

# THE STRUCTURAL TRANSFORMATION OF MOBILE COMMUNICATION

## Implications for Self and Society

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Mobile communication is a relatively new form of interaction. It has only been commonly available in developed countries for the past two decades and in developing countries for less than that. Perhaps because the rise of mobile communication is so recent, the juxtaposition of its use against traditional social practice illuminates issues in a new way. To be sure, mobile communication's explosive growth as an everyday life resource has given us a lens through which we can study both sociological and psychological developments. Despite being a relatively new addition to the media landscape, the assuredness with which we appropriate our mobile devices speaks to well routinized use. When we reach for our phone to fill in what Fortunati (2002, p. 518) calls the "smallest folds" of life, we manipulate them with ease. In addition, at the social level, we increasingly understand that it is expected of us to have a mobile phone. Our friends and family expect us to be available to them, to be socially "on call." Through mobile communication, we become more attached to one another, not to mention to the technology itself. Without the device, it is not uncommon for a user to feel utterly disconnected and psychologically distressed (Vincent, 2006).

As it continues to take root as a multi-channel resource, individuals increasingly rely on mobile communication to stay plugged in outside of their social network as well. Individuals increasingly turn to mobile communication as a way of connecting with society by using it as a resource for news, politics, popular culture, and the like. Thus, the psychological

and sociological implications of the technology are becoming progressively united through a consolidated set of processes. For this reason, we argue that explaining mobile communication's role in social life calls for new explanatory frameworks that better integrate psychological and sociological theory.

In this chapter, we will consider the changing nature and implications of mobile communication through a discussion of what is new about the technology in social life. From there, we will review theoretical perspectives from psychology and sociology that complement one another in helping to explain these developments. Along the way, we will identify opportunities for further theoretical extension and integration as scholars continue to make sense of the social implications of mobile communication.

### What is Mobile Communication?

First, a definition for what we mean by mobile communication is in order. Perhaps because of the interdisciplinary nature of this new field, perspectives can vary with regard to the exact nature of mobile communication as well as mobile communication studies. The days of the conventional, narrowly purposed "cell phone" have given way to a new era of multidimensional platforms that support a whole range of information and communication flows, making it impossible to root a definition in a particular artifact. Therefore, we ground our definition in what the hardware, the software, and the communication channels afford, or make possible, as opposed to what these things look like or conjure up through traditional notions of a wireless telephone.

By mobile communication, we mean how people and groups use devices and services that support mediated communication while the user is in physical motion. The point here is that the technology *can* be used while in motion, not that it always is. There is an important physical dimension to these devices, and usability has changed in important ways over time. In the early days of computing, there were, for example, luggable Kay-Pro and Osbourn computers that were as big as an overstuffed carry-on and weighed even more. Mobile phones at the time were also heavy and awkward devices that were better transported in a car than in our pockets. With time, phones and personal computers (PCs) have slimmed down, and there is even the budding category of pads and tablets that seem to sit somewhere between the phone and the PC in the gadget landscape. Smaller devices have added a spontaneity to our use that was not evident before. In addition, there is a ubiquity associated with mobile communication devices that is important. That is, we are able to assume that others are similarly wirelessly connected and therefore available to us. Thus, mobile

communication assumes the ability to move about with devices that allow for spontaneous interaction with others who are similarly equipped.

The nature of mobile-mediated communication has expanded dramatically in recent years. Whereas mobile communication formerly involved calling (and then later) texting, it now might refer to a whole host of channels for interpersonal interaction as well group communication, mass media consumption, information exchange, gaming, and mass self-communication via social media (Castells, 2007). Our definition of mobile communication also includes situations where the user is not actually mobile. Oftentimes, in practice we treat the technology as a portable or even fixed device. The argument here is simply that it offers *the potential* for mediated communication and information exchange while the user is physically in motion, which is important because it shapes our social expectations, and the way that we structure interaction. With that definition in place, we now turn to what is new about the technology, particularly with regard to the role of mobile communication in our psychological orientation and our dealings in society more broadly.

