

Current Societal Problems with Mobile Phone Usage in 15 Countries¹

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Introduction

This paper reports on a study recently conducted, in collaboration with NTT DoCoMo. The study is concerned with new societal problems arising from the integration of mobile phone communication into daily social life in fifteen different societies. The principal focus is negative impacts of cell phones.

In almost every country studied, mobile phones have created new problems for social order. Although cell phones are a valued and powerful tool for communication and for the maintenance of social relationships, there are aspects of cell phones which are problematic, and many societies are discussing problems that have arisen due to the power and ubiquity of cell phones. The ability to not only transmit voice, but also to collect and record visual images has created new challenges for societies in terms of new conflicts between personal freedom of expression and rights to privacy. The ability to communicate despite separation in time and space provides new and exciting possibilities for communication with others. This new availability is considered to be very positive, but at the same time creates conflicts. New conflicts and challenges are not only relevant to mobile phones but to other new forms of new communication technology.

Mobile phone technology facilitates both separation of people (in that people can be dispersed and still be available) and facilitates linking people together (in that it is easier to communicate with people previously unavailable). Members of society are experiencing great challenges in managing simultaneous contexts—the face-to-face and the digitally mediated—which may have very different types of participants and require quite different forms of talk, and different degrees of responsibility and responsiveness. A

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common problem is how to conduct private or intimate conversations in public spaces. Conventional forms of etiquette do not provide models for new technologically mediated social interactions.

Many individuals across the 15 societies report new tensions about duties to others as these are impacted by cell phones. The problems involve how to show appropriately respectful attention and response to multiple needs.

New problems: Eight Important Dimensions

We categorize the problems reported by users of cell phones into eight dimensions, as follows:

- disruptions of established patterns of communication and behavior
- stress on social relationships due to these disruptions
- new challenges managing antisocial behaviors
- conflict between “liberation” in mobility and “control” in terms of expectations to be available
- new dependence on technological connections via cell phone
- managing simultaneous contexts and spaces with different expectations and behaviors
- new private vs public boundary issues
- problems with the camera phone and the unauthorized transmission of visual information (in 2005, 2 million cell phones were sold in Norway and 800,000 were phones with cameras)

Problems range from how to enforce traditional cultural rules on silence in certain activities (such as religious and art events), concern with terrorism; concern with minorities (e.g. those with hearing disabilities, Brazil), responsibility of phone companies and the business community, issues of anonymity (e.g. identification of caller to control behavior and criminal acts), fears of lack of anonymity (e.g. concerns that conversations may be tapped or jammed in Russia), and private ownership issues (e.g. ringtone copyright in Russia). Many of these issues are inter-related, for example, safety and criminal activity, safety and the environment. Economic issues are interrelated with status, social inequality, and environmental degradation. Mobile phone camera technology and voice technology have been disrupting these societal mechanisms, by making many individuals accessible, and at the same time granting access to many individuals to spaces and occasions that were heretofore restricted.

Methodology

In order to understand emerging impacts of cell phones considered to be disruptive, we collected data from 15 countries, using researchers who were graduate students attending the University of Texas from the 15 countries. The countries studied include Australia, China, Brazil, Egypt, France, Germany, India, Indonesia, Italy, Lebanon, Russia, USA, Taiwan, Norway, and Korea. They range in size from small to

large (e.g. India 1100 million, Norway 4.5 million) and a range of penetrations of cell phones. We collected accounts in daily newspapers, conducted interviews, kept ethnographic journals of observations, did ethnographic participant observation, collected visual images of daily use and posted prohibitions, and then analyzed the data for recurrent issues and problems. The data are not designed to be completely representative of entire nations or cultures, but represent some ideas in wide circulation, as evidenced by newspaper stories, observations of daily activities, and interviews with members of each culture.

Cultural Issues

In every country studied, mobile phones have created new problems for traditional cultural values. In some cases, the camera feature of mobile phones has been particularly transgressive, permitting a new audience of viewers for what has traditionally been considered “private” or restricted. The issue of private vs public emerges as one of the most interesting aspects of mobile phone technology.

Each culture classifies not only its activities but also its surroundings into categories such as public and private, formal and informal, and so forth. Members of communities learn to interpret these categories and what kinds of audiences and language will be appropriate. Speakers have choices about what type of language to use in a particular context or to a particular person, and certain features of language can invoke a particular context, for example, using certain terms or ways of speaking can invoke a religious context, legal context, educational context or intimate context. Cultures differ in their ideas about who are authorized “speakers” and “hearers”; many cultures share the notion that certain words and phrases are taboo or forbidden in certain contexts or between certain members of society. Everyday situations are very important not only for children’s learning, but for the whole society’s production and maintenance of habits of understanding and expectations. New challenges and contexts have arisen through new technologies which challenge customary activity categories, for example, with television bringing scenes of places and people, both real and fictional, reaching audiences, both intended and unintended, outside the immediate environment. The cell phone enables very private conversations to take place in very public places.

