone is not taken for granted. All the informants, even the youngest ones, remember life before its popularization. This is tall cotton for a sociologist. It allows one to gather in the fresh insight and reports “directly from the front” as it were. We can watch the development and institutionalization of mobile telephony as it takes place. In this respect, it is important to be out there and to gather the primary information.

One of the impacts of mobile telephony is the ability for nuanced, instrumental coordination. This forms the core of micro coordination. With the use of mobile communication systems, one need not take an agreement to meet at a specific time and place as immutable. Rather, those meetings have the ability to adjust the agreement as the need arises. In addition, mobile communication systems allow for the redirection of transportation to meet the needs of social groups. This is largely a functional and instrumental activity.

Moving beyond this, “hyper-coordination” encompasses instrumental coordination and adds two other dimensions to this. The first is the expressive use of the mobile telephone. That is, in addition to the simple coordination of where and when, the device is employed for emotional and social communication. People chat with each other. The Short Message System (SMS)² function is used to send chain letters, and personal messages that can range all the way from innocent and over-sweet greetings to vulgar pornographic images. One sees the integration of the group via the use of the mobile telephone.

The second aspect of hyper-coordination is the in-group discussion and agreement as to the proper forms of self-presentation vis-à-vis the mobile telephone. That is, the type of mobile telephone that is appropriate, the way in which it is carried on the body and the places in which it is used. Thus, hyper-coordination encompasses the instrumental and the expressive use of the mobile telephone as well as strictures regarding the presentation of self. One can see that the mobile telephone provides a

² This system allows for messages of up to 160 characters in length to be sent between GSM telephones. In addition some graphics can also be sent via this system. They are generally cheaper than calling and so they are quite popular among cost conscious teens who finance their own mobile telephone use.

type of integration or “coordination” that goes through several dimensions of social life.

The thing that really marks this as a unique phenomenon is the fact that it is the teens for whom this is most important. Thus, there is a, perhaps overblown, sense that contact with one’s peers and the style of presentation is important. Thus, hyper-coordination is not simply the use of the device to coordinate activities. It involves social and emotional interaction and it includes strictures as to the type of terminal one should use and the way in which they should use it.

2 Method and general framework

2.1 Method

This paper is based on the analysis of qualitative data. From earlier work we have come to understand that several themes are important when considering mobile telephony. These include security coordination and accessibility. Further, we have begun to find that each of these three themes is of importance to different age groups. Earlier analysis has pointed to the possibility that accessibility is important for youth, coordination is an important theme for career parents and finally that security and safety are important for the elderly users.

In order to examine this we selected four age groups and planned a series of ten group interviews. All the informants were mobile telephone users. The informants in four of these were teens between the ages of 14 and 18. Another two groups included informants that were between 19 and 27, a third pair of groups included parents in two-career families and finally, the last two groups included those who were older mobile telephone users. The youngest group received extra attention because their adoption and use patterns seemed quite different from those of the other groups.

The transcripts of the group interviews form the core of the material examined here. During the group interviews the participants were asked to discuss their ownership and use of mobile telephones. In addition, they were asked about various problem areas and future developments surrounding mobile telephony.

The material from the group interviews was transcribed. It was analyzed using a flat database program that allowed for the identification and sorting of themes and core concepts at several levels of specificity. Finally, since the group interviews were held in Norwegian, the material included in this paper was translated into English.

2.2 Framework for the analysis

The results of the group interviews can be partially represented by the table shown below. The table includes two axes, the vertical axis is the movement from instrumental to expressive types of interaction, that is the movement from communications that have to do with security and coordination to those that are more focused on the exchanging of feelings and emotions.

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Table 1: Forms for interaction via the Mobile telephone

	Intimate/Primary	Secondary	Remote
Instrumental	Security		Security
	Coordination	Coordination	Coordination
Expressive	Social interaction	Social interaction	

The horizontal axis is an adaptation of Calhoun’s taxonomy of social interaction (1987, 1992). Based on Cooley’s distinction between primary and secondary relationships, Calhoun expands this to include four levels, three of which are included here. The first of these, primary relationships, are characterized as being directly interpersonal and involving “the whole person.” Secondary relationships are also direct but might also include “relationships that require the mediation of a complex communication system.” Calhoun specifies tertiary relationships as those in which one never meets the other face-to-face but rather the relationship is mediated through a communication system. As an example he uses bureaucracy in which one, for example, sends in an application that is handled by a person functioning in a formal position. When considering the work here, this has been changed to be those persons with whom one has only a remote interaction via the mobile telephone. One can think of various information services such as the person one calls to get a bus schedule or to reserve tickets to the movies. In these cases, there is real interaction between the two, but, like Calhoun’s tertiary form of interaction, there is no real long-lasting form of engagement.³

The cells have been filled in with three types of activities, i.e. security, coordination and social interaction. The mobile telephone, it seems, is often bought with the notion that it will be a device to increase one’s security. However, as the mobile telephone becomes more and more embedded in one’s everyday life it also gains other attributes, and is used in other ways. Instead of simply being a lifeline, it is also used for the coordination of various everyday activities. In addition, for some, it crosses over the divide into more expressive forms of interaction. If one applies a somewhat broader reading to the expressive dimension of the table it also includes the issues of display and the presentation of self.

One can see a type of adoption cycle at a social level. The adoption, in its most basic form, is to solve a specific problem, i.e. security in the case of accidents. In this situation the interaction is directed towards the intimate sphere and perhaps the representatives of institutions such as emergency services. As the use and ownership becomes more routine it goes over to various types of coordination. Finally, there is the development of expressive interaction. In this way, the table describes the embedding of the technology in everyday situations. There is the movement from the extraordinary and unexpected to the expected and the mundane. This dynamic has

³ Calhoun describes quaternary relationships in which the individual is not even aware that they are the subject interest. Situations in which there is wire tapping or other forms of eavesdropping fit into this group. This form of “interaction” will not be considered here.

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also been described, using other terms, by Silverstone (1994, 122-131) and Douglas and Isherwood (1979).

3 Micro coordination

Beyond the function of security, one of the primary functions of the mobile telephone is the mundane coordination, or perhaps the micro-coordination of everyday life. When introducing this concept, it is worth while describing the context into which it is being introduced.

The need to coordinate activities is a basic social function. Many of the large social institutions have as a portion of their activities the coordination of interaction. Coordination is of key importance when considering transportation, particularly in the context of modern urban settings. This is, in turn, effected by changes in the efficiency of communication such as that seen in the development of the mobile telephone.

3.1 Transportation, telecommunication and the development of the cities

It has been noted that “To avoid transportation humanity invented the city” (Hägerstrand 1982). It is obvious, however, that cities have not eliminated the need for transportation nor have they eliminated the need for coordination, they may have had the opposite effect. Until the development of telegraphy, transportation and communication were, in effect, synonymous. The speed of transport was also the speed of communication. With the development of Morse telegraphy, and other systems of telecommunication, transport and communication were separated from each other (Giddens 1984, 123; Standage, 1998). Until recently there was a relatively strong barrier between the two in that one who was under transport was *incommunicado*. In this section of the paper we will examine the re-integration of coordination and transportation.

