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Goggin, Gerard and Spurgeon, Christina (2007) Premium rate culture: The new business of mobile interactivity. *New Media & Society* 9(5):pp. 753-770.

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The final, definitive version of this article has been published in the Journal, New Media & Society 9(5):pp. 753-770. © <SAGE Publications Ltd

Final submission to *New Media & Society* (edited for length)

Premium rate culture:

The new business of mobile interactivity

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Abstract

This paper considers a neglected but crucial aspect of the new business of mobile interactivity: the premium rate data services industry. We provide an international anatomy of this industry model, and the ways in which it has been used to capitalize upon the surprising success of short message service (SMS) to provide a basis for the development of consumer markets for mobile data services. We situate this analysis within a wider consideration of the role of premium rate culture in the social shaping of interactivity in convergent media. Specifically, we look at how premium rate services are being constructed in relation to telecommunications, television, and the Internet. We conclude that although premium rate culture has rejuvenated innovation in broadcast television it may potentially constrain the interactive potential of the mobile Internet.

Key words

premium rate telecommunications — mobile phones — premium mobile services — mobile messaging — SMS — interactivity — mobile Internet

Premium rate services are a diverse class of services that have a layer of value added to the standard telecommunications service. This can take a number of forms. It can be content or interactive functionality, or both, and is charged at a higher rate than a standard telephone call. Voice services can be pre-recorded or live. Data services can be pre-produced or customized on the fly. Premium rate services were pioneered in the 1980s, and expanded into the early 1990s. Early examples of premium rate service included specialized weather, sports, news and market information services; competition entry lines; live counselling services; live and recorded horoscope and 'psychic' services; and, of course, 'adult' entertainment services.

With the advent of the commercial, mass Internet from 1993-94, consumers had a range of other ways to obtain information or entertainment, often at a lower cost. However, the premium rate services industry was able to maintain certain sorts of niche services, not least for particular user groups who, either felt comfortable with telephony (as a familiar technology, or a secure, trusted system of payment) or who for various reasons had a preference for aural cultures of materials (in the case of many Blind users, this could be related to the familiar accessibility of audio and speech). Being an innovative industry also, a trait that has earned them the ire of regulators worldwide, premium rate service providers were quick to sense new opportunities. The most lucrative, even mass market, applications were voting and competition lines for television programs and also backchannels for pay (subscription) television. Even here the premium rate services industry might have foundered, it not being clear how to increase its growth and revenues — if it were not for emergence of mobile phone culture.

Carriers, equipment vendors, and a range of new multimedia providers were

seeking to capitalize on the high rates of ownership and use of mobile phones by the end of the 1990s. They also were looking at ways of recouping losses from slow takeup of third generation (3G) mobiles, by extending the life of the second-generation digital platform for instance with mobile data extensions and applications based on 2.5 and 2.75 generation protocols. Popular services included ringtones and music, wallpaper for mobiles, downloadable games, graphics, picture and video downloads, and text chat.

The task of obtaining a global snapshot of the size and value of premium rate services industries is thwarted by their diverse and rapid proliferation in proprietary virtual spaces. In his global profile of mobile premium rate services Madanmohan Rao (2005) notes the significance of the ringtone market which exceeded the value of CD sales in the UK and South Korea in 2003 and 2004 respectively. Growth in this market has been quick, with more than 10 percent of the overall worldwide music market estimated to be in ringtones. Mobile games have also quickly developed into a billion dollar industry, with Korean and Japanese mobile game markets already maturing and presently accounting for about 65 percent of this global market. Other important premium rate applications include mobile blogs (moblogs); adult services predicted to have a global market of US\$1.2billion by 2008; and gambling, with a global premium rate services market anticipated to be worth a staggering US\$6 billion by 2008.

Such developments are the backdrop for this article, which looks at how a particular business model that has enabled the commercial provision of information and entertainment services via telephone systems is implicated in the social shaping of mobile interactivity. Firstly, we discuss interactivity as it is unfolding in mobile

networks. Secondly, we give a detailed account of the rise of premium rate telephony services. The transformation of premium rate culture from telephony to mobile messaging is charted in the third section, before we turn, fourthly, to how mobiles became incorporated into contemporary televisual industries and cultural shifts. In the fifth section, we compare and contrast, premium rate culture as conceived on mobile platforms with the mobile Internet. Finally, we conclude with some remarks about the cultural and policy implications of this new mobile interactivity.

