

## **Mobile Generations: The Role of Mobile Technology in the Shaping of Swedish Media Generations**

GÖRAN BOLIN

Södertörn University

OSCAR WESTLUND

Göteborg University

It is often argued that young people are among the first to adopt new media technologies, and that they are especially keen on taking on all new features connected with mobile technology and the Internet. In spite of this oft-repeated claim, one could suspect that since computers and mobile phones have become so widespread among large portions of the populations in the industrialised world, it might not be technology, per se, that distinguishes the young from the old, but rather the actual ways in which it is used. One approach to discuss this is in terms of media generations. It could be expected that generations that have grown up with different mediated experiences during their formative years will relate to the mobile technology in a variety of ways (cf. Mannheim, 1952 & Volkmer, 2006). In this article, three such generations are analysed: the radio/print generation (born in the 1930s), the TV generation (born in the 1950s), and the mobile technology generation (born in the 1980s). Access and usage patterns are researched, and the degree to which the three generations differ when it comes to their relations to mobile technology is discussed, but also the unifying character of the mobile telephony usage. Our methodological approach is quantitative, analysing results from annually conducted postal surveys that are representative for the Swedish population.

Keywords: Mobile phones, Generations, Media usage, Sweden.

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Göran Bolin: [goran.bolin@sh.se](mailto:goran.bolin@sh.se)

Oscar Westlund: [oscar.westlund@jmg.gu.se](mailto:oscar.westlund@jmg.gu.se)

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### ***Introduction***

In a global perspective, the Nordic states, including Sweden, are at times held as advanced when it comes to access to mobile technologies. Laptops, MP3s, etc., are widely used and practically everyone owns a mobile phone. Demographically, the only Swedish group where access is low is among older, low-educated women (75+) (Bolin, 2008). Mobile devices such as small portable laptops and mobile phones thus constitute an important personal communication tool in the everyday lives of ordinary people in Sweden. Although penetration and access differ quite substantially, there are also common features that imprint the everyday uses of the mobile telephony for most Swedish users. Although mobile phones are available in increasingly more technically advanced and complicated forms, they are, to date, primarily used for personal communication through voice calls and SMS (Ling, 2004; Bolin, 2007; Goggin & Hjorth, 2007). The use of multimedia functions on the other hand, is more limited (Wilson, 2006; Kivi, 2007, Westlund, 2007, 2008). However, with the continuous development of more advanced features, other communicative functions of the mobile technology are on the rise, or are at least expected to be.

Widespread access does not, however, necessarily mean similarity in use. There are, in fact, quite substantial differences between social groups' usage and attitudes. As an example, young Swedes use the SMS function of the mobile technology more than the elderly (Bolin, 2007). It is also an often held claim that young people are more inclined to explore and use new media technologies (Lorente, 2002; Ling, 2004). However, some studies related to mobile technology conclude that the user and adoption behaviour among the youth have many differences, and that they should be viewed as a heterogeneous group (Thulin & Wilhelmson, 2007; see also Pedersen & Ling, 2002 or Westlund, 2007 for research overviews). When it comes to diffusion of new technologies, Rogers (2003) argues the perception that young people always adopt innovations is misleading, and that the outcome of diffusion is specific to the context in which diffusion takes place.

It is purported that the media technology and its dominant uses which an individual embraces from one's youth can be expected to be the media that one keeps a special relation with for the balance of one's life (whereas most people thereafter, as adults, develop a certain scepticism toward new media forms). This is how media generations are supposed to develop, in which common experiences are connected to specific media or media contents (Gumpert & Cathcart, 1985; cf. Forsman & Bolin, 1997). The generation that grew up with the cinema at the birth of the film medium, will bring with it this special experience of film as it was phenomenologically perceived at that moment, in that very technological, cultural and social setting. This will bring persons with similar experiences together. In concert with this argument, those who have grown up with the mobile phone will share similar experiences of this media technology. This also makes the expression 'new media' relative, as what is new for one generation, is not necessarily novel for another. Conversely, it also distances people from each other, or as Gumpert & Cathcart posit, the different media experiences produces 'media gaps which separate people' (Gumpert & Cathcart, 1985, p. 23).

