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What's Happening? Mobile Communication Technology and the Surveillance Function of News

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Why are people interested in news and what maintains their interest in it? These questions are the subject of much debate and analysis by media scholars and contemplation of the enduring interest in and desire for news has resulted in numerous explanations, from the broader political and economic need for information to the satisfaction of the simply prurient and curious tendency in people. This paper considers the argument of Shoemaker (http://web.syr.edu/~snowshoe/frames/) that news has an important "surveillance function" (1996. p.32) which is a primary, but not the only reason, why people are interested in it. The paper considers this function of news in the context of the widespread and increasing use of mobile communications technology (MCT).

Shoemaker argues that the surveillance function of news is a result of biological and cultural evolution that results in people having "an innate desire to detect threats in the environment, keep informed about the world, and devise methods of dealing with these threats, whether real or potential" (p.32). In this paper the widest definition of Shoemaker's term is understood to be applicable to the determination of what constitutes 'news'. That is, surveillance is understood to refer to a monitoring of the environment for potential threats but also for events of interest and novelty. Davie and Upshaw have also applied Shoemaker's definition to electronic media in general to argue,

> Surveillance requires us to go beyond what we usually define as news to a broader combination of information and impressions of the world we inhabit. To keep our balance in that world, so full of strangers and unexpected events, we constantly scan the people, things, and spaces around us. We are looking for reassurance, for a zone of safety, not realising, or only half-realising, that we're doing so. (2002. p.14)

The surveillance function of news is a particularly relevant concept to apply to the news and information sought and received via MCT because mobile communications devices increasingly have the capability to enable the electronic surveillance, or monitoring, of the environment in a constant manner. Access to news via MCT assists the user to acquire information considered necessary to make sense of, and survive, in the contemporary environment by extending the applications of existing media. Most significant is the capacity for MCT to deliver news and information to consumers on demand and to deliver more precisely content that suits the perceived needs of an individual rather than being mass produced. Such information may relate more to variations in the price of petrol or shares, the latest traffic conditions, or sports results, than the arrival of a wild beast on the horizon but may be just as important to the individual seeking it. This view is also consistent with the emerging use of mobile information services where applications such as weather updates, financial market reports and location guides are offered with news services.

It is important to note that in this paper the primary perspective is that of the user of MCT with reliable access to a mobile network. At present such users are predominantly urban based. Mobile communication consumers in remote and regional areas - where access to services may be unreliable or unavailable -perhaps have a more pressing need to access news in the surveillance of the physical environment and are likely to have different issues and different responses regarding access and availability to news beyond the scope of this paper. The disparity of access to MCT between individuals in more affluent, technologised countries and many poor and economically developing countries is also acknowledged and it is important to note that MCT is bringing electronic media and telecommunications to people in many parts of the world who have not previously had access to them. In July 2003, at a conference at the United Nations on Wireless Internet Access, "many of the more than 200 participants agreed that the wireless Internet, or Wi-Fi, must become a priority for policymakers in the developing world. They cited its costeffectiveness, worldwide standards, potential for growth, and its deregulated nature." (Radio Free 2003. http://www.rferl.org/nca/features/2003/07/02072003154546.asp) The successful diffusion of MCT on a global level has seen the number of users of mobile or cellular telephony expand to 1.3 Billion in May 2003 (http://www.cellular.co.za/stats/stats-main.htm) thus allowing many more people to use this new medium and to begin to access the services offered. Projections for the future indicate that the number of people who use MCT will continue to rise with media services for the mobile communications market becoming increasingly important.

The potential for individuals to demand access to information that is time critical and relevant that can be delivered by MCT is an important factor in the role of the surveillance function of news in a mobile communications environment. That is, the use of MCT offers the potential for MCT users to choose news and information according to their individual needs. Similarly, as changes occur in the environment, the information deemed necessary to feel comfortable and secure is also likely to change. For example, people living in cyclone prone regions may place higher importance on weather news while those in densely populated urban areas would value traffic information more highly. The use of MCT will require more rapid changes in the news environment, depending on consumer needs and demands, and in response to particular events and locations. Such changing consumer demands will require associated changes in the production of news and in the responsiveness of the media to specific, localised events.

