

**Text, Talk, or View:
The Role of Control, Culture, and Cost in Using ICTs¹**

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ANNA'S DILEMMA

It was August, and Anna – a Norwegian teenager – was saying goodbye to her father.² A mobile communication specialist, he was about to spend a semester as a visiting professor in the United States. In preparation for the separation, he installed a webcam on the family's computer, intending to use the video function of an instant messaging (IM) client to bridge the gap between the American mid-west and Oslo.

Once settled into his temporary residence, my colleague logged onto IM and attempted to coax Anna to switch on the home webcam. Much as she loved – and missed – her father, she declined. As she later explained, while “talking” with her dad (over IM) on the computer, she was also busy multitasking: conducting her usual simultaneous IM conversations with local friends. Had she turned on the webcam, all her father would have seen was his daughter's eyes focused on the keyboard and IM screen, not upon his face.

Anna's dilemma is part of a larger question raised by information communication technologies (ICTs): How much of ourselves do we reveal to potential interlocutors?

Communication Medium Options

All human communication occurs through a medium, such as face-to-face interaction, a telephone call, a video conference, a written message. Media often overlap: Conversations have historically entailed both spoken and visual encounters; writing can be done in isolation, though also accompanied by voice and face-to-face interaction, as when lecturing and using a blackboard.

Individuals have some control over their linguistic interactions with others. We cross the street to avoid unwanted conversations, and we send written messages when we do not wish to

²This vignette is based on a true story, but the girl's name has been changed.

confront someone face-to-face. Contemporary technologies (including the landline phone, computers, and now mobile phones) amplify our opportunities to determine how much of ourselves to expose to others. Express messaging on telephones lets us leave voicemail without needing to speak with the intended recipient. Caller ID alerts us as to who is trying to reach us, letting us choose whether to take the call. And IM allows us to engage in multitasking unbeknownst to our conversational partner.

Sometimes media choices are driven by personality traits or by the nature of the relationship between interlocutors. Many people are more comfortable sending written messages than engaging in telephone conversations (much less communicating face-to-face). Studies of computer-mediated communication (including chat and MOOs) indicate that shy people tend to prefer online discourse to face-to-face encounters (Roberts, Smith, and Pollock 2000). In fact, Carducci and Zimbardo (1995) suggest that CMC is “the perfect medium for the shy” in that it affords users the opportunity to prepare in advance what they wish to say, and it camouflages their face and voice. The danger, of course, is that “technology will become a hiding place for those who dread social interaction” (p. 82).

Differences in social status may also lead interlocutors to favor one medium of communication over another. Consider a former student of mine (now an accomplished professional) who contacted me, requesting a letter of recommendation. As we spoke on the telephone, I genially suggested she call me “Naomi” rather than “Dr. Baron.” During our conversation, she expressed discomfort at the notion and steadfastly refused. Only in a subsequent email did she venture a salutation of “Dear Naomi,” which she hastily followed with the qualifier “aha! in an email,” suggesting that writing my first name was less unnerving than speaking it.

Issues of communication medium choice arise in diverse facets of everyday life. Since the 1960s, telephone manufacturers have attempted to interest the public in videophones.³ Even putting cost issues aside, for many years users resisted visually inviting the people they were calling into their kitchen, living room, or bedroom. At the same time, though, the public became increasingly eager for front-row seats to political and legal proceedings. In many governmental chambers, television or video cameras have become permanent fixtures, and advocates of open-access continue to lobby for live coverage of court cases.⁴

Technologies such as computers and mobile phones invite users to control what kinds of access they grant to potential interlocutors. Choices may involve whether to activate a voice or video option on IM, whether to send a text message or to talk on a mobile phone, or whether to block potential interlocutors in the first place.

Factors Shaping ICT Usage Decisions

The issue of personal choice in communication access via computers and mobile phones has been attracting growing attention from researchers. Quan-Haase and Collins (2008) studied how college students manipulate their use of instant messaging to limit (or screen) access other people have to them. Baron (2008a) examined ways in which college students use multitasking (while doing IM) to orchestrate interactions with others – online, on the telephone, and face-to-face.

Why do users of ICTs select one channel of communication over another? Again studying college students, O’Sullivan (2000) examined the use of mediated versus face-to-face channels for impression-management. Mesch and Talmud (2008) describe how teenagers in

³ AT&T introduced the first videophone at the 1964 World’s Fair in New York. For a brief history of the videophone, see “Videophones: Why is No One Calling?” (2000). For analyses of how videophones function in interpersonal communication, see Bruce (1996) and O’Malley et al. (1996).

⁴ For a summary of discussions regarding television coverage of the US Supreme Court and other federal courts, see Tong (2006).

