

Age-old Practices in the ‘New World’: A study of gift-giving between teenage mobile phone users

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ABSTRACT

In this paper, we present an overview of the data collected from an ethnographic study of teenagers and their use of mobile phones. Through the data, we suggest that teenagers use their phones to participate in social practices that closely resemble forms of ritualised gift-giving. Such practices, we claim, shape the way teenagers understand and thus use their phones. We go on to show that this insight into everyday, phone-mediated activities has practical implications for mobile phone design. Using an example, we describe how teenagers’ gift-giving practices can inform design, providing an initial means to conceptualise future emerging technologies.

Keywords: Ethnography, gift-giving, teenagers, mobile phones, cell phones, SMS, text messaging

INTRODUCTION

There is a vision of computing that projects a world in which technology exists as an ever present and all encompassing force, a force that shapes both our individual and social lives. The discourses associated with this vision describe a world in which ubiquitous technologies pervade everyday life, providing us with better and faster ways to do what we do, and do what we cannot even imagine doing. Such visions would have us believe that technological change progresses independently and that technology directly influences how we work, play, and interact with one another (e.g., [20]).

In the CHI literature, it is now common to find research suggesting that this deterministic rhetoric oversimplifies the relationship we, as social beings, have with technology. The point has been made that technological determinism denies the dialectic interchange that unfolds, throughout our social histories, between us and the technological tools that we use. It conceals the fact that we, and the immensely rich and varied social worlds in which we live, have a profound impact on the ways technologies are understood and used, and subsequently evolve across time [13,19].

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Yet, despite this recognition, deterministic talk continues to be conspicuous in the rhetoric surrounding wireless, mobile technologies. The technological advances made in miniaturisation and wireless protocols have been used to issue promises of devices and services that will allow us to communicate whatever we want, whenever we want, to whomever we want; ‘invisibility’, ubiquity and bandwidth are presented as the ‘Holy Grail’ of mobile technologies and promise to serve our communication and information needs in hitherto unprecedented ways.

The practical reality of mobile technology adoption and usage is, not surprisingly, somewhat different from this purported envisagement. Evident in the misfortunes of firms such as Palm and Handspring [22], the predicted demand for handheld devices has seemingly been overestimated. Slow at best, the rate of adoption of information-rich wireless services has also been a surprise for the, until now, relatively prosperous telecoms manufactures and network operators [4,15]. It appears that the overly deterministic visions of technology have misjudged, not only the downturns in economic cycles, but also how we, as active members of society, come to shape technology for ourselves. In short, they have given precedence to the assumption that technological advancements guide what people want and need, rather than recognising that technological requirements are born through the complex interplay between technology and its users.

In this paper, we aim to illustrate how the uptake of technology might be better understood by exploring this complex relationship. Reviewing the key points made in a longer paper, we will argue that everyday, practical activities are influenced by established social practices. This argument will be supported using the data collected from an ongoing study of mobile phone use amongst teenagers. Gift exchange, as a social practice, will be explored in particular. It will be revealed that a range of teenagers’ phone-mediated activities closely resembles ritual gift-giving and that their participation in these activities has a significant impact on the ways in which they see and understand the use of mobile phones. To illustrate how such an understanding of technologically mediated activity can benefit design, the paper will conclude with an overview of a possible design solution. Our aim here will not be to provide one final

solution, but rather to show that through a critical analysis of the relationship between technology and our social world, it is possible to articulate a number of design principles relevant to specific contexts of use.

FIELD STUDY

This paper draws on data from a four-month long ethnographic study of teenagers and their use of mobile phones. The study took place in what is known in the UK as a ‘sixth form college’, located in a suburban town near London. The research encompassed qualitative procedures, including observational and interview techniques. This resulted in a substantial collection of both observational field notes and group interview transcripts. The observations recorded the mobile phone use of students between 16 to 19 years of age. Most of the observations took place in the college’s cafeteria, although data were also captured in the college hallways and in areas immediately outside the college. The group interviews were undertaken to investigate phone use in private settings such as bedrooms, living rooms, etc. as well as to get a greater insight into the use of phones in public spaces. The interviews were held twice a week for a period of eight weeks. Two boys and four girls from the college participated—all six being regular mobile phone users before the study. The interviews were semi-structured and based on questions raised from early analysis of the observational data and on the discussions that took place during the interviews themselves.