### New Developments and Important Questions

Coinciding with the rise of mobile communication and its various social consequences is the emergence of the new field of mobile communication studies. This nascent field is beginning to develop a body of work that follows the contours of how mobile communication is making itself felt in our daily lives. Growing branches in the existing scholarship include studies of mobile communication and social cohesion (Ling, 2008), space and time (Ling & Campbell, 2009), linguistic conventions (Baron & Ling, 2011; Hård af Segerstad, 2005), and the developing world (Chib, 2013; Donner, 2008; Horst & Miller, 2005). Rather than a review of those and other extant themes in the literature, our aim here is to identify and reflect on some of the core questions and concerns on the horizon, particularly with regard to shifting understandings of self and society through mobile communication.

These areas of consideration will be anchored in the central argument that one of the most notable new things about mobile communication is that it is no longer all that new (Goggin, 2011; Ling, 2012). Like the radio, television, and the Internet, it has become an ingrained part of everyday life for many if not most people. This is especially apparent in the developed world where the number of mobile subscriptions actually exceeds the population in many places, indicating that some users have more than one device/subscription (although some subscriptions can be attributed to public entities, e.g. fire department). Even in developing societies it is not uncommon for most people to have access to and use mobile communication as an everyday resource (International Telecommunication Union,

2012). In other words, mobile communication per se is no longer a novelty. It may present novel affordances, apps, and gadgets, but mobile communication itself has joined the realm of other technological advances that have gone from revolutionary to mundane and finally to being expected, such as the watch and the automobile (Ling, 2012).

Following this trajectory, at first, mobile communication was a luxury (Agar, 2003). Then it became “nice to have.” Now it is an expectation, with important implications for how we understand ourselves and each other. If people in our lives do not have a mobile device, it becomes *our* problem (Ling, 2012, p. 3; Katz, 2008). We can see this when we are trying to organize an informal social event with a group of people. In the era of landline phones previous to the development of answering machines, getting in touch with people was a chancy affair. Often we had to call back several different times in order to “catch them at home.” Others who were willing to take a note were helpful, but there were still lags in connecting. The answering machine helped to bridge this gap since we knew that we could leave a message at the location of the phone being called and, as the technology developed, the owner of the answering machine could call in to hear their messages. However, the lag between our call and the time when our intended interlocutor would call back was not easy to determine. The fact that we are (or at least that we are expected to be) continually outfitted with a mobile phone means that we are almost always available to one another regardless of time and place. The only exceptions are when we do not hear the ringing, our battery is not charged, the phone is in disrepair, or we have forgotten it at home. In addition, we might choose to not answer a call if it comes at an awkward time or we feel uncomfortable talking to the person calling. Beyond voice calls and texts, there is also an increasingly complex set of alternatives that include using social networking sites or a location-based platform for arranging our social lives (e.g., Humphreys, 2007). In Durkheim’s (1938) terms, being so highly connected through mobile technology has become something similar to a taken-for-granted *social fact*. Despite the emergence of new features, mobile communication, as a context for being socially connected, is now more of a shared expectation than something new and revolutionary (Ling, 2012).

This movement toward taken-for-grantedness raises important questions about how we got to this point. As such, there is an opportunity for developing theory that explains how mobile communication has become what Berger and Luckman (1967) would describe as a *social institution*, or a structural part of the social environment. Berger and Luckmann argue that understanding the establishment of a social institution can be gleaned by examining the habitualized behaviors that, over time, crystalize and work their way into the rhythms of social life.<sup>1</sup> As new social dynamics become shared experiences, they can become routinized in ways that are both personal and collective, to the extent that they become almost second

nature to us as individuals and, in turn, a structured part of the social environment. Therefore, we treat habit as a point of entry for understanding the individual and social processes that have supported mobile communication's transformation into a taken-for-granted aspect of social structure. We do not suggest here that all mobile communication is habitual. Nor do we suggest that habit is the only way of explaining its role in social life. Rather, we recognize habit as a promising avenue for theory building on how mobile communication has become a structural part of it.

With that said, we already know that much of our interaction with technology occurs without full cognitive processing (for a review, see LaRose, 2010). Not surprisingly, there is growing evidence that for many users, certain mobile communication behaviors have become habitualized (Bayer & Campbell, 2012; LaRose, 2010; Oulasvirta et al., 2012; Peters, 2009).<sup>2</sup> Psychologically, habits represent a form of automaticity, or a cued behavior lacking four components: attention, awareness, intention, and control (Bargh, 1994; Gardner, 2012; Orbell & Verplanken, 2010). A mobile phone user can be more or less automatic, regardless of how much they use their device (Bayer & Campbell, 2012; Gardner, 2012). While it shares this in common with other media, the habitualization of mobile communication is distinct.