PREMIUM RATE CULTURE AND THE SOCIAL SHAPING OF MOBILE INTERACTIVITY

As various new media and communication scholars have noted interactivity is frequently and uncritically invoked as the difference between 'old' and 'new' media (Downes and McMillan, 2000; van Dyke, 2001; McMillan, 2002; Marshall, 2004; Middleton, 2002). This is problematic for empirical research in new media because an adequately theorized definition of interactivity is required so that the concept can be made operational (Kiousis, 2002: 356). It is also problematic for critical research traditions because emergent new media cultures and politics are often defined and self-defined by their philosophical orientations to mediated interaction as well as uses and applications (Meikle, 2002: 32). The Open Source movement, for example, has evolved from the early gift economy and hacker culture of the Internet, to offer a formidable, if much-debated, alternative vision of how information production, distribution and exchange can be organized and sustained. This contrasts with what we dub 'premium rate' culture, which seeks to rather narrowly conceive, indeed restrictively enclose, social relations.

Premium rate culture is built on the hopes of carriers that the habituation pattern established by the requirement that consumers make regular payments for telephone connectivity can be successfully and unproblematically extended to include additional payments for data services (Feldmann, 2005: 32). The 'free lunch' of program content provided by commercial broadcasting, and of communication tools provided by the commercial web destinations (Marshall 2004: 59) is anathema in the culture of premium rate services. Premium rate culture is also strongly resistant to the possibility that end-users might participate in shaping the processes and pathways of mediated information exchange or creation in the mobile data environment, or have any legitimate role in shaping and managing governance procedures and processes. In outlining the history of the premium rate services business model, its expansion into the cellular mobile telephone environment, and convergence with the television and Internet, we address these macro-politics of premium rate mobile interactivity.

Definitions of interactivity have emanated from a number of sources, including sociology, psychology and organizational communication (McMillan, 2002). However models derived from the mathematical theory of communication and cybernetics continue to anchor our common sense understandings of interactivity as well as more highly theorized accounts (Marshall, 2004). The reasons for this are rarely explored but it seems likely that, for as long as our engineered systems of communication continue to be shaped by this paradigm, it will figure prominently in our analyses of the systemic dimensions of communication, if not the social or psychological dimensions. It will also continue to be the touchstone of critiques which advance our understanding of the multidimensionality of interactivity (van Dijk and de Vos, 2001; Manovich, 2001).

The consequences of the social and political shaping of engineered media and communications systems have been a major focus of critical political economies of communications (Mosco, 1996; Schiller, 1999). Similarly, there is a long tradition of communication history that has explored the consequences of the materiality of communications technologies for human consciousness and culture (Carey, 1989). Another significant critique of transmission-based models of communication and interaction is the cultural production thesis of cultural studies (Marshall, 2004; Fiske and Hartley, 1989). This locates the processes and acts of sense making at the heart of cultural production and, in so doing, radically problematizes reception. Although cultural studies has resisted systematization as part of this critique, it can nevertheless be observed that the cultural production thesis is diametrically opposed to views of communication which are limited to closed systems analogies and rationales. Instead, the social relations of engineered systems and processes of cultural production, including interaction and communication, are seen as analogous to the neural networks and circuits of highly complex, open, self-organizing and reproducing (living) systems (Mattelart, 1996).

Having established the active audience of mass media (Ang, 1996), and the emergence of user-generated 'DIY' culture and citizenship practices (Hartley, 1999), new media studies now theorizes the 'disappearance of the audience' (Marshall, 2004: 13) and the emergence of the 'user' (Marshall, 2004: 24ff) as the dominant subjectivity of digital media. The concern here is less to do with how the end-user is configured in the socio-technical systems of communication and more about the influence that end-users can and do exert upon, and within, these systems. Indeed, the struggle between these two positions – of networked actors and passive subjects – has emerged as one of the major fault lines of contemporary media politics. As we hope to

demonstrate, this is as much the case in the configuration of mobile interactivity as it has been with modern mass media and the Internet.