These arguments have been tested in an international study on news and public memory involving nine nations. Ingrid Volkmer (2006a) and her colleagues studied how different national media users in three specific generations related to, on the one hand, media technologies, and on the other, to international media events or news stories such as the moon landing, the Second World War, the Vietnam War, the assassination of John F. Kennedy, the Prague Spring, Watergate, Woodstock, etc. The generations studied were born in three cohorts: the radio generation (1924-1929), the black-and-white TV generation (1954-1959); and the Internet generation (1979-1984). It was concluded that these three generations did relate to international media events differently. The oldest generation was formed by a media environment dominated by radio (to a certain extent film, but this was not elaborated on as the study focused on news) and print media (newspapers and books). A common denominator was that all content was addressed to adults, and consequently their memories involved experiences of their parents' reactions to major historical events, and to other life world circumstances. The second generation was formed by television and popular culture media, and was considered the first 'media generation,' that is, the first generation formed by and in relation to the media. Their memories were characterised by cross-media referencing (Volkmer, 2006b, p. 264). The youngest Internet generation was marked by the increased international media environment that they were part of, and referred much more than the other cohorts to international media in their accounts. However, whereas the oldest generation remembered explicit stories from newspapers, typically their fathers' reactions to reading something in the newspaper or listening collectively on the radio, the youngest generation not only 'very rarely mentioned print media, but did not mention any news format at all' (Rusch & Volkmer, 2006, p. 91).

A major inspiration for Volkmer and her associates was the theory of generations of Karl Mannheim (1928/1952). As many early sociologists, Mannheim sought for the explanations of social change in the continuous exchanges of generations (as did, for example, Ortega y Gasset 1923/1931). In the theory on generational succession, Mannheim argued that not only age was of significance, but the common generational experiences of people born at about the same time. In trying to lay bare a basic structure of any single generation, Mannheim made a major distinction between generation as 'location,' and as 'actuality.' Making analogies with the class position of certain groups in society, Mannheim defined class (and generation) as 'the certain "location" (*Lagerung*) certain individuals hold in the economic and power structure of a given society' (Mannheim, 1928/1952, p. 289). The basis for the generational location is naturally a year of birth: all people born in the same year, for example, have a 'common location in the historical dimension of the social process' (Ibid., p. 290).

Since location is insufficient for defining a specific generation, Mannheim introduced the concept of generation as *actuality*. This refers to those that are located in the same place in the historical process, but that also are bound together through common experiences. This, however, does not mean that the individuals of a biological generation react in the same way to the commonly shared experience of the same historical problem. When faced with a specific phenomenon, individuals can 'work up the material of their common experiences in different specific ways,' which will result in separate 'generation units' (Mannheim, 1928/1952, p. 304). These generation units can be seen as ways of relating to the same phenomena, and as such make up 'an identity of responses' to the problems at hand (Ibid., p. 306).

An important component in the formation of the generational experience is the phenomenon Mannheim calls 'fresh contact,' that is, that moment at which an individual is confronted with a novelty of some sorts (Mannheim, 1928/1952. p. 293ff). As young people are lacking in experience compared to older people, fresh contacts will have a deeper impact on the young person than on the old, and moreover, '[a]ll later experience then tend to receive their meaning from this original set, whether they appear as that set's verification and fulfilment or as its negation and antithesis' (Ibid., p. 298). Experience, then, appears in the form of a 'dialectical articulation, which is potentially present whenever we act, think or feel' (Ibid.). Furthermore, the individual is most receptive in relation to phenomena they are confronted with around the age of 17 years, give or take a few years, according to Mannheim, who, just as Gumpert & Cathcart (1985) refer to research on the formation of language in an individual, of which it is said that the spoken dialect seldom changes after the age of 25. One might therefore expect a certain homology in, for example, the way that 16-22 year-olds relate to a certain media technology and its dominant uses, and that they should bring with them these relations when they grow older.

This article asks if there are discernible patterns of mobile use connected to different generations, and — if so — are these patterns consistent over time in a way that makes it possible to speak of specific mobile generations? Or, as is arguably the case, can the differences between certain age groups be ascribed life phase factors, so that they are expected to change with increased age? That is, are young people active in relation to new media technologies *because* they are young (that is, the relation can be explained by age), or do they bring with them these patterns when they grow up (the relation has generational explanations)?

This article addresses these questions through a comparison of three different generations, and their usage of specific mobile phone functionalities. A common denominator to these functionalities is that they enable interpersonal communication; they are voice calls, SMS and MMS. Inspired by Volkmer, respondents born in 1930s, 1950s and 1980s have been chosen from a set of national surveys from 2003-2007.<sup>1</sup> The choice of these generations can be motivated by their specific relations to dominant media that was introduced and quickly became popular during their formative years. For those born in the early- and mid- 1930s, the radio as a medium heavily influenced social life habits, perceptions about the nation, and family life. For those born in the 1950s, television was the medium that further established some of the patterns introduced by radio, but also introduced new ones. For the children born in the 1980s, the digital media became natural components in their everyday media landscape.