In spite of the fact that cities reduce the need for “long-haul” transportation, there is none-the-less the need for the transport of people and goods within the city on a routine, everyday basis. This routine, everyday activity dictates that they move about in order to take care of daily needs and assignments. This is elegantly seen in Hägerstrand’s studies of “time-space” paths (1982).

There has been a clear relationship between developments in transportation and the spread of the city. First via trams and trains and later via the development of the car and highways the cities have spread beyond their traditional centers into vast areas of suburbs. Since the middle of the 20th century the technology that has had the greatest impact on the current form of the modern city is the automobile (Crawford 1994; Dyckman 1973; Hall 1996; O’Connor and Maher 1982; Thorns 1972). The rise of car based shopping, i.e. the shopping center, the shopping mall or strip development based on access to abundant parking, is a centrifugal force on city growth (Crawford 1994).

While transportation has, to some degree neutralized distance, there is still the need for coordination of interaction. It is communication technologies that provide this link. The telephone is the coordination of the transportation system (Pool 1977; Gillespie 1992). The car allows one to live far from their place of work. Thus, the

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arrival of the car, the expansion of the city and the coordinating function of the telephone has given form to modern urban and suburban society (Pool 1982).

More recently it has been suggested that communication systems have developed to the degree that they have the potential to provide an alternative to the city and more specifically the extensive use of the personal transportation system (Grahm 1997; Hampton 1998; Nilles 1991). Calhoun suggests that the combination of modern communication and transportation means that both economic and political activity can move away from the cities (Calhoun 1992). While many say that there can be a substitution of transportation with telecommunication, others point to the notion that the two systems are perhaps complementary. That is, telecommunications allow for a more efficient use of the transportation system (Katz 1999; Salomon 1985). Salomon, who was writing before the rise of mobile telephony, points out the possibility for transportation with linked purposes.

With the rise of the mobile telephone the coordinating potential of telephony has entered a new era. Previously, coordination involved the direction and control of transport from geographically fixed terminals or nodes. The development of mobile telephony means that these stations are becoming less necessary. It is this notion that has given rise to the idea of micro-coordination, that is the coordination of interaction without the need for larger nodes or centralized bases of operation.

3.2 Mobile communication and micro-coordination

It was not until the rise of mobile telephony that transportation and communication were again linked together. Previous to this one who was in transit was also *incommunicado*. Now mobile telephony allows for nearly continuous and ubiquitous communication under transport. This barrier has fallen and those who are in motion or away from a known “fixed” terminal, are also available telephonically.

This gives rise to several different types of coordination (Haddon, 1999; Katz 1999; Ling 1998). The first can be described as basic logistics. Here one can see the redirection of trips that have already started, i.e. one partner calling another and asking them to stop in at the store on the way home. This might extend all the way into the store in that the husband calls the wife while he stands inside the store and needs to know if it was whole or skim milk that was on the shopping list (that he forgot on the kitchen table). Another version is the “softening” of time, i.e. sitting in a traffic jam and calling ahead to the meeting to let them know that you will be late.⁴ A third variation is the progressively exact arrangement of a meeting. Two parties might, for example, generally agree to meet somewhere at an approximate time. As the two are in transit they might call each other to confirm the timing and the location. Finally, if the two can not locate each other at the agreed upon place at the agreed

⁴ This type of coordination plays on the notion that time is a system used for the coordination of social activity. The modern era is characterized by the use of the mechanical clock to coordinate interaction (Beniger 1986; Dohrn-van Rossum 1992; Kahlert, Mühe and Brunner 1986; Landes 1983; Sobel 1996; Zerubavel 1985). The development of mechanical time keeping and standard units of time allowed for persons to make agreements by reference to an external system. As time keeping became more portable, this system of social coordination became quite standardized (Landes 1983). As transportation expanded there was a need for better navigation based on extremely accurate time keeping (Sobel 1996). Further, as the speed of transportation increased there was a need for far more coordinated scheduling (Beniger 1986).

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upon time we can have a third round of calls for the final location of each other. Thus mobile communication allows for the structuring and rationalization of interaction, particularly in the face of distributed participants (Lange 1993, 204). These types of coordination form the core of our idea of micro-coordination.

The material describing the use of the mobile telephone to coordinate one's activities comes from the group interviews with two-career parents and, to a lesser degree from the older informants. The informants described the various dimensions of micro-coordination in their comments, i.e. the arrangement and rearrangement of various logistical details on the fly.

Ida: I have to get in touch with my husband because he is out and about a lot and that is why I am glad that he has a mobile telephone. So when we are out and about, both of us then we can talk with each other while we are out and about.

Interviewer: What is it that you talk about when you are out?

Ida: Everything about practical, everyday things

Interviewer: Does it happen very often that both of you are out?

Ida: Yea, as a matter of fact

Interviewer: On the average?

Ida: Right in the last day I have only called him one time and that is not too bad only that. Often it is three or four times during the day.

Interviewer: Yeah, but the topics is it. . . ?

Ida: ‘Can you drive the youngest one to music lessons?’ ‘Can you get him?’ ‘Can you go to the store and buy milk?’ It is that sort of thing. And he or she has called and needs keys to this or that house, can you. He works for the city and he has keys to a lot of buildings and there is always an alarm that goes off some place or another and [he] needs the keys. . . .

We see some of the same issues in the comments of Anne.

Anne: That is pretty nice if you are away from home and can not reach somebody via the regular telephone then you can call and leave a [SMS] message. So we use a lot of messages.

Interviewer: What kind of messages do you send?

Anne: It is if somebody is late, it can be if we need to buy something, if there is something important that he needs to bring home, if he needs to call somebody or if he has been home and has to give me a message. It is not like ‘Hi, I am doing fine, etc.’ It is something that we need.

Anne's final comment, "It is something that we need" is a key theme in many of the comments. It points to the idea that the interaction over the mobile telephone is often instrumental in nature for these informants. It is also often used in the intimate sphere outlined in Table 1 above. The calls involve the exchange of information that allows for the on-going but mundane maintenance of everyday life. Tom takes up the same theme when he says "There are always a lot of short messages like children that need to be picked-up at day-care, and things that come up, meetings . . ." One also sees this use of the mobile telephone for micro-coordination in the comments of Ida.

The need to be available for children's activities was a theme that several of the informants brought up. The mobile telephone helped the parents to manage the logistics of driving the children and also it helped the parents to manage their common role as volunteers in the various free time activities.

Ole Johan: It is very nice to be available when you know that you have kids in the marching band and the soccer team you know. And there are always messages

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regarding picking-up and driving and not the least with the marching band. There can be driving for picking up things for the flea market and things like that. And it is nice to be available, that you can get messages and such. It is things like that. People plan in the afternoon what they will do and so that they don't start to double book themselves with a lot of things and you come home and find out that there are other things to do because you have not gotten a message and can not plan your free time.

The fact that these activities need to be done while one is either in transit or away from a traditional telephone mean that the mobile telephone is well suited for this need.

We also came across material that confirms the notion of "remote care-giving" described by Rakow and Nivarro. While the notion of care giving may seem to have an expressive ring to it, the way it is practised here shows that it also has an instrumental aspect. The use of the mobile telephone is not to exchange emotional content, rather it is to make concrete arrangements and dealing with practical issues.

