James E. Katz   A Nation of Ghosts?

Choreography of Mobile Communication
in Public Spaces

This conference on mobile communication, with its focus on social interaction and political involvement, explores some exciting and dramatic changes taking place in around the world and, quite appropriately, especially in Hungary. Hungary as a country and Hungarians as a people have historically been leaders in telecommunications. For instance, Hungary was the first country to have regular commercial "on-line" news service and opera broadcasts (in these cases, via the telephone network).[1]

The conference is fateful in another way as well. It is held in April 2003, which marks the 30th anniversary of the first personal mobile phone call.

But beyond the historical setting, the topic of the conference is worthy in itself. Cell phones and other personal communication technologies continue to be embraced by people across the entire social spectrum, so much so that their popularity is not only rivaling, but even appears to be surpassing that of that most ubiquitous telecommunication

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[1] In the early 1890s, "Telefon Hirmondó" began service in Budapest and continued until 1925. It was described in 1922 by an American visitor as a telephone-newspaper that had "42 party lines, serving some 6000 subscribers. Each station has two or more receivers, but no transmitting apparatus. It is the stentor at the central office who does all the talking over this system of wires, and is heard by all subscribers at one and the same time. The transmission of news begins at nine o'clock in the morning and is carried on throughout the day in accord with a fixed schedule, so that any one interested in a particular class of information knows just when to listen in. In the afternoon a short story is offered, or a chapter from a continued story. At four-thirty, the concert of the Imperial Band begins, transmitters being placed about the bandstand. While in the offices of this unique newspaper, about five o'clock one afternoon, I heard the stentor announcing the personnel of the artists who were to sing at the Budapest Opera House that evening, and later, at the home of the manager of this newspaper, I enjoyed the privilege of listening to Wagner's 'Die Walküre', in common with other subscribers throughout the city." (Charles E. Duffie, "Why I Believe in Government Radio", *Popular Science Monthly*, October 1922. Retrieved from http://earlyradiohistory.us/1922govt.htm, last accessed June 15, 2003.)

technology, the television.[2]

The phenomena of how they are used and with what effect are of growing interest to scholars, and a rapidly growing literature has been focusing on the questions of social management of the process.[3] Naturally enough, these studies often target the unusual, the ethnomethodological, and the normative aspects of this technology. Too, when one considers the folk discussions as reflected in casual conversation, editorial pages of newspapers, and chitchat at social gatherings, one also picks up a sense of unease about what these devices are not only doing for us but also to us.[4]

Disturbances to Ordinary Communication Choreography

Undergirding much of the discussion, however, is the often-tacit question of whether the social and phenomenological disequilibria that mobile communication set in motion are in their very essence transient and epiphenomenal, or rather profoundly at odds with human nature. That is, on the one hand, we see that people are everywhere using and enjoying their mobile phones. And, on the other, we hear everywhere people complaining about the irritation they experience when others use these technologies.[5]

One way this topic could be explored is in terms of whether these disturbances are normative, and thus likely to disappear, or inherent in

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[2] James E. Katz (ed.), *Machines That Become Us: The Social Context of Personal Communication Technology*, New Brunswick, NJ: Transaction Publishers, 2003.

[3] Leopoldina Fortunati, "Italy: Stereotypes, True and False", in James E. Katz and Mark Aakhus (eds.), *Perpetual Contact: Mobile Communication, Private Talk, Public Performance*, Cambridge: Cambridge University Press, 2002; Rich Ling et al., "Mobile Communication and Social Capital in Europe", in this volume; Ronald E. Rice, "What's New about New Media? Artifacts and Paradoxes", *New Media and Society*, vol. 1, no. 1 (1999), pp. 24–32.

[4] Kenneth J. Gergen, "Self and Community in the New Floating Worlds", in this volume; Satomi Sugiyama and James E. Katz, "Social Conduct, Social Capital and the Mobile Phone in the U.S. and Japan: A Preliminary Exploration via Student Surveys", in this volume.