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<sup>1</sup> More precisely, we have analysed respondents born 1931-1937, 1951-1957 and 1981-1987. The year of birth for the data in this article has been slightly adjusted compared to the data in Volkmer's study, due to the character of the data at hand (that is, we do not have access to data earlier than 2003). The empirical data origins from the annual SOM-survey 2003-2007, carried out at University of Gothenburg, and, in connection to mobile use, in cooperation with Södertörn University. It is sent by post to 6,000 randomly chosen Swedes, with an average net response rate of about 65%.

### ***The Swedish Media Landscape***

In order to be able to evaluate the differences that might or might not be found between the three different generations that are analysed in this article, we need to understand the major characteristics of the media landscape during the formative years of each generation. Sweden shares many similarities with other north European countries, both pertaining to social composition and media structure. Radio was introduced in 1925 and spread rapidly within the population. Within two decades, more than two million households had acquired their own radio (Hadenius et al., 2008).

Television was introduced to the public in 1956, and the spread of this medium was even more explosive. Within five years, 1.5 million households had bought a TV set. Within 20 years, television had been firmly 'domesticated' (Haddon 2004) and was found in three million Swedish living rooms. The diffusion on a household level has since further developed, with more TV sets acquired to the same households, and television has become a personal medium (Carlsson & Facht, 2007, p. 263).

Digital media, most notably personal computers and mobile phones, were introduced in the 1980s and diffused more widely to the Swedish public during the 1990s. In 1994, about 20% of Swedish households possessed a computer and the amount was similar for mobile phones. Thereafter followed a rapid increase until the early 21st century, when the growth had reached about 70% for computers and 80% for mobile phones. Internet has also shown a rapid diffusion during this time period, and it has become common that households with computers also have access to Internet (Hadenius & Weibull, 2005).

This development has been paralleled with strong urbanisation (Guteland et al., 1975/1981, p. 33), and increased mobility, in Sweden as in many other nations (Urry, 2007). Although time spent on travel seems not to vary significantly, travelers are spending more time on their mobile phones as a result of new communication technologies, which has given them more opportunities to make their calls (Urry, 2006, p. 364). In this process, the need to organise and coordinate people is seemingly increasing. Researchers on mobile phones have concluded that most uses of the mobile phone fulfill three basic functions: the micro-coordination of individuals, entertainment, and expressive purposes (e.g., Campbell 2007; Ishi, 2006; Pedroso, 2006; Wilska, 2006). If these are privileged user possibilities, the use of mobile phones could be expected to vary according to lifestyle, age and the activities one can connect to these. For example, micro-coordination of movement is more important for those on-the-move between work or school and the home (illustrated by a substantially lower figure for business journeys among the oldest generation in Table 1) (see also Westlund, 2008). The need for expressing oneself is, of course, evenly distributed, but the means for expression should be expected to vary as well, as would means for entertainment. It might, therefore, be of value to map the differences between generations when it comes to activities that would arguably privilege micro-coordination, as in Table 1 below.

**Table 1: Life style related activities for the three generations over time 2003-2007. Activities conducted at least once a week (%).**

	2003	2004	2005	2006	2007
<b>Visit a pub/restaurant</b>					
1980s	25	28	38	28	31
1950s	7	6	6	5	4
1930s	3	2	0	1	1
<b>Engage in evening activities outside home</b>					
1980s	72	64	67	66	58
1950s	48	50	50	45	46
1930s	33	22	21	21	25
<b>Socialise with friends</b>					
1980s	92	92	89	87	83
1950s	62	57	58	58	53
1930s	64	57	66	63	59
<b>Socialise with neighbours</b>					
1980s	18	23	17	22	16
1950s	23	23	26	25	19
1930s	41	39	41	41	34
<b>Make a business journey</b>					
1980s	--	--	--	13	8
1950s	--	--	--	18	20
1930s	--	--	--	2	2

Source: SOM surveys 2003-2007

Comment: The number of responses for each statement vary between 130 and 311 (1980s), 210 and 421 (1950s) 120 and 306 (1930s). No questions were asked about business journeys prior to 2006.

Some of the above activities are arguably of the kind that would privilege micro-coordination, and a high degree of engagement in such activities can be expected to be connected to high levels of mobile phone use. To engage in activities outside of the home is one such activity, as well as to visit pubs and restaurants. At times, these activities probably include socialising with friends, but this is an activity you can also engage in your own home. Nonetheless, your visiting friends may need to call to alert you that they are running late, so this activity can also be said to privilege mobile phone use. All these activities are also more frequently engaged in by the youngest generation. To socialise with neighbours, on the other hand, is not obviously triggering a need for micro-coordination, so this is also an activity where the older generations are more active.

