

Smartphones and the social dynamics of “busyness”

Melissa Mazmanian & Ellie Harmon
Informatics Department
School of Information and Computer Science
University of California, Irvine
{m.mazmanian, ellie.harmon} @uci.edu

ABSTRACT

Our research focuses on the individual experiences and social dynamics of smartphone use, and asks how people negotiate the new capacities for communication that such technologies enable. We are using concepts of “interaction layering” and “immediacy” to describe these experiences. Here, we show how this work relates to the issues highlighted in the workshop’s call for studies related to a “culture of busyness,” and raise questions about intervening in this “culture” that we have encountered in our own work.

Categories and Subject Descriptors

K.4.0 [Computers and Society]: General

General Terms

Human Factors

Keywords

Smartphones, ethnography, organizational and social dynamics

1. INTRODUCTION

Our research, informed by a background in social sciences, organization studies, and HCI explores the individual experiences and social dynamics associated with people adapting to various communication devices. We are particularly engaged with understanding the social construction and organizational and individual consequences of smartphone use, a device that, as the workshop call notes, “makes it all instantly accessible on the go.” To observe such adaptation is to examine a frontier where groups establish and maintain social structure, where individuals create and express their social selves, and where new relationships and power dynamics emerge. This work touches on numerous themes of this workshop.

2. ONGOING AND PREVIOUS WORK

In our work, we focus on smartphones as emblematic of a trend toward constant connectivity and overlap amongst an individual’s multiple personal and work lives. Communication technologies mediate the ways that individuals build relationships, produce social dynamics and develop social identities. Smartphones enable constant, asynchronous, and mobile communication that is increasingly media-rich. As such, smartphones inform the frequency and nature of communication acts available to, and engaged in by, their “users.”

While we often talk (and think) about smartphones as devices for work communication, it is important for a study of the pervasiveness of a culture of “busyness,” that we also pay attention to the variety of communications that are enabled by these devices. Smartphones, today, are not only used for sending a work email, or checking in with the boss before heading in to an off-site sales meeting. As advertisements for the iPhone4 suggest,

one might also use his/her smartphone’s “FaceTime” video chat feature to catch up, from bed, with a romantic partner who is traveling, or perhaps lives in a different city entirely. The increasing prevalence of smartphones is contributing to the creation of new capacities for interpersonal communication that spans, and in some sense blurs the distinction between personal and work spheres, calling into question the usefulness of such labels. Smartphones also contribute to a “culture of busyness,” in which an individual’s (mediated and immediate) presence is often demanded by multiple other individuals, and highlight tensions between “virtual” and “physical” presence.

Our research asks how people experience these changes in the communicative practices of everyday life, how they negotiate expanding capacity for connectivity in negotiations between work and multiple personal spheres, and the cultural narratives that inform how they come to understand what such technologies ‘are’ and how these technologies might become embedded in, and essential to, everyday life.

We are currently engaged in three complementary research projects. Two of these are ethnographic in nature – focusing on interviews and observations as the primary modes of inquiry – while the other seeks to engage with broader cultural discourses through an analysis of media and advertising.

We are in the early stages of an ethnographic project that focuses on the everyday experience of smartphones in the home. We plan to recruit participants through engagement with a business organization, so that participants will share an organizational culture with each other. This project will employ repeated observations of the home-life and interviews with family members in order to understand how users negotiate and manage the capacity for constant access and awareness in their ‘personal time.’ In addition to interviews and observations, we will also ask family members to participate in a 4-day period of disconnect from work-based smartphone use during “personal time.” We hope that as a reflection exercise, this will further provoke and inspire a deeper understanding of both positive and negative effects of connectivity, as well as provoke a re-consideration of the gains and losses relative to a participant’s different temporal frames of reference – what is gained and lost in communicating something immediately as opposed to waiting until some later time.