[5] Leopoldina Fortunati, "The Mobile Phone and Democracy: An Ambivalent Relationship", in this volume; Ling et al., *op. cit.*; Ronald E. Rice and James E. Katz, "Mobile Discourtesy: National Survey Results on Episodes of Convergent Public and Private Spheres", in this volume.

the nature of the way we operate as humans.[6] To put the matter prosaically, is the irritation and displeasure that results from the public use of mobile phones comparable to ethics, politics or fashion, all of which can change rather quickly, or biology, which changes but little over many generations.

Examples may serve to illustrate the point. We observe phenomena such as political regimes (e.g., socialism) or patterns of men's facial hair (e.g., goatees) which seem odious at one time and attractive at others. We also apprehend phenomena that initially seem plastic and tractable but prove ultimately intransigent, such as listening attentively to two conversations at the same time or going without sleep indefinitely. Both of these tasks seem plausible, but despite repeated attempts turn out to seem to be beyond human capability.

When it comes to mobile communication, a legitimate question may be raised as to whether we are hardwired in a way that prevents us from being comfortable with mobile phone use by others when we share public space with them. Many experts assert that the irritation people experience from public use of mobiles is a matter of acclimatization and thus is transient: with exposure comes equanimity. This may indeed be the case. But it may not be the case. I think there are some good reasons that humans are likely to continue to be at least partially unhappy with the public use of the mobile phone, and I would like to investigate some of those reasons here.

I explore this question drawing on several disciplines. The primary one, though, is social psychology. I do this with some trepidation because we have some highly respected experts in the field present here today. Yet, as I hope to demonstrate, the investigation of this topic is wide-ranging, and cuts into areas that as far as I can tell have been little explored in terms of some of the enduring issues about the public use of mobile communication.

Defining Hardwired

Before delving further into the possibility that we will be permanently irritated by the process of public mobile communication, it is necessary for me to address the concerns strict social constructionists would have, for they deny that there is much if anything that could be plausibly hard-

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[6] Ronald E. Rice, "New Patterns of Social Structure in an Information Society", in J. Schement and L. Lieverouw (eds.), *Competing Visions, Complex Realities: Social Aspects of the Information Society*, Norwood, NJ: Ablex, 1987, pp. 107–120.

wired.[7] I address these concerns so that those of you who do hew to a heavily environmental viewpoint in the "nature versus nurture" debate do not dismiss out of hand my entire intellectual enterprise even as I seek to unfold it. For those of you who are stalwart in rejecting the usefulness of the term hardwired in its more far-reaching sense, please substitute the phrase "strongly conditioned by our culture". If you do not accept the notion that people are behaviorally conditioned, I would suggest that you use the term "enduring artifact of our socially constructed culture". However, the point here is less the source of these potentially invariant aspects of human nature than it is the degree to which the public use of mobile phones runs up against some invariant dimension of humans. (On the question of which of these *Weltanschauungen* are most usefully applied to the domain that contains the problem which we are analyzing here, my own view is pragmatic: there are a variety of lenses that can be of greater or lesser use in understanding the phenomena under consideration.)

To begin, an explanation of what I mean by hardwired is in order. By this term, I assert that we have ingrained predispositions to act in a certain way. Following the late Stephen Jay Gould,[8] I would claim that these ingrained predispositions generally have the consequence of often (but not necessarily) helping a species survive, that is, we and all other living organisms have "the selfish gene".[9] Having said this, I do not claim that we are micro-genetically driven, in that we have a gene for every specific trait.[10]

Moreover, this is not the same as asserting that we have no choice in the matter. I think the situation is analogous to food. We all must have at least a modicum of interest in food, and doubtless we are genetically programmed to want it. Yet there is tremendous variety in what people enjoy eating, how much they eat, and what they avoid eating. Our genetic programming can in times of abundance be quite dysfunctional and lead us to over-eat, and an early death, hardly the recipe, as it were, for survival! And, despite the fact that we are genetically programmed to eat, it is possible for people to decide they do not wish any

[7] William R. Clark and Michael Grunstein, *Are We Hardwired? The Role of Genes in Human Behavior*, New York: Oxford University Press, 2000.