Some of the activities predictably change over the studied period. Those who are born in the 1980s visit pubs and restaurants to a larger extent in 2007 than 2003. This is quite natural, since they, in 2003, were between 16 and 22 years old. In Sweden, you cannot buy alcohol at pubs or restaurants before the age of 18 (and many, if not most, places have higher age restrictions for entry), and from that

follows that with increased age, the possibilities for going to such venues increases. At the other end of the age spectrum, the 1930s generation show a declining habit of visiting pubs and restaurants over the years. The 1950s generation have also lowered their amount of visits, but it is fair to say that neither of the older generations has been very keen on visiting restaurants and pubs over the period.

On the whole, the 1950s generation show a more consistent pattern of activities in relation to the other two, which does not change much over the period. This is perfectly expected, since this generation does not meet with any dramatic breaks and changes in their life phases over the period analysed. Such changes are more obvious among the youngest and the oldest respondents. The youngest are at the threshold between school and working life, home settlement, etc., whereas the oldest, who was between the ages 66-72 in 2003, just has entered into retirement.

However, all this is more connected to phase of life, that is, with explanations connected to age rather than generation. If we instead look at how patterns of use develop over time for our three groups, we might see to what extent behaviour is consistent.

### ***Voice Calls***

For the vast majority of Swedish mobile phone owners, the phone's is first and foremost an interpersonal tool for oral communication. This is also so for the three generations at focus here, although the intensity and frequency with which they call vary. Furthermore, not only the frequency of calling differs quite substantially between the generations. There is also a general consistency over the years concerning how different generations use the mobile phone for voice calls. Very few in the youngest generation do not use the cell phone for voice calls, and although the amount of non-voice callers in the 1950s generation is somewhat higher, the differences are decreasing slowly over the years, as can be seen from Table 2.

It is also interesting to note that few among the 1930s generation use their mobile phone for voice calls on a daily basis. Rather, it is being used weekly or monthly, which reflects their needs for mobile communication in relation to their lifestyle and social orientation. They might prefer to keep their habits of deciding meetings with others beforehand, and not to change these arrangements in the last minute by a mobile voice call. It might also be that they more seldom encounter situations where they have a need for micro-coordination of different daily activities. However, even if the respondents in the 1930s generation use their mobile phone less for voice calls than do the other generations, their usage does in fact increase over the time period.

The differences between the 1980s' and 1950s generations are obvious if comparing those who call on a regular basis, that is, those who call on a weekly basis or more — are what we might call 'regular callers.' From that perspective, 93% among the 1980s generation make voice calls (in 2003), compared to 80% among the 1950s generation. When comparing even more frequent usage, for example, those who call four times a day or more, the gap between the 1980s' and 1950s generations further increases. These differences have become greater over the years. At the same time, it needs to be acknowledged that larger parts of all generations call more often.

**Table 2. Voice calls for three generations 2003-2007 (%).**

	1980-generation					1950-generation					1930-generation				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Never	2	1	1	1	0	8	6	5	5	2	29	18	16	18	6
At least once a month	7	3	1	4	1	12	9	14	7	10	19	29	26	21	31
One or several times a week	38	37	34	16	18	36	42	32	28	26	42	36	51	39	46
1-3 times a day	29	36	35	36	37	19	20	28	27	27	7	16	5	16	11
>4 times a day	26	23	29	43	44	26	22	21	33	36	3	1	2	6	6
Number of responses	200	170	158	130	126	216	211	222	223	199	154	152	146	141	112

