

MOBILE PHONE CULTURE
AND THE LOVE OF TEXT MESSAGING

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Presented at
The Annual Meeting of the Australian and New Zealand Communication Association
Christchurch, New Zealand
4-7 July 2005

Abstract

Mobile communications have played an influential part in media transformations over the past two decades, and are set for an even greater role. In this paper, I explore mobile phone culture and its wider stakes by focussing on a phenomenon that was not thought initially to be at all significant in terms of the grand futures of convergent media, namely the history of the comparatively recent phenomenon of text messaging. To frame my discussion of the history of text messaging, I draw on actor-network theory, especially Bruno Latour's Aramis, or The Love of Technology.

To analyse and problematize the 'success' of short message service (SMS), I retrace the development of text messaging. I briefly discuss four stories about text messaging: the narrative of an engineer engaged in formulation of the GSM standard in the 1980s; the tale of users in the 1990s finding and experimenting with the technology; a story about users showing some indifference to the technology; and the emergence of new forms of mobile phone culture at the seam-line between television and telecommunications.

In conclusion, I suggest that it is important to reconsider mobile communications and its cultural histories especially in engaging with emergent issues regarding mobile culture and citizenship.

New Media Culture, Mobile Phone Culture

Mobile communications have played an influential part in media transformations over the past two decades, and are set for an even greater role. The mobile - or cell - phone is now used by over 1.3 billion people worldwide, and more than fourteen million subscribers in Australia. In 2003 there were an estimated 1,340,667 mobile or cell phone subscriber worldwide in 2003; up from approximately 91 million in 1995, and 1.158 billion in 2002, or 53.49% of total telephone subscribers (ITU, 2004). More people now use mobile phones than they do fixed phones. In many countries, more households have mobile telephone connections than they do traditional fixed phones. In a mere two decades since the mobile phone was marketed commercially, the mobile phone has become much more than a device for voice telephone calls — it has become a central cultural technology in its own right. Mobiles are associated with significant cultural transformations, such as the role of mobiles in forming & maintaining social networks (useful treatments of mobiles include Fortunati et al., 2003; Katz, 2003; Katz & Aakhus, 2002; and Ling 2004).

There are now quite a number of studies of how mobile phones have been taken up in many different countries, what distinctive cultural and communicative practices have developed in different settings, and what mobiles signify in different places. Whereas the telephone had been relatively neglected by scholars despite over a century of widespread use - as Ithiel de Sola Pool (1977) famously observed, mobile phones have in the past five years been favoured with a growing number of studies. With this trickle of scholarship now becoming a torrent, there is a widespread recognition that the mobile phone, and the many other cognate mobile and wireless technologies have important cultural ramifications.

While there is not sufficient space here to place mobile phones in the broader landscape of digital media convergence, there are now important developments unfolding in at least four areas: the intensification of mobiles as a technology and media device - for instance, the rise of mobile learning, mobile commerce, mobiles for information and entertainment, mobiles as a games platform; the proliferation of mobile communications technologies with the growth of portable digital assistants, new cultures of use around devices such as

Blackberries; the interpenetration of mobiles with new television formats and platforms; the relationship between mobiles and the Internet, not least the sense in which mobile Internet is heralded as the future of online communications.

In this paper, I wish to focus on a phenomenon that was not thought initially to be at all significant in terms of the grand futures of convergent media, namely the history of the comparatively recent phenomenon of text messaging.

Mobiles Histories

If histories of media have their difficulties, there are peculiar challenges and characteristics in seeking to formulate histories of the newer media (Flichy, 2002). This is certainly the case with doing the histories of the mobile phone. Despite its relatively recent commercial availability and consumer adoption from the early 1980s onwards, the mobile phone has been in development for at least fifty years. It also recursively adopts and reconfigures habits, expectations, and cultural forms from two other technologies central to modernity, namely the telegraph and telephone.

One particular difficulty in writing histories of telecommunications is that while there have been many institutional, technical, or national histories of telecommunications, studies that take the social and cultural dimensions of telecommunications are relatively scarce compared to a wealth of literature on other media (notable exceptions include Fischer, 1994; Marvin, 1988; Sconce, 2000; the history of telecommunications also features in one important history of media technology, namely Winston, 1998).