Kari: I call very little, very short, very short conversations actually. But I say that I will be late if something happens on the way home. Then I can call the kids and tell them that I am coming, that I am on the way. Before I had to stop at a gas station to call if there was something. And for practical things, if I call to my husband and ask him to do something on the way home or at work. Then I send a text message to him because he refuses to take a mobile telephone call on the subway.

This is both micro-coordination and the discussion of the "proper" use of the mobile telephone. It also foreshadows the discussion of the concealed use among youth in that it describes the context sensitive/discrete use of the mobile telephone.

The two career parents described very active lives. They had demanding jobs as well as demanding free time activities. For some of these people the mobile telephone has become a necessary part of their everyday lives.

Ola: It is very important for me at any rate, but I don't like having a mobile telephone. I work with building stores you know, and we are always behind schedule and things are late and a lot of that. And when I am in those periods I know that when it rings between 7 in the morning and 7 in the evening that something is wrong. And in the summer I work as a soccer coach for some 14 year olds. And when you have 50 of them with all that that includes of this and that. Like yesterday, it started to rain a little and so you get 15 – 20 [calls] in the space of a very short time asking if there is going to be practice and a lot of things like that. So I could do without it but I have to have it you know.

Tom describes the use of the mobile telephone to coordinate portions of both his work and his private life. His description, however, indicates that the two are relatively independent. Other informants described how the mobile telephone allowed the tighter integration of their work and private lives. Nikolas works in the marketing department of a large company. He commented:

Nikolas: Let's say that you are out shopping and suddenly remember that I have to buy something, let's say toilet paper or light bulbs. I park the car near the store. Then I can get a [job related] telephone call there. It is like, I can go out of the store and talk with the person there and you can take a message and be available even though you are doing something in your private life and that is very nice because working hours are quite long anyway and you can sneak in things that you need privately during working hours. You are more free.

This section has described the instrumental use of the mobile telephone in the micro-coordination of everyday life. Many of the comments have focused attention on the need for coordination among members of the intimate sphere. In addition, we have

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seen the use of the mobile telephone for the coordination of more remote groups, i.e. soccer teams and in work situations. In the next section we go over to the more expressive use of the device among teenaged users.

4 Hyper-coordination

In the section describing the general framework we noted that the group interviews were designed to examine three general uses of mobile telephony. First, the oldest users focused often on issues of safety and security when discussing mobile telephony. The middle aged users focused, if anything, on the coordination potentials with the system. The youngest users, that is the mid-teens group, had perhaps the most distinct profile. Beyond the instrumental uses of safety and logistical coordination, their use was often expressive in nature. In addition to that there was a whole set of strictures regarding the style and modes of use. For this group the importance of the system was far more central than for the older groups. Even the young adults were far less focused on the technology than the mid-teens.

In the section that follows we will examine first the role of adolescence in contemporary society in order to set the stage for the subsequent analysis of what we have called hyper-coordination.

4.1 Adolescence, contemporary society and accessibility

Before going into the discussion of mobile telephony and adolescence, it is necessary to place the phenomena of adolescence and youth into its proper context.

4.1.1 *The concept of adolescence in contemporary society*

There is a well-established discussion of adolescence in the anthropological literature. Much of this focuses on the transition from childhood into adulthood, rites of passage and the issue of sexual maturation (Gennep 1960). This analysis divorces the notion of physical maturation from that of social definition of the individual as an adult. The wide variance in the age at which one undergoes a rite of passage in pre-literate societies underscores the social nature of this transition.

This idea, that the transition from childhood to adult life has a social component, is also important when describing adolescence. In industrialized societies the specific rite of passage is largely replaced by more or less extended apprentice adulthood. During this period the individual learns the skills needed in order to carry on as an adult. Unlike less differentiated societies, however, the teen-aged person cannot often expect to carry on in exactly the same type of work or the same location as their parents. The need for specifically skilled workers in industrialized society has also resulted in the expansion of the educational system. This in turn has meant that the period of youth is extended and that there is an age sorting in order to make teaching more effective. This age sorting has the effect of spawning a peer culture wherein individuals receive portions of their orientation to the world via same-aged friends (Hogan 1985).

Thus, adolescence is that period when the individual masters various types of social and technical knowledge in addition to filling in the outlines of the role they will fulfill later in life. As noted in earlier work, this can also include:

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Specific knowledge can include an understanding of personal economy, strategies for negotiation with various groups and individuals who have alternative cultures, the role of gender and sex in one's life, how one secures a job and the expectations of the working world, a sense of personal style and integrity, and recently, an understanding of how one interacts and uses information and communication technologies (ICT) (Ling, forthcoming).

Many of the intergenerational differences in life-experience are a result of the rapid developments in technology. The speed of change in the material culture is often far greater than that of attitudes and expectations (Ogburn 1950). The child's experience of and attitude towards technology is likely to be different from their parents' and perhaps even their older siblings. Thus, one must select that information that is relevant rather than accept it whole cloth. In this way socialization is not simply received but rather the individual is active in the process. Glazer and Strauss have spoken of this as "shaping" transitions (1971, 57-88). Here we can see the role of the peer group. It can assist one (perhaps misguidedly) in the transition from childhood to adult life. This does not mean that the difference in experiences is always accepted without comment. They can be and sometime are seen as significant moral issues.

In contemporary society, the peer group gains significance during adolescence. It is during this period of life that friends are most central to the individual. Previous to this point, one's parents are in focus and later on, one's partner and children gain a central role. According to Rubin, "This is perhaps the only time in our lives when friends come fully to center stage, transcending all other relationships in immediate importance as they engage us on a daily basis around every aspect of living." The interaction with peers takes over significant portions of the teen's time and energy. Rubin also notes that the relations with one's family are often "fraught with the conflict of the struggle for independence" (1985, 110). To this end, various devices, styles, ruses and other social props are used to demarcate the boundary between the teens and their parents. As we will see below the mobile telephone and the jargon surrounding its use has grown to be one of the tools used for marking the boundary.

Turning now to the other major element in the discussion here, ICTs have had a significant impact on society at all levels. At the functional level, they have caused the reorganization of many social functions. Transport, administration, health and a whole set of social functions have been and are being effected by the development of these technologies.

It is also important to also examine their integration into pre-existing social structures (Bijker 92; Bijker, Hughes and Pinch 1987; Haddon 1992; Haddon and Skinner 1991; Silverstone 1993; Silverstone 1994). It is necessary to be aware of their meaning to both the user and to the context in which they find themselves. This perspective is of particular relevance as the fashion and status meaning of the various ICTs have incisive but quickly shifting meanings. Their symbolic meaning and the ways in which they are perceived have themselves become the impetus of social institutions in Berger and Luckmann's sense of the word (Berger and Luckmann 1967).

Bringing ICTs and adolescence together, the simple functional understanding of ICT is important for their future life. In addition, ICTs can be a factor in the need to establish identity vis-a-vis older generations. This is nothing new as many forms of differentiation have been brought into this arena. "Outlandish" clothing, seemingly atonal music, various plays on vamping and sexual display, forms of talk and argot

are all available as ways to define and enforce the boundary. More recently, the use and display of various forms of ICT have also come onto the scene in this context.