THE DEVELOPMENT OF PREMIUM RATE SERVICES

Premium rate services developed through the 1980s in the wake of a range of crucial technological, legal, and institutional changes in telecommunications that saw intensified competition in residential markets for new media and communications services in the final quarter of the twentieth century. They evolved from value added telephone services that were developed in the public service ethos of the telecommunications monopoly. An important early example of this type of public service was the 'speaking clock', developed by British telecommunications engineers to extend the reach and accessibility of standardized time in 1936. This technology was transferred to a number of countries, including Australia in 1954 (TSA, 1981: 2). Other value added information services perceived to have public service value followed, for example the weather (supplied by government meteorological agencies) and stock market information. Importantly, these value added services had a marked impact on network traffic volumes. They stimulated increased call activity, which came as an unanticipated bonus for public telecommunications monopolies which used revenues raised on high volume routes to offset investment in the realization of a universal network. These early value added services did not attract a premium charge, not least because developing the means to provide billing and collection services for third party information service providers did not generally figure as a priority in the universal service culture of monopoly carriers. As with many new communications services and network enhancements, the potential for commercial development of

premium rate services was recognized, even if not fully understood, by monopoly carriers for many years. However, it remained dormant until new paradigms in telecommunications law and policy associated with neo-liberal market-based competition and convergent digital technologies resulted in a transformation of communications laws, policies and network infrastructures.

From the early 1980s private 'dial-it' information service providers in the US used the liberalizing law and policy environment to develop residential consumer markets. They interconnected their content management and traffic systems with local telephone companies and negotiated revenue sharing arrangements for carriage, and billing and collection services. A decade later, as telecommunications markets were liberalized across the industrialized world, similar interconnection principles and practices were established in many more countries. New categories of businesses and services quickly grew, matured and evolved.

By this stage, a number of billing and collection methods for premium rate services had reached a mature stage. Payment by credit card at the time of receiving a premium rate service is one method. More common is for premium rate services to be charged to a telephone account. Tariffs can be levied on a per-transaction basis or by subscription, a method of payment favoured by mobile carriers (though not at this stage by consumers).

In addition to billing and collection services and carriage, another important element of premium rate services grew in importance — namely the content and rights management systems provided by intermediaries such as information service providers. This convergence of revenue and data management systems is the reason why premium rate services are sometimes also described as micropayment systems in

industry and policy discourse. There is an echo here of Theodor Holm Nelson's earlier usage of the term in connection with the failed Xanadu project, which aimed to establish a hypertext scheme for the Internet with inbuilt content rights management and micropayments systems (see Nelson, 1981 and 1987, and also the later discussion in Nelson, 1996). While viable micropayment systems are still gaining consumer assent in the web environment, they have been developing in telecommunications environments for nearly three decades. However, differentiation between the two is important, if for no reason other than the tariffs levied for premium rate services are of quite a different order of magnitude to those envisaged by the early Internet micropayment systems.

E-commerce payment systems, and the capacity to collect and distribute revenues across extended value chains, took some time to develop with the new medium of the Internet, not least because of the simple yet rather rudimentary IP and hypertext transport protocol, and the prevailing gift economy of the Internet.

Previously, those developing electronic networks had been working with other proprietary standards, but, with a few exceptions, by the late 1990s and even into the early 2000s, these had not been adopted for business-to-consumer use, let alone business-to-business use. With their powerful, well-capitalised and, in the case of monopolies and former monopolies, comprehensive customer management and billing and collection systems, telecommunications companies were well-positioned to put in place sophisticated payment and revenue systems across communications networks. Their existing systems could already track, aggregate and distribute premium rate service revenues to service providers according to agreed revenue sharing formulas.

Not surprisingly perhaps given these features of premium rate services, per transaction tariffs vary significantly between services and countries. A popular premium rate application is voting in television formats. In Australia the base rate charged for services such as voting in reality TV shows has typically been 55 cents per call from a fixed telephone, and more for calls from mobile phones (reflecting the customary charging of mobile phone carriage costs on a higher, timed rate). The cost of a TV show fact sheet or a mobile phone ring tone might be a few dollars, while live information — anything from phone sex to professional legal or financial advice — could be as high as \$22 for 5 minutes. In Europe the highest maximum premium rate tariff we observed in a 2004 examination of pricing and services was 20 Euros in Finland while in Spain the maximum that could be charged was 0.90 Euros (Netsize, 2003).