Israel select computer messaging or mobile phones to avert parental oversight of personal communication with friends. Work by Byrne and Findlay (2004) probes how adults manage their romantic relationships by opting for text messages on mobile phones or voice calls. Other researchers (e.g., Madell and Muncer 2007; Reid and Reid 2007; Walther 1995) have investigated how users gain control over their interlocutors by deciding whether to talk or text on mobile phones, or to engage in computer-mediated communication instead of telephone or face-to-face exchange.

There are, however, additional factors shaping people's decisions in using ICTs. These include cultural as well as economic considerations. In Sweden, for example, a surprising number of young adults feel comfortable making phone calls or sending text messages at the family dinner table, while their Italian counterparts find such behavior inappropriate. In the US, college students report they would send more text messages from their mobile phones if the prices were cheaper, while Italians would call more if the cost of voice calls were lower.⁵

Figure 1 summarizes factors influencing the choices users of ICTs make in deciding to send a written message (e.g., an email or IM on a computer; a text message on a mobile phone), to use voice functions (e.g., the voice component of a computer-based IM client; a voice call on a mobile phone), or to add visual access (generally through a computer-based webcam). Also included are some of the creative ways in which people manipulate these technologies to restrict face-to-face interaction with people in their physical vicinity.

The list is divided into three categories: factors giving individuals control over their interpersonal communication, factors relating to culture, and factors involving cost. (Obviously, these variables sometimes overlap.) While the list is likely incomplete, it offers some sense of the options available to users.

⁵ These findings are from my cross-cultural research on mobile phones, described later in this paper.

INDIVIDUAL CONTROL FACTORS

- Choice and Reflection
 - choose time/circumstances when initiate or respond to message (spoken or written)
 - have opportunity to reflect on/revise written message before transmitting
- Restricting Access
 - on computer, avoid voice (and video) options to preserve privacy
 - block potential interlocutors from accessing you (e.g., blocking on social networking site or IM; letting calls go to voice mail)
 - use text messaging (rather than voice) on mobile phone to eliminate need to give interlocutor a hearing
- Social Avoidance when Face-to-Face
 - pretend to talk on mobile phone to avoid interaction with people near you
 - use other functions on mobile phones to avoid interaction with people near you

CULTURAL FACTORS

- General Acculturation (e.g., regarding use of loud voices in public space; whether strangers initiate conversations)
- Laws or Public Warnings (e.g., laws against doing text messaging while driving; signs requesting not to speak on mobile phone while on subway)

COST FACTORS

- Mobile Phone Bill
 - costs for calls, text messages
 - who pays (individual or family plan? pay your own bill or someone else pays it?)
 - pricing structure (monthly plan or pay-per-use? limited or unlimited calling/text messaging plans?)
- Level of Affluence
 - expendable income available for mobile phone bill
- Cultural Customs Regarding How Large a Mobile Phone Bill is Acceptable

Figure 1. Factors Influencing Choice and Use of Communication Medium

Research Questions

This paper explores the rationales behind individual decisions regarding choice of communication medium when using mobile phones and computers:

- mobile phones: whether to send a text message or to make a voice call
- computers: whether to restrict communication to written messaging, to hold a voice conversation (using VOIP – voice over Internet protocol), or to turn on video capabilities (assuming they are available)

Data are drawn from a cross-cultural study of mobile phone use by university students that I conducted in Sweden, the US, Italy, and Japan during the 2007-2008 academic year. The study involved an online questionnaire, face-to-face interviews and focus groups, conversations with professional colleagues, and personal observations. The present paper reports on only a small portion of the data, largely drawn from the online questionnaire.

The three specific research questions addressed in this paper are:

- How much does mobile phone use involve talking versus texting?
- What are the reasons young adults decide to send a text message rather than talk?
- Assuming that students have video capabilities on their computers, when do they decide to add video to their interpersonal exchanges with friends or family members?

TEXTING OR TALKING: THE CROSS-CULTURAL STUDY

Research Design

Subjects completing the online questionnaire were between age 18 and 24.⁶ All were university students (either undergraduates or graduate students). In each country, data were collected from more than one university, located in different parts of the country. Figure 2 summarizes the subject pools:

⁶ Many people assisted in designing the online questionnaire. I am grateful to Jonathan Donner, Leopoldina Fortunati, Ylva Hård af Segerstad, Rich Ling, Misa Matsuda, Marieta Pehlivanova, Oscar Westlund, and the students in my Autumn 2007 class “Language in an Online and Mobile World” in the Department of Linguistics at Göteborg University for their invaluable guidance. I also thank Ylva Hård af Segerstad, Maria Bortoluzzi, and Sachiko Aoshima for translating the survey into Swedish, Italian, and Japanese, respectively.