Looking specifically at telephony, a dominant issue in the work that has been done up to this point often deals with the issue of time spent using the traditional fixed telephone (Aronsen 1977, 31; Claisse and Rowe 1987; Kellner 1977, 292; Lohen 1997; Mayer 1977, 228-31). Mayer's work is useful in that he traces the extended use of the telephone to teens that had recently moved within an urban area. Thus, one receives the notion of the individual trying to maintain a social network, a theme that is brought up below.

One can almost use the metaphor of a car with its motor racing and the clutch in. In many ways, youth find themselves in this situation. They have not yet begun the work of lugging themselves through life. In addition they have the luxury of a disengaged period before the serious issues of establishing themselves and caring for others have begun in any serious way.

4.1.2 *Adolescence, access and the role of the mobile telephone*

Turning now to the role of the mobile telephone for adolescents, the widespread adoption of the device points to the importance of availability for teens. Unlike the adults who could feel stressed by the mobile telephone, the teens thrived on access and interaction. To receive a message is a confirmation of one's membership in the group (Stuedahl, 1999). Thus, it is an occasion that receives extra attention. One sees this in the comments of Bente (18) when she says: “If I get a text message I am curious. I want to be included, so, like if I am in the shower and I get a message, I, you know, have to read it. If I write a message and don't get a response immediately then it is like, you know. ehhh . . . ”

The teens felt that their accessibility was an important aspect of their social life. To be available to friends and to be oriented as to what one's peers are up to is seen as very central. Accessibility is an expression of their status and the need for accessibility is cultivated and developed.

To understand the background for teens' adoption of the mobile telephone it is important to also consider the economic issues of mobile telephone ownership. One of the keys to the spread of mobile telephony among youth has been the pre-paid card system.⁵ The pre-paid system eliminates one of the concerns often cited by parents that the teens will over use their telephone and receive an overwhelmingly large bill *ex post facto*. Often, but not always, the teens themselves have the responsibility for buying their own pre-paid cards.⁶

The marginal economic situation of the teens means that they are forced to be frugal in their telephone use. This is seen in the response of Erika (17) when asked to tell

⁵ In this system one pays beforehand for their telephone access. Thus, when the allotted sum has been consumed then one cannot call out to other (non-emergency) numbers. One can, however, continue to receive calls and text messages for a certain amount of time that varies by operator. The “card” refers to the card upon which the access number is printed. This is the physical object that is purchased which in turn activates the individual's account upon being entered into the system.

⁶ This is quite age determined in that younger teens often receive support from their parents where older teens must pay for their own telephone use (Ling, forthcoming).

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what she considered to be the biggest social problem with mobile telephony. Her response was simply that “It is way too expensive.”

The marginal economic situation of the teens also means that they are astutely aware of costs, as well as the various alternatives. There is also some chaffing at the idea of having a standard subscription where one avoids the need to constantly buy pre-paid cards.

Oda (18): I have a standard subscription because I use the telephone a lot for both calling and for text messages so I use up three pre-paid cards a month. It would be a lot easier for me to have a normal subscription and cheaper also⁷

This frugality has, in turned, supported the popularization of the SMS text messages in that they are unit priced and in many situations they are cheaper than a telephone conversation particularly since a conversation often draws out over a longer period of time.⁸ This is reflected in the comments of Nora (18) “A little message is a lot cheaper to send” and Rita (18) “It is so expensive to call with a mobile telephone, it is not worth doing it.” The same theme arises in the comments of another informant.

Arne (17): I start using SMS when I have only a little money left in my card. When I have a lot of money in my card, I call. When it is getting down into seven kroner (\$1.00) then I start using messages.

There is also a price issue here that perhaps also enforces the mobile-to-mobile interaction. It is about 2 – 3 times more expensive to call a traditional fixed telephone from one’s mobile telephone when compared to placing a call to another mobile in the operators same network. Thus, the growing access to mobile telephones on the part of teens along with the high price associated with calling a fixed telephone have served to establish the mobile telephone as a parallel communication system.⁹

4.1.2.1 Mobile “haves” and mobile “have nots”

Ownership of the mobile telephone is very much related to being in contact with one’s friends and knowing what is happening at a given moment. One is out of touch without a mobile telephone. In the words of one boy, “It is stressful not to have my mobile telephone because I don’t know what is happening” (Arne 17). Another girl said, “When you are going to meet somebody you have to get hold of them and most people do not just sit at home every single day so it pays to have a mobile telephone” (Erika 17). Yet another noted:

Nora (18): It is practical to be available because you do not miss anything. It is also practical that others are available; at any rate it is irritating not to reach people when you want to reach them and get them involved in something. It is very irritating.

The opposite side of this issue is those who are without mobile communication.

⁷ In a standard subscription one pays a fixed rate per month in exchange for a lower minute price.

⁸ Originally the system was free however; when it suddenly gained popularity in September of 1998 the traffic threatened to overwhelm the system of normal mobile voice traffic. It was at this point that the tariffing system was established. Currently a SMS message costs slightly less than \$0.20. By contrast a standard telephone call from a mobile telephone with a pre-paid card costs between \$0.25 and \$0.90 per minute depending on time of day and the type of telephone being called.

⁹ It is also more expensive to call from a mobile telephone to another that is in the competing operator’s network. This prompted one respondent to note that he has “Telenor” friends and “Netcom” friends, that is, friends determined by the mobile telephone operator with whom they have a subscription.

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Oda (18) I have a friend [without a mobile telephone] that has an hour and a half trip so you cannot get in touch with her either at home or at work you know. If you want to get a message to her then it is a big problem. It is the same with me if I don't have a telephone with me.

It also came out that Oda did not have a valid pre-paid card and thus she was unable to send SMS messages. Thus, she had fallen out of currency. She noted, “There is nobody that bothers sending me text messages because my card is empty and I can not answer.”

4.1.2.2 *Access and the traditional telephone*

One might answer that the traditional fixed telephone can also be seen as an approach to managing accessibility. This suggestion is, in the eyes of some informants passé. According to one girl “Nobody sits at home and waits for the [fixed] telephone to ring” (Ida 18). Another noted, “To get in touch you have to call their mobile telephone” (Erika 17). To a certain degree, the teens had replaced the system of fixed telephony with that of a mobile system of interaction. There was even the suggestion that one is unreachable via the traditional fixed telephony system. One girl said, “A lot of my friends only have my mobile telephone number. . . . Generally you have more control if you have a mobile telephone because your friends can call you all the time. You are more accessible then” (Oda 18). Another noted:

Erika (17): I think that the mobile telephone is most important in relation to my friendship network because I have the memory full of telephone numbers and that is only mobile telephone numbers. I could not get in touch with my friends at their home phones.

4.1.2.3 *Communication outside the purview of parents*

We have noted that adolescence is that period of life when one is perhaps least focused on relations with their family and most concerned with one's peers. The mobile telephone plays into this in that it provides one with their own communication channel. As we have seen, the mobile telephone produces a communication network that is parallel to that of the traditional telephone but has the advantage of being outside the purview of authority figures. For some this was seen as a way to interaction without bothering others in the house. It is also ubiquitous. One boy said, “If there is somebody that wants to get in touch with me at night then they should be allowed to get in touch at night without disturbing my parents” (Erik 14). The mobile telephone enables continual access. It is little wonder then that the technology has been so readily adopted.