There is a lively debate within the premium rate services industry about the relative merits of transaction-based versus subscription tariff structures. Experience in the Japanese and Korean markets of the infant billion-dollar global mobile games industry suggests that although the subscription model may deliver the rates of return mobile carriers seek in the short term, it may actually stunt potential growth and industry development in the medium and longer term (Screen Digest, 2005).

Furthermore, these markets would probably also benefit from longer term perspectives on per-transaction tariff structures. For example, Korean wireless game downloads are charged on a cost per download basis rather than on a subscription basis. Another important difference between Korea and less well-developed mobile games markets such as Western Europe and North America is that Korean mobile game players pay between one-third and one-quarter the prices charged to their European counterparts. In other countries the premium rate services model has not yet

delivered pricing structures that stimulate comparable levels of consumer engagement. The relative high costs of flat-rate subscription to proprietary 3G services, combined with the persistence of per transaction charges for certain types of content within these spaces, also contributes to consumer inertia to flat rate subscription models in countries outside of Japan and Korea (Vesa, 2005).

FROM SMS TO MOBILE DATA SERVICES

One of the most intriguing aspects of mobile phone cultures is text messaging, the first widely used mobile data application. SMS was built into the European Global System for Mobile (GSM) standard, as an insignificant, additional capability (Trosby, 2004). In a number of countries, especially the Nordic countries, Philippines, and Japan, messaging was avidly taken up by young people, forming new cultures of media use (Harper, Palen and Taylor, 2005; Kasesniemi, 2003; Ito, Okabe and Matsuda, 2005). In other countries such as the United States or Hong Kong, text messaging was more slowly adopted (Goggin, 2006).

However, once SMS became a relatively well-established means of communications, industry became intensely interested. For consumers, the key attractions of SMS are flexibility (for example it supports mobile peer-to-peer as well as one to many communication modes), and cheap tariffs relative to the cost of mobile voice connections. For carriers and value added service providers, the surprising success of SMS suggested that demand for mobile data services would be strong. It also stimulated the development of new intermediaries to provide digital content services that attracted a premium charge in addition to a carriage service charge.

The early success of the Japanese i-Mode model of premium rate services also boosted interest and confidence in prospects for mobile data markets. The i-Mode system provides users with access to an unlimited amount of content for a flat-rate subscription (Natsuno, 2003). While i-Mode is a proprietary system, and usergenerated content was not initially anticipated in its original design, substantial amounts of user-generated content can actually be accessed through i-Mode (Hjörth, 2006). This has contributed to extremely high levels of engagement such that the flat-fee subscription is perceived by Japanese consumers to provide good value. Yet i-Mode has not been as successful in the countries to which it has been exported. This aspect of the i-Mode experience illustrates two related points. First, that closure is the presently the preferred default setting of carrier mobile data environments, and second, that carriers have been slow to recognize the end-user 'will to produce' (Marshall, 2004: 100ff) as an important source of potential added value.

For fixed network carriers, the revenues derived from premium rate services account for a very small proportion of total revenue, but the rate of return is much higher than for standard calls. Markets for voice-based premium rate services on fixed networks have matured and new opportunities for growth are being explored (Pagani, 2005). Newer mobile network operators, however, are looking to SMS and successor premium rate MMS (multimedia message services) to jump start volumes and returns on costly spectrum investments (Wilson, 2006). They are also developing new multimedia value added and premium rate services to entice consumers to third generation (3G) wireless communications platforms, thereby conditioning markets for 'next generation' location-based interactive and m-commerce services (Maitland, Bauer and Westerveld, 2002; Olla and Patel, 2002; Sabat, 2002).

In spite of this complex of factors that have contributed to the staggered development of mobile content services around the world, a boom in premium rate service development is anticipated over the next decade — as well as diversification in the range of services and the platforms upon which they will be delivered. The voice and chat services that were characteristic of the earlier services developed on fixed networks still remain, but new business to consumer applications are emerging daily. Some of the more interesting developments in premium rate services have been in relation to broadcast media, notably as premium rate SMS has been taken up as a back channel for broadcast TV.

