

14 How a University Domesticated the iPhone

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INTRODUCTION

This chapter studies how the iPhone entered one formal organization, the University of Art and Design Helsinki (Taik). Like mobile phones throughout their history, the iPhone was a coveted object that people passionately wanted as soon as it entered the market. However, Taik had a mobile phone contract with a carrier that did not have the iPhone in its selection until summer 2010. This paper shows how Taik found settlements between passion and organizational policy through several routes from 2007 to 2010: at one School, through a conflict; at another, through research-based justifications; at a third, through the very reason for existence of the School. iPhone as a moral object



One strand of literature on mobile phones has looked at mobiles as more than things for calling and texting. In what must be the first empirical study on mobile phones, the sociologist Timo Kopomaa noted that phones are moral objects.¹ Just like many other novelties, people and institutions observe and evaluate mobile phones, and people who buy them may have to explain the reasons for buying and using them.² Typically, buyers and users appeal to reason for buying their phones: phones are tools, not toys.³ A few years later, Leopoldina Fortunati, James E. Katz and Raimonda Riccini edited a book that looked at phones as fashionable objects.⁴ From around 2000, phones were treated as accessories, and companies like Nokia followed the fashion and luxury industries keenly to create phones that would attract a following among the fashionable set.

In 2007 and 2008, the iPhone was hotter than any other phone at that time. Some reasons were in the cult status of Apple and its American origin, but the iPhone's sleek interaction design and minimalist appearance also played a part. The iPhone, however, was not just hot. It was also a dangerous object, especially in formal organizations. People wanted it, but large formal organizations had phone policies that tied them to carriers that did not always have an iPhone in their selection. Also, the iPhone was at the more expensive end of the market, which often placed it outside the price range accepted by many organizations.

Reasons like these turned the iPhone into a possible source of conflict. Organizations work on premises that follow organizational rationalities; people work on other premises. These may work in harmony, but just as well be at odds. When they are at odds, there needs to be ways to reconcile these alternate realities, hot and cool, passion and organizational rationality. This paper focuses on smart phones in organizations for several reasons. Organizational uses of mobile phones have got little attention in mobile studies, even though they make up a major part of the smart phone market. Organizations are also good laboratory animals for studying issues like the clash between passion and rational decision-making.

MISTAKES AND RULES AT WORK

Organizations create policies that justify some actions, and make some others punishable. Members of the organization are held accountable for following these policies. Typically, everyone is expected to know these policies, but it is another question who can define which deviations are noticed and how they are interpreted.⁵ In this respect, organizations are moral systems.

The American sociologist Everett C. Hughes once urged sociologists to look at mistakes at work as a way to understand power in organizations. His point was simple enough: everyone makes mistakes occasionally, but penalties are not distributed evenly. Some get away with practically anything; some have to be wary about making mistakes; some get no leash at all.⁶ Following Hughes, Charles Bosk has described in his marvelous ethnography *Forgive and Remember*, how some breaches are forgiven to medical students while some others are not. Attending physicians accept technical errors as long as they are not fatal, but are wary of moral errors that reveal the student's character. Good students can get away with almost anything, while those whose character is found faulty are punished for the tiniest of mistakes.⁷

Usually however, these evaluations are based on organizational rules rather than informal character assessments. Typically, it is senior management that has the job of seeing that things go according to the rules. Their job is to monitor things and decide what kinds of moral implications they have.⁸ At medical school, at stake is entry into the most prestigious medical specialties. In formal organizations, punishments vary from barely noticeable to losing one's job. Organizational rules, however, are not cast in stone. They can also be changed if senior management so decides.

In this paper, "domestication" is shorthand for describing the ways in which the iPhone enters an organization, not an explanatory concept. Literature on the domestication of technologies originated with Roger Silverstone's writings, but has focused on households, and has been largely void

of questions like power and organizational rules.⁹ For this reason, the starting point of this paper is in Hughes' and Bosk's writings.

POLICY MEETS PASSION

The University of Art and Design Helsinki (Taik) is a large design university by European standards. In 2007 to 2008, when the iPhone saw daylight, the university had a contract with Elisa, the mobile carrier of the former Helsinki Telephone Company. Everyone at the university who was entitled to a company phone was to get a mobile policy from Elisa.

When the iPhone entered the Finnish market in 2008, Apple did a package deal with TeliaSonera, a company formed a few years earlier in a merger of former Telia, Telecom Sweden, and Sonera, Telecom Finland.¹⁰ For private use, anyone was able to buy an iPhone. Charging calls, text messages and data transfers from the university was out of the question.