This is a type of parallel communication through which one starts to establish a life that is separate and removed from that of one's parents. While still seen as socially immature, that is not completely competent at the tasks demanded of an adult, they are none-the-less in the process of establishing themselves in that world. The mobile telephone allows for the development in that the child controls the interaction and the messages that are sent and received without any censoring by parents.

Rita (18): It is ok when somebody will leave a message on an answering machine on my mobile telephone instead of the family's machine. I can call people who call; it is a little more private.

Erika (17): If I am not home and if I don't have a mobile telephone then my parents would have been clear about all the people I hang out with and if they [the friends]

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wanted to give me a message when I am not home but instead put it on the telephone answering machine then they would have to be fast on their feet when thinking about what they want to say. When you have a mobile telephone then you have a private answering machine and a private telephone.

The mobile telephone also provides one with the ability to communicate while physically within the context of another situation. For example, the informants were asked if they had turned off their mobile telephones when participating in the group interview. A common response was that they had turned off the sound but that the telephone was still on. Thus, they were still available to their social network even when participating in another social event. A similar attitude was shown towards the use of the mobile telephone in school. Erika, who we have cited before said:

I have a lot of friends that work at night and at other times outside of school time. If they want to get in touch with me when I am at school then it is fine with me because it is boring there anyhow.

When members of the social network have collected face-to-face, however, they take precedence over the use of the mobile telephone and SMS.

When it comes to the use of SMS vs. talking with friends face-to-face the latter takes precedence.

Erika: If we are sitting together and somebody gets out their telephone, then you are a little irritated. That is something you do at school and on the bus.

Interviewer: Ok, so that is not something that is normal, that you sit down at a party and write [SMS messages]?

Erika: Then you might say that they have a low social standard.

Finally, the nuances of communication have advanced such that one can even exclude and snub potential interlocutors when using the mobile telephone.

Erika (17): If there is somebody that I don't like and they call me then I just press "no" and then they get the busy signal and then they know that it rings first and then get the busy signal.

Here is the mobile telephone being used to snub people that one wants to avoid.

4.1.2.4 Managing accessibility and the mobilization of the social network

The adoption of mobile communication may, in some cases outstrip the teen's ability to manage social life (Ogburn 1950). The high premium placed on accessibility can, in some cases tip over into uncontrolled situations. This is seen in the suggestion that one can quickly mobilize help when in threatening situations from a large social network via the mobile telephone.

Rita (18): If, for example there is some trouble, then it is a bigger problem, for example if there is trouble then somebody calls all their friends and then it can be dangerous.

Erik (14): It doesn't have to be dangerous.

Rita: No, you are wrong because then they call others and so it just gets bigger you know. It has to be if there are 100 involved instead of just 2.

Erik: Yeah, but it is good if there are 20 people that are going to beat you up.

Rita: But the problem just gets bigger you know.

The suggestion here that the mobile telephone can mobilize broader forces is somewhat similar to that of Lein and Haaland (1998). Their work suggests that the efficiency of the system means that the social friction of face-to-face mobilization serves to reduce the severity of such violence. By contrast the fragmentary and point-

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to-point nature of the mobile telephone means that rumor can more easily spread (Shibutani 1966). On the negative side, however, there is a certain broadcasting efficiency that face-to-face communication affords, i.e. one can announce the event in a location where a group is assembled and thereby collect all possible participants.

Another type of social event that can spin out of control is parties arranged in the homes of the teens. From the perspective of the individual the mobile telephone allows them a system with which they can find access to parties and exciting social events.

Interviewer: We have the sense that the mobile telephone expands the area that you move in and the number of people that you are in contact with

Helen (15) That's true

Interviewer: that you will be in contact with others that you would not normally be in contact with.

Annika (17) For example, if you are at a family party and you were going to go to a party afterwards but that party is cancelled and you sit there and say ‘What should I do now?’ So instead of just sitting there you send text messages to others and eventually you find a place you can go or a party or something. Or sometimes you go someplace and there is nothing happening and you find out that something is happening another place

Charlotte (15) Last week I was at a party at my best friend's house and suddenly there were people that I had never seen before and it was like ‘Hi,’ How did they find out about this? But that was surely the mobile telephone because somebody heard about it and they called somebody they halfway knew and when they came, I had never seen them you know.

The informants saw the mobile telephone as the technology that enabled this to happen. While the potential partygoers benefit from the ability to better locate exciting happenings, the host can be faced with an invading horde.

Geir: I don't see why people have parties any more because it takes off there are tons of people that come and break things you know.

Ivar: It is just because everybody has a mobile telephone

Interviewer: But do you have rules, in your group do you make rules about how you will deal with this?

Geir: If I wanted to have a party then I would have talked with my friends and said, like invited just friends and get them to not tell everybody and not to really play it up so that everybody will come.

Interviewer: How do you organize your social life then if you cannot have parties?

Geir: You can have parties, but you risk that a gang will come and begin to steal things.

Interviewer: Does it get out of hand because of the mobile telephone?

Ivar: Yeah, because there was somebody that called a lot of others, it is just people that call to others they know.

This is the same dynamic described by (Manceron, 1997) with regards for the nomadic search for parties and happenings among youth in Paris. In that case the traditional telephone was used but the emphasis on fast updating among a social group is the same. Thus, there may be a type of social lag wherein the adoption of the technology has gone faster than the development of methods for controlling its consequences.

4.2 Instrumental use of the mobile telephone

Now, having set the stage by reviewing the role of adolescence in society and having examined the impact of the mobile telephone on the desire for accessibility, we now turn to the three aspects of hyper-coordination. In particular we look at the functional use of the mobile telephone among teens, its expressive use and finally the role of the mobile telephone in the display of self. The functional issues described here are the use of the mobile telephone in interaction with one’s parents and the use of the mobile telephone in coordinating – perhaps micro-coordinating – with peers.

4.2.1 Interaction with parents

Informants among the “parents” group had several disparate ideas regarding the use of mobile telephones among teens. On the one hand it was seen as a synthetic need but others saw the device in terms of the security that it provided.

One mother doubted the need for the mobile telephone among teens. “I don’t think that [my son] needs one. I believe that it is a demand that has simply been created. That is why I am doubtful. Is it really necessary that everybody needs to talk with each other all the time.”

Others differed here. Echoing the outline presented in Table 1, a common theme for these parents was the security that the mobile telephone provided.

Anne I have a boy that is 17 years old and is in high school and he has not gotten [a mobile telephone] yet but he can borrow one sometimes. But now I am thinking about a cheap one that functions for him. Because he is beginning to go out occasionally now. He goes downtown and, and it is not that he needs to call me or that I need to call him because it doesn’t matter if he has the mobile telephone with him *but if something should happen*. He was someplace this summer, at a conference at the university and he didn’t make it to the last subway from there or something. And then he could have called so that we could come and get him. We planned that he would go together with some others on the subway but they didn’t make it. And they stood there. In those kinds of situations I think it is good to have a mobile telephone. . .

Marta I have a 17 year old and the worst thing I know is when she goes downtown. I am so afraid but I just have to accept this you know. But it helps that she has a mobile telephone because she can call if something happens. It is not to control my daughter that she should take her mobile telephone when she goes out, but it is .ahh . . .

