EMERGING PATTERNS OF AMERICAN MOBILE PHONE USE: Electronically-mediated communication in transition

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Abstract
Mobile telephony in the United States is gaining ground against high adoption rates in other parts of the world as a medium for both talking and sending text messages. While there is research on the use of written forms of computer-mediated communication in the US using full keyboards (e.g., chat, email, instant messaging), we know relatively little about mobile telephony as an American form of electronically-mediated communication. To address this lacuna, we administered questionnaires using convenience sampling to American college students on two campuses regarding their use of mobile phones for both talking and texting. The results suggest that the mobile phone platform is still a medium in transition but that some usage patterns may be gender-driven or economically-based, and that others may be distinctive to American culture.

Keywords
cell phones, computer-mediated communication, electronically-mediated communication, mobile phones, SMS, texting

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Large-scale proliferation of mobile phones began in the early 1990s, following the European creation of GSM, along with hardware developments that decreased the size and weight of mobile phones (Ling, 2004). While GSM phones were designed for voice communication, the Short Messaging Service (SMS) soon became at least as important, especially among young people. In much of the world, a text message sent via a mobile phone is known as an "SMS". In North America, the usual term is "text".

By early 2007, there were 2.73 billion mobile connections in a world of 6.57 billion people (GSM World; US Census Bureau). As of 2005, nineteen nations had more mobile phone subscriptions than population. High penetration rates appeared in Europe (e.g., Luxembourg: 155 (per 100 inhabitants); Italy: 124; Norway: 103), the Middle East (e.g., Israel: 112), and Asia (e.g., Hong Kong: 123) (ITU, 2007). In 2005, more than one trillion text messages were sent globally (GSM World, 2006) – that is, about 1.3 messages per day per mobile subscriber.

A growing body of research has analyzed the social functions of mobile telephony (especially of text messaging) in Europe and Asia (e.g., Grinter & Eldridge, 2001; Hamill & Lasen, 2005; Harper, Paylen, & Taylor, 2005; Ito, Okabe, & Matsuda, 2005; Ling, 2004; Mediappro, 2006). Several linguistic analyses of texting have also appeared, including Döring (2002), Hård af Segerstad (2002), and Ling (2005a).

THE AMERICAN CONTEXT

Within the United States, the networked personal computer is more deeply entrenched as a communication technology than are mobile telephones. As of 2005, there were 76.2 personal computers per 100 inhabitants, while the comparable figure for Europe was 30.2. By contrast, while Americans had 67.6 mobile phone subscriptions per 100 people in 2005, Europeans had 84.5 (ITU, 2007).

By 2006, 73% of American adults went online with personal computers (Madden, 2006). Email remains the most popular internet application – over 90% of online adults (Fox & Madden, 2005). Among teenagers and young adults, instant messaging is particularly widespread. As of 2005, 42% of adults who went online used IM, compared with 75% of online teens (Lenhart, Madden, & Hitlin, 2005).

Given a choice of technologies for communicating with friends, 24% of American teenagers chose IM, while 51% preferred landline phones, 12% opted for voice calls on mobile phones, 5% selected email, and only 3% chose text messaging (Lenhart, Madden, & Hitlin, 2005). By contrast, Livingstone & Bober (2004) reported that when young people in the UK aged 12-19 wanted "to get in touch with a friend", they were far more likely to speak on a telephone (landline or mobile) or to send a text message than to IM.

Mobile phone usage in the US (especially for text messaging) has been slow to develop. Phones were expensive, as were the calling plans needed to activate them. Given the ubiquity of landlines, along with declining costs of long-distance calls, mobile phones were perceived as a luxury through much of the 1990s. Readily-available computers, not mobile phones, were the natural choice for electronically-mediated communication. Email and instant messages were "free" (once internet access was paid for), while text messaging on a mobile phone was an additional cost.

In the early 2000s, several factors helped accelerate mobile phones sales in the US. Prices of both phones and calling plans fell. Safety concerns, especially after September 11, 2001, became an important incentive for acquiring a mobile phone. Aggressive marketing by service providers further contributed to sales.

Phone subscription rates tell only part of the story. Internationally, the US remains on the low end of the texting spectrum. As of 2006, approximately 70% of Norwegians aged 19-24 reported daily use of text messaging (Ling & Haddon, in press). By contrast, in the United States, as of 2005, approximately 4% of all people and 18% of those aged 18-24 used texting on a given day (Traugott, Joo, Ling, & Qian, 2006). Young people aged 13 to 24 highlight the discrepancy between European and American texting patterns as of 2006. Among mobile phone subscribers from Germany, Italy, Spain, and the UK, between 81% and 86% sent text messages. In the US, the number was 39% (M: Metrics, 2006).