The management did not see any reason to change the rules: the iPhone was barely seen as a novelty in a country that had been one of the world leaders in mobile telephony since the mid-nineties. Although the iPhone had the cool factor, it was technically inferior to Symbian-based smart phones. Business solutions like maps, mail and calendar syncs were easier and safer to use in Symbians than in iPhones. Multimedia capabilities like cameras and MMS had been available from around 2002 in most phones sold in the Finnish market. In a culture like this, the management found few reasons for opening the doors to the iPhone and breaching its contract with Elisa.

Of course, there were ways around the TeliaSonera package deal. A few days after the iPhone's release, it was possible to hack the iPhone's SIM cards so that the device became carrier independent. Anyone with some technical skills and access to the Web could buy an iPhone from the United States in 2007 and hack it into a working phone. An easier way was to buy a Sonera policy and send the bill to the university.

The university, however, could refuse to pay it with a reason good enough to be defended in court. Managers in charge were tied to Elisa policy; if they departed from it, they might have been held liable for breaking the law. University policy, in effect, made it impossible to buy and use iPhones, although Taik is a design school, which mostly lives in "Apple culture." The policy and these workarounds created a situation in which many types of reasons drove people to buy iPhones, most of these reasons being based on passion and desire to have the latest Apple product, while some were legitimately based on professional needs—like in the case of media designers.

This was a temporary situation. It began on 11 July 2008, when the iPhone 3G came to the Finnish market, and ended in Summer 2010, when Apple's package deal with Sonera ended. Taik's mobile partner Elisa begun to sell the iPhone and iPhone subscriptions, making it an ordinary object in the eyes of the university. By then, Taik had also lost its independence and

become a part of Aalto University, which also had engineering and business Schools. Aalto's phone policy made it possible from the very beginning to buy an iPhone with an Elisa connection.

The tumultuous period, then, lasted for about two years. During this period, several settlements took place at Taik. The conflict between passion and policy was solved in several ways, involving several types of processes, negotiations, and power positions. This paper looks at the ways in which three Schools of the university reached settlements.

THE iPhone AS A MORALLY CONTESTED OBJECT

At one of the university's schools, passion for the iPhone came into conflict with Taik policy in 2008. The settlement was painful and caused serious conflict between senior administration and academic leaders. It shaped policy in this school for two years.

Two employees bought iPhones with Sonera cards and started to use the phone as a work phone. A third employee bought the phone from abroad during a business trip, hacked it and started to use it as a Taik phone. Administration at the school took notice and refused to pay for the phones when these employees handed in the receipts. The same happened when the first phone bills arrived. For senior administration, the situation was clear: a breach of rules had happened. Its position was that these three people had to return the phones because they were not acquired according to Taik policy. The school could not pay for calls and data in the Sonera network. The reasoning was straightforward: this would have been against Taik's contract with Elisa. Employees had made a mistake; the senior administration could not see this mistake through its fingers.

The employees, however, did not accept this line but appealed to the dean of the school, who then listened to both parties. From the employees, he heard a host of reasons for why the iPhone was a necessity. One of the employees, a former vice dean, justified his reasons by claiming that he needed an iPhone for teaching media production for small screens. Another employee's reason was that he needed an iPhone to maintain students' computer systems from his home. The third employee's reason was that he needed to test its sound capabilities, again with media production in mind. To the dean, then new in his job, these reasons were convincing enough to overrun the administration's line. For him, these reasons were professional enough to justify exceptions to Taik policy.

Senior administration was not happy and saw this development as evidence of moral failure: it was not anymore a mere mistake. Fearing what would happen to its authority (and the school's budget) if the iPhone floodgates were opened, it took the emerging conflict to central administration. Unsurprisingly, it supported the administration's line, and said in no uncertain terms that the phones were against company policy. The

message was that they were not allowed, and they had to be returned. This response, however, posed a threat to the dean's face. He was forced to choose his side.

In terms of power, the situation was easy enough: deans have enough power and resources to run their Schools as fiefdoms. All they need to break company policy is to find a proper justification for breaking away from it.

However, this requires some balancing; a cautious dean does not humiliate his key administrators. After about six weeks, there was a simple settlement. Two employees agreed to pay their own iPhone bills and kept the ownership of their phones—that is, they did not try to charge the price of the phone to the university. One employee agreed to separate work use from personal use, and use a separate affix for his work calls to indicate which use was work-related. The school paid this part of his phone and data bill.