Internationally, work on mobile histories is very much in its infancy. There is one lively and accessible book devoted to the subject (Agar, 2003), coverage of the subject in a number of other books (for example, Steinbock, 2003), special issues of journals devoted to the history of the technical and standards development of mobiles (such as Lehne, 2004, and Lyytinen & King, 2002), and the histories and politics of mobiles (Goggin & Thomas, 2006), as well as suggestive treatments in various articles and collections on social aspects of the mobiles (Goggin, in press; Hamill and Lasen, 2005; Ito, Okabe & Matsuda, 2005; Katz, 2002 & 2003; Lacohee, Wakeford & Pearson, 2003; Ling, 2004). For its part, text messaging has been the subject of much fascination and study and a dedicated collection on the topic is due out this year (Harper, Palen and Taylor, 2005), but I have been only able to find one scholarly study of SMS history (Vincent & Taylor, 2005).



Figure 1: Sydney Morning Herald, 15 April 2005

There are manifold difficulties, then, at this relatively early moment in doing the history of mobiles let alone text messaging. Nonetheless, I would like to think about how such history might be done. To do so, I would like to draw upon the influential approach to understanding the itineraries and adventures of technology offered by the body of work that has come to be called — for better or worse — actor-network theory (see Law, 1999, and Latour, 1999). Broadly situated in social studies of science and technology (Wajcman, 2004), actor-network theory seeks to radically think the relationships between classic, binary categories such as society and technology arguing that these are mutually implicated and constituted, and human and non-human actors. A full discussion of the resources and intricacies of actor-network theory is not possible here, but to suffice to say that it offers many challenges to traditional theories of technology, but also opens up new historiographic approaches.

A classic text of actor-network theory especially pertinent here is Bruno Latour's *Aramis, or the love of technology* (Latour 1996). In *Aramis*, Latour offers a comprehensive account of a technology that was a 'failure' rather than a 'success': a French automated train system known as Aramis commenced in 1969 and finally abandoned in 1987. The questions Latour poses at the outset of his study are three-fold:

Can we unravel the tortuous history of a state-of-the art technology from beginning to end, as a lesson to the engineers, decisionmakers, and users whose daily lives, for better or worse, depend on such technology? Can we make the human sciences capable of comprehending the machines they view as inhuman, and thus reconcile the educated public with bodies it deems foreign to the social realm? Finally, can we turn a technological object into the central character of a

narrative, restoring to literature the vast territories it should never have given up — namely, science and technology? (Latour 1996, p. vii)

For Latour, Aramis is a ‘topic worthy of the task’, because those responsible for it also developed a counterpart automated subway system that was deemed a ‘success’ (p. ix). There is much to consider in Latour’s hybrid, polyvocal text, which collates a number of narratives — a young engineer’s ‘sociotechnological initiation’ (p. x); a running commentary from his professor; accounts of interviews; and even strange voices that use the rhetorical device of *proposopoeia* to allow Aramis to speak; and its challenges to theories of technology, society, and history-writing are many. I wish to briefly draw upon it here to make some notes towards an adequate history of text messaging.

In what follows, then, I seek to analyse and problematize the development of text messaging. I briefly examine four stories about text messaging: the narrative of an engineer engaged in formulation of the GSM standard in the 1980s; the tale of users in the 1990s finding and experimenting with the technology; a story about users showing some indifference to the technology; and the emergence of new forms of mobile phone culture at the seam-line between television and telecommunications.

Story 1: SMS in GSM

While engineers, designers, marketing and business people saw the potential for mobiles to go beyond mere voice communication to become a data medium, not least with the rise of the Internet in 1993-94, early applications were not successful. Textual communication through mobile phone was an after-thought (Agar, 2003). In the first instance, technology designers, manufacturers, and mobile phone companies had been preoccupied with transferring telephone capabilities and culture to the mobile phone platform. With the growth in data communications from the 1960s onwards, consideration had been given to data capabilities of mobile phone. One difficulty, however, had been the poor quality and slow transfer rates of data communications over mobile networks, especially with first-generation analogue mobiles. SMS was built into the European Global System for Mobile (GSM) standard, as an insignificant, additional capability. One story about this is told by Norwegian engineer, Finn Trosby, who chaired an important working group on the technology.

