Understanding Unavailability in a World of Constant Connection

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Historically, the problem of coordinating opportunities for real-time communication has been dominated by the problem of co-presence. Before there was any interactive media, people had to be in the same place to talk. Visiting somebody's house ("calling," in the early sense) to see if they were available or scheduling a time to meet were both good ways of coordinating.

Early media such as the telephone changed this process a bit, in that people no longer needed to be physically co-present to talk. Mediated co-presence (i.e., being on the phone at the same time) could offer a similar experience. And one could inquire about another's availability for mediated co-presence by calling in a more modern sense; namely, by dialing the phone and waiting for a response on the other end [1].

Instant messaging (IM) and chat systems, which became very popular in the late 1990s and early 2000s, changed this process again [2]. With these systems, one had a list of contacts who were co-present at any given time. Co-presence, for many users of these systems, suggested availability for conversation and was often reason enough to start one. The contact list made co-presence even easier to coordinate.

More recently, there has been a larger socio-technical shift that we believe has significant consequences for how people coordinate around communication. In contrast to earlier media, such as the landline telephone or IM, which provided mediated co-presence when one was in the vicinity of a landline phone or PC, today's mobile devices provide constant co-presence. Instant messaging is often combined with text messaging or proprietary messaging clients (e.g., BlackBerry Messenger, Apple's iMessage, etc.), such that today's teens send hundreds of messages per day to stay in touch with family and friends [3]. People are assumed to be constantly co-present, and thus, constantly available for conversation.

This is taking a toll. There is evidence that all of these opportunities for interaction cause overload and stress. A recent Pew report suggests that nearly a third of respondents periodically turn off their phones just to take a break from all of the interaction opportunities they provide [4]. Sherri Turkle's recent book suggests we are paying more attention to our devices than to each other [5]. Others report feeling dis-

tracted by all the potential connections or overwhelmed by the responsibility of staying in touch with Facebook friends from the many chapters of their lives. We believe one key reason for these stresses and problems is that today's technologies focus on connecting but do not provide good support for managing *unavailability* and *inattention*.

In many ways, managing unavailability is a more difficult problem than coordinating co-presence or availability. One is unlikely to be perceived as rude for answering the phone and talking, but one might risk damaging a relationship by failing to respond promptly to a call or text message.

We are interested in how people manage their unavailability and social inattention, and have conducted a series of studies of what we call *butler lies,* one common strategy for inattention management. In this short article we will provide an overview of our work on butler lies, our current projects, and our agenda for future work.

Butler Lies: One Strategy

We have identified the butler lie as a linguistic strategy commonly used to manage unavailability for interaction with others. Butler lies are named in reference to the one-time function of a butler in managing his (most butlers were male) master's unavailability. One early manual for house servants provided the following instructions for answering the door:

"In the next place, you should never admit any person or persons into the parlour or drawing room, without first announcing their names to your mistress or master. This you can readily find out by saying, 'What name shall I say, ma'am?' or 'sir?' Therefore by this way, you will find out whether your employers wish to see them or not. If not, tell them your mistress, master or whoever they wish to see, are engaged, &c. in a polite and civil manner" [6].

There are several lessons to take away from the butler's traditional role that inform our current understanding of butler lies and inattention management more broadly. It's important to note that the butler is mediating the interaction between visitor and master, who cannot talk directly. This mediation is facilitated by the physical design of the house, such as the architecture of the foyer or vestibule for receiving guests, which restricts the flow of information about the master's actual presence or availability. Mediation is further facilitated by social norms and rules that preclude the visitor from shoving the butler out of the way and storming into the master's private quarters.

Most people's interactions today are not mediated by butlers, but many of the same principles hold. Butler lies are a way to give polite and acceptable reasons for one's unavailability or inattention, even if the messages are untrue in a strict sense. As with butlers answering doors, certain designed attributes of media restrict the flow of information about others' actual availability or activities. When receiving a text from somebody, for example, we do not know where they are or what they are doing, though this could easily be different if we are using a location-tracking tool such as Google Latitude. Similarly, we do not typically know when our messages have been read by others, though, again, this is different with tools such as BlackBerry Messenger (BBM), Apple's iMessage, or Lotus Notes email, which all provide indicators of when a message has been read.

There are also social norms surrounding the use of media that govern polite behavior. It may be acceptable, for example, to wait longer before responding to an email than to a text message, and an IM might demand an even faster response. There are also norms surrounding what constitutes acceptable reasons for not responding to a message or not taking a phone call [7].

In using butler lies, people formulate explanations for potentially rude behavior in ways that draw strategically on these socio-technical attributes of media. These attributes, that is, afford some ambiguity that participants can use to present a reasonable explanation and preserve their relationship with the message recipient. Of course, this can be done truthfully, as well, but we have chosen to examine deception because it brings the strategic nature of these messages—and the difficulty of designing for inattention—into sharp relief.

The Data

Over the past four years, we have conducted five studies of butler lies using IM [8], SMS [9], and BBM [10]. We have also interviewed 47 people about their use of butler lies to better understand how these messages are perceived in everyday life and situations. In this process, we have collected and examined more than 7,000 IM messages and about 15,000 SMS and BBM text messages. With striking consistency, we have found that approximately 10 percent of the messages we collect are deceptive in these media, and about 20 percent of those deceptions can be classified as butler lies (for details of data collection, coding, and analysis, please see our published papers on this work). To aid our analysis and interpretation, we typically ask participants to explain what about their messages was deceptive.

How Butler Lies Are Used

To understand how people use butler lies, we divided them into several categories, based first on their function: to head off a conversation that hasn't yet started, ending a conversation that is already under way, or explaining unavailability at another time (e.g., a missed past message or a proposed future conversation).