This was against Taik's phone policy, but the administration backed up and accepted this change. Others at the department agreed not to buy iPhones. These three phones, then, did not open the floodgates; the school policy remained restrictive. In reaching this settlement, the administration was successful in its effort to enforce the company policy, and none of the employees lost the visible token of their passion, the iPhone.

RESPECTING ORGANIZATIONAL MORALITIES

The contrast between the previous case and the School of Design illustrates the importance of the management's definition of what is normal and its power in defining the borderline of acceptable and non-acceptable errors. At this school, Taik policy was overrun in a few cases, but with academic and senior management's consent. For this reason, iPhones at this school did not raise questions of mistakes or moral failures.

Few academics at the School of Design have iPhones even in 2011, because they generally find them technically inferior to Symbians (and possibly also Androids). Deans and department heads do not have one, and only two professors—one personal, another a company phone. The attitude was restrained from the beginning. The dean did not authorize purchases without very good reasons, and no one challenged her authority.

This was the main picture, but it cracked on a few occasions. The school respected Taik's contract with Elisa but allowed a few exceptions for solid organizational reasons. The first iPhone was bought for a research project that developed interactive maps of a national park close to Helsinki. In the project, researchers from the Geodetic Institute and the university wanted to create interaction designs for the park, but Symbian proved to be too difficult to function as a proper test platform. As standard interaction techniques were far easier to implement with the iPhone, it was chosen as a technology platform.

For this reason, the then vice dean of the school authorized iPhone purchases with Sonera SIM cards for researchers in this project. In the end, only one researcher, a computer scientist, bought it. The school paid for his iPhone from project funds. In fact, in October 2008, the vice dean went to mobile phone shops with the researcher to study the alternatives and to compare the prices. They even learned about available hacks in case they would be needed.

However, the researcher bought a Sonera SIM card for his phone and did not try to charge his calls and data to the university, even though the vice dean had told him that he would approve it. The researcher said that as Sonera subscriptions for unlimited 3G data were only 12 Euros per month, and that this covered using the iPhone as a modem, it did not make sense to separate a sum this small into work and personal use. Even today, as he uses mail for communication and makes only one or two work calls a month, separating the bill would make no sense. When traveling, his habit is to seek the cheapest alternative for communications. For instance, when his present research project takes him to Cambridge, UK, he uses cable connection for his laptop and connects the iPhone to the laptop for Skype calls.

This became the bottom line within the School of Design. Breaking this policy was fine as long as the dean and the vice dean were able to find a solid reason that justified a departure from the policy. They needed a rationale to explain their decision in case someone would ask why the School did not follow university policy. This was a very restrictive policy, but also effective. Although a few employees have iPhones, they are personal. There was only one Taik iPhone at this school of over 100 people between 2008 and 2010.

The School of Design shows how respecting the lines of authority in the organization maintains its policies. The key thing was that any breach is done properly, respecting the lines of authority at the school, not by rushing to the shop and placing the deans in to a situation in which they have to choose their side and risk losing face.

When we compare the School of Design to the first school, we see how the iPhone was just like any other symbol. The right to interpret what kind of symbol it becomes depends on whether the lines of power are respected or not. For designers, the iPhone is still not always a serious object. When this paper was written, one of the leading professors of the school said that he found it difficult to imagine how things could go wrong at the other school. For him, it is self-evident that if he buys toys, he uses his own money.



THE iPHONE IN A HACKER CULTURE

There was yet a third path to the iPhone. This path shows even better how power played a significant role in the domestication of this device. One of Taik's schools specializes in new media. iPhones started to appear in this school almost immediately after it was launched in the US in 2007,

well before its launch in Finland in July 2008. Getting an iPhone did not become a big deal at this school, known for its technological orientation and hacker culture.

The first person to acquire an iPhone, in fact, was the then dean of the department, who bought the phone from California during research leave. When he returned to Helsinki, he hacked his phone so that it became operator independent, and simply put his Elisa SIM into the phone.

Several other members of the school followed suit. The iPhone was bought as a gadget, it was hacked, and it was used as a normal phone.

This became an unofficial policy of the school. The iPhone was defined as an internet gadget, and as a mini version of a laptop. As such, the phone policy was irrelevant, or not to be taken too seriously. Since the mission of the school is to explore new media technologies, the policy, the logic went, interfered with freedom of research and teaching. The same logic was applied to Apple: its products were not meant to be hacked, but if the possible rights of Apple became a hindrance to academic freedoms, the greater good justified hacking.