Trosby begins his account with the trope of bathos: ‘the reason for writing an article on ‘the birth of SMS’ is not to reveal a 15 year old story about huge achievements in terms of complex protocols and challenging combinations of radio, data and network design ... The SMS ... is definitely one of the simplest compounds of the GSM system’ (Trosby, 2004, p. 187). Rather, Trosby continues, his main reason is

because SMS is a story about innovation. SMS was indeed a true newcomer ... SMS ... was an extremely simple messaging service tailor-made for GSM ... The major part of the GSM community expected the circuit switched data and fax services to be the most important non-voice services, and SMS to be more like an add-on that might increase the attraction of the GSM system without any commercial significance. The years to come proved it to be the other way round. (p. 187).

Within the European consortium developing the GSM specifications, Trosby was entrusted with the responsibility of convening a 'Draft Group on Message Handling'. Trosby notes that his working group was given quite some latitude in the SMS design, and discusses various approaches taken to features of message length, path, additional features, and alphabet. He summarises the merits and flaws of the design — for example, simplicity and use of available 'in-house' capabilities of SMS versus lack of forethought of envisaging and designing for future possibilities such as group chat or message templates.

Trosby reflects upon the experience of being involved in SMS design and what lessons he can offer. Firstly he suggests: 'No individual expert or company should claim to be the 'father' or 'creator' of any service or major functionality produced during the GSM development' (Trosby, 2004, p. 192). After acknowledging various individuals for their respective roles in SMS development, he then offers a fairytale as a way to address the 'Tricky part: what can we learn from the SMS adventure, if anything at all?':

The story [of SMS] has a slight resemblance to those of the Norwegian fairy tale character Askeladden, who picks up all kinds of items that he encounters given the presumption that it may come to use some day. In the adventure they always do, resulting in a massive success. (p. 192)

For Trosby, this is a nice analogy for SMS, and what sets it apart historically from the situation now:

In real life, they sometimes pay off — as with the SMS. Trying to imagine the same situation today, it is not hard to imagine the average modern executive immediately tearing the SMS concept ... into pieces. (2004, p. 193).

To amplify this point, Trosby offers a counter-example:

The strange thing is that if one imagines the modern product development filtering on all other services than SMS, they might have passed the checkpoint procedures without difficulties ... we can very well envisage a situation where the methods of today would have accepted fax and circuit switched data — the failures — and discarded SMS — the success! (p. 193)

Trosby's narrative of SMS is only one, among many, and it recalls a particular, engineering vantage-point on the early phase of development in the 1987-1990 period. Nonetheless, it is worth attending to in some care, for the richness and complexity it adds to standard treatments of SMS, but also for Trosby's keen sense of the improvisatory, contingent nature of what was devised in this time.

Story 2: Finding Uses for SMS

Two accounts would appear to be commonly circulated about the first SMS message ever sent. A young Nokia engineer is credited (according to Agar 2003), or it was thought that the first message was sent in Britain - according to sources on the Internet; also the source of Rheingold's claim that the 'first text message was sent in December 1992 in the United Kingdom (Rheingold, 2002, p. 15).

Nonetheless the first widespread take up of text messaging is identified with the Nordic countries. In 1995, private individuals in Finland were first able to send and receive SMS, and in 2000 nearly 1 billion text messages were sent (Kasesniemi & Rautiainen, 2002, p. 170). Kasesniemi & Rautiainen suggested that text messaging ‘captured the interest of the youngest generation of Finns in 1998’ and ‘like TV and the Internet, has established itself as part of the adolescents’ everyday life as a teenager’ (p. 171). They found that suddenly ‘instead of talking about calling and changing color covers on their mobiles, all teenagers wanted to give their views on text messaging’ (p. 172). Very quickly then a culture of text messaging formed, with its own ‘terminology, customs and social norms’ (p. 177).