This project investigates “interaction layering” as the layering of physical and temporal space with multiple, often conflicting, and simultaneous interactions. Such layering increases the possibility of offending communication partners and requires exponentially more ‘face work’ to ensure smooth social interaction (Goffman, 1963). Norms emerge from shifts in behavior and it becomes difficult for individuals to have the agency and knowledge to make choices about their time and attention. This project is a clear

example of work that is engaged in “*analysis of ties between technologies in domestic environments and the acceleration of home life.*”

In some way, our very presence in people’s homes will be meddling in their lives. Our IRB-approved consent forms, our interview questions and the reflection exercise will all bring explicit attention to issues of smartphone use and work/life balance. However, we are also interested in this research as something that might seek to intervene more explicitly. While many ethnographic inquiries might acknowledge researchers’ complicity in creating the situation “under study,” they frequently have an ultimate goal of reporting on a description of the research subjects. We intend this study to be a more experimental engagement with participatory forms of ethnography that might open new spaces for conversation about communication patterns both in the home and in the workplace (e.g. see Darrouzet, Wild, & Wilkinson, 2009). By engaging with multiple families, over a period of multiple weeks each, we also hope to extend conversations and concerns across what might otherwise be isolated social circles. Finally, we see our ethnographic engagements as opportunities for reflection across multiple contexts, in order to inspire design, with our participants, of social and technological interventions that might alleviate some of the difficulties of constant connectivity that this workshop call highlights, and that participants in Melissa’s own prior work have articulated. We are not yet at a point to begin to specify what these interventions might look like, but we are interested in this workshop, in part, because we hope it might help us begin to speculate and think about issues of intervention in more detail.

Alongside this project we are engaged in a separate research endeavor that in part will help us understand the narratives and stories that people engage to make sense of smartphones in their own lives. We are currently undertaking a discourse analysis of advertisements for smart phones and similar technologies in order to look at the narratives crafted in selling these technologies over the last 10 years. In particular, we analyze the diverse narrative strands that emerge as unique ‘story lines’ in advertising and analyze the trajectories of these stories within and across advertisements over time. We approach advertising as an extension of the design process in that it is one initial articulation of the narratives surrounding the adoption and use of technology. That is, advertising is one of the means by which people begin to see a technology as simultaneously new and yet also already implicated in everyday life, something that fulfills a need that is already seen to exist. Additionally, advertisements articulate ideas about prospective consumers and the values and lifestyles they strive for. As such, this project speaks to “*the roles of IT in coping with or promoting a culture of busyness.*” Through this project, we are tracing the different cultural narratives that surround the smartphone, its purported impacts, its implied possibilities, and the “*rhetoric and costs of anytime anywhere access, and availability with mobile and awareness technologies.*”¹

¹ Take, for example, some of the more recent commercials – e.g. <http://youtu.be/EH1N21ebeak> for Windows Mobile 7 – that explicitly acknowledge the incompatibility between always-on connectivity and attention to, and presence in, the current moment. These advertisements leverage this seemingly intractable paradox as a way to entice consumers to buy another smartphone.

Melissa is also currently engaged in a separate multi-year and multi-stage ethnographic engagement with an elite global consulting firm². The organization studied introduced an experimental change effort centered on enabling individuals to take predictable time off. It attempted to free people, for a limited time (one evening per week), from social expectations of expanded availability embedded in previously established ways of working. The change effort suggested certain structures for experimental teams to follow in service of this goal. Teams enacted these structures and experimented with alternate ways of working and communicating in diverse ways. Achieving this goal required team members to coordinate in new ways. This research has emphasized that such change is non-trivial. It necessitates a structural shift in work practices, new communication practices, a willingness to buck the culture of individual heroics, and the creation of new forms of trust among team members.

This focus on the interrelationship between communication technologies, organizational and social dynamics, and work/life negotiation has been at the center of a multi-year research agenda of one of us (Melissa Mazmanian) and is the emerging object of interest for dissertation work for the other (Ellie Harmon).