The function of butler lies varied according to the medium that was being used. IM is generally viewed as a more conversational medium than SMS, for example, in which conversations have explicit openings and closings. As such, we saw a much larger fraction of butler lies being used to end conversations in IM (41 percent) as compared with SMS (7 percent). Explanations for exiting IM conversations often included deceptive references to the need to do work (e.g., "Anyway, I have to go so I can write a paper. I'll ttyl") or eat meals, both of which are likely be perceived as good reasons to end a conversation. These findings highlighted the lack of design support for gracefully exiting IM conversations—users had to develop their own linguistic solutions. Otherwise the window persisted on screen indefinitely, along with the buddy-list indicator.

SMS, on the other hand, tends to be used more for social coordination and making plans. We saw a correspondingly large number of butler lies in SMS (81 percent) related to unavailability for interaction at other times, which was substantially more than in IM (37.9 percent). In these cases, messages acknowledged that the sender was running late (e.g., "I'm on my way" or "I'll be there in five," even when the participant had not actually left home yet or was actually more than five minutes away), or explained why they had been unavailable at another time. A frequent butler lie was "Sorry! I just saw your message," even when the message had actually been seen well before the reply was sent. Interestingly, participants in our BBM study reported delaying the opening of messages in reaction to BBM's feature that notifies senders when a message has been read.

We further divided butler lies into categories based on the type of ambiguity that participants were using: time, activity, or location. For example, the "I just saw your message" excuse is related to time because the exact time at which the message was read would be unknown. About 17 percent of SMS messages and only 2 percent of IM messages drew on ambiguity related to time. The vast majority of messages in both IM (97 percent) and SMS (82 percent) were related to activity. Common explanations involved being too busy to interact, not feeling well, or having to go do something else. Finally, a small number of butler lies in both IM and SMS drew on ambiguity related to participant location, such as the "I'm on my way" explanation described earlier.

We have also seen substantial evidence that butler lies are used to preserve relationships, not merely to escape interaction with undesirable contacts. This was especially true in our interviews, in which participants told us repeatedly that they felt butler lies were a reasonable way to end a conversation or explain behavior. Many felt these butler lies were not even perceived as deceptive, and that they are part of everyday, expected communication behavior. Others did feel the messages were deceptive but sometimes necessary.

What was particularly interesting in our interviews is that there was a clear sense that butler lies are a form of coordination between the senders and receivers of messages. As long as both parties feel the relationship is important and desire to preserve it, the butler lie serves as a communication act in that process. Mary's message reading "I'm on my way," for example, may not be literally true, but its implied meaning might be interpreted as "I'm running late and I apologize for that, but I still care about our friendship, so please don't be upset!"

On the other hand, trouble lurks in the cases where there is a mismatch between people in how the relationship is understood. We had one participant, for example, who described a period where people he assumed to be friends told him a series of butler lies that added up to a clear message that they were no longer interested in the friendship.

Implications and Future Work

Based on our studies so far, we believe the management and coordination of unavailability to be an important and pervasive problem among always-connected individuals, to which many have responded with language—butler lies—as a coordination tactic. We believe, however, that there are several design implications that can help simplify the process of managing unavailability.

First, we urge a shift from a focus on coordinating around co-presence to supporting coordination around both availability and unavailability. There is often an implicit assumption when designing that sharing information about others' status, location, and availability will aid in coordination and finding good times to interact. This may be true some of the time, but sharing more information also constrains the ambiguity that we argue is crucial to the valuable relationship management that

occurs via butler lies. We therefore urge designers to weigh the value of more information against the threat to potentially valuable ambiguity. Consider options that allow people to share information at multiple levels of detail (such as what city or neighborhood they are in, but not the specific address) and only with specific contacts. Another possibility is to allow for sharing information with certain people temporarily, rather than presuming constant access. There may also be additional ways to facilitate ambiguity by reducing the normative imperative to always appear available.

Second, there is a clear relational component to butler lies that affects both how they are used and whether they are likely to be successful. Clear threats to the plausibility of butler lies may affect not only whether the lie is successful, but also the relationship itself. Social media tools such as Facebook and Twitter further complicate matters by not making it clear who has seen or has access to certain information (e.g., specific status updates, tweets, etc.). We therefore urge designers to consider ways to make it clear who has access to and has seen specific bits of information about others. This would allow people to better understand what others know, and construct explanations more likely to be effective.

In our current studies, we are gathering additional data to examine other aspects of how people send and receive butler lies via text messaging. Our previous work examined butler lies from the perspective of the person who sent the message. Currently, we are collecting messages from conversational partners. This allows us to examine the same messages from the perspective of both the sender and the receiver, which will help us to better understand how these messages are received and interpreted.

In another current study, we are using an Android application to collect messages while manipulating additional contextual information (such as the user's location) that accompanies messages. This method allows us to see how the additional information impacts the construction of these messages.

Lastly, we are using linguistic analyses to examine how the properties of butler lies are different from those of other message types, including truthful butler messages and general lies.

We also expect that butler lies will be universal. We should see them in every culture that has adopted modern communication technology, though of course we expect the kinds of justifications and explanations to vary across cultures according to differences in technical infrastructures and social norms. For instance, in the U.S., calling and texting plans are often unlimited, whereas in other countries each text or phone call requires funds to be available on a SIM card. We should, therefore, expect some excuses to revolve around ambiguity regarding fund availability that we don't see in the U.S. We should also see differences dependent on interaction norms, such as the variability in tardiness across cultures. Butler lies for being late in Japan, where the norm is punctuality, should be quite different from those in Argentina, where tardiness is more acceptable.

In conclusion, we believe butler lies provide a useful window into the broader sociotechnical problem of unavailability and inattention management. Our aim is to continue exploring and understanding this problem using a variety of behavioral research methods and technological interventions.

ENDNOTES:

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