The character sets were limited, the keyboards small, the typeface displays rudimentary, and there was no acknowledgement that messages were actually received by the recipient. Yet SMS was cheap, and it offered one-to-one, or one-to-many, text communications that could be read at leisure, or more often, immediately. By 1999-2000, text messaging had been adopted in a number of countries, especially by young people. It had become involved in wider social, political, and economic changes. One use of SMS which has passed into myth occurred in the Philippines (‘the text capital of the world’), where text messaging was credited, rather problematically, with a key role in bringing down the Estrada government in 2000.

There is much else to say about the domestication of SMS. Part of this work, I suspect, entails consideration of cases where SMS has not been so popular, has not been used or enlisted users (cf. Haddon 2004 on non-users, former users and intermittent users of ICTs). For example, in the USA, text messaging was relatively slow to gain users (Agar, 2003, p. 108). Then there is the case of one of the most mobile connected societies in the world, Hong Kong.

Story 3: Hong Kong and the Slow Takeup of SMS

Hong Kong has had quite a different experience of text messaging, from many other countries. Its take up and use of SMS is often lamented as much lower than other, much discussed, text and multimedia loving Asian counterparts such as Japan, Korea or the Philippines. For example:

Hong Kong has a comparatively low mobile data penetration. Hong Kongers only send an average of 11 SMS per month compared to over 200 SMS per month sent by Japanese and Korean subscribers. Less than 1.5 per cent of Hong Kong mobile subscribers access the Internet from their mobiles compared to nearly half per cent of Korean subscribers and approximately 80 per cent of Japanese subscribers, over a fifth of whom only do so from their mobiles. (Waters, 2004; cf. IT Matters, 2002, also Telecoms Infotech Forum, 2004)

There are a number of reasons adduced for Hong Kong’s comparatively low use of text messaging.¹ Firstly, Hong Kong operators were slow to adopt inter-operable SMS that allowed text messages be sent and received across networks (Hansen, 2001). Secondly, text messaging to date has been much easier for speakers of languages with Latin scripts,

rather than, say, Chinese scripts. The act of typing messages in English, for instance, is difficult enough, let alone, typing messages in Chinese characters.

As John Ure notes '[consumption] patterns as well as consumer adoption rates of [SMS] would seem to be influenced by both local cultural factors and local market conditions, such as the level and structure of prices' (Ure, 2003, p. 10). For instance, voice calls on mobiles in Hong Kong, and access to mobile telephony generally, have been perceived as very cheap compared to other countries, so there is not the price-based motivation for users to text to save money. Hong Kong is a very competitive, fragmented and relatively small mobiles market (Godfrey and Kam, 2004; see also Cheung, 2003). At the stage when SMS usage was beginning in Hong Kong, there were doubts about its profitability in the face of what were presumed to be technologies with far greater capabilities (Hansen, 2001).

For their part mobile phone companies have tried various ways to create demand for text messaging services. An early service devised to attract young users by CSL was 'I-DATE-U', an interactive scenario games based on four female characters. Claimed on the website to be 'the first-ever virtual dating game on mobile phones', the game could run on SMS or WAP/GPRS. Presumably male users could ask questions and engage in conversation via text with characters (McKenzie, 2001). Another service introduced to stimulate takeup was 'canned messages' like "happy birthday", prepared in Chinese, to save keying time. Another popular group of text services are text subscription and transaction services. For instance, Peoples Mobiles offers a mobile betting service, allowing customers to place bets on football and horse racing. M-commerce, such as payment by mobile (m-payment) has also been seen as a way of increasing revenue (Ramos, 2003). Hong Kong has also moved early to position itself for multimedia services (MMS), with early implementation of interoperability across networks.