<u>Country</u>	<u>Source of Subjects</u> ⁷	<u>Total Subjects, by Country</u> ⁸
Sweden	Göteborg University (Göteborg), Chalmers University of Technology (Göteborg), Karlstad University (Karlstad)	171
US	American University (Washington, DC), Michigan State University (East Lansing)	523
Italy	University of Udine (Pordenone), University of Modena and Reggio Emilia (Modena)	616
Japan	Ritsumeikan University (Kyoto), International Christian University (Tokyo)	529

Figure 2. Subject Pool for Online Questionnaire

The questionnaire, which took about 10 minutes to complete, included both quantitative and open-ended questions. Quantitative questions covered such issues as how long people had been using mobile phones (and computers), use of text messaging versus IM, and conditions under which it was appropriate to talk or do text messaging on a mobile phone in public space.

This paper centers on the following groups of questions:

⁷ While it was not possible to construct random samples representing 18-24-year-olds in each country, the data collected offer a first comparative look at university students in different parts of the world. My thanks to Solveig Granath (at Karlstad University), Ylva Hård af Segerstad (at Göteborg University), Ann-Sofie Axelsson (at Chalmers), Nicole Ellison (at Michigan State University), Maria Bortoluzzi (in Pordenone), Marina Bondi (in Modena), Kumi Iwasaki (at International Christian University), and numerous colleagues at Ritsumeikan University for their assistance in identifying study participants.

⁸ In all four countries, there were more female subjects than male. However, tests for statistical significance (results reported in Tables 1-6) indicate that gender did not affect between-country differences.

Number of Voice Calls and Text Messages per Day

Yesterday, what was the combined total number of voice calls you made and received on your mobile phone? Include voicemails you left for other people and that you received.

Yesterday, what was the combined total number of text messages you sent and received on your mobile phone?

Choosing to Text, Not Talk on Mobile Phone

When you decide to send a text message to a friend on your mobile phone, how important (in general) are the following reasons for sending a text message rather than calling?

It's not a good time for me to talk.

It's not a good time for the recipient to talk.

I want to make my message short, and talking takes too long.

Sending a text message is cheaper.

Avoiding Social Contact by Pretending to Talk on Mobile Phone

How often do you pretend to be talking on your mobile phone

to avoid talking with someone you know?

to avoid having a stranger talk with you?

Avoiding Social Contact by Using Other Functions on Mobile Phone

How often do you use other functions on your mobile phone (e.g., writing or checking text messages, listening to music, playing games)

to avoid talking with someone you know?

to avoid having a stranger talk with you?

Findings⁹

Voice and Texting Usage, per Day

Table 1 summarizes participants' reports, by country, of how frequently they had used mobile phone voice functions and texting functions, on the previous day:

⁹ I am grateful to Marieta Pehlivanova and Miriam Callahan for assistance in analyzing data.

		0-2	3-4	5-10	11-20	> 20
Sweden (N=171)	voice	36.3%	25.7%	31.6%	5.8%	0.6%
	texts	34.5%	21.6%	30.1%	9.9%	2.9%
US (N=523)	voice	22.0%	26.6%	38.4%	10.5%	2.5%
	texts	27.0%	13.4%	26.8%	15.1%	17.8%
Italy (N=616)	voice	51.0%	27.8%	19.0%	1.6%	0.7%
	texts	18.2%	15.1%	26.6%	16.4%	23.7%
Japan (N=529)	voice	62.4%	23.1%	12.7%	1.3%	0.6%
	texts	8.5%	9.8%	29.5%	25.3%	26.8%

Table 1. Mobile Phone Voice Calls (Made and Received) and Text Messages (Sent and Received) on Previous Day¹⁰

Overall, Swedes had the lowest mobile phone usage. In fact, more than one-third of Swedes used only 0-2 voice functions and 0-2 texting functions the previous day. Their volume of talking versus texting was also the most balanced. Considering just text messages, at the upper end of the spectrum (11 or more sent or received), Swedes were the lowest group and Japanese the highest:

<u>Texting: ≥ 11</u>	
Sweden:	12.8%
US:	32.9%
Italy:	40.1%,
Japan:	52.1%

The heaviest users of voice functions were Americans. Considering respondents who made or received 11 or more voice calls a day, the number of US subjects was double that of Sweden, and roughly six times that of Italy or Japan:

<u>Voice: ≥ 11</u>	
Sweden:	6.4%
US:	13.0%
Italy:	2.3%
Japan:	1.9%

¹⁰ voice: $p < .0001$; texts: $p < .0001$

Both Italians and Japanese heavily used their phones – but for texting rather than talking.