BETWEEN TELEVISION AND TELECOMMUNICATIONS

The dynamism and diversity of premium rate services is explained by a range of factors. The entry of mobile carriers into competitive markets is one that has already been mentioned, and to which we will return shortly. Another is the imperative for commercial broadcast media to develop new revenue streams to complement advertising revenues which are threatened by declining audiences and fragmenting markets. Cross-media premium rate service applications have proven to be enormously popular (Feldmann, 2005). The particular application considered here is the back channel or return path for broadcast media, especially television, whereby interactive television has finally become a reality not, however, principally through digital television or pay television platforms, or other much vaunted interactive television technologies, rather through incorporation of the humble telephone in program formats.

As far as we can ascertain, premium rate services were first integrated into a television program format as the platform for audience interaction by production company Endemol in *Big Brother* in 2000 (Simmons, 2003). (In some locations, notably the UK, early, widespread consumer uptake of teletext was also an important antecedent to these newer formats based on premium rate interaction with broadcast media.) Not only did this use of premium rate services offer the opportunity for heightened viewer engagement with the program, it also generated a revenue stream that was shared by all commercial participants in the premium rate service value chain. In the case of services associated with a TV show, for example, call revenues can be split between five or more parties: the carrier who provides carriage as well as billing and collection services, the premium rate service provider who provides number ranges and call management services, the broadcaster who promotes the service, the program producer who provides content, and the program format owner who has deployed premium rate services as a structural feature of the show.

With the first two series of the Australian *Big Brother* (2001-2002), the returns from the premium rate services were modest relative to total production costs but nevertheless important. For example, program producers could apply their share to defray production costs, including prize money. Although the audiences for the third series of *Big Brother*, broadcast in 2003, fell by 13 percent from the previous series eviction votes reportedly increased by 20 percent with 60 percent of votes lodged by SMS. SMS revenues for this series were estimated at AUD\$5.5 million. Half was retained by the carrier (Telstra) with the balance equally distributed between the production company Southern Star/Endemol, the broadcaster Network TEN, and the premium rate service intermediary Legion Interactive (Schulze and Sainsbury, 2003).

In the United Kingdom, as many as 11 million votes were cast by mobile or fixed premium rate services in the course of UK *Big Brother* 4, with an additional 2.75 million registered via Sky Digital's interactive 'red button' (Mercier and Barwise 2004: 15), arguably another premium rate service window. During the previous *Big Brother* season UK audiences were invited to participate not only by voting but by texting messages directly to the program. There was an extraordinary response, with some 500,000 text messages received. These were moderated and retransmitted in a text 'strapline' on the bottom of the television screen. This innovation elevated the living room conversation about *Big Brother* to a national scale, and to a continental scale in the case of African *Big Brother*, which used the same feature with similar popular responses despite the low levels of telephone penetration in many parts of the continent (All Africa News, 2003; BBC, 2003; Doherty, 2005).

Premium rate interaction with the various versions of *Big Brother* and other television programs is no longer limited to voting or messaging. Service providers, carriers, program producers and marketers are committed to expanding services using new generations of mobile technology which support new forms and applications including Multimedia Messaging Services (MMS). In 2003 when *Big Brother 4* was broadcast in the UK premium rate MMS was used for merchandising. Fans could download picture alerts, ringtones, logos, video clips, java games, and animations, and they did in modest numbers.

Nevertheless, telephone services remain an important, if under-studied, way for audiences to interact and be active with television stations and program makers and producers. Premium rate services development has coincided with new programming genres, such as 'reality TV', and new variations on quiz shows and

talent quests. These programs codify new sets of cultural expectations, and viewing habits, in which telephony is crucially embedded. Mobile text messaging has subsequently emerged from television plugged into telecommunications as a crucial extension of the 'enhanced' television experience (Mercier and Barwise, 2004: 5).

The convergence of television and SMS text has also spawned other interactive program formats and cultural intermediaries. For example, it has supported the emergence of the 'text jockey' (TJ) from the SMS chat moderator (Doherty 2005). In 2001 Sky Digital in Britain started carrying new television programs and channels formatted entirely on premium rate services. Content consists almost entirely of viewer interactions with TJs and other viewers, and broadcast in straplines (Mercier and Barwise, 2003: 14). TJs have also developed sub-cultural fan followings in various parts of the world.