Both the field notes and interviews raised numerous aspects of teenagers’ use of mobile phones already reported in similarly focused studies. We found, for instance, that mobile phones were *de rigueur*, with the vast majority of the students observed owning their own phones and being what could be best described as seasoned users [6,12]. The presence and use of mobile phones was found to be common during ‘localised’, co-proximate forms of interaction in particular [21]. We also found that the use of the short messaging service (SMS) or texting, as it is colloquially known, was ubiquitous [5,10]. In sum, what was strikingly clear from the observations and teenagers’ accounts was that the ubiquity of mobile phone use was, in general, commonplace for teenagers; phone-mediated activities were a routine, taken-for-granted part of teenagers’ daily encounters.

Gift-giving

Over the course of our fieldwork and through numerous readings of our data, it has become apparent that mobile phones meet not only teenagers’ technological requirements, but also serve various purposes in their normative, social practices—practices that are a part of the orderly happenings through which teenagers organise and structure their daily lives. In particular, we have found compelling evidence for what we understand to be practices of *gift-giving* in which certain text messages, call-credit and mobile phones themselves are treated as *gifts*. Licoppe and Heurtin have reported similar findings in their extensive study of mobile phone users in France [11]. Their research, however, reports on the use of mobile phones for remote voice calls and

refers, by in large, to the exchange of calls and telephone numbers. In using the term *gift-giving*, we refer to the exchange of the tangible between both physically distributed and co-proximate groups, and also give strong emphasis to the symbolic forms of exchange that are central to teenagers’ ongoing social lives. We thus make reference to those forms of gift-giving, in all their varieties, that are deeply rooted in the age-old practices that peoples ceremoniously perform to establish and cement allegiances, and sustain rivalries.

To explicate this idea of *gift-giving* and illustrate the ways in which teenagers manage and organise the associated practices, we will aim to describe how a specific set of teenagers’ phone-mediated interactions resemble a number of characteristics of gift exchange commonly referred to in the sociology and anthropology literature. We will begin by explaining how teenagers use mobile phones to embody shared meanings, amongst other things. These meanings, we will demonstrate, are taken on through forms of ritual exchange. We will further explain how teenagers’ phone-mediated activities can be understood in terms of the obligations of exchange: to give, accept and reciprocate. Through meeting or avoiding these obligations it will be shown that teenagers are able to demonstrate friendships or rivalries. Finally, we will describe how value becomes associated with particular objects of exchange.

Embodied meaning and ritual exchange

The gift embodies meaning. As a material offering it makes tangible something of us as givers and our relationship with the recipient [2,3,14,18]. For example, the gift helps us to order our memories into things that can be “grasped and held” and thus becomes associated with “particular histories and bound up with particular individuals” [1:5]. The mobile phone and its content provide teenagers with several possible means of organising their memories in such concrete terms. The text message, for example, can embody that which is sacred to the owner.

Yeah, Peter sends me loads of nice messages and I want to keep them all. It’s so sad cause he sends me so many nice ones and I have to delete some. I feel horrible... And like, I really don’t want to give the phone back because it’s got so many little memories and things on. And it’s not the same having them written down... cause it’s not from him anymore... I really hate deleting messages that are nice you know. Like when someone’s said something that’s really sweet or just like really personal or something.

In this extract from the interview transcripts, Susan reveals that text messages and memories can become intimately entwined. She speaks of the phone as containing ‘so many little memories’. These memories are embodied in things such as text messages that have emotional significance and can be used to recall past thoughts and feelings through later readings. The message thus resembles a gift in so far as it carries with it symbolic meaning, meaning that is expressly manifest for the recipient.

Susan also talks of the importance of keeping text messages in their original form to accurately preserve embodied memories. Transforming the electronic to the handwritten loses something of the message, possibly the handcrafted ‘moniker’ of the sender. The written text message is thus

seen to bare the hallmarks of the crafted gift. As Cheal [3:158] writes, the “object that is made by hand is not quite like any other object. It is unique, and carries the inescapable marks of the person who made it. The infusion of the person into the product...”

It is through the offering of the gift—the *ritual exchange*—that the gift takes on its meaning [1]. Thus, the meaning is expressed not only in the gift, or by giver and recipient, but also by the occasioned ceremony in which the exchange takes place [3]. For text messages or voice calls, for instance, it is through the ritual offering, and all that ensues, that the everyday, tangible artefact becomes wrapped, ceremoniously, in meaning.