Hacking, of course, has been a cherished part of the culture of the school in talk and sometimes in practice. There is knowledge only hackers have, and if a school aims to know what is happening on the internet, it needs to support hacking as well. Of course, this was never an official policy; the dean was watching hacking through his fingers.

This was a temporary settlement. As soon as the iPhone became part of Elisa's selection, researchers and professors at the school switched to official products. The reasons were spelled out to me in an e-mail by a professor, who told me how he bought an iPhone from Cambridge, UK, in 2008, and used it as his personal phone with a Sonera SIM. He hacked the phone with Zibri's hack soon after returning to Helsinki to make it carrier independent. His reason was not to put a company card into it; he wanted to use it in Finland, which was not possible with a phone bought from the UK. This history was repeated soon after when he got a free iPhone 3G, which he was able to use in Finland, but not in New Zealand, where he went for a sabbatical. Again, he needed to hack it so that he could use his device with prepaid SIM cards in New Zealand and Australia. His hack was DevTeam's "yellow snow."

He switched to Elisa as soon as it became possible, however. The reason was that these hacks made any upgrade of iPhone's OS time-consuming and risky. When the iPhone 4 came to the market and a part of Elisa's selection, he wanted to get rid of the need to repeatedly hack his phone and risk losing his data. Also, as the baseband system in the iPhone 4 is unlocked, he explained, he can also use prepaid SIMs abroad. He writes:

The down side to the hacked phone is upgrading to new releases of the iPhone OS. It's time consuming, boring and risky. As soon as Elisa started selling iPhone's to their business customers last year I upgraded

to the iPhone 4, which is a far superior device, especially re: camera and location technologies. I gave no temptation to jail break this one as there are so many good, inexpensive apps available from the app-store and I don't have time for all the hacking upgrade nonsense. Also the baseband system (telephony and SIM related operating system) is already officially unlocked so I can use any prepaid sims I like abroad. (e-mail to the author, 31 March 2011: 18:03)

At this school, the iPhone was treated very differently from the two other schools. The reason for the existence of this school is new media and its technologies. Not having experience of the iPhone would have been against the very charter of the school. For this reason alone, the process of getting iPhones was, if not legitimate, accepted. The acceptance started from the dean, professors and key researchers. After they had opened the path, they found little reason to say no to others who wanted to get an iPhone. Though everyone knew iPhones were against Taik policy, they easily found reasons not to care about this policy, as did the administration and the deans at other schools. The greater professional good became an unspoken policy.

THE IPHONE IS FREED

In 2010, the iPhone became freely available in two ways. First, Taik joined a larger university, named Aalto University. Officially, Taik is called Aalto University School of Art and Design, starting from 1 January 2010. Aalto's mobile phone policy aims at keeping the selection fairly small to ease upgrading, but the iPhone is in its small selection. Second, as I have said, Taik's and Aalto's carrier of choice Elisa started to sell the iPhone in summer 2010.

After these changes, anyone entitled to a mobile phone at Aalto can purchase an iPhone, if his or her superiors accept the purchase. Installing an Elisa SIM into it is normal practice. It is also possible to install prepaid cards into these phones when traveling.

There is a twist, however. At Aalto University, the IT unit buys cheaper phones and takes care of "modest" phone bills. Specifically, this cheaper model is a desktop GSM or Nokia 2730, priced at 85 Euros, including value-added tax. Other models authorized by Aalto were Nokia E5 at 280 Euros, Nokia E7 at 590 Euros, Nokia N8 at 478 Euros, iPhone 16Gb at 598 Euros and iPhone 32Gb at 705 Euros. The policy also specified warranty: for Nokias, it was 24 months, for iPhones, 12. The following policy is on Aalto's intranet.

iPhones: Aalto moves from landlines to mobile phones in several stages¹¹

In IT unit's development discussion 4.1.2011 (participants: the rector, vice rector, NN, MM, JJ, and KK), it was decided that the expenses

for phone acquisitions are directly allocated to the units that buy the phones. The acquisition process and first use is administered by the IT unit. For those who have to change their landline phones to mobile phones due to changing the unit, the IT unit pays once for a decently priced mobile phone (Nokia 2730, desktop GSM). Aalto University acquires a connection through a centralized process administered by the IT unit, and pays modest phone bills for the connections.

This policy is valid immediately.