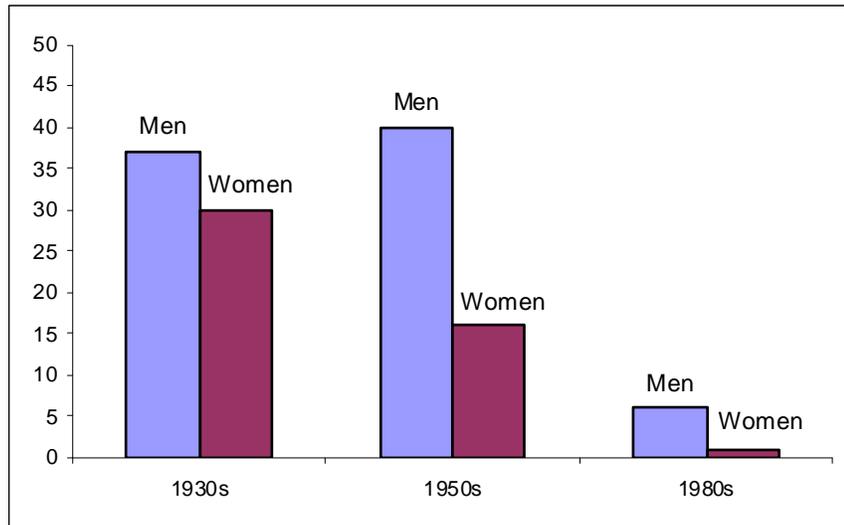
Source: SOM surveys 2003-2007

Voice calls may serve many functions, such as coordinating people, sending/receiving information, chatting away some dead time on the bus, etc. All three generations increase their calling over the period, although it is also clear that the youngest generation is increasing their calling more than the other two generations. Furthermore, this increase is in frequent calling, that is, more and more individuals within the same generation call daily and also several times a day. Also, the 1950s generation has become increasingly active in calling, but not as much as the youngest generation. For the oldest generation, on the contrary, the most significant change is that their calling pattern changed from owning a mobile phone yet not using it at all, to calling occasionally a few times a month.

The differences between the three generations indicate that calling over the mobile phone is part of everyday life routines among the two youngest generations, but not among the eldest. One explanation for this could be that older generations do not need to micro-coordinate as much as do younger generations. For want of a better term, we could call this 'life cycle explanations.' As we know, that much voice calling is connected to working life (or at least paid for by employers), we can expect people who are outside of working life, such as senior citizens, to call less often.

There are significant differences between men and women within the different generations. Within each generation, men more frequently make voice calls than do women. The year 2006 marked a point when there was an especially high general increase in voice calling. Figure 1 illustrates that much of the increase was accounted for by men. Until 2005, calling patterns among men and women within the 1980-generation were actually not that distant from each other, a statistic that also obviously changed in 2006.

**Figure 1. Voice calls at least 4 times/ day among three generations 2003-2007 (mean), divided by sex (%).**



Source: SOM surveys 2003-2007

If we look at the group that we might call 'frequent callers,' that is, those who speak over the mobile phone at least four times a day, we can see that this group consists of more men than women, and especially so among the 1950s generation. One reason for this is that in Sweden, three times as many men as women have a mobile phone paid for by their employer, a pattern that has been consistent over the entire period (Bolin, 2007). This also explains the increase of this group among the youngest generation, as they are gradually becoming established within working life. This is also why the difference between men and women is at its strongest among the 1950s' generation, as this generation is firmly established on the job market, whereas the youngest in the 1980s generation are still on their way into the market.

In a comparison between generations, it also is clear that men within the 1950s generation actually use voice calls more often than women from the 1980s generation. Being a frequent voice caller was, in 2007, equally as common among young men as among young women (although men have during previous years been more active). One might say that this is a gendered use pattern that is privileged by conditions on the labour market, and as such gender seems to be a stronger factor when it comes to shaping user habits than is the generational belonging. In fact, this is one of the strongest demarcation lines when it comes to social differentiation.

### **Messaging**

During the 1990s, the communicative functions of the mobile phone were extended to short messaging services (SMS), which made it possible for people to exchange short messages of text and symbols. Apart from voice calls, the communication by SMS is asynchronous, meaning that it is disembedded from time boundaries. It is commonly known as a youth phenomenon in Sweden — a relatively cheap form of communication that enables people to express themselves in a less direct manner. It seems as if it also fulfils the same basic three functions of the mobile phone, as do voice calling: micro-coordination, expressive features, and entertainment (having something to do to kill time).

By 2003, SMS-messaging was already fully integrated into the everyday lives of the 1980s generation. Texting has since further increased, and in 2007, this whole youth group can be considered regular users, as is revealed by Table 3. In fact, almost 80% send text messages daily, and almost half of the generation more than four times a day. This can be contrasted with the very low levels of messaging made by the eldest generation, where only a tiny fraction can be considered frequent users. The changes in this group concern a change from non-usage at the beginning of the period, to using it occasionally in 2007, just as with calling. In 2003, only about 20% used SMS at all, and the frequency among the users was relatively low. And although frequency in use has increased somewhat, sending SMS messages cannot be considered a regular routine in the life of the 1930s generation.

The 1950s generation, however, have used texting occasionally from the start, but there are now more of them that enter into a frequent user stage. Although the frequency of messaging is far from as intense as among the youngest generation, it is still used among a majority of the mobile phone owners.