The ritual of exchange is nicely illustrated in the commonly sent ‘goodnight’ text message sent between friends, evident in our own data and documented elsewhere in the literature [10]. This ordered exchange is re-enacted nightly because friends recognise their moral obligation to be party to the ritual. As Mark, from the group interviews tells us: “Of course I have to text her, you know, when I go to bed... you need to say good night.” The nightly offering of the text message is part of the normal course of events, but still signifies the special intimacy between friends. Thus, the normal, mundane encounter is made special through the observation of ceremony. This ceremony is ritualising, insofar as it results in the meaning of the message being thereby altered in ways that gives it semi-sacred values. These values are manifest in the desire to keep the message, to share it and to value it over and above its mere textual form; the text message comes to mean more than merely an exchange of words, but becomes an offering of commitment to the relationship.

Obligations of exchange

In response to the gift, the recipient is compelled to accept. The receipt of the gift acknowledges the donor’s participation in the occasion and, more importantly, the donor’s role in the larger social network. This *obligation to accept*, as a part of the gift-giving ritual, is apparent in the following extract.

- Alex: [Asks where they use their phones and what for.]
- Jennifer: Mostly text messages, I think... At home, in my room, on my bed... And then I get moody if they don’t reply and it’s like one o’clock in the morning. I’ve got ones that are recorded at like three o’clock in the morning. [group laughs] It’s like wicked.
- Alice: And I do that to. Sometimes I’m like ‘okay, if I’m not sleeping then you have no right to be asleep.’
- Jennifer: Yeah, that’s what I do. ‘How dare you be asleep when I’m awake?’
- Alice: ... and then I wake them up. And if I send a message and I see that they’re ignoring it then I call them. [Laughs] It rings and they just can’t get away from me. They go like ‘HELLO!’ I’m like: ‘Hi! Were you sleeping? Oh shame. How are you?’

As Alice and Jennifer make clear, the recipient is thus obliged to meet the ‘challenge’ of the donor. The messages and calls made from their bedrooms in the early hours are performed with the expectation that they will be accepted.

By accepting the ‘challenge’ the recipient also accepts the *obligation to reciprocate*. As Cheal writes [2:426]: “Reciprocal giving makes possible a shared understanding of the relationship as one that is founded upon mutual regard and cooperation.” So, in response to an offer of call credit or a text message, for instance, the recipient is obliged to reciprocate in kind.

This *system of reciprocity* allows people to employ the tangible in a way that binds them through unspoken contracts. In describing this mixture of things and people, Mauss eloquently writes:

In short, this represents an intermingling. Souls are mixed with things; things with souls. Lives are mingled together and this is how, among persons and things so intermingled, each emerges from their own sphere and mixes together. This is precisely what contract and exchange are. [10:20]

The ‘intermingling’ of things with people, and people with people, is illustrated in an example from the interview data where Jennifer talks about the obligation a recipient has to reply to a text message.

if you don't reply they go ‘are you ignoring me? Are you still awake?’ [Group laugh]... And then you get a bit annoyed if someone doesn't reply to you. Like, are ‘are you going to reply to me? Are you ignoring me now?’... And yeah like the person who finishes it... They always say ‘see you tomorrow.’ ‘Ok, see you tomorrow.’ And you reply to them ‘ok goodbye. Goodnight’ and they go ‘oh good night, have a nice sleep. Are you doing anything tomorrow?’ I’ve tried to end the conversation four times and they don’t end the conversation.

Besides the clear indication Jennifer gives of the obligation to reciprocate, she also makes reference to the *cycle of reciprocity*. She tells of the ongoing exchange of messages that take place during the ceremonial ‘goodnight’ ritual in which neither party wishes to be seen as weakening. Gouldner reflects on this pattern, citing Malinowski’s seminal work that documents the exchange between inland communities and fishing villages. Using Malinowski’s words, Gouldner writes: “Neither partner can refuse, neither may stint, and neither should delay” [7:240]. Gouldner goes on to explain that this “beneficent cycle of mutual reinforcement” is enacted because of what he refers to as the moral norm of reciprocity, “a concrete and special mechanism involved in the maintenance of any stable social system” [7:247].