In an initial investigation of these issues, Melissa conducted a research project in 2004-2005³ where she interviewed over fifty mobile information professionals – lawyers, venture capitalists and investment bankers – about their experiences of wireless-enabled email. In contrast to their experience of cellular phones and laptop computers, these users described wireless email as enabling a sense of liberation and control in the present. Yet, this sense of individual control was challenged by social expectations of increased connectivity (Mazmanian, Orlikowski, & Yates, 2005, 2006). A current paper on this work explores the ways in which communication practices and the material configuration of certain technologies constitute identity through use. This paper argues that the enacted experience of using the device resonates with a salient professional identity. As such, the material object becomes constitutive of an ongoing identity performance as a dedicated, yet autonomous, information professional (Mazmanian, Orlikowski, & Yates, 2011).

Melissa continued to explore these questions in her dissertation (data collected 2005-2008), examining, in real time, the introduction, use, and absorption of BlackBerry™ smartphones into daily communication routines in a mid-sized sales and manufacturing company. An ethnographic investigation, this work provides longitudinal and empirical data on the ways in which technologies may “*redistribute workload either surreptitiously, intentionally, or accidentally, fairly or unfairly, sometimes in the name of ‘efficiency.’*” A current paper on this work explores the process of emergence, the development of communication norms and the ways in which different occupational groups develop distinct normative systems and patterns of expectations regarding extended availability to email, speed of responsiveness, and homogeneity or heterogeneity across the actions of individuals within a communication network. The character of communication norms is related to work/life outcomes and whether or not individuals experience the BlackBerry as enabling more or less personal time (Mazmanian, 2011). As such this work

² This work is conducted in collaboration with Leslie Perlow at Harvard Business School.

³ This work was conducted under the mentorship of her doctoral advisors Wanda Orlikowski and JoAnne Yates.

directly engages with questions about “whose time and at whose expense” is technology saving time.

3. KEY CHALLENGES

This workshop highlights the issue of “busyness” as something that we might take a moral issue with – that we might hope to *change* in some way, and asks the question of whether (and how) it might be possible “to intervene in the culture of busyness by altering the design of IT or its use practices.” In our own work, we view technologies and humans as co-constitutive of a socio-technical world. That is, norms and social interactions surrounding technology use and appropriation do not alone dictate or fully explain the “impact” of a technology; and neither does a technology materially determine its use patterns independent of social processes of sense making. This position, and our own prior research, suggests that, if we seek to affect change, a combination of both social and technological interventions is likely required. Just identifying the relevant spaces for such intervention is difficult, and this challenge is compounded by the potential difficulties in convincing people at a variety of social levels, and in various positions of power, to agree to any proposed set of changes. Furthermore, any one individual may have conflicting goals and desires with respect to issues of their own connectivity. Because individuals participate in multiple social spheres and roles, what may be beneficial in one area of a person’s life may be harmful to another area of their life. Similarly, something beneficial in the short term may have more negative consequences in the long term.

In investigating the ways that norms become entrenched in the “taken for granted” and continuously re-enacted fabric of social life, we are left wondering how can we – or anyone, including individuals, people in positions of social power, and people in positions of technological power – foster change. It seems that social interventions are particularly challenging – in some sense we would be seeking a conscious redress to a problem rooted in tacit norms. When we consider the ways that mobile technologies, and issues of “busyness” cross multiple work and personal spheres, and particularly the way that mobile interaction patterns may have differing costs and benefits for different social actors, how do we get everyone “on board” with a proposed change? We are interested in getting input from other researchers about how they have successfully (or not) addressed similar issues of creating lasting and meaningful interventions?

As noted above, Melissa has had some experience participating in a top-down experimental change effort with one global consulting firm, whose executives have taken a particular interest in issues of work/life balance. While we might expect that convincing such executives of the need for a re-adjustment of company norms might be the most difficult challenge, it turned out that convincing individual employees to participate was sometimes more challenging. In this project, participants were essentially forced to participate. If an employee was part of an experimental team, regardless of their own desires and whether they saw a need for a change in their own life, they were basically told that this is an initiative that the company has decided to embrace, and you need to play along so that it can work for everyone else. In the end, some of these individuals found the intervention to be truly life altering – only after being “disconnected” were they able to realize the negative effects of their prior constant “connectivity.” Multiple individuals who were initially skeptical of the project have now rather radically re-configured many of his work-based communication patterns. In addition to highlighting the straightforward challenge of garnering the support and

participation of the whole group of individuals needed in order to implement a social intervention, this experience also raises the moral question of whose change should be designed and implemented – and how much coercion is ethically justifiable in service of a larger social agenda?