What is appropriate for a particular culture is often not apparent until breaches occur or people do not perform in expected ways. Habits create what seems “natural” to people and beliefs of societies impact attitudes about communication and proper social relations. Many of those using cell phones report their feeling that there is a lack of “common sense” among cell phone users. So-called “common sense” is actually a set of established, culturally embedded practices, learned behavior and a learned world view. Some aspects of cell phone use that are being experienced as socially disruptive include the interruptive nature of cell phones. When phones ring, people feel obliged to answer them, which can mean abruptly turning one’s attention from one conversation or activity to another. Cultural rules and norms about how to manage interruptions of current activities have not yet been established for cell phones. A person calling on a cell phone is not aware of the social context surrounding the person who will answer. Cell phone

users in Italy reported their disapproval of people who answered their cell phones during family meals, for example.

Cell phones can threaten safety and result in challenges to individual freedoms as well as group security, and the management of work vs private time, as well as public vs private spaces. People report, for example, that the cell phone has changed social habits of visiting friends and relatives, and that people complain that they now receive text messages rather than visits, for example, in Indonesia. Mobile phones are changing work habits and the length of the working day.

Health and Safety

Two categories of health problems were mentioned by study participants: direct and indirect health issues. In terms of direct health concerns, members of most of the societies studied cited radiation hazards, fears that cell phones cause early aging and headaches. In terms of indirect health problems, study participants cited sleeping disorders and depression. There is a paradox about health issues, however. While people are aware of the potential dangers of cell phone use they also report being “cell phone addicted,” using a metaphor indicating that needs for connection and communication can override questions about the safety of the means for such connection. In Brazil, for example, a 60-year-old study participant reported that “people can get addicted to cell phones” and this causes them to “forget family values.” At the same time cell phone users report some positive health outcomes, as in the case of a 48-year-old business owner in Brazil who reported that he was able to reach his doctor on a different continent and undergo lifesaving surgery: “I had to have urgent surgery and was able to reach my doctor who was on vacation and answered his phone while on a train in Spain.” In France there was felt to be a lack of information on the issue of health.

Other safety concerns include using a cell phone to talk or text message (except in “hands free mode”) while driving or bicycling (e.g. Korea, Italy, France, Russia, Australia, Egypt, Brazil). This problem is a focus of regulation in many countries. As one interviewee in Egypt stated: “I find someone driving a car and he is speaking [on the phone]-at any time he could cause an accident. He isn’t paying attention and is speaking on the mobile phone and he is very concentrated on the mobile phone and it is possible that he hits another car or hurts someone. Maybe he rear ends the car in front of him because he is busy and it is possible that he becomes upset and at this time he takes his hands from the wheel because he is catching the mobile phone. Even if there is a hands free set, he is upset and busy and can cause an accident at any time.” Even though there are prohibitions, there is little police supervision, for example, as reported in Italy.

In China and Korea, concerns about e-waste (electronic waste) and its impact on the environment surfaced in interviews and questionnaires. China had almost 70 million cell phones thrown away every year prior to the first half year of 2004. Cell phone use changes the safety of the environment for wearers of pacemakers (mentioned in news reports in Russia and a topic of regulation in many countries) and in gas stations (mentioned in news reports and a topic of regulation in Brazil and Egypt). Many people report their unhappiness with unsightly cell phone towers and antennas. In France and Indonesia newspapers report difficulties between local authorities and cell phone

companies finding agreement on the installation of antennas. In many cultures the noise of cell phone rings and the level of conversations on cell phones is cited as a kind of pollution of the environment.

Criminal Behaviors

New Criminal Behaviors enabled by cell phone technology have emerged in all of the 15 countries studied. The cell phone is a new aid in criminal and anti-social behavior. Cell phones have been used to facilitate assaults, to facilitate harassment (cyber bullying), to illegally advertise products, and to undermine law enforcement. Members of all 15 societies were especially concerned about the protection of youth and the fact that cell phones enable access to vulnerable populations, particularly children. In Australia mobile phones with texting capabilities, photo and video capabilities, and satellite positioning options make it possible for children to have constant access to the Internet. Much of this access is currently unsupervised. As a court report in Australia states, cell phones have "taken the Internet out of schools and family computers and put it in children's pockets and pencil cases, offering 24/7 [24 hours a day, 7 days a week] unmonitored access." New antisocial behaviors at school include cheating during exams and petty theft (e.g. Korea, Russia).