Alliance and friendship

Much of what teenagers do with their phones revolves around the exchange of phone content and of the phones themselves. Through such phone-mediated gift-giving, relationships are expressed in tangible ways and the moral commitment to these relationships are demonstrated and preserved. In practical terms, phones give teenagers something to talk about amongst themselves; this provides them with yet one more mechanism for sharing their emotional experiences and exchanging objects of personal significance. This exchange of the intimate is illustrated, although only momentarily, in the extract presented below.

Four girls sit at a table. One girl, G1, sits with her mobile (Nokia 3210) on the table. Sitting next to her, G2 takes the mobile and looks at the display. The two crouch down towards each other and over the mobile. The mobile becomes their central focus and draws them away from the

other two who are talking. After a few moments, G1 takes the mob from G2 and they return to talking with the others. G1 sits, holding her purse and her mobile in her hand.

On this occasion, two girls, G1 and G2, withdraw from their larger group to talk to one another. The first thing to notice is that G1 has made an 'offer' by placing her phone on the table and making it publicly available. In picking up the phone and holding it so that it is between the two of them, G2 accepts this 'offer'. In doing so, G2 physically distances them both from the larger group. The physical presence of the phone seems to embody a shared (although only fleeting) focus between the two girls, allowing them to establish a subordinate interchange or 'sideplay' [8]. The sideplay presents something of symbolic meaning to both the girls and to the others present. It creates a bond between them through breaking the bond with others achieved by dint of co-presence. Thus, it ties the two girls together, establishing a temporally bounded sense of intimacy.

The next extract reveals how phones can be shared between slightly larger groups. The phones are passed around, and exchanged with little need for discussion or negotiation.

A group of four girls sit round a table. Two of the girls are using mobiles phones. One, G1, looks as though she is playing a game. She is heavily engaged with the phone and seems focused on it. The other, G2, is looking at a phone's display with a third girl, G3. They laugh and talk as they look at the phone. G2 hands the phone to G3 and then retrieves another phone from a bag on the table. Meanwhile, G1 has taken G3's phone and now holds two phones – one in each hand. She seems to be pressing the keys on one of the phones and looking between them (perhaps copying something). The four girls carry on interacting with their phones. Eventually, four phones are visible at the table; all are Nokias and all seem to be customised with bright and colourful covers. They share their phones, looking between the displays, swapping them and handling them. What is striking is that the focus on the phones seems to be accepted practice. No one seems unfamiliar with or perturbed by the fact that they are central to the ongoing interactions.

Through sharing and exchanging their phones and phone content in this way, all four girls implicitly demonstrate their intimacy with one another. By offering the phone or its content and by taking another's phone, or by reading another's content, each of the girls is at once committing themselves to the obligations of giving, accepting and reciprocation and thus at the same time conforming to an agreement of mutual dependence. Through gift and counter-gift, then, this agreement binds the girls together. The phone and its content, it might be said, allows teenagers to take part in gift-giving using distinct repertoires, or 'social markers', through which they are able to negotiate and renegotiate their social relationships [16].

Status and rivalry

As we have seen, gift-exchange, through the principle of reciprocity, establishes a connectedness between people. In apparent contradiction, gift-giving, by changing the balance of a relationship, produces an environment suitable for the demonstration of status and rivalry. Both status and rivalry are subject to the obligation of reciprocity [14,18,17]. As the recipient is obliged to reciprocate the giving of a gift in the form of gratitude, he or she is immediately placed in a position of inferiority. Without a proportional show of gratitude the imbalance remains and gives rise to a status

differential, where the giver takes on a position of seniority and the recipient is indebted until sufficient gratitude is expressed [9]. The phone and its content, like other objects of exchange, are mechanisms through which these struggles of power and rivalry can be played out. The offering of a voice call, for example, can symbolise more than just intent to show affection or allegiance. It can also be used to place the giver in a position of power over the recipient. As Alice explains below, the voice call can become a useful object of exchange through which authority can be asserted over one's boyfriend.