Related to this, is the question of how to generate or engage a public discourse on “busyness” and related issues. In an age of assumed constant connectivity, it often seems that people abandon topics of communication that might be potentially difficult. Such topics might include the kinds of issues that could form a basis of interpersonal trust and the capacities for individual (or localized social) agency in directing the appropriation and uptake of new technologies. When and how are people able to have the tough conversations about when and where one is available, strategic discussion about priorities in terms of when work will be done, or the active discussion of symbolic gestures in order to disconnect without offending key communication partners (from both work and personal spheres)? How might we, as researchers, participate, engage, or promote such a social discourse?

4. AN INSPIRATION

We have found John Tomlinson’s book *The Culture of Speed: The coming of immediacy* to be particularly provocative as a theoretical and conceptual discussion of the modern state of constant connectivity (Tomlinson, 2007). Tomlinson traces the cultural stories that surround the modern idea of “speed,” suggesting that earlier narratives engaged with “speed” as something that was “unruly” or something that might be disciplined or regulated. Further, when we talk about technological change, or the current condition, as being characterized by “speed,” we are still implying that people and ideas must move from point A to point B along linear, sequential timelines. Tomlinson argues that our present “culture of speed” might be better described as a condition of “immediacy.” Communications technologies contribute to the emergence of this condition by “constitut[ing] a different form of mobility,” that does not merely allow us to move quickly (through space or information), but rather calls forth an “imagined *transcendence* of space and place” (105). This concept of immediacy and transcendence seems like a potentially more useful way of characterizing issues of constant connectivity, or a culture of “busyness” than metaphors of speed and acceleration. It is not that a person needs to be accountable to someone at work, and then to someone at home, and shift quickly between the two “roles,” but, rather, that a person often finds himself or herself in a situation that requires “interaction layering.” It seems that what is so difficult and troubling in a culture of busyness is the demand that a person be accountable to multiple other individuals *simultaneously*.

5. REFERENCES

- [1] Darrouzet, C., Wild, H., & Wilkinson, S. 2009. “Participatory Ethnography at Work: Practicing in the Puzzle Palaces of a Large, Complex Health Organization.” In Cefkin, M. (Ed.) *Ethnography and the Corporate Encounter*. New York: Berghahn Books.
- [2] Goffman, E. 1963. “On Face-Work,” *Interaction Ritual*, pp. 5-46, New York: Anchor Books.
- [3] Mazmanian, M., Orlikowski, W. J., & Yates, J. 2005. “Crackberries: The Social Implications of Ubiquitous Wireless E-Mail Devices.” In C. Sorensen & Y. Yoo & K. Lyytinen & J. I. Degross (Eds.) *Designing Ubiquitous*

Information Environments: Socio-Technical Issues and Challenges. New York: Springer.

- [4] Mazmanian, M., Orlikowski, W. J., & Yates, J. 2006. "Ubiquitous Email: Individual Experiences and Organizational Consequences of BlackBerry Use." Paper presented at the Academy of Management. Best Paper Proceedings, Atlanta, GA.
- [5] Mazmanian, M. 2011. Technologies of connectivity and norms of divergence: Managing accessibility in the face of wireless email. *Under Revision, Academy of Management Journal*.
- [6] Mazmanian, M., Orlikowski, W. J., & Yates, J. 2011. The paradox of autonomy: Materially constituted identity and wireless email use among knowledge professionals. *Under revision, Organization Science*.
- [7] Tomlinson, J. 2007. *The Culture of Speed: The Coming of Immediacy*. London: Sage.