CULTURAL, GENDER, AND ECONOMIC VARIABLES

Research is beginning to appear on how culture interacts with mobile telephony (e.g., Fortunati, 2001a; Goggin, 2006; Rivière & Licoppe, 2005). Ito *et al*. (2005) chronicled the social reasons why talking on mobile phones in public spaces in Japan was largely replaced by texting. Conversely, talk-culture in America supports use of voice functions over texting on mobile phones (Ling & Baron, in press). In 2004, TeliaSonera compared mobile phone practices in Scandinavia. Finns talk nearly twice as much as Swedes, while Norwegians send more than four times as many text messages as Swedish counterparts.

Gender also shapes electronically-mediated communication (e.g., Boneva & Kraut, 2002; Herring, 2003). Baron (2004, in press a) found that IM conversations by college-aged females more closely resemble written language, while those of males are more akin to speech. Norwegian females in nearly all age cohorts send more text messages per day than males (Ling 2005a), while Fortunati (2001b) has explored use of phones as fashion statements.

Economic factors are relevant as well. In Europe, text messaging is nearly always less expensive than voice calls. In America, most users have monthly contracts for allotments of

voice minutes, with text messaging an added expense, paid by the message or through a monthly plan. The choice between a voice call or a text message is sometimes determined by who is paying the bill. Parents of teenagers or college students know to expect monthly voice charges, but sometimes balk at additional fees for texting.

RESEARCHING MOBILE TELEPHONY IN THE US

To explore cultural, gender, and economic parameters of emerging American telephony, we administered a questionnaire to college students examining physical characteristics of mobile phones, text messaging versus voice calls, and reasons for using a mobile. We also collected demographic data, including age and length of phone ownership.

PHYSICAL CHARACTERISTICS OF PHONE

Phone personalization may come through physical decorations or distinctive ring tones. In Japan, mobile phone users of both genders typically attach decorative straps to their handsets. Phones can also be personalized with pictures or stickers (again popular in Japan) or a fashionable face-plate. Casual observation of mobile phone users in the US suggests little use of physical personalization.

Downloaded ring tones are an audible form of personalization. Estimates for global ring tone sales in 2005 are over $4 billion, with American sales for 2006 estimated at about $600 million (FasPay Technologies, 2006). Users may choose an individual song (or series of tones) for all incoming communications or distinctive rings for different people in their address book. Given the relative novelty of mobile phones (and of pay-per-download ring tones) in the US, we were interested to see how prevalent ring tone personalization had become.

TEXT MESSAGING VERSUS VOICE CALLS

Subjects using text messaging were asked how long they had been texting, whether they had a monthly messaging plan, how many texts they sent or received daily, and whether they used predictive texting. Those using text messaging also compared volume of voice calls versus text messages, proximity of interlocutors for each form of communication, and identity of interlocutors.

REASONS FOR USING MOBILE PHONE

Finally, we considered the reasons subjects used mobile phones for talking versus texting. Students were asked to rank order their three top motivations for each, choosing from such options as "keeping in touch" or "arranging to meet in a few minutes". Subjects also ranked their top three reasons for deciding to text rather than talk, selecting from explanations such as "it's not a good time for me to talk" or "I want to make my message short, and talking takes too long".

Beyond texting and talking, mobile phones may serve other functions, such as cameras, calculators, alarm clocks, or platforms for music or games. A further use suggested by students helping design the study was pretending to talk, when actually you are not.

METHOD

Participants in the study were a convenience sample of 93 traditionally-aged undergraduates at two universities in the United States. University 1 (U1) is a mid-sized private institution on the east coast. University 2 (U2) is a large public mid-western school. At U1, students in a class taught by the first author each administered the questionnaire to four campus friends (of the students' choosing), yielding 68 subjects (34 females, 34 males). At U2, the 25

female subjects were either members of the second author's course on mobile communication or students in an introductory communications course.[1]

The mean age of participants at U1 was 19.8 years (males: 20.0 years; females: 19.7 years). At U2, the mean age of the (female) subjects was 19.5 years. Participants at U1 had owned mobile phones about three-and-a-half years. There were no differences between U1 males and females with respect to ownership,[2] though there was considerable variation at U1 (2 to 84 months). At U2, (female) subjects had owned phones over four years, with a range from 1 to 96 months. All data were collect in Fall 2005, using a paper-based questionnaire.