**Table 3. SMS use among three generations 2003-2007 (%).**

	1980-generation					1950-generation					1930-generation				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Never	3	3	3	2	1	28	27	21	23	10	81	73	66	72	61
At least once a month	10	6	5	4	1	29	33	30	23	19	17	16	22	11	25
One or several times a week	32	34	37	25	21	39	39	37	38	38	2	9	11	15	8
1-3 times a day	26	32	31	37	33	10	7	6	13	22	0	1	1	2	3
>4 times a day	30	25	24	32	46	4	3	5	4	12	0	1	0	0	3
Number of responses	200	170	158	130	126	216	211	222	223	198	154	152	146	141	108

Source: SOM surveys 2003-2007

Besides text messaging since 2002, Swedes can also use their mobile phone for exchanging MMS or multimedia messages. In 2003, only one in 10 within the 1980s generation used this feature at all, and the amount was even smaller among other generations. Over time, there has been an extraordinary adoption of this communicative function among the youth. However, it has not become part of everyday life communications. Rather, it is most commonly being used once a month. The number of users among the 1950s generation has also increased, but very few use it more than once a month. Finally, there are few changes among people from the 1930s generation; there are no surprises that they show no desire for adding multimedia messages to the few messages they send.

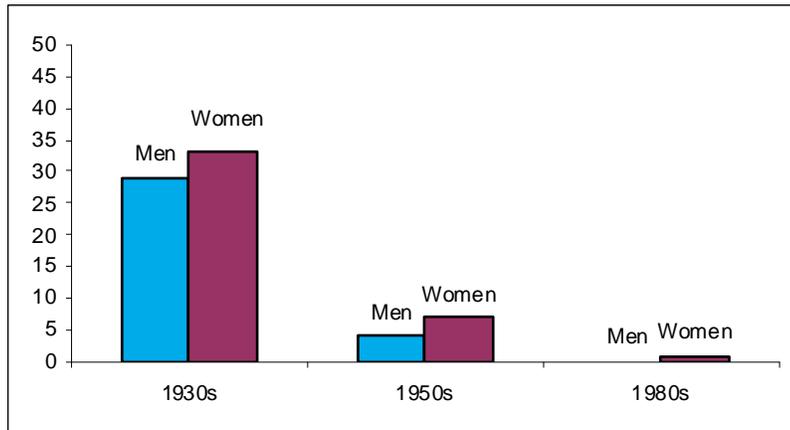
**Table 4. MMS for three generations 2003-2007 (%).**

	1980s generation					1950s generation					1930s generation				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Never	91	62	59	43	33	94	91	90	79	66	99	100	98	98	94
At least once a month	4	21	27	31	52	3	6	8	17	25	1	0	2	1	6
One or several times a week	6	14	10	20	13	1	2	1	3	8	0	0	0	1	0
1-3 times a day	1	1	2	5	1	0	0	0	0	1	0	0	0	0	0
>4 times a day	0	2	1	2	0	1	0	0	0	0	0	0	0	0	0
Number of responses	200	170	158	130	126	216	211	222	223	195	154	152	146	141	107

Source: SOM surveys 2003-2007

The results have confirmed that the engagement with SMS is highly connected to the youngest generation, and even more obviously so with MMS. The analysis of gender differences concerning the use of SMS shows that women use messaging more than men, which is the opposite to the use of voice calls. These differences were decreasing among the 1980s generation between 2003 and 2005, but has since increased again. The results convey gendered communication patterns that are prevalent among different generations, just as for voice calls. Voice call functions are used predominantly by men, and SMS by women independent of generation.

**Figure 2. SMS at least 4 times/ day among three generations 2003-2007 (mean), divided by sex (%).**



Source: SOM surveys 2003-2007

As we can see from Figure 2 above, the gender patterns are reversed compared with what was the case with voice calling. If we disregard the oldest generation, as very few in the group send text messages at all, we can firstly see that the youngest generation is the most active when it comes to texting, although there are also those among the 1950s generation that do send text messages. For both these groups, however, we can see the women are more active text messengers than men.

It is very obvious that texting is not very common at all among the oldest generation, but those who use the text function are women, which makes texting more common among females than males in all generations.

### ***Generational User Patterns***

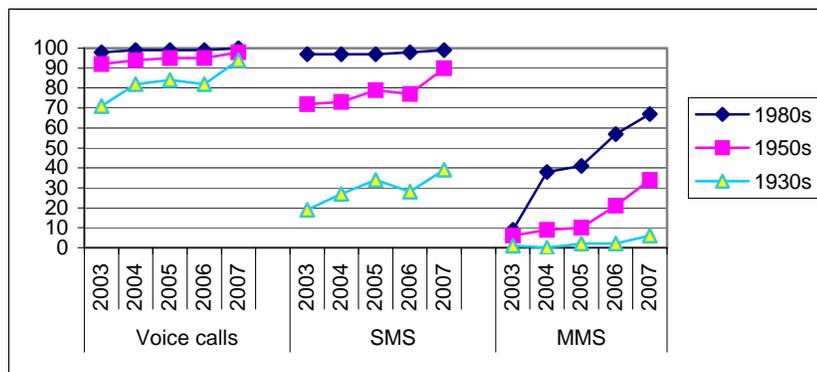
It has often been stated that youth is the most interesting category when it comes to uses of new media. This article has confirmed the assumption that the 1980s generation more frequently than other generations use their mobile phone for interpersonal communication be it through voice calls, texting or the sending of MMS. To qualify this a bit, however, it needs to be distinguished three different overall patterns of use.