You can use it to wind people up. Sometimes when, umm, I call him [boyfriend], I call his phone and the minute it rings – just the first ring – I'll hang up... I'll do that about five or six times. And I'm always afraid he's in a lesson. He doesn't tend to switch his phone off or put it on silent. It's always on personal. So if it rings I know it's going to interrupt his lesson. If I'm feeling evil I just do that and I call him like six times and just hang up each time and then eventually he'll switch it off. And then he'll call me and go: 'You stupid girl. Why were you calling me?' I'm like: 'Calling you? Oh my phone must have been... I forgot to lock it or something so I must have sat on it or something.' I'm like 'how dare you call me stupid!' and he starts apologising. I feel really good. I've never told him that I actually do it intentionally. He doesn't know that yet... but it's fun... And he's like: 'I'm sorry, I'm sorry. You know I love you really. I'm so sorry, I'll never ever...' And Ezra's going 'Oh my God, oh my God. He is such a dunce!'

At first reading, this colorful example may merely seem like an exercise in playful torment, and indeed this is how Alice herself describes it. But one can also see how this kind of behaviour manifests and sustains a system of obligation and exchange that has hierarchical elements. Through this tormenting, Alice is able to position herself as the dominant member in the relationship with her boyfriend. She makes the offering of a call to her boyfriend when she knows it will provide her with the upper hand. She performs the offering when she feels 'evil', she tells us, and does so when her boyfriend is in class and unable to reciprocate. Along with the embarrassment and trouble receiving a call in class might bring, the boyfriend can only feel further subordinated through Alice's moves to take the upper hand. In class, he is forced to accept offer after offer and cannot meet his obligation to reciprocate, leaving him indebted and caught in a position of inferiority with no means of recourse. Thus, although this may seem somehow from the die of gifts and gift-giving, this example's relevance has to do with how it turns on the obligation of reciprocity.

Noticeably, Alice plays on the fact that her boyfriend is obliged to reciprocate and that he is likely to attempt a counter play for positioning. She is thus prepared for his retaliation. She claims innocence when he admonishes her for the disruption and reciprocates with a further counter move, exclaiming 'how dare you call me stupid!' Eventually, the boyfriend withdraws from the escalating exchange. In doing so, he relinquishes any control he may have had in the exchange and submits to Alice's authority.

In the following extract from the interview transcripts, Alice further alludes to the manner in which reciprocity has its part to play in the rivalry between giver and recipient. She reveals that not only can the recipient's failure to reciprocate be a

cause of tension, so too can the offering of a gift of insufficient value.

- Alice: There's some people I refuse to send messages to because I know they won't reply because they never have credit on their phone yet they always expect you to send them messages. And if they do eventually decide to reply they'll send it over the Internet. Oh, that bugs me by the way. I hate it when people send messages... 'powered by Yahoo' or whatever.
- Jenny: You never know who it's from as well, because sometimes they forget to sign it.
- Alice: Yeah. It just really, really bugs me. I just don't reply. I don't even acknowledge whoever sends it. Even after they tell me 'oh by the way it was me.' I go 'Oh was it. Ok.'
- Alex: Why is that?
- Alice: I don't... Because they expect me to send them messages which is fine. 'Ok I send you messages and you don't reply because you refuse to put credit on your phone' – not because they don't have the money. They just don't wanna! And when they do decide to reply you do it by the Internet. It's just cheap! It's lame!

Alice first reveals how the failure to reply to a text message can lead to the breakdown in mutual exchange. She tells us that she refuses to send messages to those who do not reply. She describes the irritation caused by those who expect messages to be sent—gifts to be offered—but do not reply. This failure to reciprocate can be taken in one of two ways. As we saw in the earlier example, it can be seen as a relinquishing of rights and status. Alternatively, it can be seen as an act of hostility—a declaration of “war” in Mauss’ words [14]. In this example, Alice has little sympathy for the absence of reciprocity and takes a hostile stance against those who are unwilling to reciprocate.

Alice explains that this hostility can be further exacerbated if the reply is written and sent using one of the free text messaging services available on the Internet. ‘I hate it when people send messages... ‘powered by Yahoo’ or whatever’ she says. She sees these counter-gifts as insufficient in value and thus an affront. She refers to the response as ‘cheap’, transforming what might initially be seen as a mutual and fair exchange into one of tit-for-tat—an exchange of goods where value, and specifically economic value, determines status.

Value

The objects of exchange offered via the phone are thus assigned value by teenagers. The value of an object can be determined by the object itself: what it is and how it is formed. The text message, for example, is seen to have greater or lesser value if written in particular ways.