While interest in broadcasting television and television-like services to mobile devices is now growing, it is also the case that MMS opens the way for real-time inclusion of end-user generated video content in broadcast media streams. Now that the real-time inclusion of SMS text messages into programming is proving to be a commercial success, industry attention has turned to the larger challenge of 'smoothly integrating viewer generated MMS content' (Rao, 2005: 136). Indeed it is plausible that consumer resistance to 3G services will be overcome through the development of such picture-to-broadcast applications. However the extent to which mobile telephony can adopt this kind of 'architecture of participation', especially in Europe, is, in large measure, dependent upon how carriers balance their short term interests in returns on costly spectrum investments against longer term prospects for returns from encouraging end-user productivity (Wilson 2006).

MOBILE INTERNET

As Jason Wilson (2006) has noted, even though mobile phones need to be distinguished from computers, they are also usefully regarded within the spectrum of Internet-enabled devices. This is especially the case in places where the mobile phone and premium rate services are an important form of alternative access to Internet-like and -based information and communications services. For example, China's Internet portals are heavily involved in premium rate SMS services and rely on them to contribute to their profitability. This is in spite of the fact that China Mobile, the carrier partner, takes up to 80 percent of the revenue made on SMS-delivered news and information services (Mendoza 2005: 375). While the sheer size of the Chinese market means that substantial revenue streams and profitability have been realizable for China's convergent Internet and premium rate information service providers, the underlying model of re-purposed content distribution, also favoured by carriers and premium rate service providers around the globe, is not likely to support the emergence of 'killer apps' in the 3G context. Mounting evidence suggests the future successes will arise from those which applications facilitate and integrate social networking and communicative and distributive interactivity.

Mobile carrier reliance on managed content spaces, populated with premium rate services, is a widespread growth strategy for mobile data services. So, in Australia, for instance, the carrier Vodafone has 'Vodafone Live!', competitor Optus has the 'Optus Zoo', Virgin Mobile has 'The Vibe', while Hutchison has 'On 3'. For those users not happy with either 3G or 2.5G platforms and handsets, the former

monopoly and still dominant carrier Telstra offers the Japanese i-Mode system under license. Respective differences aside, there are clearly 'walled gardens' in the premium services space and wireless Internet (Aufderheide, 2002). Unlike the services that were the focus of consumer and competitor concerns about Internet enclosure in the Federal Communications Commission review of the AOL and Time Warner merger, these walled gardens are accessed by mobile telephones and over mobile telecommunications networks, not proprietary cable set top boxes over broadband Internet networks. As the technological platforms develop, these walled gardens look increasingly like branded content farms. The volume and range of content services to choose from — frequently derived from re-purposed content, sourced through strategic partnership arrangements from well-known existing media and entertainment brands — is also a significant feature of these environments. While new content creators and aggregators are included in this mix their main contribution is to facilitate this convergence.

There is a larger related problem that obstructs a social networking development approach. This is picked up in a wider debate occurring around the question of whether, and when, proprietary networks or walled gardens are the most effective industry development strategies in the first place. This debate also arises at the point where mobile data services intersect and converge with the possibilities of mobile and Internet interconnectivity and interoperability, something we wish to briefly elaborate upon.

There has been much emphasis on mobile and wireless technologies as ushering in new attributes, capacities and practices for contemporary media. Not only is there a great deal of industry, policy, and popular discussion about mobile media,

there is an emerging debate about the nature of cultural consumption with such devices and the new forms and relationships with which they are being associated. In his widely read book, *Smart Mobs*, Howard Rheingold was one of the first to constellate a number of the themes about a new phase in media in which mobiles are central. Rheingold argues that digital mobile phones are part of a new generation of 'portable, pervasive, location-sensitive, intercommunicating devices' (Rheingold, 2002: xix) which allow users to circumvent various forms of coercive authority through ad-hoc cultural formations based on networks of co-operation, trust and public good. Rheingold calls these formations 'smart mobs', and presents them as evidence of the collective human capacity to engineer technologies of co-operation from the blind force of scientific technique and excesses of corporate capitalism.