The mobile phone is an anytime-anywhere resource. Cues for use and our responses to those cues are not restricted to a specific environment. In turn, an individual might develop the habit of checking for texts or Facebook updates when entering an elevator, or texting when they see a funny sign on the street. Alternatively, a person could develop the habit of texting when feeling sad, lonely, or angry. Over time, these cues for mobile communicative behavior—whether physical objects in the environment or discrete states in the mind—become acted on by reflex. They are subconscious links to other social planes. Every habitual mobile user may have a unique and potentially ubiquitous repertoire of cues. Hence, mobile phone behavior can no longer be studied by the mere metric of frequency. Indeed, studies indicate that the frequency of mobile phone usage is often independent from the degree of social and psychological effects (Bayer & Campbell, 2012; Campbell & Kwak, 2011; Walsh et al., 2010, 2011).

Another issue is that, unlike most other habits, mobile communication is characteristically a social activity. Our urge to call or text, and the way that we respond to others who reach out to us in these ways, is a social act. Consequently, new research is needed to understand not only when and where habitual mechanisms are enacted for different users, but how they are enacted *across* users. The reciprocal nature of communication means that habitual processes are not only reinforced by our own personal situation, but that they are contagious. We expect one another to be available when we are excited or angry, and we become concerned when they do not answer their phone. In this sense, mobile communication habits are

formed and altered at the collective as well as psychological level. Thus, mobile communication habits and the structural transformation of the technology's role in social life call for explanations that engage with both psychological and sociological processes.

### Renewed Bridges between Sociological and Psychological Theory

Thus far we have argued that mobile communication has transformed into a taken-for-granted part of social life and that one avenue for explaining this transformation is to examine how use of the technology has become routinized in daily affairs. Because the technology is so central to both self and society, and because habits are formed at both individual and collective levels, explanatory frameworks are needed that can bridge between micro and macro levels of social order (Haddon & Kommonen, 2005; Oishi, Kesebir, & Snyder, 2009; Webster, 2009, 2011). In this section we examine steps that have already been taken in this direction and identify opportunities for integrating and extending frameworks for explaining mobile communication's role in social life.

One step toward bridging micro and macro perspectives can be found in the theoretical evolution of micro-sociology, particularly with its interest in collective rituals and social cohesion (Oishi et al., 2009).<sup>3</sup> By bringing the societal-level perspectives of Durkheim (1995) down to the granular level of everyday life experience, Goffman (1967) shows how rituals have become a structured part of social action and foster a sense of togetherness. With this as a foundation, Collins (2004) places more focus on the interactions involved in social rituals as they develop into what he characterizes as ritual interaction chains. These involve a mutually recognized focus on a shared social experience (engrossment) and the development of a common mood (effervescence, to use Durkheim's term). When we give ourselves over to the mood of the situation and share in becoming engrossed, we drop barriers to interaction with our co-participants and share a common experience. It is through these collective processes that we form groups and we grow to trust the other members of the group. Likewise, it is through the recognition of shared status that we drop the barriers to our individuality and begin to identify as part of a social unit. Thus, internal psychological processes as well as social interactions are tightly bound into the situation.

Using this framework, Collins (2004) examines conversation as a ritual interaction. In a conversation there are both psychological and social activities in play. There is this willingness to engage in a mutual social engagement "with its own boundaries and constraints" (p. 23). Further, we have a responsibility to the situation and at the same time we are involved in it with our own personal engagement. Participants must keep

the conversation alive by discussing the appropriate topics, giving the appropriate responses, and making the appropriate gestures. We need to work out themes and responses. We need to manage the facade that, following Goffman's ideas, we are "giving off," (1959, p. 108), and we need to interpret the facade and the flow of conversation from our interlocutors. All of these are psychological processes. However, the sum is greater than the parts. The conversation is a social event that is socially constructed and exists in its own right. It draws on culture and on reciprocally constructed understandings. In addition, the conversation can have consequence for the structuring of further interaction between the people involved, and for that matter, people who are not even present. Collins sees these as "rituals calling for cooperation in keeping the momentary focus of attention and thus giving respect both to the persons who properly take part and to the situational reality as something worth a moment of being treated seriously" (2004, p. 24). That is, the conversation is an entity just as the interlocutors are. He considers our orientation toward these social events as the production of self under social constraint, and as such it is a key element in the bridge between the individual and collective.