The greater physical mobility of many people as a result of contemporary transportation together with their increasing "telepresence" (Virilio, 1997) in the abstract space of the global communication network, including that afforded by the increasing use of MCT, creates multiple environments for an individual in contemporary society. The use of MCT enhances physical mobility and connects people to the global communication network in situations never before possible, for example, when in a car or on a train, and more generally, wherever a signal is available. Until recently, the use of mobile communication was confined mostly to one to one communication, primarily by voice, but also by Short Message Servicing (SMS). The introduction of mobile Internet access and a range of associated services, including the ability for one to many messaging, is now creating a much more diverse and sophisticated mobile media environment. In the multiple environments of contemporary life, where people are mobile over large distances and interact with numerous social networks, there is an increased need and desire for people to be able to access information about what is going on in different places. MCT makes it possible for them to do so, efficiently and reasonably cheaply. The need to monitor the environment, as described by Shoemaker (1996), is a powerful determinant of social behaviour and confers a high value on access to news and other information that assists in the monitoring process.

The mobility of MCT, together with access to the Internet, will enable individuals to 'move' between the global cybersociety and the localised environment of their daily life. Individual users of MCT are already able to do this by maintaining contact, and being contactable, and so live simultaneously in a local, individualised physical space and within the space of the global communication network. The desire and curiosity to know what is happening in both the physical environment and the abstract environment of the information world has the potential to become a

"supervening social necessity" (Winston, 1998. p.6) that will drive the diffusion of news and information services into the mobile communications environment. Winston argues that "supervening social necessities" are the generalised social forces that assist in the transformation of technology from ideas through the process of innovation and development to applications.

> They can range from the objective requirements of changed social circumstances (such as the consequences of the introduction of one technology forcing the development of another) through to the subjective whims of perceived needs (such as the introduction of new consumer technologies to fulfil essentially the same function as those filled by previously diffused consumer technologies). (p.6).

News and information that users can access using MCT are therefore important in enabling people to satisfy their desire to monitor multiple environments, from the one they are in to any other environment of importance or interest. There is some evidence that this is already the case with Internet news and information; for example the BBC report on the results of a survey in 2002 found people were more "addicted to news" than other Internet sites. (http://news.bbc.co.uk/2/hi/technology/2278743.stm)

Virilio's (1997) concept of 'telepresence' is an apt descriptor for the relationship between an individual and the global telecommunications system and the growing dependence on access to it. It is especially appropriate when considering MCT and issues of time and space although the industry marketing concept of 'anywhere, anytime' communication is perhaps more succinct. However, the issue of whether a particular technology has the ability to transform our perception of time and space is not new. In 1977, Cherry attributed the development of the telephone system with the "creation of mobility" because it "allows us to move about the country (or today, over much of the world) and yet appear to stay in one place," (p. 114). In a similar way, in his analysis, The Media in Everyday Life, Moores (2000) uses Williams' (1974) concept of "mobile privatisation" which famously defined elements of the cultural shifts that developed as a result of the technology of the car and the television. Williams argues that the combination of the two technologies "enhanced a style of living that is both private and mobile." (p.26) and also attributed the development of both desire for and reliance on new media technologies, specifically radio and television, which had the capacity to deliver "news from 'outside' from otherwise inaccessible sources" (1975. p.27) to the rise of "mobile privatisation". Williams' concept of "mobile privatisation" is now useful in examining MCT and understanding how people use the technology to manage their lives and to manage time and space. An important element in managing time and space is to maintain a flow of information about and within different environments. MCT allows individuals to electronically shift between locales and to maintain contact with significant members of relationship networks by being able to answer the questions, "Where are you?, What's happening?, What's next?, Where are you going?" These functions of MCT have been explored by several researchers, (Rakow and Navarro, 1993. Ling and Haddon, 2001. Plant,2001.) resulting in the identification of the use of mobile communications by individuals to facilitate a monitoring of relevant environments and even individuals. For example, Rakow and Navarro (1993) found that the use of mobile communications allowed women to undertake "remote mothering" by being able to access, and to be accessible to, their children. While the information that they sought was of a more personal nature than that provided by a media organisation, some media news and information would support their specific needs, for example, weather news, news about transport strikes or school closures.