[8] Stephen Jay Gould, *Dinosaur in a Haystack: Reflections in Natural History*, New York: Harmony Books, 1995.

[9] Richard Dawkins, *The Selfish Gene*, New York: Oxford University Press, 1976.

[10] Steven Pinker, *The Blank Slate: The Modern Denial of Human Nature*, New York: Viking Press, 2002.

longer to eat, and starve themselves to death. In the cases of protests, this could be interpreted as demonstrating the triumph of willpower over biological dictates.[11]

Therefore, in some sense those who hope that we might "get over" our obsession with food are fighting an uphill battle. Too, those who might wish to restrict the public sale of food are also unlikely to succeed over the long haul. This brings us back to the focus of inquiry, namely the possibility that it is inherently pleasurable to contact others in our circle using mobile phones, including and perhaps even especially in public places, but equally it is irritating to be around strangers who are using their mobile communication devices in public places.

The Presence of Others

As to the first of these processes – the pleasure of our communication activities – it seems very much the case that we are hardwired to seek social contact. Left to our own devices (here you will forgive the double entendre), we will be inclined to find others with whom we can communicate, that is we will seek Perpetual Contact.[12] Of course, this is an impulse that varies in degree from person to person, and is possible to resist. Nevertheless, it is common enough to be characterized as a human trait. It is noteworthy that even the definition of introvert connotes a preference for a few close and intense communication encounters over many superficial ones, rather than a preference for no contacts whatsoever.

The reasons for this preference for contact would seem apparent. Using our communication skills, we are able to organize individual resources into a collective that can turn a mammoth into dinner or send an astronaut to the moon. Further, the prolonged helplessness of infants is easily discernable, and the infant learns or is programmed to present numerous communication strategies with which to engage an adult's attention. These include the coo and the smile. Clearly, there is a reason why a baby's scream is so hard to ignore.

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[11] Ellen Ruppel Shell, *The Hungry Gene: The Science of Fat and the Future of Thin*, New York: Atlantic Monthly Press, 2002.

[12] James E. Katz and Mark Aakhus (eds.), *Perpetual Contact: Mobile Communication, Private Talk, Public Performance*, Cambridge: Cambridge University Press, 2002. Colleague Mark Aakhus and I chose for our edited book surveying the worldwide consequences of the mobile phone the term "perpetual contact" to imply that contact with others is the homeostatic situation many prefer.

According to child psychologist Esther Cohen (personal communication), it is a fairly common phenomenon for infants and toddlers to try to open the eyes of their sleeping parents. I think that most of us are able to confirm directly or indirectly the validity of her observation. She suggests that children have much difficulty separating physical presence and emotional presence, so that when parents are present with their eyes shut, and are not responsive to their kids, the kids can feel distress with this imbalance. Hence the best and easiest way for them is to try to pry open the eyes of the parents, assuming that eye contact will bridge the gap between the physical and the emotional presence. This will re-establish the normal situation, namely that the parents are alert and able to interact with (and thus protect) the child.

This same situation makes it hard for homebound spouses of tele-commuters to ignore the fact the telecommuter is in a state of "absent presence". They continually find reasons to interact with the spouse, and often find it difficult to accept the fact that even though the telecommuter is physically present, the expectation is that the telecommuter should be unavailable. (Certainly, the similar problem of ignoring someone who is present works in the opposite direction as well.)

So drawing on these examples, several reasons could account for why people will have continuing difficulties with the use by others of mobile phones in public: such use cuts against deeply engrained patterns of behavior.