Interesting also, Hong Kong mobile companies have responded to the unique characteristics of overseas Filipino workers resident in Hong Kong, with specific offerings including SMS. In August 2004 CSL partnered with Smart, a unit of Philippine Long Distance Telephone Company, to offer cheaper text messaging than its competitors as well as voice call and other services including money transfer via text message. While there are an estimated 180,000 overseas Filipino workers in Hong Kong, there may be as many as 8 million in total overseas according to some estimates. In response another Hong Kong mobile company SmarTone joined with a Philippine mobile counterpart Globe - jointly owned by Singtel and Ayala - to also allow subscribers to transfer money via text to relatives and friends in the Philippines, building on their earlier service to allow airtime to be bought in Hong Kong and transferred to someone in the Philippines.

These commercial responses to use of SMS in Hong Kong seem to be in keeping with Angel Lin and Jim Lo's pioneering study of Hong Kong college students and SMS use. Lin and Lo discerned 'emergent trends and patterns of SMS use' in which 'gendered differences are most apparent, and bilingual linguistic identities also seem to be emerging among the high users' (Lin & Lo, 2004). They cautiously concluded that 'new mobile communication technologies might interact with existing sociocultural and discursive practices to produce gradual change in these practices as well as in communicative practices both among and between males and females' (Lin & Lo, 2004, p. 15).

I have only briefly touched here on the social and cultural aspects of SMS, MMS, and other 2.5G and 3G mobile data services in Hong Kong, not to mention the complexities of the economic and industrial debates regarding this, and the policy responses such as the Hong Kong Wireless Development Centre (see publications of the University of Hong Kong Telecommunications Research Project, especially Ure, 2003a & b; Telecoms Infotech Forum, 2004). Nonetheless for the broader rethinking of mobile phone culture, the Hong Kong experience is a very interesting one because it questions the assumption that text messaging can be universally regarded as a 'success', or that it has a particular trajectory. A history of text messaging needs to include and account for this case, not just for comprehensiveness, but also because it stands to tell us something about the shaping of this technology.

Story 4: From Messaging into Mobile Media

These debates regarding directions in mobile data services and mobile phone culture are not simply of interest to Hong Kong, but are also playing out elsewhere. SMS became a big business for telecommunications carriers because of the extraordinary volumes of traffic and so revenue it generated. SMS also developed in other surprising ways, with a range of new cultural intermediaries seeking to commodify, and 'commoditise' it. Many applications have been developed in the past two to three years that are quite mundane: SMS for alerts, news, parking meters, ticketing, and so on. In many countries around the world mobile carriers are seeking to position MMS as the successor to SMS, supported by heavy marketing for consumer adoption of new mobile phones with picture and video capacity. Premium rate services have developed as a back channel or return path for broadcast media, especially television (for a full discussion of premium rate SMS/MMS, see Goggin & Spurgeon, 2005).

These sorts of SMS and MMS services were able to be quickly established because of the familiarity of users with mobile text message culture. Take, for instance, the case of television over mobile devices. The best illustration of the intricate fitting of mobile messaging into the repertoire, programs, conventions, and audiences of television is the case of voting and downloads for the *Big Brother* series, and, rather spectacularly, the *Idol* show. The marketing of *Idol* reveals much about the enlisting of users and audiences for both mobiles and television – in particularly the pre-teen and teen market of boys but especially girls. Here I will turn to an Australian case study.

The first series of the Australian version of *Idol*, *Australian Idol*, was immediately popular when it screened through 2003. Audience participation through SMS voting and MMS (downloads) was an integral part of the program. In 2004, the series was even more widely watched and discussed. This was due to the unlikely emergence of the winner, Casey Donovan, a young woman, whose body shape, dress, and attitude did not fit the usual mainstream music industry requirements. However, there was a strong alignment between Donovan and one of the most important audience demographics, namely mobile phone wielding young teenage and pre-teen girls.



Figure 2: Sydney Morning Herald, 11 November 2004

In an article entitled 'At last, girls find a way to break free', redoubtable national conservative columnist Miranda Devine declared:

Casey, with her dreadlocks, face-jewellery, grunge and not exactly waif-like frame, is the antithesis of the ... role model presented as the ideal to young women and girls. She is beautiful in a much more earthy way, and her self-confidence and poise seemed to grow in front of our eyes, as week after week her worth was validated by the text message votes of hundreds of thousands of strangers.