Interviewer: For her safety?

Marta: ‘If something happens, call home and we will come immediately!’ you know.

Because she needs to go out and experience Oslo. She has to learn about the world.

The teens had a somewhat different perspective. On the one hand much of the teen’s discussion of mobile telephones vis-à-vis their parents revolved around the issue of safety and security. For the adolescents there was recognition of the convenience of the mobile telephone when it came to arranging transport etc. with one’s family. There was, however, certain ambivalence with regard to the potential for one’s parents to control them via the mobile telephone.

Nina (18) There are telephones where you can do it like if a certain number calls it goes right into the telephone answering machine, for example if parents call then it goes right into the answering machine.

Arne (17) I do that.

Interviewer: You do that?

Arne: Yeah, when I am out on the weekend I do that.

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Interviewer: Who do you exclude?

Arne: The family.

Another boy (Morten 14) said “I usually block my parent’s number . . . but then there is a lot of hubbub when I come home.”

When the teens see that it is the family telephone number they refrain from answering and use some ploy such as that “I didn’t hear it ring.” This was a well-recognized strategy. It follows from the notion that peer groups are important during this phase of life and that there is a need to distance oneself from the older generation.

It is clear that the issue of control was in the background here. In some cases the mobile telephone was used more clearly to maintain an overview over the activities of children. This was usually the case with younger children. The teens knew of children who were still in elementary school who had received mobile telephones from their parents. In one case, a nine or ten-year-old neighbor was reported to have a mobile telephone. “She uses it so that her mother can call her to come home and eat dinner. But you could agree on that beforehand.” (Marianne 17)

There was the sense among the teens, however, that this was not necessary. They felt that so long as one has a relatively small circle of friends and small radius of interaction there is little need for mobile communication. “[When I was younger] I was more in the neighborhood, I was together with a few friends you know. My parents could just call the parents of my best friend and we were playing there.” (Rita 18) The implication is that as one’s social life becomes more complex and the range of interaction grows there is an increasing justification for owning a mobile telephone.

4.2.2 *Coordinating activities with peers*

As with the two-career parents and as shown in Table 1, the mobile telephone was used by the teens in the micro-coordination of their affairs. In response to the question regarding how often one calls friends to coordinate one boy said “I imagine that 75% [of my calls] are like that. You just wonder about where they are or if they are coming or what they are doing or things like that. They just call to hear what is happening. We call before school to find out if they have left home or after school to find out what they are doing after school” (Arne 17).

The need for coordination is heightened during those periods set aside for social interaction. According to one informant “On a Friday there are a lot more text messages than on the Thursday because people are out and need to find out what is going on (Erika 17).”

This is the use of the mobile telephone for normal micro co-ordination of their nightlife. Since they do not have a home telephone that is their own or an office telephone it is the simplest way for them to get into touch with each other. Both voice and SMS are used in this activity

Inger (17): If you have a mobile telephone, you can change plans along the way. You do not need to agree to meet either; you can just call whenever you want actually.

Interviewer: But how do you make agreements?

Inger: I don’t know, you agree where and when you are going to meet and if there is a change you say that you will meet another place for example, if that is easier.

Arne (17): I usually just make plans by calling [on the mobile telephone]. ‘What are you doing tonight?’ ‘I do not know yet.’ ‘Ok, I will call you later.’

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Interviewer: It is such that you call and ask if you can do something together?

Arne: Yeah, for example today when I am here, I can just agree with my friends that I will call them, when I am done. Then it is easier than planning what you are going to do [beforehand].

This sequence echos the logistical micro-coordination noted among the parents group.

4.3 Expressive use of the mobile telephone

While the mobile telephone has an undeniable instrumental function, one thing that sets apart use among the teens is its expressive function, that is, the use of the device to communicate emotional preferences as opposed to more task oriented information. The expressive side of social interaction via the mobile telephone is summarized by Nora (18) when she said “[With] friends it is chatting, parents . . . call for something.”

The expressive interaction can include things such as “chain” SMS messages, notes indicating expression of interest in potential boy/girl friends, various types of jokes and even a type of haiku wherein the message needs to include exactly the maximum 160 characters. The teens report that the jokes often deal with sexual matters.¹⁰ Again this follows from the teen’s immersion in peer group culture where one develops the knowledge about “adult” issues and the strategies one needs in dealing with them.

At a more abstract level, these expressive messages are a confirmation of a relationship. It is a type of social interaction wherein the sender and receiver share a common experience, though asynchronous experience. When one sends a message it refreshes the contact between the two.

The experience has a concrete content such as the joke, picture or other content. In addition, there is a meta-content, i.e. the receiver is in the thoughts of the sender and when they next meet they will be able to base a certain portion of their further interaction on the exchange of messages. The messages serve to tie the group together through the development of a common history or narrative. As one teen noted, “If you get a good message or one that is cool you often send it on.” Thus, the sharing of messages is a type of gifting and it is a part of the relationship’s objectification (Berger and Kellner 1964).

There is also a sense that the sending and receiving of messages is an objectification of popularity. The more popular one is, the more persons they can send to and receive from. In the case of SMS, these friends need to also be mobile telephone users. Thus, those who do not have a mobile telephone are by definition outside the group.

In many ways, they are an updated version of passing notes. The use of SMS for the exchange of sexual images and description along with the intrigue points to important issues in the lives of the teens, i.e. the exploration of sexuality and the development of social interaction skills.¹¹ They can deal with areas of life that the teens are in the process of understanding. Thus, the SMS messages are an extension of the peer group

¹⁰ During the focus groups, for example, informants showed items such as “About one million are having sex right now and what are you doing?” Another girl displayed a graphic showing an erect penis with drops of semen coming out of the end.

¹¹ The element of intrigue can be seen in the following message reported by one of the informants. “Hi, you don’t know who I am but if you want to know follow the instructions carefully.”

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that is often that area wherein one learns how to manage quasi-illicit activities and where one finds help in defining the boundary between that which is proper and improper.

4.3.1 *The social use of asynchronous discourse*

On an interpersonal level, the use of SMS is seen as an important medium in that it allows one to filter communications and also to think through the composition of the message. In Goffmannian terms the indirect nature of text messages allows one to arrange “face.” That is, it allows one to consider the effect that is desired in the message. One sees this in the comments of Ida.

Ida (18): Then one does not have to use their voice that can shout or break up. *You have to have time to think.* . . . You always use it in situations like this because it gives the other person the chance to think through and answer ‘no’. If the person is on the phone is not always so easy to answer no. (Emphasis added)

Another respondent commented on the situation described by Ida as follows.

Erika (17): I just got a SMS message now. I had asked him if he could come and get me [after the group interview] but I wouldn’t have dared to call and ask because that would have been a little, then I would have known that he would not have dared to say ‘no’ even though he meant no because he is very shy and kind. So instead, I sent a SMS message and that way I know that he will say no if he doesn’t want to do it.

Somewhat later Erika supplemented this interaction by telling that the boy had ulterior motives in driving her home.

[He] is, yeah, a little interested in me and he would not have dared say this to me, I know that. I am together with him every day and he hasn’t said anything but he dared to send a message. Then he avoids confronting me.