With his utopian register, Rheingold opens up the arcane area of spectrum management to popular and critical scrutiny. He is particularly critical of policy approaches that have come into vogue in the Western neo-liberal period. For Rheingold, these policies, which have seen many national governments sell 3G mobile services spectrum in recent times for many billions of dollars (Curwen, 2002; Hillebrand, 2002) unnecessarily perpetuate spectrum scarcity and threaten to restrict and confine the maturation and mobility of the Internet as a social, indeed creative, 'innovation commons' (Rheingold, 2002: 47). This critique is couched in an optimistic account of the capacity of wireless applications such as VoIP (Voice over Internet Protocol), WiFi and Bluetooth to forestall the reproduction in the mobile space of 'the familiar model of traditional broadcast-era mass media-"content" fed through monopoly controlled, metered one-way pipelines to passive consumers' (202).

An alternative view to that of Rheingold is provided by Henry Jenkins (2004), who is not so dismissive of premium mobile services. Jenkins discerns important opportunities in this business model for symbol creators to 'sell their content directly to the consumers, cutting out many layers of middle folk, adjusting prices for the lowered costs of production and distribution in the digital environment' (Jenkins, 2004: 39).

Neither of the perspectives offered by Rheingold or Jenkins discount the argument made here: that the mobile Internet is being most effectively and pervasively redesigned not in the open and interoperable spaces of the fixed Internet (where the micropayments debates were often focused from the early 1990s onwards), but in the proprietary premium rate spaces of digital, and increasingly mobile, telecommunications. Here, the juridical and technical capacities to build businesses on mobile communications networks, combined with the high prices paid for spectrum, have delivered cut throat competition and heavy price discounting in carriage services, and a great deal of entrepreneurial activity in third party content services and applications. Consequently there are generally no communication 'commons' in the conditional access regimes of premium rate services. Curiously the technical standards that mobile content services now rely upon are developed on a basis that, after the perceived failure of the first version of Wireless Access Protocol (WAP), now promotes the virtues of open architecture and standards, or at least 'service interoperability' (q.v. the Open Mobile Alliance; www.openmobilealliance.org). For the present, mobile premium rate applications and content services themselves remain overwhelming proprietary.

CULTURAL IMPLICATIONS

One important issue that arises from comprehending these new forms of mobile consumption returns us to the questions of publics, design, and indeed, code, that we raised earlier under the rubric of commons. Debates over the mobile commons only started in earnest in 2005. There was finally a dawning recognition over the narrow assumptions about user desires and expectations that are built into the relatively 'closed' services, networks, and even handsets associated with 2.5 and 3G services. Harmeet Sawnhney, for instance, has tellingly observed that the online mobile spaces of i-Mode less resemble the Internet in its public access, open source incarnations than the French Minitel. Minitel was a computer-mediated service that was, in that instance, a state-initiated and carefully delineated technology system and ensemble of user experiences (Sawhney, 2004). The design of premium rate SMS/MMS services, proprietary network services and portals on mobiles, and even 3G, can also be critiqued for the ways in which design values and possibilities have been foremost guided by the power of capital rather than the messy and unknown innovations of multitudes of users.

As already noted, i-Mode users have found ways around the designed limits upon their capacity to create content and have created tens of thousands of i-Mode websites (Hjorth, 2006); just as a hallmark of successive ways of mobile use has been the unexpected deployment of technologies by users in ways unforeseen by their designers, whether SMS, customization of the phones themselves, hacking of the phone operating systems, repurposing of mobiles by artists, and so on. A very poor cousin to the utopian visions of third-generation communications, the fact that

premium rate mobile services are a highly constrained, less glamorous and celebrated instance of the user-as-producer is all the more worth puzzling over given their positioning at the heart of media and entertainment industry transformations.

While debate has so far has tended to focus upon the private ownership of such space, as we do here also, it is worth considering whether consumers find genuine satisfaction and value in the quality of interactions that such services offer and facilitate. There is a pragmatic rationale for suggesting this change in approach arising from the recognition that the momentum to create mobile proprietary space is now inescapable whether this is desirable or not. This is not to say we dolefully abandon all hope for a commons (on the Internet, on mobile, on cable, on every delivery platform and protocol we can manage). However, there needs to be genuine consideration of the proposition that, if we can indeed put private ownership and commodification of such networks aside, the social relations in these spaces are no less authentic than anywhere else (say the Internet). Indeed, SMS applications, including those charged at premium rates, are developing in many interesting ways in many parts of the world. As Witwatersrand Digital Arts Professor Christo Doherty observes mobile premium rate services, 'represent for many commentators (including myself) a way in which Africans can engage in the benefits of a networked society without the physical infrastructure necessary for Internet communication' (personal communication 15 May 2006). Similarly Madanmohan Rao (2005) sees not only the problems of enclosure but also noteworthy cases where premium rates services have had the effect of diversifying news and information services, and improving their accessibility in parts of South East Asia. There are important cultural practices developing here that need to be recognised, studied, and debated. This includes the ways in which cross-platform uses of premium rate services have contributed to the

revitalization of broadcast TV by supporting real time interaction with audiences.