In-Group versus Out-Group Communication Choreography

A second trait is that we are in-group/out-group sensitive (often referred to as the "social identity" approach). We like people who are part of our own group, and tend not to like people who are members of the out-group. This holds true regardless of the distinguishing trait. This phenomenon can be readily observed in daily life. Young people join one or another fraternity and feel loyalty to members of their own "superior" fraternity, and are competitive with the "inferior" members of other fraternities. This robust finding is readily reproduced in the social psychological laboratory. For instance, Tajfel and Turner[13] have shown the following: upon completing a non-meaningful task subjects are randomly informed that they belong to one group as opposed to

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[13] Henri Tajfel and John Turner, "An Integrative Theory of Intergroup Conflict", in William G. Austin and Stephen Worchel (eds.), *The Social Psychology of Intergroup Relations*, Monterey, CA: Wadsworth, 1979.

another (e.g., "high estimators" versus "low estimators" of the number of dots on a sheet filled with dots). Bonds quickly form among those who belong to one arbitrary group, and the members of any given group soon begin commenting about the ways they are superior to the other group. Loyalty, pride, and esprit-de-corps grow among the membership of one group, but boundaries arise against outsiders, who begin to be seen in less favorable terms. (Again, we are speaking in generalities, and readily admit to occasional exceptions to these social processes.)

The territoriality issue must also be considered. People are sensitive about their immediate space (as Edward Hall has shown in his classic work). Interestingly, some observational research has been done about the use of public phones in public space. This research has demonstrated that people will talk longer on the public phone if someone is waiting to use the phone. That is, people defend what was public space, holding it as their own territory, if it appears it will be invaded or used by someone else. (Similar results have been shown with parking spaces: individuals leaving a parking space will take significantly longer to depart if someone else is waiting to take the space.)

By extension, we could hypothesize that the use of public space to make mobile phone calls violates our sensibilities in a variety of ways. One of them is the simple stimulation that occurs when others are in our presence. This simple physiological stimulation is also accompanied by some interesting collateral consequences, such as the fact that we are likely to find ourselves stimulated to perform better on tasks we know well, but worse on those that are difficult or unfamiliar ("performance anxiety").

A further violation is that these others are engaged in acts of unreciprocated communication. As such, we are physiologically prepared to engage with them, yet they are engaged elsewhere. The problem of unreciprocated communication is one that seems highly problematical as it relates to mobile phone use. It has often been noted that we generally do not object to two people having a conversation in the seat behind us on a train. Yet we find it distracting when a person is talking on the mobile, that is, when there is not a conversational partner so that we can also hear the other half of the conversation.

Does Being a "Third Wheel" Make a Difference?

My research suggests that people do not mind mobile phone use of their partner when the "distant present" individual is a member of the in-group. This would account for the popularity of using mobiles at parties: the "distant other" can be included with the rest of "the gang". Prob-

lems though often arise when the "distant present" person is not seen as a member by the non-mobile phone using partner. For instance, in focus groups many young people complain about their friends or paramours receiving calls from their buddies. These calls are ranked as highly irritating and can threaten an entire relationship.[14]

Specific Reactions in the Brain

Research has established that certain areas of the brain, and only those areas of the brain, are stimulated when we see various facial expressions.[15] This means that facial expressions have a phylogenetic component, and that they are about as hardwired as hardwiring can get. I do not know if there is a comparable process going on in terms of speech, though it may well be the case. The implications, though, are that we might have a difficult time not reacting to "half" of a conversation.

Liminal Transitions

The mobile phone is often used during transitions from place or activity. For example, I have commonly observed that the first thing people do in the U.S. upon exiting their car after having parked is to check their phone for messages, or begin to make phone calls with it. Likewise, as people leave class buildings, they immediately begin using the mobile phone. Transitions – such as leaving a table after lunch with a friend or walking along the street – are also common locations for usage. They not only keep the individual company during these transitions, but may provide a sense of reassurance. This is a topic that merits further investigation.

Ekistics

Let me return to the question of space, and touch on an important dimension in our examination of the question of the choreography of mobile communication in public places. Anthony Townsend has been a leader in examining the way in which mobile communication affects the use of urban space. Indeed, the field of ekistics – the science of human settlements, including urban or community planning and design – has much to offer in terms of integrating these devices into our social rou-

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[14] Rice and Katz, *op. cit.*
[15] Mark G. Frank, personal communication, April 3, 2003.

tines with the least harm (or even potential benefits added) to the quality of life. One observation that we can derive from the work in this field is that people generally find large open urban spaces uncomfortable. They often feel anomic, isolated, frightened or angst-ridden. Having other humans sharing that space, milling about, enjoying themselves, eliminates these feelings. This is true even if the other people in the shared open space are total strangers. Thus the mere presence of other active and engaged humans allays negative feelings that arise when being in a certain space.