Here there is, as we spoke, the unfolding of a parallel interaction. On the one hand, the rather irrepressible and post-modern Erika sat in the group interview, but on the other hand, she was negotiating both a ride home, and, in a larger sense, perhaps the initiation of a relationship with another person. There are two points to be made here. First, one sees the use of SMS to manage the establishment of a potential relationship. Second, a point to which we will return below when discussing parallel front stages, this is literally taking place during the group interview.

Focusing for the moment on the establishment of relationships, the informants provided the following comments:

Interviewer: You said that when you meet people when you are out on the town that you send text messages because it is easier than to talk together. Is this when you are out in town?

Rita (18): No, this is the day after or something. If you have exchanged telephone numbers then it is a lot easier to send a text message than to talk together.

Erika (17) If you meet a nice guy when you are out and he gives you his number, then you don’t know if he is a jerk and that is why he did it or if he is serious. So, you send him a message and then at least you know that. He also has the possibility to say no.

Ida (18) Or if you regret then you just don’t take the phone or send a message.

Interviewer: Don’t send it back?

Rita: Then you avoid the situation where you have to sit and talk with a person that you really don’t want to talk with.

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The informants point out the advantages of SMS for exploring the potential new friend. The initial contact is face-to-face. A part of this ritual includes exchanging of mobile (not fixed) telephone numbers that are entered into their mobile telephones on the spot for later reference. During the next few days, one may contact the other using a SMS message.

There are many strategic advantages to this approach. It couches the situation in a more careful and controllable context allowing the “time to think” as noted by Ida.

A noncommittal question such as “How are you doing?” or “Did you think that the music was good on Saturday?” marks the contact; gives sign of interest and also tests the other’s sincerity. The informants indicated that it is important to ask a question during this initiation phase since it is a display of interest and identification. The next turn in the cycle is some form of access display, that is either an opening for further interaction or a closing of the potential (Schiffrin 1977).

A SMS message allows one to deliberately compose the text and perhaps confer with a jury of one's friends as to the content. The message goes directly to the individual meaning that there is no need to broadcast one’s interest to the other person’s parents by using the family’s telephone. Another point is that one avoids having to deal with the fluster and embarrassment of a face-to-face interaction and awkward small talk with either the object of one’s interest or his/her parents. Finally, the logistics of delivery are quite simple. Since the SMS message is not a physical object, unlike a written note, there is no need to see the other person, nor is it possible for the object to be intercepted by other friends or, for example one’s teacher. Thus, there is a much more careful and ponderous interaction that allows one to handle the situation with a *savoir faire* that is unavailable in face-to-face situations.

If the other responds positively then one can take the opportunity to respond and perhaps move into more synchronous modes of interaction. The stately pace of the interaction also allows one to avoid “giving off” the wrong signals during the critical early portions of the interaction.

4.3.2 *The quantification of popularity*

The teen group was remarkable in that almost all the participants had between 100 and 150 names in the automatic dialing registers on their telephones. Many of the names were infrequently used but it was nonetheless common to note the name and number of new acquaintances in this manner. It was important to the teens that the register is full. When questioned on this point it was far less common for participants in the older groups to have full name registers. This is an indication of their social currency. Like the idea that one receives a lot of SMS messages or a lot of messages on their answering machines it is a quantification of popularity that is used when making comparisons of one's social popularity.

Erika (17): I have received seven or eight messages from him today and so I have answered seven or eight messages but that is not the way it is every day you know. When I come home then I often have a pile of text messages from the day but it varies in relation to who you are in contact with and what day it is.

Another variation of this was described by a participant in one of the older groups, who was a coach for a soccer team. He said “I had a team in the Norway cup [a week long soccer tournament] and there were four boys and they had an internal

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competition. They erased everything [in the mobile telephones name register], the one that got the most girl’s numbers . . .” Again, one sees the use of the device as a way to quantify popularity.

4.3.3 In-group definition and control of group boundaries

The data shows that the mobile telephone is one of the strategies used in the development and control of group boundaries. The data indicates that the use of language helps to define a sense of group membership, particularly vis-à-vis the older generation. At the same time, the extraordinary networking potentials that lie in mobile communication mean that it can be difficult for a specific peer group to maintain the boundaries of in and out groups.

Examining the latter first, the use of slang, that is newly created words used by a limited group, denotes the group as unique and separate from other social groupings. The use of slang provides the group with a sense of intimacy and in-group solidarity. Those who are outside the group either will not understand the meaning of the slang or will be clumsy and imprecise in its use. The use of slang among adolescents is particularly common in that it allows them to establish an identity separate from that of parents, teachers and adults.

When considering the use of the mobile telephone and in particular SMS there is an emphasis on homophones, cognates and abbreviations. This has part of its genesis in the somewhat difficult process of entering letters into a message¹² along with the limited number of space in a message. The messages are also the marking of group boundaries. Since there is a certain illicit tinge to SMS messages, particularly those sent and received in school and those having to do with, for example, sexual topics, it is advantageous to camouflage contents. Thus, those who are outside of the group may not immediately recognize the sequence “CUL8R” as being “see you later.”

4.4 The mobile telephone as an element in the presentation of the self

The final dimension of Hyper-coordination is the use of the mobile telephone in the presentation of the self. The analysis based on Table 1 does not specifically touch on this dimension since much of it has to do with direct un-mediated interaction. In this dimension we are more concerned with the physical aspects of the terminals, the style of use within the context of various social situations and the culture that has arisen around these issues.

4.4.1 Issues surrounding style and display

The physical aspects of the mobile telephone were important for the informants. Having the correct style and type of device was seen as being important in one’s presentation of self. It was telling that when asked about which type of telephone they had, several of the respondents were not willing to show their terminals, as they were too old, big or unfashionable. One respondent, Ida (18) noted that she “was not exactly proud” of using her telephone. A mother in one of the older group interviews

¹² The alphabet is arranged in the standard telephone keypad with, for example, A, B and C on the #2 key. Thus to type C one must first be in the text mode and thereafter press the #2 key three times in order to display the C.

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told that her daughter refused to use her mobile telephone because of its size and vintage.

Mia: My 13-year-old is allowed to use her father’s, but she refuses. That belongs in a museum. It is two years old and one can not be seen with it. I had my two daughters on the ferryboat from Denmark last weekend. I said to one of them that they could call home and say that we would be landing at this and that time. ‘With that telephone? Are you crazy?’ It was a blank refusal. She had to change the [SIM] card over to her own telephone. She would not touch the other one in public. She would have to hide to do that.

The informants were quite well oriented about the newer models on the market. It was clear that they knew the models, capacities and possibilities that were included in each of them, though it must be said that the design and visual impact of the handset were important.

The size of the device is important in determining its desirability. It was common to describe the ideal devices as being small. As noted by one informant “It depends on the way it looks and also the size. It is often the small very nice mobile telephones that have the highest status” (Nina 18). The size of the telephone also means that it is not visible. “It is important that it fits in your pocket that it doesn’t stick up so that when it rings they know, that is not too good.” Erik (14) Big unfashionable telephones are often referred to as “bricks” or “refrigerators.” One can also see the emphasis on size in the comments of Inger.