RESULTS

PHYSICAL CHARACTERISTICS OF PHONE

Physical decorations. As Table 1 indicates, relatively few students decorated their phones. Females were more likely to do so than males (21% of U1 females vs. 6% of U1 males). There was sizable variation across campuses (U1 females: 21% versus U2 females: 13%).

Table 1
Physical Decorations on Phones

U1 total	13%
U1 male	6%
U1 female	21%
U2 female	13%

[1] Few males enroll in communication studies at U2. The vast majority of the 93 subjects were Americans, though a handful of international students (along with students who had traveled abroad) were included in the sample. Given the composition of our sample, we are not claiming generalizability to the larger population of American college students. Rather, this study is intended as a first empirical look at mobile phone use for this demographic cohort.

[2] Many of the relationships here were examined statistically. However, given our sampling limitations, we report only numerical results.

Ring tones. Roughly half of the subjects downloaded distinctive ring tones (see Table 2). Females were somewhat more likely to do so than males, especially at U2.

Table 2
Distinctive Ring Tones Downloaded for Different People in Address Book

U1 total	47%
U1 male	41%
U1 female	53%
U2 female	63%

However, as Table 3 shows, among subjects using varied rings, males downloaded more tones than females.

Table 3
Average Number of Distinctive Ring Tones Downloaded

U1 total	6.2
U1 male	7.5
U1 female	5.2
U2 female	4.6

TEXT MESSAGING VERSUS VOICE CALLS

Basic text messaging profile. Nearly all subjects used text messaging (Table 4).

Table 4
Number of Subjects Who Used Text Messaging

U1 total	91%
U1 male	88%
U1 female	94%
U2 female	96%

Those who used texting averaged two-and-a-half to three years of experience (Table 5). However, there was considerable variation across subjects.

Table 5
Average Experience with Texting, in Months

	Mean	Median
U1 total	32.2	28.0
U1 male	32.4	27.5
U1 female	32.0	31.0
U2 female	35.4	36.0

There was also variation between U1 and U2 in monthly texting subscription plans, rather than paying by the message (Table 6).

Table 6
Percent of Students Subscribing to a Monthly Texting Plan

U1 total	59%
U1 male	59%
U1 female	59%
U2 female	91%

Females at U2 had the most plans, with no gender differences at U1.

As Table 7 shows, the number of messages sent closely approximated the number received. Females at U2 had the highest texting traffic, with no gender differences at U1.

Table 7
Mean Number of Text Messages Sent and Received per Day

	Sent	Received
U1 total	3.6	3.6
U1 male	3.8	4.0
U1 female	3.4	3.3
U2 female	5.5	5.7

Table 8 summarizes findings on predictive texting. Almost 90% of subjects had heard of predictive texting. While two-thirds of this 90% had tried texting, about half who had tried it used predictive texting consistently. There was no difference between genders or between U1 and U2.

Table 8
Percent of Subjects with Predictive Texting Experience

	Ever Heard of Predictive Texting	Ever Use Predictive Texting	Use Predictive Texting For All Messages[3]
U1 total	85%	67%	47%
U1 male	83%	64%	44%
U1 female	87%	69%	50%
U2 female	91%	70%	57%

Comparison of talking versus texting on mobile phones. We asked subjects how many of the last 10 mobile phone communications they had made – or received – were voice calls or text messages (Table 9).

Table 9
Percent of Last 10 Mobile Phone Communications (Made or Received)

	Voice	Text
U1 total	73%	27%
U1 male	66%	34%
U1 female	78%	22%
U2 female	73%	27%

[3] Based on those ever using predictive texting

Subjects on both campuses were more than twice as likely to talk as to text on mobile phones. Males were marginally heavier users of texting than females (consonant with their fractionally higher daily texting rate – see Table 7).

Our next questions explored the proximity of interlocutors. For the last 10 voice calls made and last 10 text messages sent, we asked how many communications were to interlocutors in the same room, in the same building, within eyesight outside, not in the same building or eyesight but within 5 miles, between 5 and 30 miles away, and more than 30 miles away.

The preponderance of voice calls were made to interlocutors within 5 miles of the subject (but not within the same building or within eyesight). For most students, the next most prevalent group to call was people more than 30 miles away. Interlocutors at a distance between 5 and 30 miles were third in overall rank order, followed by people within the same building. Only a smattering of subjects made voice calls to people they could physically see (in the same room or outdoors).