Both Goffman and Collins emphasized the development of ritual through co-present social interaction, creating an opportunity for Ling (2008) to extend this line of work into the realm of mediation, particularly with regard to mobile communication. According to Ling (2008), mobile communication has become an important resource for ritual interaction chains among close personal ties. It tightens the flows of interaction and aids in the development of distinctive social rhythms (Ling, 2008). This theoretical stream may be a useful starting point for examining how mobile communication habits develop at the social level.

To be sure, the notions of ritualistic and habitual behavior are distinct, one referring to symbolic meaning and the other an automatic orientation. That said, they may be linked in the concrete situation of mobile communication and in ways that are theoretically meaningful. It is possible that socially habitualized mobile communication practices may come out of shared interaction rituals. Some support for this can be found in the notion of *habitus*. In his explication of habitus, Bourdieu (1977) argues that members of a social collective develop shared understandings and practices that, over time, can take on a life of their own and become part of the structure of society. They become ingrained in daily activities and interactions to the extent that individuals fall into these shared understandings and practices without consciously thinking about their original meaning or intent. Arguably, mobile-mediated ritual interaction chains can develop into this type of habitus over time. So far, the research on mobile communication habits has primarily been concerned with explaining behavior that people would like to curb, particularly texting while driving (Bayer & Campbell, 2012). Thus, there is the opportunity for a theoretical contribution by

broadening the scope of that line of inquiry to examine whether and how mobile-mediated ritual interaction and habit are related. It is conceivable that habit and ritual interaction are related in ways that shape mobile communication's transformation from something new, to something expected, to something that is now part of self as well as the larger social structure.

Goffman (1959, 1963, 1967; see Jacobsen, 2010) also theorized about habits in ways that point to transcendence from the cognitive to the collective level. He examined the social structure of interaction, arguing that by the end of childhood, many people are conditioned into blasé participation in a clear-cut world of turns and moves. Goffman unveiled the subtext, negotiations, and contracts that uphold social reality—or at least the social reality of his time, which preceded mobile communication. The game has changed with the advent of mobile communication. The full access to our social network is simply a ring (or buzz) away. Our potential social moves are now unlimited; we have gone from checkers to chess. At the same time, we have shown how this game is played in a taken-for-granted manner. Mobile phone users utilize a number of maneuvers to balance both local and virtual interests at once (Ling, 2008). As these uses develop into everyday practices, they become part of the larger mix of media habits (LaRose, 2010).

As researchers pursue habit as an avenue for explaining mobile communication's (now) structural role in social life, they should also keep an eye out for the ways it may undermine or constrain conscious interpersonal goals. On the individual level, it may reduce the number of communicative partners. Alternatively, on the collective level, it may push individuals to go along with social expectations with which they disagree (such as constant availability). As the unconscious mechanisms solidify, individuals lose awareness of agency, but gain communicative efficiency personally and as a member of social units and society. However, this sometimes comes at the expense of attending to one's co-present surroundings, evidenced by research linking texting while driving to a habitual orientation to texting more broadly (Bayer & Campbell, 2012).

Fully developing new explanatory frameworks that integrate the psychological and sociological dimensions of mobile communication is beyond the scope of this chapter. That said, it is within our scope to indicate promising areas that may serve as points of entry for this type of undertaking. The search for bridges between the social and the psychological is obviously not new. As Oishi et al. (2009) point out, "This individual-group discontinuity effect shows that there is a shift in cognition and behavior when people are in groups and that group behavior is not a linear function of individual behavior" (p. 344). Reconciling these levels of human behavior requires researchers to call on established frameworks as well as new interdisciplinary visions.