This is significant because when these strangers are on their mobile phones in these public spaces, they are no longer psychologically available. The sense of protection one might otherwise get from their presence is denied.

Moreover, studies have demonstrated that when drivers are using their mobile phones in the car, they are to a large degree mentally absent. These studies have been backed up by data about accidents and mobile phone usage. It would seem too that one is even visually absent to the mobile phone user on the street. Street talkers are so engrossed in their conversations that they do not apprehend what is going on around them despite their eyes being wide open. Hence, there may be substantial implications for the nature of urban public space due to the heavy usage of mobile phones. The evidence as I read it does not suggest that these reductions in the human qualities of public space are likely to be mere transient adjustments.

Historical Analogies Suggest Adjustment

My argument so far has heavily stressed the inflexible and the "nature" aspects of the way mobile phones are affecting our lives. There are obviously some arguments on the other side of the balance sheet. It may be that we will normalize. After a period of adjustment, we accept the presence of mobile phone conversations in public places without disturbance. We can draw analogies by looking at the comments from a century ago of those who first experienced the telephone's intrusiveness potential. For these involuntary technological pioneers, it was considered by some to be a terrible and heartless instrument of torture, ruining the lives of the sick and tired, opening homes to all varieties of evil-doers, and even as a spreader of disease via unsanitary mouthpieces.[16] Likewise,

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[16] Carolyn Marvin, *When Old Technologies Were New: Thinking About Electric Communication in the Late Nineteenth Century*, New York: Oxford University Press, 1988.

a cottage industry of commentators were busy two decades ago extolling the virtues of a clacking typewriter or even scratching of quill pens in preference to the strange and inhuman process of using a computer to compose one's prose. This line of discussion seems quiescent of late.

The prospect of intercontinental air travel has gone from the status of a miracle to a humdrum burden. Moreover, I hardly need reminding that there were a century ago so-called experts who thought that no human body could withstand the "extreme" experience of traveling at the speed of 100 km per hour. Such footnotes to human history must make one cautious about asserting the limits of human behavior and capabilities of adjusting to change.

Conclusion

Richard Sennett in his book *The Fall of Public Man*[17] decried structural changes that have harmed the quality of modern urban life. His list has been echoed in Robert Putnam's exhaustive *Bowling Alone*.[18] These concerns focus on diminished civic engagement, democratic mobilization, citizenship, quality social relationships, trust, and social capital.

Yet as important and valuable as these desiderata are, perhaps thought also should be devoted to understanding the subtle changes arising from widespread mobile phone usage. We should ask, and seek to answer, questions such as: What are we doing to our great public spaces? How are we influencing at the margins our relationships and the moods and outlooks of those around us? In addition, if it turns out that many of the effects of mobile phone usage are indeed hardwired, as they may well be, how can we design our technology and our built environment so as to moderate any negative effects?

The answer is not blowing in the wind nor do we need a weatherman to tell us, Bob Dylan's advice to the contrary notwithstanding. Rather the answer is within our grasp. It is our job as social scientists to get the needed information. It is through high quality research, such as is being exhibited at this conference, to help policy makers understand the stakes and to assist the technologists in designing instruments and systems that meet many layers of individual and social needs. With

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[17] Richard Sennett, *The Fall of Public Man: On the Social Psychology of Capitalism*, New York: Alfred A. Knopf, 1977.

[18] Robert D. Putnam, *Bowling Alone: The Collapse and Revival of American Community*, New York: Simon & Schuster, 2000.

insights gleaned from research on mobile phones, the intricate choreography of communication can be as pleasurable for the audience as it is for the performer.[19]