Criminal behaviors include short message spam, fraud, identity theft, phone theft, telephone bombs (Indonesia), used markets abuses (Asia), illegally trafficked communication gateways (Egypt), new black markets in phone lines (Lebanon), new ways to transmit pornography (all cultures), culturally inappropriate sexual content on cell phones (Korea, Indonesia, France), gambling by text message (Indonesia), and use of cell phones in prison breakouts and problems at penitentiaries (France). Both state and religious transgressions are reportedly of concern. For example, there is increased visual access through pictures sent via camera phone showing ritual spaces or private occasions that were previously restricted. Cell phone users in Korea and Russia are concerned about wiretapping, and those in Brazil are concerned about how cell phones can expose people's private networks; in Korea people are concerned about being able to find a person's exact location. Law enforcement can, however, also be aided by cell phones, as in the case of the conviction of a man for attempting to sell Egyptian military information to Israel, sentenced to 15 years with testimony based partly on his mobile phone call history. Mobile phones are recognized to be agents of change, for example, in the way social groups manage freedoms vs. constraints in order to prevent harm and to promote well being. In the process of creating a safe society, certain populations are deemed more vulnerable, for example, children and in some cases women. The same new vulnerabilities, however, are creating opportunities for these groups.

Regulation

One question is whether regulations should be centered on a method of increasing individual understanding of dangers, regulating the behavior of individuals through laws and penalties, or regulating access. Special courts have been set up in Brazil specifically

to mediate mobile phone complaints by individuals. Increased regulation of cell phone use is emerging. In Russia, identification is being required for purchase of a SIM card. Silence is being enforced in locales such as libraries and museums and some restaurants. Compliance is requested through the use of signs.

Many countries agree on regulating certain spaces such as cinemas, theatres, churches, hospitals, schools, libraries, post offices, portions of trains, and on planes during take-off and landing. In Australia a proposed amendment to the New South Wales Violent Crimes Act included the proposal that police be empowered to confiscate mobile phones for up to 48 hours and impose 10 years of imprisonment on individuals who incite violence through mobile phones. However, members of the public objected that the legislation was too broad and could expose innocent individuals to police scrutiny, that stored information could be misused, and that cell phone technology did not differ from other forms of communication.

Language change

Because of economics, text messaging is preferred over voice in many countries. As a result new forms of abbreviated language are being invented and used. Very short messages with abbreviated forms of language are used in SMS “interactions” and a notion of keywords seems to be emerging. There is a contraction of space available for texting, though the space through which the message can travel is highly expanded. In cell phone conversations, new forms of greetings and leave-takings are emerging. Some study participants reported a use of more direct, abrupt and therefore “less polite” language. Teachers worry about effects of text messaging on spelling. Some members of societies are troubled about the degeneration of language skills due to abbreviation and other new forms of messaging. New forms of speaking and writing by younger generations are often judged to be symbolic of negative social processes of fragmentation and disruption of values, authority, and continuity of culture. Examples of this are complaints in India about “Hinglish” (so-called because of its combination of Hindi and English) forms, creative new uses of language in Chinese SMS messages, and language forms in Indonesia and in English. In France, a country well known for its discussions about fears of negative influences on the French language, cell phone users are concerned about the effects of text messaging on French. A 20-year-old study participant from Lebanon, however, reported that text messaging can have both negative and positive consequences: “using SMS has worsened my English but at the same time it has improved my mother’s English quite a bit because she can use the SMS dictionary which teaches her new words.” Study participants reported misunderstandings increased with texting. Rumors can be spread very fast by text messages, and the audience for messages cannot always be controlled or known. Cell phones facilitate communication, decreasing the distance among family members, but they also become a monitoring device, and can intrude on personal space. Parents value cell phones for added communication with their children, but then have little control of children’s communication with their peers and others.

Cognitive Impacts: Planning

In several societies it was noted that cell phones have reduced punctuality and changed habits of planning. People make vague plans, and feel less compulsion to be prompt to appointments. They contact each other through a series of calls or text messages. In the classroom, text messaging on cell phones is considered to negatively impact concentration of students. Difficulties concentrating with cell phone interruptions while at work is another way that cell phones are affecting cognitive aspects of human behavior. As an interviewee in Egypt reported: “now if I am at work and I have my mobile phone and I am engrossed in my work, suddenly I receive a phone call. I will have to get completely out of the working mode and then deal with the phone call and maybe this phone call will make me leave my work and go finish a different problem. Or even if I continue work, then there is a subject distracting me. I will not work with the same level of concentration. I am worried about something that happened. I will not conduct my work with the same quality...I want to say that it will take a certain amount of my concentration and this will decrease my concentration on work.”