In the past decade the provision of on-line news services by existing media organisations has provided access to a range of media to audiences who would previously have found them difficult or expensive to obtain. Considerable discussion and analysis of the consequences for the media of the new media environment has accompanied this development. In the United States the Pew Research Center (http://people-press.org/about/) (sic) for the Press and the People conducted research through i t s Internet and American Life Project (http://www.pewinternet.org/) in the first six days of the 2003 war in Iraq "to survey Americans

about their views about the conflict, how they were getting news about it, and the impact of developments on them." (p.2) Amongst the findings the report notes that,

> Many are using their Internet connections to keep abreast of war developments, perhaps because it is the most convenient way for them to catch up on headlines during the day or because they are not immediately able to turn on a TV or radio. (p.4. http://www.pewinternet.org/reports/pdfs/PIP_Iraq_War_Report.pdf)

This finding supports Shoemaker's theory that the surveillance function of news is a critical driver of interest and consumption of news and information by media audiences. The situation reported by Pew indicates that, as people sought information about the war, they turned to the most immediate and accessible form of news and information. The added dimension of mobility will further enable people to access news and information services when they feel it is necessary for them to be monitoring an event or a situation of relevance to them. It will inevitably accelerate and change the modes of production and delivery used by the media.

The availability of credible news is especially meaningful in the process of monitoring the environment because the information acquired from news organisations is understood to have been collected, checked, filtered and edited. That is, it is news that has been processed through the gatekeeping function of the media (Singer, 1998). Singer argues that the gatekeeping function of the media endows news and information with authority. It is this authority that audiences value when they seek news from traditional media sources to monitor the environment.

However, the use of MCT is different from previous forms of media communication technology in one significant respect. MCT will be used increasingly by media professionals but also by audiences who will be able to use it to transmit information themselves. News and information will not only be delivered to mobile communication devices but delivered from them by both media professionals and individuals using MCT in different situations. We are already seeing this in reporting of news where members of the public call in with reports from incidents such as accidents. Most recently, in much of the reporting of the War in Iraq of 2003, the increased use of MCT in the production of news was evident with the use of satellite phones, video-telephones and mobile phone direct to air interviews with reporters. As more content increasingly becomes available via MCT, it will be possible to transmit news and information to mobile communications devices without it being processed via a centralised media facility. The 'live to air' phenomenon, sometime in the future, will become a 'live to mobile' one. Such a move has implications for both the gatekeeping role of the media and the surveillance function of news.

Already, many news organisations provide a service to send news and other updated information direct to mobile devices. The British newspaper, The Guardian, offers several services for mobile communication users (http://www.guardian.co.uk/index/platforms/0,3109,342891,00.inc) t h a t exemplify the new mobile news and information. The newspaper offers,

> a range of SMS services, providing users with the latest updates on news, media, politics and business. Plus a Goal Alerts service to keep football fans in touch with their teams.