I hate it when they do it [send text messages] in capitals and sometimes when they don't put punctuation marks in, ah, it annoys me. Another thing I've noticed is that... Ok, you're going outside the normal rules of the normal everyday English language writing and everything and so because of that you don't have to keep conforming to the commas, full stops, and the capitals and all that. But still, it bugs me when people refuse to do it properly. They put three words together and there's no indication of where it starts or where it ends, no full stop, no nothing. It just looks horrible... Yeah, because there's some words for instance... if you don't have enough space ok and you're too cheap to send two messages instead of one, what you can do is probably... use the symbol

- '&'— so even if you join it together... that kind of isn't as bad as if you squashed everything together... just looking urgh...

Above, Alice suggests that there are proper ways to construct messages. An improperly composed message is viewed as ‘horrible’. Alice associates such messages with people who are too ‘cheap’ to send longer messages. In doing so she imposes a value system upon messages based on their form.

For gifts such as text messages, value is also associated with who sent the gift and the context in which it was sent and received. As Alice suggests, it tends to be the personal messages from her boyfriend that are valuable and worth keeping: ‘I don't keep sick messages. I tend to delete them. So I haven't got any of the ones... I usually only keep the ones my boyfriend sends me because they're sweet.’ Susan adds to this, recognising that messages are only of interest to particular people in certain contexts.

Well, it's like anything really. Only certain things appeal to certain people. So it's not... like one text message is going to appeal to all of my friends in college. And like, you know like some people will like that my boyfriend will text me to say 'love you' or something, but some people would say 'oh my god.' You know 'I'm single! Rub it in!' whatever... Personal messages aren't really something you share.

Show a boyfriend's message to a friend who is single and expect a less than positive response Susan tell us. The value of a text message is seen to be equally, if not more questionable in other contexts. For example, the ending of a relationship through the use of the text message is regarded as the most contemptible use of the technology.

- Jennifer: That is the worst way. That is like a bitchy thing to do [laughs with Jenny]...
- Alice: It's... It's very... It's worse than being a coward. It's worse than calling someone when you know they're a thousand miles away and going 'oh yeah, by the way, you're dumped.' It's terrible... It's... I hate to use this term... It's a copout. It's lame. I don't know that's me personally cause I hate to leave things without knowing... I don't know, it's just unfinished business. You can't just send a message and say, you know, 'you're dumped.'

This use of the text message clearly leaves Jennifer and Alice feeling strongly about its value. They both see the impersonal nature of the text message in this context. In quite a different context, however, the text message can be seen as an invaluable object of exchange. Talking of text messaging in general, Susan feels that ‘it's cool cause you can talk about anything. Like, you can talk about your love life or your friends, or like mean people or anything.’ Her view is of an object of exchange that promotes social relationships and binds friends together in intimate ways.

The distinction between messages that are personal, or private, and messages that are aimed at a larger audience is yet another way in which value is assigned to messages. The public messages—the jokes or those sent to groups—are seen as disposable whereas the personal messages are felt to be the invaluable residue of important memories or happenings. Susan and Jennifer talk about this distinction in the extract below:

- Susan: ... And ones that are directed at a lot of people like I told you my friend text me to say 'thanks for asking me out. I had really nice time. Say hi to everyone.' And I showed that

around and said ‘argh, how cute is she?’ Because she hardly ever comes out with us, and umm, ... everyone was like ‘arr, yeah...’ And then there are ones that say... Umm, I can’t think of anything. Like [pauses]... Like my friend was telling me that he used to get bullied at school and stuff and like he was saying how horrible it was and like I would never show that message to anyone, which is why I deleted it. But I was still really conscious of...

Jennifer: Yeah, you sometimes have to delete messages like that, that you want to keep but... But if they’re like really, really personal and you know that you’re not going to want other people to know. But you want to keep it and it like shows...

Susan: It shows trust between you... That’s why I think you should be able to lock them. Just have a password to get into all of your messages, like all of your ‘inbox’.

Susan tells of the shared jokes and the ‘cute’ messages that are passed between the members of larger groups. These seem to be of temporary interest and lose their significance outside of the relevant context. Jennifer puts it like this: ‘A lot of messages, when you take them out of context they don’t mean anything anyway. So like with Susan, in that situation [above] it meant something, but if someone had read it the next day it wouldn’t have been the same.’ On the other hand, Susan refers to ‘really personal’ messages that signify something of lasting importance between people. These are sentimental objects to be kept, but at times must be discarded because of the mobile phone’s inability to lock or hide messages.