Economic impacts

The power of mobile phones to establish and maintain communication and to distribute information makes them an important economic resource. In some countries this resource is expensive enough to make it unavailable for large numbers of people. People in Taiwan, Australia, and elsewhere report problems with incursion of debt. In Australia, for example, one person reported in an interview that: “cell phone debt nearly ruined my sister’s credit future... in 2 months she had amassed over \$1,000 debt.” In Indonesia, callers use expensive cell phones despite the availability of low cost public phones, and an Australian participant described a new kind of “financial recklessness.” However, our research also shows that the mechanism for payment of services which has been developed locally can be subverted through highly creative means. An example is Lebanon, where callers used the “missed call” feature in various ways to communicate a message agreed upon in advance without cost incurred. In Egypt, various ways have been developed to take advantage of the way costs are recorded and billed in order to have access to mobile phone technology at lower cost. Street vendors sell cheap per minute calls on mobile phones in Egypt, although vendors are not stable in terms of their location. In Brazil cell phone users complain of problems getting reimbursement of non used credits. In China people complain of problems of quality, maintenance, confusing plans for telecommunications services, and the used market in cell phones. Mobile phones have entered the economy of status as well. In every society, social status is an important feature in the organization of social distinction. Cell phones have entered into the status economy in all 15 countries studied. In Taiwan and Indonesia cell phones are a part of fashion, and TV shows promote relationships between cell phones and status.

Social Relationships

Mobile phones problematize or eliminate some important ways people have strategized to manage multiple and often conflicting social obligations. With cell phones, for example, it can be more difficult to avoid onerous social obligations and censure. An Egyptian study participant, for example, reports: “We can say that it [the cell phone] brings people together quickly. At the same time there will be accusations. You don’t have any excuse... There will be dissatisfaction between people... if he has a mobile phone and you don’t ask about him then he gets angry. You didn’t ask about him, you don’t have an excuse.” We found wide reports of a new interpretation of number of calls correlating with social value or desirability, and people reporting feeling “left out” of their social network if they are not receiving calls. People use their number of calls to mark inclusion and exclusion in social groups. There are also new problems related to “paying attention” to others, for example, prioritizing callers over people present face to face. In China a patient complained about her doctor answering his cell phone during her consultation. New problems also have been noted in gender relations, for example, the use of cell phone records in a Chinese divorce court. A 62-year-old engineer in Brazil reports: “I know cases of men who lost their wives after they were caught text messaging their lovers.” Although gender relations can also be improved and enhanced, Taiwanese cell phone users we interviewed report that the cell phone can be a new trigger of quarrels.

The cell phone has become a kind of social memory, with users exchanging cell phone numbers instead of business cards in Korea, and a reliance on the phone to recall and remind about people’s birthdays and other important dates. This technologized memory, however, can cause problems. In Egypt one interviewee reported an incident in which a young man sold his phone to an elderly leader, who then received a pornographic photo intended for the young man.

Motiquette: Etiquette

Etiquette emerged as a key issue in the U.S., Germany, Italy and elsewhere. People had no scripted or routine ways to politely avoid or deflect unwanted requests and directives, to complain or minimize the loudness of ringtones and conversation, to politely handle interruptions and a new lack of punctuality, as well as to manage invasions of privacy. Conducting personal activity in a public space leads to threatening the comfort and autonomy of others. One student used the analogy of smoking, which is variously tolerated across cultures and contexts and is a highly valued personal activity that has negative impacts on those within the immediate social environment.

Political life

Cell phones can play a key role in political life and processes, including social protest, the tapping of politicians’ phones, using cell phones in electoral campaigns, and public opinion gathering with cell phone (e.g. Korea). In China, the National Democratic

Party has given mobile phones to party members with free service on elections days. Camera phones have made new citizen journalists in Brazil.

Conclusion

Although for the most part cell phones are widely believed to be essential tools for communication and maintaining social relationships, some disruptive aspects are noted in 15 countries of widely different cultural practices and beliefs. All cultures are engaged in mediating new possibilities for antisocial behaviors and new requirements for behavioral standards. Individuals are experiencing conflicts between responsibilities to themselves and to society, autonomy and dependence, liberation and control, public and private space, new visual replication possibilities, and managing simultaneous complex spaces and conversations. They are experiencing problems managing social responsiveness and duty to others due to increased accessibility to requests and demands of others, merging of work and private time, new antisocial behaviors and criminal behaviors, unifying and disunifying spaces and behaviors. Many places still lack connectivity, but the overwhelming similarity of problems encountered in these very diverse societies suggests that we can begin to model how new communication technologies might negatively impact societies.



Prohibitions



Cell Phone Towers



Driving with a Cell Phone

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