(Director, IT services Aalto University)

This policy creates an internal market at Aalto. Schools and other units have an incentive to push people to buy cheap models and use their phones sparingly. Specifically, it hits the more upmarket phones like the iPhone. The iPhone is more expensive than most other phones in Aalto's selection, and it is also more expensive to use. Price is a local matter: anyone interested in buying a phone has to get approval from his or her superior, who is typically the head of department. The superior needs to be convinced about the need to go for more expensive phones.

However, this policy leaks at many points. The difference between the price of the iPhone and more expensive Nokia models is small. In fact, the most expensive phones someone can buy at Aalto are Symbian phones, usually manufactured by Nokia. For example, Nokia Communicator has always been popular with senior professors and deans, and Aalto does not forbid these expensive models. Even though the website only suggests this, it is always possible to buy some of these very expensive models.

In terms of culture, two things come to play. First, price is related to organizational position. Several Nokia models like the communicator are far more expensive than iPhones. These upmarket products have been routinely bought and used by deans, senior professors, administrators and other frequent travelers who want to check e-mails wherever they are.

If history gives any clue to the future, the iPhone will find its home in this category. Though the iPhone is not in the upmarket category alone, it is solidly there with the most expensive Symbians. In brief, purchasing an iPhone—or any other expensive phone—is a matter of whether the employee is able to justify it to his or her superiors. However, as always with justifications, some people need to justify more. For example, for the author of this chapter buying an iPhone was a matter of filling in an order form. Aalto's IT services bought him an iPhone 16Gb even though his department head forgot to authorize the purchase.

Second, there are different cultures of use. Designers have stayed in Symbian, and still generally distrust the iPhone at a technical level. It does drop calls and its sound quality is inferior to Symbian-based devices. Industrial designers, furthermore, have little interest in Apple's App Store. For media designers, on the other hand, the iPhone and its ecosystem are hugely

interesting and important. Media designers have largely switched to the iPhone, although there is also a trend toward Android phones.

Obviously, it is too early to say much about these cultural matters. After all, the iPhone became available at Aalto in summer 2010, and the normal life cycle of a phone is two or three years. Few people have acquired new phones after the iPhone has been an approved option.

CODA: THE ROLE OF POWER

The tale told in this paper is not strange. It is not the first of its kind and certainly not the last. Similar battles have been fought over Apple and Microsoft cultures in computers, and many electronic devices like Walkmans, MP3 players, cameras and mobile phones have been objects of moral discussion at some point.¹² This chapter has argued that when gadgets like these enter formal organizations, they have to find their place not only morally, but also organizationally.

This chapter has looked at people in institutions: both those who run them and interpret their rules, and those who have little control to define what can be accepted. Specifically, this paper has looked at moral reasoning involved in making sense of whether it is possible to have an iPhone or not. The main inspirations were Everett C. Hughes and Charles Bosk, two Chicago sociologists who have pointed out that mistakes open a particularly interesting window to understanding organizations.¹³

The iPhone is a particularly interesting object for an organizational analysis for many reasons. As a phone, it is a tool, and obviously also a necessity at work. It was also the cool thing to have in 2007 and 2008. As several writers have noted, people have projected many kinds of meanings to mobile phones over the years, and the newest models have consistently been both desired and simultaneously frowned upon. The iPhone is no exception, although it is an Apple, which has a long enjoyed cult following.

In fact, the iPhone was particularly suitable for raising these moral evaluations. Its slick industrial and smooth interaction design set the industry standard in 2007, especially in comparison to the market leader Nokia, whose phones all of a sudden looked dull in comparison. Against the Nokia-led Symbian background, the iPhone was a hot, dangerous object, and it was easy to turn it into an extension of self against the mass. As an object of passion, it was prone to clash with the standardizing mentality of bureaucratic rationality especially in a country in which most functions of the iPhone had been a commonplace for years.

The testbed for these ideas has been Taik, a large art and design school in Helsinki. Taik bought its phone services exclusively from Elisa Communications, which did not have the iPhone in its selection until 2010. This meant that anyone who wanted to have it had to find a way around Taik phone policy.

As we have seen, despite the policy, a few people managed to get an iPhone. However, there were major differences between the schools. At one school, the iPhone raised problems. There, people bought iPhones without asking for permission. Since the line of authority was not respected, the administration fought back and managed to restore the policy. In contrast, in media-oriented programs, the policy was permissive from the beginning. In the name of its mission, the dean and senior professors at one of the media programs authorized iPhone purchases and did not go after hacks. Their policy was a quiet acceptance, that is, “Don’t ask, don’t tell.” In fact, at this program, the dean and senior professors set an example for such flexibility. In design schools, getting an iPhone required a good justification. Typically, this justification was research.