If we look at voice calls, it is obvious that both the youngest and the middle generation call substantially more than the oldest generation. And although the 1980s generation does so to a higher extent than the 1950s generation, the difference is not that big. In order to differentiate we need to break these figures down by sex, where we can see the distinct differences between generational units. As this is not our focus here, we refrain from presenting this analysis.

If we then look at texting, again the youngest generation is the most active, but this time, the gap between the 1980s' and the 1950s generation is larger. And for the oldest generation, it is even still a greater gap.

Lastly, if we look at the exchanging of multimedia messages and moving images, this is only engaged in by the youngest generation to any mentionable extent. We can sum this up in the more generalised figure for voice calls, text, and multimedia messaging over three generations as in Figure 3 below.

**Figure 3. Voice calls, SMS and MMS use for three generations of mobile phone owners 2003-2007 (%).**



Source: SOM surveys 2003-2007

Comment: The figures represent those who engage in the activity at all.

We come to an important conclusion when it comes to voice calling among mobile phone owners. In 2007, there are no significant differences in the habits among the three generations analysed (although at the start of the period, one-third of the oldest generation did not use the mobile phone that they owned). The differences in interpersonal communication patterns are found in comparisons of how other functions are used, namely SMS (text) and MMS (image). These differences between generations also seem to persist over time. Although more mobile phone owners from the older generations have become acquainted with technological possibilities such as SMS and MMS over the years, the younger generations have been far more eager to adopt. In conclusion, the communicative patterns among the three generations vary by the extent to which they use different functions. Table 5 illustrates that the oldest generation only use one function, while younger generations tend to use more functions.

**Table 5. Generational communication patterns.**

	1980s	1950s	1930s
Voice	x	x	x
Text	x	x	
Image	x		

Our conclusion is that we indeed *can* speak about three separate generations, but how should these be characterised? Should they be labelled according to the dominant medium in their formative years in the way that Volkmer and her colleagues have done? Or should we find other characteristics, for example other defining events that might have been influential during their formative years?

To us, it seems not very wise to argue for the label mobile technology generation, for the very simple reason that we do not really know if 'mobile' will be an intelligible concept in the near future. That we today speak of the 'mobile,' rather than the 'mobile phone,' as the device is so much more than a mobile telephone, is a case in point. With new technological development of powerful mobile devices that can be used for surfing the Web, accessing e-mails, chat services, news feeds and television and radio streaming, we are facing a situation where it might be hard to distinguish a mobile (phone) from a laptop computer. It might, therefore, be better to try to find a less time-bound label, for example, focusing on the communicative forms and symbolic cues that are favoured by the mobile phone users.

It should be noted that the three different features that separate these generations in this analysis are connected to three different communicative forms: sound, text, and image. And although many older people are active in their mobile phone uses, the young ones take advantage of more options that the mobile technology provides them with. Arguably, this could be connected to the fact that the 1980s generation have grown up with computers, and hence are used to manipulating digital texts and images. This involves both synchronous and asynchronous communication (whereas the oldest generation seem to prefer synchronous talk).

### **Conclusions**

We have, in the above, analysed the role of the mobile technology in the shaping of media generations in Sweden. We are of course aware that the temporal perspective of only five years is insufficient to draw any general conclusions. However, we believe that the indications that we can find in the data of consistent generational patterns point us in a certain direction. It is reasonable to conclude that the youngest generation take advantage of a wider range of communicative cues in their communication with distant others. And it will indeed be interesting to explore deeper the consequences of this — for the ways in which these generations relate to the surrounding world, to other individuals, to technology, etc. However, for such an aim, a more sensitive qualitative methodology needs to be adopted, along with the continued quantitative analysis.