Considering respondents who made or received only 0-4 voice calls a day, the percentages were:

<u>Voice: 0-4</u>	
Sweden:	62.0%
US:	48.6%
Italy:	78.7%
Japan:	85.4%

Choosing to Text, Not Talk on Mobile Phone

Table 2 summarizes the level of importance that participants gave to their own convenience and that of their interlocutor in deciding to send a text message to a friend rather than calling:

		very important	somewhat important	not very important	not important at all
Sweden (N=171)	not good time for me to talk	62.5%	28.1%	4.7%	4.7%
	not good time for recipient to talk	51.5%	38.0%	6.4%	4.1%
US (N=523)	not good time for me to talk	64.6%	27.3%	5.0%	3.1%
	not good time for recipient to talk	56.6%	33.8%	6.9%	2.7%
Italy (N=616)	not good time for me to talk	59.9%	29.9%	8.8%	1.4%
	not good time for recipient to talk	53.1%	35.4%	9.1%	2.4%
Japan (N=529)	not good time for me to talk	46.9%	37.8%	13.6%	1.7%
	not good time for recipient to talk	49.0%	41.0%	8.3%	1.7%

Table 2. Convenience of Self and Interlocutor in Choosing to Send Text Message¹¹

¹¹ not good time for me to talk: $p < .0001$; not good time for recipient to talk: $p = 0.3751$

In Sweden, the US, and Italy, personal convenience was judged a “very important” factor in deciding to send a text message rather than make a voice call – generating between 59.9% and 64.6% of the responses. Convenience of the interlocutor was also deemed “very important,” though slightly less so, generating between 51.5% and 56.6% of the responses in each country.

Japan presented a different profile. Nearly half (46.9%) of respondents felt their own convenience was a “very important” reason to text rather than talk. However, even more respondents (49.0%) found the convenience of their interlocutor to be “very important.”

Table 3 summarizes findings on another reason for choosing to text rather than talk – keeping a message short:

		very important	somewhat important	not very important	not important at all
Sweden (N=171)	want message short, talking takes too long	33.9%	39.2%	15.2%	11.7%
US (N=523)	want message short, talking takes too long	37.9%	33.6%	17.8%	10.7%
Italy (N=616)	want message short, talking takes too long	34.7%	36.2%	22.1%	7.0%
Japan (N=529)	want message short, talking takes too long	12.6%	31.2%	43.7%	12.5%

Table 3. Choosing to Send Text Message to Shorten Message¹²

Again, Swedish, American, and Italian participants clustered as a group: More than one-third (33.9% - 37.9%) judged that a “very important” reason for texting rather than talking was to minimize the amount of time invested in communicating with an interlocutor. By contrast, in

¹² p<.0001

Japan, only a third of this number (12.6%) thought that a “very important” reason for texting was to keep the message brief.

Table 4 summarizes participants’ responses on the importance of cost as a reason for texting rather than talking:

	very important	somewhat important	not very important	not important at all
Sweden (N=171)	22.8%	22.8%	29.2%	25.2%
US (N=523)	8.2%	12.6%	21.8%	57.4%
Italy (N=616)	43.0%	31.8%	17.4%	7.8%
Japan (N=529)	38.0%	34.4%	19.8%	7.8%

Table 4. Texting is Cheaper¹³

To interpret these findings, some context is useful. First, we should be mindful that perceptions of whether cost is an important reason for using text rather than voice don’t necessarily correlate with actual costs. Second, as I learned from the focus groups, most students have little idea what their monthly mobile phone bills are, or what the cost is of individual voice calls or text messages. And third, there is incredible variation in pricing for mobile phone usage. Depending upon such issues as whether you have a pre-paid card or a subscription plan, a special promotion that might only be valid for a month or two, a plan that offers “free” texting or voice calls, a plan that has reduced rates if you communicate with another person using the same telecommunications company, a one-minute voice call might cost nothing or 30 euro cents. Therefore, we need to remember that our data only indicate subjects’ opinions regarding the role of cost, not actual communication prices.

¹³ p<.0001

In addition, mobile phone telecommunications pricing in the US has traditionally worked differently from pricing in the rest of the world. Nearly all US mobile phone subscriptions are based upon long-term contracts that include a substantial number of “talk minutes” each month. Usually, text messaging is an additional charge (either by the message or for a given number of messages each month). In most of the world, mobile phones have historically used pre-paid SIM cards, working like debit cards. Charges for both text messages and voice calls are deducted from the same balance. While long-term subscriptions are becoming more common in Europe and Asia (typically offering packages of talk-time and texting), many teenagers and young adults still rely on pre-paid SIM cards.

Looking at the “very important” column of Table 4, we see that Italians were most prone to report using texting to save money (43.0%), followed by Japanese (38.0%) and then Swedes (22.8%). American responses were quite low (8.2%), probably reflecting the fact that texting rarely saves money in the US, since it is nearly always an add-on cost to voice communication.