The offerings made through the phone, such as text messages, thus have embodied meanings and these meanings are what enable the assignment of value to the objects of exchange. The text message, the voice call, the offer of a phone, etc. are gifts, in so far as they have value, that this value is connected with the giver, the recipient and the context in which the exchange takes place, and is embodied and retained in material form.

INFORMING DESIGN

This overview of the fieldwork reveals that teenagers’ phone-mediated activities resemble the practices of gift-giving in a number of ways. By drawing on examples in the data, we have demonstrated that mobile phones provide teenagers with a means of exchanging tangible objects that embody shared meanings. These objects of exchange, it is revealed, take on their meanings through rituals of exchange, rituals that are commonplace and taken-for-granted in teenagers’ daily lives. We have shown that teenagers are able to meet their obligations of exchange through their phones and that in doing so they are able to sustain their relationships, demonstrating both ties and allegiances or rivalries.

Looking at mobile phone use in this way offers an illuminating insight into how we might consider the design of new features. Considering phones in terms of people’s social practices, and not merely with respect to technological innovation, provides a basis for designing emerging technologies that are of practical use in everyday life. This section aims to show, through an example, how mobile phone design might be guided by understandings of practical, social activity.

Saving text messages

Something that is apparent from speaking to teenage phone users is that they frequently find themselves having to delete the messages they wish to keep or having to transfer them into some alternative form. This is because most phones have a limited number of messages that can be stored—of the order of 10-20 messages. This technologically imposed limit has the potential to be solved relatively easily by simply increasing a phone’s memory capacity. This solution, however, does little more than apply the wholly inadequate idiom more-is-better. By meeting a poorly defined need, it offers little assurance that it will provide teenagers with what they actually want.

Our claim is that, to produce an acceptable solution, questions must be asked, such as: why do teenagers want to store messages? What do they do with messages that are stored? And, how does text messaging contribute to young people’s orderly lives? The findings presented in the earlier section offer several possible ways in which to answer these questions and in doing so point towards several design possibilities.

Embodied meaning

Our findings suggest that one of the reasons why teenagers store messages is because they embody sentimental meanings. The meanings are embodied in the message’s physical properties: its form, its content, its time and date stamp, etc. all work in combination to instill meaning into the physical. This suggests that it might be fruitful to design a memory solution that further enhances the association between the physical object and symbolic meaning. Indeed, one of the study’s participants, Susan, introduces this thought in one of her own design ideas:

I was thinking the other day, you know how you have memory cards for Play Stations?... I so think you should have them for phones... Just stick them in the bottom and then you could like save your text messages like..., cause like... I keep this thing, ... like a box of stuff that reminds me of certain people yeah, and so I have a box for every person, and it would be really cool to have like a memory card for each person so I can put all their text messages in there so I can retrieve them one at a time when I want them.

Susan’s idea nicely illustrates how the physical object can become imbued with meaning and, specifically, how technology might be designed to support such an everyday practice. The idea of using memory cards with mobile phones is, of course, not new. Several phones available on the market already have such a feature. What is interesting about Susan’s suggestion is that she sees memory cards not as some technological solution for expanding the phone’s memory, but rather as a means to embody her own memories still further. In her view, the cards are thought of as objects in which the memories associated with a particular person can be embodied. Thus, the cards are what Susan later refers to as ‘diaries’ for each friend.

Ritual and the obligations of exchange

Taking Susan’s idea further, we might consider how memory cards could be taken up in teenagers’ ritual practices of exchange. The storage of messages on memory cards offers yet another way for the obligations of exchange to be met

through tangible and practical means. Through using removable memory media, not only do messages exist as possible objects of exchange, but so too does the means by which they are stored.

Memory cards thus provide teenagers with a host of possibilities for giving and accepting collections of stored messages. Besides collections associated with specific people, collections of jokes or text-based pictures might, for example, be shared and swapped. This points towards the design of a mobile device that is not only able to hold one memory card, but to hold two or more and also possibly have 'on-board' memory so that messages can be easily exchanged between cards. Further, the practical operations needed to share and exchange stored messages might be designed so as to afford ritual performance. Like text message composition, there might be proper or improper ways by which messages can be exchanged.