Although this chapter has shown that to understand mobile technologies, we sometimes need to place the locus of action within organizational dynamics rather than individual decisions, it also shows that there is nothing obvious about organizational policies. As the British critical management theorist Hugh Willmott has noted, rules are sense-making devices that provide people and organizations with ways to make sense of what is right and wrong.¹⁴ Who has the power to use these rules to make sense of things and to forgive breaches is crucial in understanding how the iPhone was domesticated at Taik. Organizational rules and policies are not just flexible, they are also moral devices that management uses to draw a line between normal and abnormal, a mistake and a severe breach of morality.

In all, this chapter has taken an unusual angle on the iPhone. It has been treated as a moral object and a symbol that may endanger organizational policies. The chapter has shown how the iPhone threatened the established order at Taik, how knowing this established order led to many types of actions among Taik employees, and how administration and management was forced to form their own policies to deal with these actions. We have seen how these policies carefully balanced official policy with passion. Perhaps more than any other object recently, the iPhone became a matter of negotiation and also a display of power.

ACKNOWLEDGMENTS

I want to thank several colleagues for telling me about their policies regarding the iPhone and the reasoning behind those policies. A special thanks goes to Taik administration for telling me about its phone policy and about how the iPhone was handled in the organization. As former vice dean for the School of Design, I was one character in the story; my role in the story is that I authorized buying one iPhone for the project mentioned in section four of this paper.

NOTES

1. Timo Kopomaa, *The City in Your Pocket. Birth of the Mobile Information Society* (Helsinki: Gaudeamus, 2000).
2. For Sony Walkman, see Shuhei Hosokawa, "The Walkman effect," *Popular Music* 4, 1984: 165–180; Michael Bull, *Sounding Out the City* (Oxford: Berg, 2000); for generations of cameras, see Sarvas Risto and David M. Frohlich, *From Snapshots to Social Media. The Changing Picture of Domestic Photography* (London: Springer, 2011).
3. See also James E. Katz and Mark Aakhus, eds., *Perpetual Contact. Mobile Communication, Private Talk, Public Performance* (Cambridge: Cambridge University Press, 2002).
4. Rich Ling, "Fashion and vulgarity in the adoption of the mobile telephone among teens in Norway," in Leopoldina Fortunati, James E. Katz and Raimonda Riccini, eds., *Mediating the Human Body. Technology, Communication, and Fashion* (Mahwah, NJ: Lawrence Erlbaum, 2003).
5. Harold Garfinkel, *Studies in Ethnomethodology* (Englewood Cliffs, NJ: Prentice-Hall, 1967); Carolyn Baker, "Ticketing rules: categorization and moral ordering in a school staff meeting," in Stephan Hester and Peter Eglin, eds., *Culture in Action: Studies in Membership Categorization Analysis* (Washington, DC: University Press of America, 1997), 77–98; Ilpo Koskinen, *Managerial Evaluations at the Workplace* (Helsinki: Hakapaino, 1998).
6. Everett C. Hughes, *The Sociological Eye* (Chicago: University of Chicago Press, 1984).
7. Charles Bosk, *Forgive and Remember* (Chicago: University of Chicago Press, 1979).
8. As the critical management theorist Hugh Willmott has noted, organizational rules are sense-making resources. Hugh Willmott, "Studying managerial work: a critique and a proposal," *Journal of Management Studies* 24, 1987: 249–270; see also Mats Alvesson and Hugh Willmott, *Making Sense of Management: A Critical Introduction* (London: Sage, 1996). For seeing how these evaluations are done, see Koskinen, "Managerial Evaluations at the Workplace."
9. See Roger Silverstone, Eric Hirsch and David Morley, "Information and communication technologies and the moral economy of the household," in Roger Silverstone and Eric Hirsch, eds., *Consuming Technologies* (London and New York: Routledge, 1999).
10. In this paper, I will follow local custom and refer to TeliaSonera as Sonera.
11. Translated by Koskinen. Names have been removed. Accessed 3 April, 2011.
12. Kopomaa, *The City in Your Pocket*; Hosokawa, "The Walkman Effect"; Bull, *Sounding Out the City*; Sarvas and Frohlich, *From Snapshots to Social Media*.
13. Hughes, *The Sociological Eye*; Charles Bosk, *Forgive and Remember*.
14. Willmott, "Studying managerial work."