Avoiding Social Contact

The final two sets of questions explored the extent to which participants used their mobile phones to avoid contact with other people. Table 5 summarizes the frequency with which participants pretended to talk on their mobile phones to avoid speaking with an acquaintance or a stranger:

		at least once a week	about once a month	occasionally	never
Sweden (N=171)	avoid acquaintance	0.6%	3.5%	14.0%	81.9%
	avoid stranger	0.6%	2.9%	21.1%	75.4%
US (N=523)	avoid acquaintance	3.4%	9.2%	27.0%	60.4%
	avoid stranger	3.8%	11.3%	33.5%	51.4%
Italy (N=616)	avoid acquaintance	1.0%	1.1%	34.7%	63.2%
	avoid stranger	1.6%	6.0%	47.7%	44.7%
Japan (N=529)	avoid acquaintance	2.7%	3.8%	13.0%	80.5%
	avoid stranger	2.5%	3.6%	16.8%	77.1%

Table 5. Pretending to Talk to Avoid Acquaintance or Stranger¹⁴

Table 6 summarizes how often participants used other functions on their phones (such as writing or checking text messages, listening to music, or playing games) to avoid social contact with acquaintances or strangers:

		at least once a week	about once a month	occasionally	never
Sweden (N=171)	avoid acquaintance	5.8%	9.4%	36.3%	48.5%
	avoid stranger	8.8%	9.4%	36.2%	45.6%
US (N=523)	avoid acquaintance	11.3%	14.0%	31.5%	43.2%
	avoid stranger	11.8%	13.8%	36.9%	37.5%
Italy (N=616)	avoid acquaintance	2.8%	5.7%	44.5%	47.1%
	avoid stranger	4.4%	9.1%	55.0%	31.5%
Japan (N=529)	avoid acquaintance	12.3%	8.9%	42.2%	36.7%
	avoid stranger	14.2%	11.0%	37.6%	37.2%

Table 6. Using Other Functions on Phone to Avoid Acquaintance or Stranger¹⁵

Table 7 combines responses for engaging in these avoidance behaviors “at least once a week” with “about once a month” (together: “at least once a month”):

¹⁴ avoid acquaintance: $p < 0.0001$; avoid stranger: $p < 0.0001$

¹⁵ avoid acquaintance: $p < 0.0001$; avoid stranger: $p = 0.0004$

	<u>Acquaintance</u>		<u>Stranger</u>	
	Talk	Other Functions	Talk	Other Functions
Sweden	4.1%	15.2%	3.5%	18.2%
US	12.6%	25.3%	15.1%	25.6%
Italy	2.1%	8.5%	7.6%	13.5%
Japan	6.5%	21.2%	6.1%	25.2%

Table 7. Avoiding Social Contact at Least Once a Month by Pretending to Talk or by Using Other Functions on Phone

With both acquaintances and strangers, respondents in all four countries were more likely to use assorted functions (such as reviewing old text messages) to avoid social contact than to pretend to talk on their phones as a way of evading conversation. Differences ranged from roughly twice as much use of other functions (US) to nearly four or five times as much use (Sweden, Japan).

Overall, the biggest “avoiders” were in the US and in Japan, though Americans were twice as likely as Japanese to avoid communication by pretending to talk. (Given how rarely Japanese speak on their phones compared with Americans – see Table 1 – this finding is hardly surprising.) Avoidance rates in both Sweden and Italy were lower.

Although their absolute avoidance rates differed, subjects from Sweden, the US, and Japan used mobile phones to avoid acquaintances and strangers “at least once a month” at roughly similar rates. Only Italians were more likely to use mobile phones to avoid strangers than to avoid acquaintances (strangers: 7.6% talking, 13.5% other functions; acquaintances: 2.1% talking, 8.5% other functions).

Discussion

Our first two research questions were

- How much does mobile phone use involve talking versus texting?
- What are the reasons young adults decide to send a text message rather than talk?

We saw (Table 1) that samples of comparably-aged university students in Sweden, the US, Italy, and Japan used their mobile phones in differing amounts and in differing ways. Swedes used their phones (for talking or texting) the least. Text messaging was highest among the Japanese, and talking was highest among Americans. But how do we explain these data?

Mobile Usage and Cost

Behind these numbers lie a variety of factors, only some of which we were able to measure quantitatively. One factor was cost. We saw, for example, in Table 4 that Italians worried more about cost of talking than other cohorts. While we were unable to obtain accurate measures of actual costs of talking and texting in each country (due to variety in pricing plans, along with students' general ignorance of what these costs were), focus group discussions in Italy helped explain responses in our questionnaire regarding cost.