Inger (17) I have a real ugly Bosch telephone.

Interviewer: Why is it ugly

Inger: Because it is big and ugly

Functionality is only a secondary consideration. One informant for example noted that he was interested in buying a new terminal. The actual technical specifications for the device enable it to access Internet content via the so-called Wireless Application Protocol (WAP).¹³ His comments however seem to be more focused on the physical aspects of the device.

Arne (17) I could imagine getting the [Nokia] 7110.

Interviewer: What is that?

Arne: It is the one that is coming soon; it has the roller on it.

Interviewer: Roller?

Arne: Yeah, you can page down, it is real smart.

This striving to have the smallest or best device could however tip over the edge and become vulgar. The most exclusive devices were seen as being simply showing off.

Beyond having the correct device, there is also a well-prescribed style of use and display. The placement on the body indicates one’s *savoir-faire*.

Interviewer: Where do you carry your mobile telephone, on your belt?

Arne (17): Covered up as much as possible.

Interviewer: Covered up as much as possible?

Oda (18): It is tacky to have your mobile telephone in your belt. It is not very cool to show off your mobile telephone.

¹³ This technology allows for the more efficient downloading of material from the Internet including e-mail.

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Interviewer: It is not cool to show it off?

Nina (18) I think that it looks dumb.

Interviewer: Where should it be?

Inger (17): In either your purse or your bag.

Arne: Or in your pocket

Interviewer: Why shouldn't you show it?

Oda: It is not that you shouldn't show it off but you look like the village idiot if you have it in your belt.

Thus, there is a fine balance to be struck. On the one hand one needs to have a savvy in terms of the appropriate models and styles. Further, one needs to know the appropriate way to carry the device and where to include it in one's dress. Finally, one needs to know the line beyond which expensive devices are seen as being conspicuous display.

4.4.2 *The culture of concealed use*

Another issue here is the facility with which one used the mobile telephone in the context of other social situations. Aside from those social activities where one focused on the face-to-face interaction, i.e. intimate discussions with friends, it was acceptable to use the mobile telephone in most other social situations. In some situations such as in the theater and other more formal occasions it was felt that it was more discrete to turn off the sound.

School is another situation in which it was felt that one could use the mobile telephone so long as the sound was turned off and one was not observed using the device. However, given the slightly illicit nature of the mobile telephone in school, it is not surprising that the informants described a set of methods with which to conceal the use of the mobile telephone. Informants related the use of the mobile telephone to pass notes, pool information and other quasi-illicit activities.

During school the informants noted that they used text messages since the sound for the terminal could be turned off and thus not arouse suspicion. The mobile telephone was seen as being a better medium than traditional paper based notes. “It is no use to pass notes because they see it immediately. However, they can not see it if you have your mobile telephone in you pocket for example (Ola 14).”

There is, however a type of judgement as to how much attention one must pay to the “front stage” activities. Use of the mobile telephone while in the context of other situations is not something that is only done by teens. This aspect of the mobile telephone has been a part of its profile from the very beginning of its popularization (Ling 1996).

We have already reported on Erika's management of two parallel activities, i.e. participation in the group interview and interaction with her potentially new boy friend. In Goffmanian terms she was operating on parallel front stages that were to a certain degree exclusionary (Goffman 1959, 139; Ling 1997). When one was involved with situation A, those in situation B were not active. Here, via SMS, this girl was hopping in and out of the face-to-face interaction occasionally in order to negotiate the second interaction.

This situation underscores the difference between the use of voice mobile telephony and SMS. With synchronous voice telephony, one must pay attention as the event

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unfolds. One can only with difficulty and with the forbearance of others have a telephone conversation “on the front stage.” (Goffman 1971)¹⁴

By contrast the use of SMS allows one to operate on the front stage but one must also be conscious of the small-scale boundaries between the front and the back stage. Thus, in those situations wherein it is illicit to use a mobile telephone, such as during school, the areas that are outside of the direct sight of the teacher become, in effect, the back stage, or perhaps even a parallel front stage. These small spaces under the desk, in one’s pocket or in one’s purse allow for the manipulation of the mobile telephone. This in turn allows for parallel communication be it instrumental or expressive.

One’s reputation as being street smart is threatened if they are so clumsy so as to be caught. In fact, friends who are not in class report that they call others sitting in class in order to cause their telephones to ring thus resulting in the loss of the individuals’ telephone, in the worst case, until his or her parents come to school to retrieve it. This, effectively enforces the rule that one turn off the ringing for their mobile telephones while in school. It also describes the covert nature of the device.

5 Conclusion

In this paper we have tried to outline some of the social issues associated with the widespread adoption of the mobile telephone in Norway. The general framework for the analysis shown in Table 1, shows that we were interested in examining the role of Instrumental and expressive communication among various social groups. At the most basic level the mobile telephone was used for security. This was often a topic for elderly respondents. The use of the mobile telephone for coordination was more common for active adults. Two-career parents often talked about this type of use. In the context of this paper we have called this type of interaction micro-coordination

The major shift that we found in the material comes from analysis of the teens and their use of the telephone. In this case we have found that, in addition to the instrumental use, they have adopted the expressive use of the device. This, in addition to the use of the device in the social presentation of self, has lead us to call their use hyper-coordination. This adoption of technology follows from their specific life period. Since they find themselves in a situation where they desire access to peers and wish to distance themselves, to a certain degree, from their parents the mobile telephone is a logical tool in this work. Other advantages are that it allows them new ways with which to develop intimate relationships and to remain abreast of social life.

The next issue here is speculation regarding future developments. Table 2 replicates much of that shown in Table 1. In addition, however, it outlines the potential ability to access information from 3rd party sources, i.e. databases with relatively fixed information as opposed to persons. This potential lies in the development of systems such as WAP, and the third generation mobile telephones now being developed.

Table 2 Future forms for interaction via the Mobile telephone

¹⁴ In addition to the exchange of SMS messages during the group interview, Erika even managed a short telephone call with her potential paramour. In this case she asked permission of the others to accept a call from him.

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	Intimate/Primary	Secondary	Remote	3 rd party information
Instrumental	Security Coordination	Coordination	Security Coordination	Coordination
Expressive	Social interaction Gaming	Social interaction Gaming	Social interaction Gaming	Gaming

With these developments one can suggest that the various coordination functions can be carried over to mobile interaction with for example bus schedules and other types of databases.

In addition, the technology will likely support Chat, IRC, MUD and MOO type activities that are now available on the Internet. Thus, social interaction will be carried out via various servers that allow one to establish friendships and engage in social interaction with others outside one’s immediate geographical peer group (Ling 1999). In addition, these technologies will allow for various types of gaming. These can take the form of either games between individuals, other somewhat more remote friends that are available at the moment or persons with whom one has no “off line” contact. Finally, it may also be possible to play against virtual opponents.

In summary, then, the data shows that we are experiencing a shift in the type of mobile telephony used by teens in Norway. The remarkable thing is the move from the instrumental to the expressive. It is likely that they take this approach to mobile telephone with them as they age and as the intense interest in the activities of the peer group wanes. As they move into young adulthood they will likely continue to use the mobile telephone to a far greater degree than older generations, though the intense use of youth will perhaps be left behind.

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