Overall rank ordering for interlocutors receiving text messages paralleled that of voice calls. Subjects were more likely to send text messages to interlocutors within 5 miles or beyond 30 miles than to people between 5 and 30 miles away. Those within the same building were the next most likely recipients, while people within eyesight were rarely sent text messages.

Whom did subjects call and text message? Tables 10 and 11 summarize our findings.

Table 10
Percent of Last 10 Mobile Phone Calls Made to Particular Recipients

	Same-Aged Friends	Siblings	Parents	Other
U1 total	62%	9%	22%	7%[a]
U1 male	65%	8%	21%	6%
U1 female	59%	11%	23%	7%
U2 female	58%	8%	17%	17%

Table 11
Percent of Last 10 Text Messages Sent to Particular Recipients

	Same-Aged Friends	Siblings	Parents	Other
U1 total	76%	17%	3%	4%
U1 male	82%	14%	4%	0%
U1 female	72%	19%	3%	5%[4]
U2 female	54%	8%	5%	32%[4]

Of the last 10 voice calls students at U1 had made, 6 were to same-aged friends. Next most prevalent was parents – 2 out of 10. Voice traffic to siblings was 1 out of 10. Subjects at U2 were also most likely to speak with same-aged friends and next most likely to call parents, though calls to "others" (17%) were as numerous as calls to parents. U1 males were slightly more likely to phone same-aged friends than were U1females.

Same-aged friends were the most common recipients of text messages. However, at U1, the next most likely recipients of text messages were siblings, with negligible numbers of messages sent to parents or "others". Again, U1 males were more likely than U1 females to text-

[4] Does not sum to 100% because of rounding

message same-aged friends. For U2, the ordering among the categories same-aged friends, siblings, and parents remained the same, but a third of messages were sent to "others".

REASONS FOR USING MOBILE PHONE

Talking and texting. Subjects rank ordered their top three reasons for making a voice call or composing a text message on a mobile phone. Tables 12 and 13 summarize the results. To determine rankings, we assigned 3 points for each subject's first choice, 2 points for second choice, and 1 point for third choice.

Table 12
Rank-Ordered Reasons for Making a Voice Call

	U1			U2	Total Corpus	
	Total	Males	Females		Points	Rank
Keeping in touch	1	1	1	2	159	1
Arranging to meet in a few minutes	3	3	4	1	102	2
Arranging to meet in a few hours	2	2	3	4	96	3
Sharing news	4	4	2	5	84	4
Killing time while waiting or traveling	5	5	5	3	66	5
Asking advice	6	6	6	6	14	6
Appearing unavailable	7	7	7	7	1	7

Table 13
Rank-Ordered Reasons for Sending a Text Message

	U1			U2	Total Corpus	
	Total	Males	Females		Points	Rank
Arranging to meet in a few minutes	1	2	3	2	99	1
Arranging to meet in a few hours	4	1	5	1	97	2
Sharing news	2	5	1	2	97	2
Killing time while waiting or traveling	3	3	2	4	82	4
Keeping in touch	5	4	4	5	73	5
Asking advice	6	6	6	6	13	6
Appearing unavailable	7	7	7	7	6	7

The major motivation for making a voice call on a mobile phone was to "keep in touch". "Arranging to meet" was the next most common function of voice calls, to rendezvous in either a few minutes or a few hours. Sharing news was quite important for U1 females, though less so for U1 males or U2 females. Voice calls were sometimes used for "killing time while waiting or traveling", but only infrequently for asking advice.

Reasons for sending text messages followed different ranking and varied considerably across groups. The most prevalent motivations were to arrange a meeting in a few minutes or a few hours, and sharing news. There was a stark split on the use of texting for sharing news – very important for U1 females, but not for U1 males – with U2 females in between. (Recall that in judging reasons for making voice calls, U1 females also ranked "sharing news" more highly than U1 males or U2 females.) Unlike U1 males and U2 females, U1 females used texting only minimally for longer-term arrangements. For all groups, using texting to "kill time" or "keep in touch" was also reasonably important.

We next asked why subjects sometimes decided to text message rather than talk on the phone, again using a weighted ranking system (Table 14).