One possible tool for researchers looking to bridge this gap is structuration theory (Giddens, 1984). Structuration theory provides a framework

for understanding how individual behavior interacts with the rules of a social system. Since its inception, communication and technology studies have adapted this framework for understanding the “micro–macro” link in other contexts (see Orlikowski, 2000; Webster, 2011; Whitbred, Fonti, Steglich, & Contractor, 2011; Yates & Orlikowski, 2002). In their recent examination of communication networks, Whitbred et al. (2011) note that according to the structuralist perspective, “As agents (either consciously or subconsciously) behave consistently with existing rules, these same structures are reproduced or reified and continue to have future influence” (p. 408). Their findings provide credence for the duality of structure, or the central idea within structuration theory that individual behavior affects the development of normative rules and vice versa. Such perspectives may be of use to mobile communication researchers going forward given the competing pressures of psychological attachment and societal constraints.

Another opportunity for explaining both micro and macro levels of social change associated with mobile communication is domestication theory.<sup>4</sup> Domestication is a framework for understanding how personal technologies go through transformations in the private realm of use, with emphasis on the individual-level processes of adoption, integration, and conversion of the technology as part of an individual’s identity. Domestication theory was originally advanced to explain how computers were transformed from an organizational resource to both a resource and a fixture in the home (Silverstone & Haddon 1996; Silverstone, Hirsch & Morley, 1992). It has since been applied to understand mobile communication adoption and usage processes (Haddon 2003). At the core of domestication theory is the principle that personal technologies go through a series of stages as they develop from just an idea, to something newly acquired, to part of the mix of other objects of everyday life, to part of the user him/herself. These stages are not necessarily linear, meaning the technology can go through several waves of evolution within each of these stages (Ling, 2004).

The transformation of mobile communication into a structured part of social life provides an opportunity to revisit domestication theory (or perhaps what we might call neo-domestication theory since it is not tied to the home) to better account for changes in the socio-technological landscape at the societal as well as personal realm. Mobile communication moves through this conversion process. It moves from being something imagined by the eventual user, through to finding its more or less secure position in our lives, which is characteristically a social process. When used for targeted interaction with peers, rhythms are established making expectations for accessibility more of a shared assumption (Ling, 2008). By extension, we can also think about how “domesticated” technologies gain a critical mass in a society and eventually become assumed ways of facilitating sociation. In this process, there is the individual evaluation of the technology and its place in our personal lives, but there is also a

broader social component since technologies with such reach demand our use as a member of society. There are undeniable benefits to, for example, owning a clock or a phone, but we are also expected to be punctual and available (Ling 2012). Thus, the conversion process from something new to something taken for granted and structured occurs at both micro and macro levels of social order, and extending domestication theory from the micro to the macro level may help to reveal how mobile communication became, and continues to become, a structured part of society.

### Concluding Remarks

When we use our mobile device to check for texts, receive a call, access social media, or navigate the web, we are engaging in processes that play out on both psychological and sociological levels. We slip into the interaction using reflexive behaviors as we pull the device out of our pocket or purse. We use familiar behavioral patterns when we start to engage in the texting session or answer the phone. These practices have become well integrated into the flow of events in our daily lives. As the technology's capacity for information management continues to develop, other uses of it are moving in this direction too, creating shared expectations for being connected not only in the private realm, but in public life as well. Not long ago, these affordances for social connection were revolutionary advances. Although they may still be revolutionary, they no longer seem like it to many users. Instead, they are increasingly expected and even taken for granted, much like our reliance on mechanical timekeeping (Ling, 2012). This transformation is meaningful because it represents movement toward a new layer of social structure. Because of the individual and collective dynamics of its use, explaining mobile communication's shift toward a taken-for-granted part of social structure calls for the integration of psychological and sociological perspectives. This chapter helps lay the groundwork for steps to be taken in that direction by identifying points of entry made visible by extant theory, particularly that which bridges micro and macro levels of social order. Future research and theory building will benefit by translating these insights into hypotheses and research questions geared for deeper understanding of how mobile communication has worked its way into the structural realm of social life.

### Notes

- 1 Berger and Luckmann discuss this as a mutually interactive process. Their definition of an institution is the reciprocal typification of habitualized action. Thus, there is an interplay between personal habituation as well as reciprocal interaction.
- 2 To be clear, we are not talking about "addiction" here, but rather the extent to which the user puts conscious thought into what they are doing when using the technology.

- 3 Often when we think of ritual we think of large-scale religious ceremonies. By way of contrast, for Goffman and for Collins, ritual interaction often takes place in the context of everyday life.
- 4 This approach has roots in the work of Giddens and the scholarly community around him, in particular Leslie Haddon and Roger Silverstone.

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