Along these lines it could be suggested that premium rate culture offers a highly constrained yet very important way for audiences to construct themselves as individual yet collective members of television audiences. In doing so, premium rate culture builds upon cultural habits learned from ten years of mass diffusion of Internet; but and also of cultural habits learned from over a century of voice telephony, nearly two decades of mobile phone use, and far fewer years of mobile text messaging. Crucially, premium rate culture also adds visual and video cultural aspects to text messaging. We need to appreciate, therefore, the new cultural practices developing here, and how these relate to the transformations in political economy, industry structures, media and regulatory institutions.

CONCLUDING COMMENTS

This analysis of premium rate culture has paid attention to some of the specific ways in which end-users are configuring and re-configuring mobile interactivity in the operation of premium rate services markets. We have also qualified the impact of premium rate culture on the broader trend to digital media enclosure by acknowledging the ways in which markets and competition have differentially enabled the development and expansion of mobile culture in the first place. In closing we call for further research into some of the important questions of politics and policy that arise in relation to the significantly unbalanced social and economic power relations of premium rate culture. We frame these comments in terms of consumer rights for a variety of reasons, but principally because of the traction this framework

can achieve in national and supranational public policy processes and wider market discourses.

As social relations of premium rate services are made opaque by the operation of claims to confidentiality in the market, very little of the information needed to make judgments about the equity and fairness of premium rate services terms of trade circulates among consumers, and this puts them at a serious, structural disadvantage. For this reason, the terms and conditions of consumer protection in these proprietary spaces requires serious attention from government, to ensure that the industry does engage in fair trade practices (Goggin and Spurgeon, 2005).

Although the market and services economy policy environment should favour the development of a general consumer protection approach to premium rate services (Braithwaite and Drahos, 2000), the special cultural status of premium rate services has also been successfully pleaded. Specific regulations to restrict and prohibit certain types of content are generally far more developed than consumer protection regimes that address the high bit-for-bit costs of these services.

It has been observed that many new communications technologies taken up in residential markets go through a 'porn-led' phase of development (Hartley, 2000: 11). This was the experience with VCRs in the 1970s, and more recently with the Internet. It was also the experience with fixed network premium rate telephone services and, without doubt, is also a driver in the development of mobile premium rate services. Consequently, public debates about new media (in this case premium rate services) have been routinely gripped by moral panic, usually resulting in a toughening of content restrictions (for example Spurgeon, 1993 & 1999). Most recently, in September 2005, the British the government signalled tough new laws on

pornography on mobile devices as well as Internet, and other jurisdictions have also implemented or at least foreshadowed laws and regulation regarding mobile content (Goggin, 2007).

In these circumstances more general issues about consumer protection in the evolving digital economy are neglected including, for example, the extent to which telecommunications carriers are emerging as unregulated and unrestricted credit providers for third parties. Also neglected is the extent to which consumers do not seek redress for the failure of premium rate services, for example when a ring tone does not work, or a vote does not register. While the sums involved might too small to justify an individual consumer's time or effort to pursue this sort of matter, the cumulative amounts involved could represent significant illegitimate windfalls for service providers and carriers further along the value chain.

Many mobile premium rate service providers support gestures to consumer protection and have been known to seek legitimacy through consumer protection commitments, including content restrictions. Like residential consumers, however, they are also consumers of telecommunications services and are generally the weaker parties in negotiations with carriers. There are now indications that some of the more powerful entertainment companies content providers are exploring ways to strike their own terms for the provision of premium rate services and by-pass the dominance of incumbent mobile carriers, including gaining access to mobile spectrum to compete directly (see for instance, Time-Warner and cable carriers' 2006 announcements, Reuters 2006). With principles of network neutrality on Internet already coming under severe pressure, the reach of consumer protection discourses and regulatory regimes into the next generation of proprietary spaces also requires further investigation.

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