Of the 17 Italian students interviewed in Pordenone, all owned two mobile phones. (Almost no one in the other three countries owned two phones.) Typically, one held the SIM card for an inexpensive texting plan, while the other gave a better rate for talking. Students explained the elaborate lengths to which they sometimes go to save having to pay for a voice call, such as “beeping” a friend (e.g., ring once and hang up) rather than actually calling or even sending a text message. Through prior arrangement, one “beep” might mean “Yes, let’s have lunch at 2:00.” Caller ID informed the recipient who was calling. Whether these students were genuinely strapped for money was unclear – especially since most had no idea what they spent on phone

usage each month. Equally likely, cutting corners on phone bills had become something of a game.

By contrast, Swedes seemed to take phone costs in their stride. In the focus groups, a number of students (particularly those who had begun graduate school) reported they were resigned to paying whatever the phone cost.¹⁶ While overall Swedish usage rates (both talking and texting) were the lowest of the four groups, the phone bills they estimated paying were at least as high (or higher) than those estimated in other countries. The deciding factor, it seems, was less actual cost than culture.

Cultural Issues

Cultural explanations underlie many of the differences we observed between countries in talking versus texting patterns on mobile phones. Here are some of the most prominent examples.

Who Talks – and Where

We have seen that Japanese do little talking but much texting on their mobile phones. But the reasons have less to do with cost than with social convention. As Ito, Okabe, and Matsuda explain (2005), in Japanese society, it is commonly seen as inappropriate to talk – or to talk loudly – in public. In Matsuda’s words, “The physical noise was not the problem. Rather, *keitai* [mobile phone] conversations disrupt the order of urban space.”¹⁷

One of the questions in our larger study measured the extent to which participants felt it was acceptable to talk on a mobile phone while walking in public. Nearly all Swedes and Americans indicated such behavior was “always” or “usually” acceptable. (Italians came in at

¹⁶ Swedish attitudes may reflect the fact that Swedish focus-group members were among the oldest in the study.

¹⁷ Matsuda 2005:24.

about 90%.) But only about 74% of Japanese approved of talking while walking. This percentage is markedly up from a similar study reported by Misa Matsuda (from data collected in 2001), when only 49% of Japanese between age 18 and 24 approved.¹⁸

Participants in all four countries were more restrained regarding talking on mobile phones while riding local public transportation. Swedes “always” or “usually” approved of the behavior nearly 90% of the time. American approval was 67%, and Italian approval was 75%. The Japanese, however, judged the behavior “always” or “usually” acceptable barely 4% of the time. (This figure is close to the 5% reported by Matsuda for 2001 data.) For the “local public transportation” question, all four cohorts found it more acceptable to do text messaging than to talk on their mobile phones.

It is important to note that Japanese transport authorities, responding to public pressure, caution riders against talking on their mobile phones while on buses and trains – a point we return to in a moment. While Swedes are hardly known for being loquacious, social attitudes towards personal behavioral choices are generally more lenient in Sweden than in many other countries.¹⁹ America, where the telephone was invented in 1876, can be characterized as a nation of telephone-talkers.²⁰ And Italy, at least by popular stereotype, is more simply known as a nation of talkers.

Concern for Others

We have seen that Japanese respondents were less likely than the three other cohorts to choose texting over talking out of consideration for their own convenience or the convenience of their

¹⁸ I am grateful to Misa Matsuda for extracting this age cohort for me from a broader sample reported in Ito, Okabe, and Matsuda (2005).

¹⁹ In response to the question “Are you bothered when other people are talking on their mobile phones and they are talking loudly?” Swedes reported being much less bothered than subjects from the other three countries.

²⁰ Baron (2008b: 137-138).

interlocutor. We also reported that slightly more Japanese found it “very important” to consider the convenience of their interlocutor (49.0%) than to consider their own convenience (46.9%) in deciding to text rather than talk. Furthermore, we found that Japanese approval of talking in public space, especially on busses or trains, was lower than the other three cohorts.

While it is true that public transport systems in Japan request that riders restrict mobile phone use (especially talking), such announcements are embedded within a broader cultural framework that helps explain not only behavior in public space but also attitudes regarding one’s own convenience and the convenience of others in deciding whether to text or talk. As my Japanese colleagues explained to me,²¹ children in Japan are regularly admonished to avoid *meiwaku* behavior, that is, behavior that makes other people feel bothered. You are bothering other people on a bus if you are speaking on your mobile phone. In fact, sometimes the announcements don’t forbid you from speaking on your mobile phone; rather, they ask that you be considerate of others in using your phone. In light of the general social injunction against engaging in *meiwaku* behavior, it is not surprising that Japanese subjects in our study were more concerned about their interlocutor’s convenience than their own.