Table 14
Rank-Ordered Reasons for Sending a Text Message Rather Than Calling

	U1			U2	Total Corpus	
	Total	Males	Females		Points	Rank
It's not a good time for me to talk	1	1	1	2	223	1
I want to make my message short, and talking takes too long	3	3	3	1	152	2
It's not a good time for the recipient to talk	2	2	2	4	132	3
Other	4	6	4	3	67	4
I'm shy or verbally awkward	5	4	5	6	39	5
I don't want the recipient to hear my voice or sounds around me	6	5	6	5	36	6

The major reason for deciding to text was that it was not a good time for the person initiating the communication to talk (e.g., he or she was in class or a noisy place). Ranking third was the reciprocal relationship: not a good time for the interlocutor to talk (e.g., in class, asleep). In second place was "I want to make my message short, and talking takes too long". U2 females found this choice more than twice as important as did U1 males or females.

Other uses of mobile phones: pretending to talk. Students utilized their phones for a variety of other purposes besides talking and texting. Nearly everyone used the clock or alarm functions, about half used the calculator, and males listened to music and played games more than females. Those with camera phones were more likely to take pictures than they were to send them. More unexpected was a function for which mobile phones had not been designed: pretending to talk. We asked, "Do you ever hold your phone to your ear to pretend you are talking, when actually you are not? If 'yes', in which situations?" Options included "when I'm

trying to avoid talking with someone I see" and "when I'm out alone at night (e.g., on the street, in a bus) and feel uncomfortable". Table 15 summarizes the results.

Table 15
Percent Pretending to Talk

	Ever Pretend	Pretend to Avoid Others[a]	Pretend because Out Alone at Night[5]
U1 total	35%	48%	31%
U1 male	35%	32%	4%
U1 female	35%	83%	100%
U2 female	68%	62%%	92%

A third of the students (male and female) at U1 and two-thirds of the females at U2 sometimes pretended to talk. The reasons for pretense showed gender variation. Females (both at U1 and U2) were twice as likely as males (at U1) to feign speech to avoid other people. Females were overwhelmingly more likely than males to feign conversations when alone at night. Informally, female students explained they felt less likely to be harassed (or attacked) if their potential predator saw they could immediately summon help.

DISCUSSION

PHYSICAL CHARACTERISTICS OF PHONE

Physical decorations. Less than 14% of the students surveyed physically decorated their phones. The higher proportion among U1 females (21%) might reflect regional fashion or the fact that many students at U1 had traveled abroad and encountered decorated phones. Anecdotally, males at U1 were perplexed at the idea of adorning a phone. One student recounted

[5] Based on those indicating they ever pretended to talk on their phones

his surprise at finding a male Japanese co-worker had a novelty strap attached to his phone, which the American judged to be effeminate.

Relative lack of decoration may also reflect American college students' comparative disinterest in the phone as a form of personal expression. Most phone sales in the US are tied to extended voice call contracts, so models are not easily changed on whim. Many students acquire their phones through family plans (e.g., with the phone style tied to the plan), where parents have final say in selection. When students in the US do procure trendy models, they seem not to adorn them, letting the design of the phone speak for itself.

Ring tones. Ring tones are growing in popularity in the US, with about half of the subjects assigning distinctive tones to people in their address book. While distinctive tones obviate the need to see your phone to know who is calling (or texting), the expense must be balanced with usefulness, since caller ID on the display screen provides the same information. Like physical decorations, downloading distinctive ring tones may, over time, reflect fashion and a form of presentation of self (showcasing one's musical tastes) more than utility.

TEXT MESSAGING AND VOICE USAGE PATTERNS

Basic text messaging profile. While most students had experience with text messaging, there was considerable variation across subjects. Monthly texting plans are taking hold in the US. Almost 60% of the subjects at U1 had texting plans, along with 90% at U2. Predictive texting is also gaining popularity in the US. About two-thirds had tried it – compared with 80% of college-aged Norwegians who reported in 2004 using predictive texting (Ling, 2005).

Comparison of texting and talking on mobile phones. American college students are more than twice as likely to use their mobile phones for talking than for texting. Continued growth in texting volume over time may not radically shift this proportion. Students continue to have a huge number of "talk" minutes (often 500-1000 per month). By contrast, in most of the world, young people use pre-paid services that include voice calls and text messages, where texting is almost always cheaper than talking.

The most frequent recipients of both calls and texts were people within five miles of the sender, but not within the same building or eyesight. These patterns are consonant with the findings that same-aged friends – largely school colleagues – are the most common recipients of both voice calls and text messages. These communications are often used for coordinating local social interaction.