**References**

- Bolin, G. (2007). 'Mobiltelefonen som interpersonellt medium och multimedialt sökverktyg' (The mobile phone as interpersonal medium and multimedia information tool), pp. 405-414 in S. Holmberg & L. Weibull (eds): *Det nya Sverige (The new Sweden)*, Göteborg: SOM-Institutet.
- Bolin, G. (2008). 'Mobila generationer i skilda världar', pp. 435-444 in S. Holmberg & L. Weibull (Eds.): *Skilda världar*, Göteborg: SOM-Institutet.
- Campbell, S.W. (2007). A Cross-cultural Comparison of Perceptions and Uses of Mobile Phones. *New Media & Society*, vol. 9(2): 343-363.
- Carlsson, U., & Facht, U. (2007). *MedieSverige 2007 (MediaSweden 2007)*, Göteborg: Nordicom.
- Forsman, M., & Bolin, G. (1997). 'Video', pp. 331-342 in U. Carlsson & C. Bucht (Eds): *MedieSverige 1997 (MediaSweden 1997)*, Göteborg: Nordicom.
- Goggin, G., & Hjorth, L. (2007). *Mobile media 2007*, Sydney University.
- Gumpert, G., & Cathcart, R. (1985). Media Grammars, Generations and Media Gaps. *Critical Studies in Mass Communication*, vol 2(1): 23-35.
- Guteland, G., Holmberg, I., Hägerstrand, T., Karlqvist, A., & Rundblad, B. (1975/1981). *Ett folks biografi. Befolkning och samhälle i Sverige från historia till framtid (The biography of a people. Demographics and society in Sweden from historic times until the future)*, Stockholm: LiberFörlag/Publica.
- Haddon, L. (2004). *Information and Communication Technologies in Everyday Life. A Concise Introduction and Research Guide*, Oxford: Berg Publishers.
- Hadenius, S., Weibull, L., & Wadbring, I. (2008). *Massmedier. Press, radio och tv i den digitala tidsåldern (Mass media. Press, radio and TV in the digital age)*, Stockholm: Ekerlids förlag.
- Ishi, K. (2006). Implications of Mobility. The Uses of Personal Communication Media in Everyday Life. *Journal of Communication*, vol. 56(2): 346-365.
- Kivi, A. (2007). *Diffusion and Usage of Mobile Browsing in Finland 2005-2006*, Paper presented at Mobile Media, 4<sup>th</sup> international CICT conference, DTU, Lyngby, Denmark.
- Ling, R. (2004). *The Mobile Connection. The Cell Phone's Impact on Society*, Amsterdam: Morgan Kaufmann.
- Lorente, S. (2002). *Juventud y teléfonos móviles*. Madrid: Instituto de la Juventud, no. 57.

- Mannheim, K. (1928/1952). The Problem of Generations. Karl Mannheim: *Essays in the Sociology of Knowledge*, London: Routledge & Keegan Paul.
- Ortega y Gasset, J. (1923/1931). *The Modern Theme*, London: The C.W. Daniel Company.
- Pedersen, P.E., & Ling, R. (2002). Mobile end-user service adoption studies: A selective review. *Scandinavian Journal of Information Systems*, 14. <http://ikt.hia.no/perrep/publications.htm>
- Pedroso, S. (2004). Information Technology and Consumption Habits among Young People from Rio de Janeiro. pp. 131-155 in T. Toivonen & T. Virtanen (eds). *From Time to Place: Interpretations from Sociology*, Turku: Publications of the Turku School of Economics and Business Administration.
- Rogers, M. E. (2003). *The Diffusion of Innovations*. New York: Free Press.
- Rusch, G., & Volkmer, I. (2006). Germany. pp. 69-93 in Ingrid Volkmer (ed.) *News in Public Memory. An International Study of Media Memories across Generations*, New York: Peter Lang.
- Thulin, E., & Vilhelmson, B. (2007). Mobiles Everywhere. Youth, the Mobile Phone, and Changes in Everyday Practice. *Young*, vol. 15(3): 235-253.
- Urry, J. (2006). Travelling Times. *European Journal of Communication*, vol. 21(3): 357-372.
- Urry, J. (2007). *Mobilities*, Cambridge: Polity.
- Volkmer, I. (ed.). (2006a). *News in Public Memory. An International Study of Media Memories across Generations*, New York: Peter Lang.
- Volkmer, I. (2006b). Globalization, Generational Entelechies, and the Global Public Space. pp. 251-268 in Ingrid Volkmer (ed.): *News in Public Memory. An International Study of Media Memories across Generations*, New York: Peter Lang.
- Westlund, O. (2007). *Mobiltelefonanvändning — en forskningsöversikt (Mobile Phone Use – A Research Overview)*, JMG report series number 47, Göteborg: University of Göteborg.
- Westlund, O. (2008). 'En mobilt uppkopplad nyhetsgeneration?' (A mobile and connected news generation?), pp. 445-456 in S. Holmberg & L. Weibull (eds): *Skilda världar (Separated worlds)*, Göteborg: SOM-Institute.
- Wilska, T. (2003). Mobile Phone Use as Part of Young People's Consumption Styles. *Journal of Consumer Policy*, 26:3, pp. 441-463.

Wilson, J. (2006). 3G to Web 2.0? — Can mobile telephony become an architecture of participation?  
*Convergence*, vol. 12(2): 229-242.