Complexity of Input

In the larger study, we asked participants to evaluate the importance of the following statement in deciding to call a friend rather than send a text message: “Sending a text message takes too much effort.” Comparing subjects who judged “effort” to be a “very important” reason to abandon texting in favor of calling, we found the following results:

²¹ I am grateful to Kumi Iwasaki and Misa Matsuda for discussing this point of Japanese cultural upbringing.

texting too much effort

Sweden:	18.1%
US:	23.7%
Italy:	14.9%
Japan:	52.6%

At first blush, the Japanese statistic is astounding, particularly in light of how few voice calls the Japanese made and how many text messages they sent.

The explanation lies in the very real differences between inputting text for an alphabetic language (like Swedish, English, and Italian) versus a character language (here, Japanese). On traditional mobile phones in the west, the user taps a number key once, twice, three times, or four times to produce a letter (e.g., “k” is two taps on the “5” key). With Japanese, however, inputting a message entails a complex process. First you enter the word in its *hiragana* form (one of the two syllabaries used for writing Japanese). The user is then given list of *kanji* (Chinese characters) from which to choose to properly write the root part of the word. Additional *hiragana* may need to be added (for grammatical endings). Moreover, foreign words that have been borrowed into Japanese need to be converted to the second syllabary (*katakana*), and there is the further option of adding words in Roman script. Texting in Swedish or English is child’s play compared with Japanese.

Given the complexity of texting in Japanese, it is not surprising that subjects would identify “effort” as a reason for rejecting texting in favor of calling on their mobile phones. Yet in practice, culture trumps exertion. Despite the challenges of texting in Japanese, young adults nonetheless do the vast majority of their mobile communication through texting.

Controlling Duration of Communication

If cost and culture are important determinants of mobile phone practices, so is the desire to maintain control over who has access to you, and under what circumstances. We saw that over a third of respondents in Sweden, the US, and Italy judged “keeping their message short” to be a “very important” reason to text rather than talk. If we combine the categories “very important” with “somewhat important,” responses rise to over 70% for all three countries. Focus groups revealed that often the reason for texting wasn’t strictly time constraints, but rather that the subject didn’t want to have to listen, perhaps at length, to what the other person had to say. (In fairness, in the US this is a common motivation in business offices for using email rather than calling or walking the few steps to talk with a colleague face-to-face.)

The Japanese data were starkly different: Only 12.6% found keeping the message short to be a “very important” reason for texting rather than talking. Even combining the categories “very important” and “somewhat important”, the Japanese total was only 43.8% -- compared with over 70% for the other three countries. One possible explanation for the discrepancy is that the Japanese did so little talking to begin with. Moreover, focus groups in Japan suggested that calls were often reserved for short communications anyway (“Meet you at Kichijoji Station, South Exit, in 10 minutes”), as well as for conversations with girlfriends or boyfriends.

Avoiding Social Encounters

A different type of control entails precluding a conversation in the first place. Teenagers and young adults already know to block friends or parents on IM or Facebook, or to screen incoming mobile phone calls before deciding whether to answer. The present study probed the extent to which students manipulate mobile phone behaviors – pretending to be on the phone or artificially busying themselves with other functions on their phone – to avoid entering into conversation.

We investigated behaviors when the potential interlocutors were acquaintances and when they were strangers.

It was interesting to see how commonly (especially in the US) mobile phones are used to avoid social contact. In my conversations with American students over the years, I have detected pride as they recount strategies for preventing acquaintances from ensnaring them in conversation.²² Americans are notorious for passing one another in public space, uttering a perfunctory “How are you?” or “What’s up?” and then continuing on without awaiting a reply. Therefore, their mobile phone behavior with acquaintances was not surprising. As for avoiding conversations with strangers, the high frequency with which American engaged in evasive phone behaviors may reflect the fact that strangers do often approach people in the US, and these encounters may involve requests for money or potential physical danger.

The Swedish and Japanese results for pretending to talk at least once a month were interesting because there was virtually no difference in rates involving acquaintances and strangers. Students in Sweden explained to me that strangers don’t approach people, and the same is largely true in Japan. In Sweden, students offered additional reasons why such pretend behavior was rare. On the one hand, they said, “It would be lying.” On the other hand, they worried that they might be found out. What if the phone were actually to ring while you were pretending to talk? What’s more, a Sony Ericsson model popular at the time of the study lit up when you were using it. You gave the game away if you pretended to talk and the handset wasn’t lit.

²² See Laskas (2008) for a humorous account of professionals pretending to talk on their mobile phones to avoid conversation with colleagues.

The data in Japan were also interesting for the high use of “other functions” to avoid acquaintances and strangers alike. To understand why this control function was so prevalent in Japan, we need to consider an important aspect of contemporary urban Japanese culture.