A substantial proportion of calls and texts "over 30 miles" probably went to siblings, parents, and "others" (e.g., potential employers, grandparents). Subjects were twice as likely to call parents as to call siblings, but (at least at U1) more than five times as likely to send texts to siblings than parents. While American parents are steadily increasing their familiarity with text messaging (Johnson, 2006), the numbers nowhere approach those of their progeny.

REASONS FOR USING MOBILE PHONE

Talking and texting. Subjects predominantly made voice calls to "keep in touch". College students often accomplish this function by dropping by a friend's dorm room, hanging out in public space, or initiating an IM conversation with "What's up?" Given all the voice minutes available, students, not surprisingly, use voice calls on mobiles to achieve the same end – a function they probably filled as adolescents with a family landline.

The importance of mobile phones for coordinating social activity is well-documented (e.g., Ling & Yttri, 2002). However, the discrepancy in the American data between "keeping in touch" with voice calls but less often with text messages raised a comparative issue. In parts of the world where text messaging is strongly domesticated among college-aged people (and voice calls are less common), what proportion of texting is used to "keep in touch"? As texting spreads in the US, will it come to be used more frequently for "keeping in touch" or will voice technology continue filling this function?

Student ranking of conditions under which to text or talk were overwhelmingly pragmatic. The most important consideration was personal convenience. In third place was the convenience of their interlocutor. Ranked second was "I want to make my message short, and talking takes too long". Many students reiterated this theme anecdotally. Baron (in press b) has argued that contemporary communication devices and software (e.g., speaker phones, call waiting, caller ID, distinctive ring tones) increasingly enables us to control our access to other people and their access to us. Dispatching an email rather than making a phone call often saves time: The sender can dispense with social pleasantries and keep the message on-topic. Our data suggest college students seek conversational control by choosing texting over talk.

Other uses of mobile phones. We were surprised at the sizeable number of students (including males) using phones to "pretend to talk" to "avoid talking with someone I see". This behavior, which again illustrates students' ability to control the terms of interpersonal communication, may be peculiar to America.

GENDER AND INSTITUTIONAL ISSUES

Females physically decorated their phones more than males, suggesting some female use of the mobile for presentation of self. While both males and females feigned conversation to avoid encounters, the practice was far more prevalent among females. It would be instructive to compare this behavior with other social avoidance mechanisms in American culture. A third gender distinction at U1 was the importance of making voice calls or sending texts to share news – ranked considerably more highly by U1 females than males. Analysis of discourse functions on landline phones or face-to-face would help contextualize this finding.

Institutionally, there were suggestive differences between females at U1 and U2 (though few reached statistical significance). U2 subjects had owned their mobile phones longer, had more experience with text messaging, were more likely to have texting plans, sent and received more texts daily, were more likely to use predictive texting for all messages, and far more likely to choose texting over talking to keep their messages short. U1 sits at the edge of an east-coast metropolis, where perhaps phone habits are influenced by the larger off-campus community. The campus has a high proportion of international students, and many Americans study abroad. U2 constitutes a large proportion of a mid-western college town. Fashion may be more directly shaped by the student population, and less by cosmopolitan standards or international experience. An alternative explanation is that U2 students, most of whom were enrolled in a course on mobile communication, were more seasoned mobile phone users that average U2 students.

ECONOMIC ISSUES

Differences between pricing plans in the US and elsewhere make it difficult to separate cultural practices from economic exigencies. These issues may only become separable if costs of voice calls fall outside of the US or if text messaging is folded into American voice plans.

MOBILE TELEPHONY AMERICAN STYLE

Mobile phones are still a technology in transition among American college students. The technology received a late start in the US. This fact, along with America's distinctive history of universal landlines and ubiquitous personal computers, may lead the country's mobile phone usage on a different trajectory than found in Europe and Asia.

Cultural factors may be relevant as well. For over a decade, most American school systems have encouraged students to type on computers rather than writing papers longhand. This directive reinforces Americans' comfort in using ten fingers on a full-sized keyboard rather than embracing small mobile phone keypads. Similarly, American culture is permissive of engaging in private talk in public places. Talking on the phone within community earshot (e.g., in airports, in restaurants) is perceived as less of a social faux pas in the US than in many other parts of the world.

A clear shortcoming of this study was sample size, along with non-generalizable sampling. That said, much of the variance we observed may be indicative of a technology in transition. Our study included early adaptors, late adaptors, and those only dabbling with the technology. The future of mobile telephony in the US will only be written with time and experience.

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