Alliances and rivalries

It is not difficult to imagine how the use of memory cards might give rise to particular alliances and rivalries. As with all that is tangible, there is ample opportunity for excluding the have-nots from the haves. For example, friends' messages may be kept and treasured and, by the same token, abandoned boyfriends and girlfriends might be symbolically jettisoned when their respective memory cards are deleted. The use of memory cards might be designed to support allegiances and rivalries in more subtle and possibly elegant ways, however.

In the interviews, the importance of keeping particular messages private was raised and one solution offered was the possibility of locking messages. This idea might be used so that locked messages stored on cards could only be read by the privileged few. Electronic 'keys' could be circulated between friends possibly in the form of text messages. Extending this metaphor, messages might also be 'hidden' on cards and only made viewable when permission is granted. These permissions could also be managed through the sending and receipt of messages.

Value

As we have seen, text messages are made special, or valuable, because of the memories they evoke. For teenagers, messages are valuable because they allow them to recall particular people or particular places. Thus the value is dependent upon, in part, who messages are sent from and where and when they are received.

If messages were to be stored on memory cards, and hidden or locked, they could be designed to be associated with people or places by taking advantage of the much touted location-based services and short-range, wireless technologies, such as Bluetooth. That is, messages could be set-up to be unlocked or made visible when phones were in the proximity of particular people or in specific locations. This would contribute to the ritual of exchange, locating the giving of a gift to particular physical spaces and people. It would allow messages to be associated with specific people

and places and in doing so become meaningful, and thus valuable, to the recipient.

Below, we summarise how our understandings of teenagers' social practices have been used to think about a solution for storing text messages:

- A tangible means to store messages, such as memory cards, could be used so as to support the embodiment of meaning in the physical object.
- Mobile phones should be designed so that the objects of exchange—the memory cards—can be shared and swapped in practical ways, ways that support observable, ritual performance.
- Elements of the design, such as access privileges to stored messages, could be used to sustain alliances and rivalries between social groups.
- By allowing stored text messages to be accessed in the proximity of particular places or people, meaning and thus value may be ascribed to the messages.

CONCLUSIONS

In discussing the ways in which text messages can be stored on memory cards, we have aimed to show that an understanding of people's social practices offers a means to generate directions for future technologies. The ideas raised, however, are presented as rough illustrations and are in no way thought to be complete.

For instance, one would want to extend the data corpus to provide measures of the extent of phone-mediated gifting. This would not be difficult and could contribute to some indication of the possible scale and hence market opportunities here. The data reported in this paper as well as other research we have undertaken has convinced us however that this marketplace is substantive. Besides methodological limitations, we have also offered just one set of many possible design solutions. These do not consider the exchange of objects other than text messages, such as ringtones, pictures, music, etc. More generally the ideas make no attempt to account for social practices other than gift-giving. In this capacity, they are thus meant to simply provoke the contemplation of mobile phone design in light of the social practices that people engage in. They should not be seen as concrete, finalised design criteria.

To bring such ideas to fruition, clearly the detail of the mobile phone's user interface would need to be carefully thought out so that it afforded the accomplishment of the respective practices. This stage of design is undoubtedly a challenging prospect in itself. In this paper, however, we have purposefully chosen to avoid any discussions of implementation. Our intention has been to focus on determining why technologies should be designed to behave in certain ways in the first place. It has been to explore how design, and mobile phone design specifically, can be driven by an understanding of people's social needs and not through some deterministic vision of technological ubiquity.

In our current work, we have set about looking at how the design and implementation of technology might be more

closely linked to understandings of our everyday, social lives. The aim of this work is, first, to investigate how technology mediates the deeply rooted social practices that we participate in. It is then to explore how naturalistic descriptions of everyday activities might be systematically interpreted to produce concrete design requirements that can be used to inform design. Our belief is that practices such as gift-giving are age-old, “immortal” practices – the “great recurrences of ordinary society” [7]. To some extent these practices shape how we use technologies in our social interactions; we learn to make use of technologies and technological features that afford our participation in them. Our goal is thus to determine systematic ways in which to uncover the relationship between social practices and the properties – or social affordances – of a technology. Underlying this research is a belief that successful technologies are ones that afford the accomplishment of particular enduring cultural practices. By interpreting and systematically depicting the complex relationships between technology and social practices with this belief in mind, we feel that we can begin to have a direct impact on the design of technological artefacts that both preserve and augment what we do as social beings.

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