Technology has taken some of the power of creating cultural ideals out of the hands of middle-aged, usually male, executives who run newspapers, advertising agencies, television channels and movie production houses, and placed it in the hands of those countless, anonymous girls who voted for the shy Bankstown 16-year-old with the diva voice. (Devine, 2004)

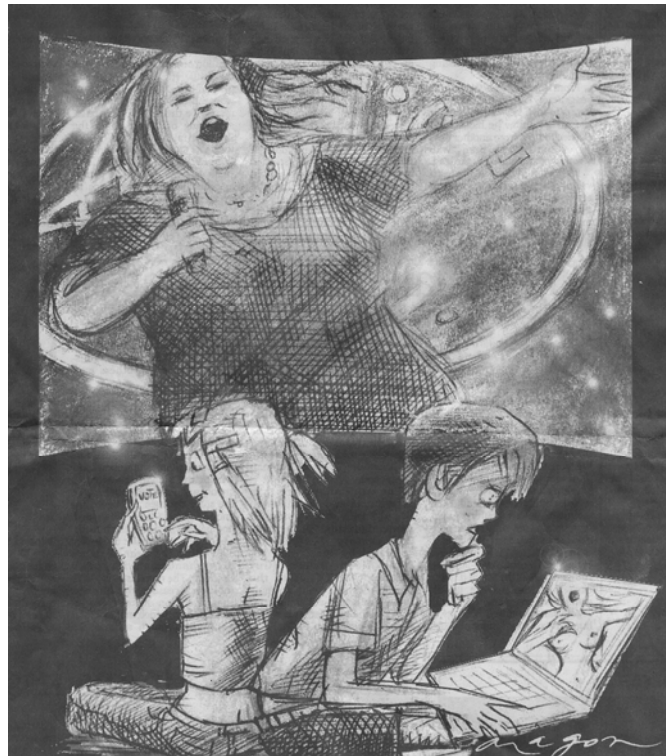


Figure 3: Sydney Morning Herald 23 November 2004

Another columnist, Richard Neville, spied a cultural seachange that harked back to his countercultural heydays of the 1960s, and the celebrated musical of that time, *Hair*:

Australia Idol is not *Hair*. And yet, there is something about the triumph of *Idol* that reaffirms the values of mateship, courage and mutual support that were at core of *Hair* *Idol* showcases an under-recognised mood of optimism and confidence among our youth, perhaps emboldened by the rising tides of the urban tribes ...

Women spanning the generation of my daughters, aged 15 and 21, are having a ball. It's not just the shopping, the plethora of extreme sport options, the cheap tickets to Shanghai, the brutal wit of *South Park* and the shiny array of mobile communication tools. It's the fun they have working together, even when they're working hard.

For all its faults, *Australian Idol* is celebration of cultural democracy; a reminder that between the cracks of commerce and cant, the light can still shine through. (Neville, 2004)

The teen and young take up of mobile phones is a commonplace of scholarship and popular discourses on the technology. The example of *Idol* illustrates the potential of 'juvenation' - as John Hartley puts it - not only in the consumption of mobile networks but also in the rejuvenation of television. Here mobile phone culture is deeply implicated in debates over contemporary media culture and its relationship to political culture and the public sphere (see for instance the celebratory account offered by McKee, 2005; or

from quite different perspectives, the Berry, Martin & Yue's 2003 collection focussing on new media, sexualities, and Asian power relations).

The 'Success' of SMS and the 'Failure' of Wireless Access Protocol (WAP), 3G, and so on

There is an assumption in the celebration or reviling, by turns, of text messaging, that it has been now proven a 'success'. Making such judgements about technology, or anything in history, is extremely problematic of course — not least given this is a quite new phenomenon. Further, as I have suggested above, the rise and rise of SMS is rather variable across cultures, as the Hong Kong example suggests.

SMS may appear to be a case — at least so far, and in some places — of a technology that has drawn many elements into an alliance, and has succeeded (Latour, 1996, p. 106). There is much to be added about the human and non-human elements enlisted in SMS especially during the 1990s - not least the 160 character set of SMS as a critical *actant*. And the future is open, as to whether SMS will decompose.