Given high population density, along with a strong value placed on privacy, the Japanese develop subtle mechanisms for creating personal space, even when surrounded by others. Nowhere is this phenomenon better illustrated than on commuter busses and trains. Out of, say, twenty passengers, at least ten of them appear to be sleeping and another five or so are fiddling with their phones. To an outsider, the entire country seems sleep deprived – or desperately needing to get a message through. Yet looking more carefully, you see the “sleepers” turn every so often to consult their phones, and the fidgeters slumping down with eyes closed. Conversations with Japanese colleagues confirmed my hunch:²³ “Sleeping,” like fidgeting with other functions on your mobile phone, is often a pretext for creating personal space. No one will intrude, and you psychologically shut out the world around you.

TEXTING, TALKING, OR VIEWING: INITIAL OBSERVATIONS

Much as ICT users make choices between texting and talking on mobile phones, they also decide whether to limit their computer-based communication to written text, use voice options, or add video exchange. Interlocutors within a conversation make “exposure” choices, depending upon such factors as the nature of their relationship with the interlocutor and what other activities they might wish to engage in simultaneously.

The focus-group component of my study included a question regarding when participants chose to text or talk, or to use video while communicating via an IM client on their computer. It turned out that relatively few subjects had computer webcams. Therefore, the data I was able to

²³ I am grateful to Misa Matsuda for her insights on this issue.

collect proved only anecdotal. I augmented these remarks with anecdotal comments from colleagues.

To See or Not to See

Underlying the development of distance-bridging visual technologies is the assumption that interlocutors prefer (at least sometimes) to see one another, rather than merely hearing the other person's voice or, with even more reduced signal, reading each other's words. In the early 1980s, it was argued that emoticons (initially the smiley face and the frowney face) were valuable enhancements to computer-mediated communication, because they provided some of the missing paralinguistic cues used in face-to-face communication.²⁴ Development of videophones and video conferencing has likewise been based on the assumption that interlocutors seek (again, at least some of the time) as rich a communication signal as possible.

Preliminary results from the cross-cultural mobile phone project suggest that while there are occasions in which one or both parties desire visual contact, there are strong sentiments against such "exposure" as well.

To See

Study participants from the United States proved more likely to have webcams on their computers than students elsewhere. The two primary situations in which focus-group participants favored using video functions for online communication was with friends who were living abroad and with significant others who were living at a distance (either in the US or abroad). Members of the focus group at American University also reported that international students (of whom there were many on campus) used video to communicate with family back home.

²⁴ See Baron (In Press).

However, even those study participants who sometimes used video did not do so all the time. One student, for example, reported using video with his girlfriend in Japan, but only on a holiday or anniversary when they were unable to be together.

Not to See

Among study participants with webcams, the majority chose not to use video, or at least not to use it often. Their reasons for eschewing video included:

- maintaining privacy
- not wanting to look “bad” on camera (one American female said her choice of whether to use video “depends on how I look”)
- engaging in multitasking while conducting the conversation
- finding video to be “creepy”
- judging a video connection to be “more complicated than it’s worth for me” (e.g., problems getting video to work, time lag in transmission)

One Swedish male said of the video component of Skype: “I don’t really see the point of it at all.”

Privacy considerations were also foremost in the minds of several Japanese adults with whom I discussed use of webcams. One Japanese woman in her 30s noted that her apartment consisted of a single room, and she didn’t wish to invite people with whom she was conversing (via her computer) into her bedroom.

CLOSING REMARKS

This paper has explored factors shaping communication choices people make in deciding to use texting, voice, or video functions in online and mobile communication. Drawing upon portions of a cross-cultural study of mobile phone use by university students (augmented by focus groups, general observations, and conversation with colleagues), we have seen how cost, culture, and the desire to control communication shape the decisions that a sample of university students in Sweden, the US, Italy, and Japan make in using their mobile phones. Because our subjects tended not to have webcams on their computers, we could only report anecdotal data on the reasons users chose to text, talk with, or view their interlocutor on a personal computer, using an IM client.

The study had many limitations. Only university students were surveyed, leaving out not only younger and older populations but also those with different educational backgrounds. Four countries are hardly representative of the world's cultures. And the online questionnaire ignored a number of important issues, including measures of shyness, the reason for the communication, choice of texting versus voice functions on computers, and decisions regarding when to use email, IM, the telephone, or face-to-face communication.²⁵

Clearly, there is much research remaining to be done – including how the variables we have been discussing play out in China. My hope is that the research described in this paper convincingly demonstrates that users have substantial control over how they use ICTs, and that their usage patterns can successfully be described cross-culturally.

²⁵ See Squires (2003) and Baym et al. (2004) for discussion of these latter media choices.

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