It would also be instructive to compare SMS with another technology that has, for some years at least, been judged a failure, namely Wireless Access Protocol (WAP). WAP was an early attempt to capitalise on the take up of the Internet, especially with the advent of the World-Wide Web and graphic user-interfaces for the IBM-PC platform. WAP offers Internet-style services for the mobile phone using the Internet protocol. WAP did not meet with immediate success. In fact, it was widely regarded as a flop. However, with improved resolution of mobiles, a greater range of screen sizes, faster sizes, and a substantial base of users with WAP-enabled phones, the technology is now slowly becoming popular — and so offers an opportunity to see the reinvigoration, or reamination, or recomposition, to mix metaphors, of this technology.

Indeed WAP resembles Latour's Aramis, and what he calls the linear model of innovation, where the

initial idea emerges fully armed from the head of Zeus. Then, either because its brilliant inventor gives it a boost, or because it was endowed from the start with automatic and autonomous power, it sets out to spread across the world. But the world doesn't always take it in. (Latour, 1996, p. 118).

SMS, on the other hand, or thumb, seems to fit the translation or whirlwind model of innovation:

the initial idea barely counts. It's a gadget, a whatchamacallit, a weakling at best, unreal in principle, ill-conceived from birth, constitutionally ineffective ... the initial gadget is not endowed with autonomous power, nor is it boosted into the world by a brilliant inventor ... the initial gadget moves only if it interests one group or another, and it is impossible to tell whether these groups have petty interests or broad ones, whether they are open or resolutely closed to technological progress. They are what they are, and they want what they want ... every time a new group becomes interested in the project, it transforms the project ... (Latour, 1995, p. 119).

Of course, this distinction between the two models of technology innovation, and WAP and SMS is too neat in itself. The symmetry will be well muddled if we add the case of another text messaging system that has successful in one country, the Japanese i-Mode system — central, in fact, to the Japanese experience of the Internet as a mobile one (Coates & Holroyd, 2003; Funk, 2001; Gottlieb & McLelland, 2003; Ito, Okabe & Matsuda, 2005). In 2004, I-mode was exported to Australia, where it is being offered by Telstra, and is being offered in other countries also.

My sense is that we are only at the beginning of understanding mobile phone culture, how it has developed, what its ‘glocal’ characteristics are, and also what its prospects might. As the example of the primacy of mobile communications in international television illustrates, with its deployment at the intersection of broadcasting, advertising, and telecommunications, lucrative commerce in SMS and MMS has provided a way for carriers and equipment manufacturers to recover from their difficulties in developing 3G services.

In a unilinear narrative of progress, third generation mobiles promised broadband speeds and video communications, marching onwards and upwards from second and first^t generation mobiles. Of course, 3G has not quite found its supporters and users yet, though it might escape the fate of Latour’s self-guiding transportation system Aramis. Aspirant carriers paid huge sums for 3G licences at the height of the telco boom, especially in Europe, making start-up costs especially high. For their part, users have been nonplussed about the videotalk, though some groups are very interested; and so 3G providers, like Hutchison’s ‘3’ brand in Australia, have proceeded to acquire customers through heavy discounting of voice calls instead.

At the present time various groups with a stake in mobile media whether industry, users, cultural producers, non-government organisations, civil society, or the state are discussing mobile cultural content. Moreover, questions of cultural citizenship and new cultural forms for mobiles are really only starting to be widely discussed. What is exercising many minds is what sort of cultural material will consumers be prepared to pay for, and how much. While these might well be the preoccupations of business and industry, there are other critical questions too – raised in debates, for instance, over the creative or innovation commons in the Internet, or in the figure of the user-producer familiar from peer-to-peer networks, computer games, or other forms of new media cultures. In all this, the histories and historiographies of these various facets of mobile technologies and their peripatetic itineraries are vitally important in opening up new perspectives and possibilities.

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Notes

ⁱ As well as the material cited here, I also draw upon interviews conducted with Hong Kong mobile phone companies during an October 2004 visit.