It states that these,

> News Alerts, Political Alerts, Media Alerts and Business Alerts are bespoke services written by Guardian Unlimited journalists. (2003)

Such news and news related services are regarded as 'leading' applications for the next generation of mobile devices and marketing of these applications appeals directly to their ability to satisfy the surveillance function. The Canadian Broadcasting Corporation promotes its mobile news update service saying,

> CBC Mobile News Updates are an essential service for anyone who wants to stay in touch with the major news events that shape our world today.
>
> For the day's top news that is of interest to you, count on the CBC to get the story to you first - straight to your cellular phone.
> (http://cbcnews.zim.biz/cbcnews/login.inc)

While handset manufacturer Nokia suggests that we,

> Take the net traveler's word for it: when trekking up the highest mountains, or forging through the deepest jungles, there is no room for surprises. Whether you have to double-check the best route back to base camp, or research the social customs of local cultures, it all comes down to trusting your source of information.
> http://www.nokia.com/cda1/0,4879,401,00.inc

In Australia, mobile telecommunications carrier, Optus, exhorts customers to,

> Keep in touch with what's happening at home and overseas with our regular news bulletins. We have several news categories, which include business, sport and entertainment news.
>
> News is available from your WAP capable mobile phone under News on the 'yes' info WAP menu. We have regular news updates from Reuters and CNN with breaking news in a number of categories, including general, business, sport, technology, health and environment. We also offer press digests from around the globe.
> (http://www.info2you.com.au/cgibin/info2you/static_file/inter_page.cgi?service_id=17)

In much of the promotional material offering news services, or mobile information, there is an emphasis and appeal to the need for people to monitor their environment for many reasons.

In all areas of mobile communications, news services are one of the major applications consistently promoted and offered via these new and emerging technologies. In Japan, however, the successful introduction of mobile Internet access via the i-Mode system showed that entertainment applications are just as likely to captivate the consumer and are ones for which they are prepared to pay. This is an important point for, as we have seen with the recent (and continuing) rationalisation of the Internet sector, the ability of a technology to deliver an information service is negated if that service cannot be continually produced for free, under subsidy or for a profit. It took some time for Internet content providers to comprehend the extent of the production costs for content for the new technology. Already, media organisations and mobile carriers are finding that people will pay for those services that allow people to monitor their physical, professional and social environments.

It is also salient to observe that the relevant factor assisting the diffusion of the IMode technology in Japan was not so much one of urgent survival but one driven more by the social desires associated with the consumers of the youth market. The desire for social inclusion and the need for young Japanese consumers to monitor their social environment, rather than the need to monitor the physical environment for danger, has been the key factor in promoting the adoption and use of I-Mode. In this sense, the surveillance function of the mobile technology serves as an extension of existing social or cultural practices and suggests that particular consumers have their own specific 'news' agenda. Ling (2001), in a study of adolescent girls and young adult men in Norway, also found that MCT is used to monitor remotely social relationships and networks while Rheingold (2002) has observed this phenomenon in other contexts and for other purposes, including the monitoring of situations for political organisation.

The prospect of 'anywhere, anytime' communication is perfectly suited to the essential task of the

media, i.e. providing information from a specific source to an individual or group of individuals. The fast delivery of information has always been a quintessential element of the media's role and, as the speed of modes of delivery has increased, the media has adapted its own processes and means of production. The potential of communications technology to make information mobile has always been quickly adopted by journalists from John Reed's (1961) eye-witness reporting of the Russian Revolution via telegraph in 1917 (which took five days to appear in print in the US) to live reports from accident scenes and trouble spots around the world via satellite. Such use of technology has helped to fuel audience expectations for the instantaneous reporting of events.

Another example from the past is the delivery of news via telephone, the closest medium to current mobile communication devices which, in the operation of Telefon Hirmondo in Budapest between 1896 and 1925, demonstrated that the delivery of news direct to individual consumers via voice was a tenable proposition (Marvin, 1987). The services available via Telefon Hirmondo look surprisingly familiar to those promised by mobile media providers – it included news, stock exchange reports, sport, a daily calendar of events, amusements, theatre news and music. Radio later extended the delivery of news via voice-based communications and transistor radio while in-vehicle radios allowed news producers to reach an audience that could be mobile. New MCT will allow the further extension of media for audiences to respond by choosing to access those services that most fit their own perceived needs in the specific environment that is important to them. Existing media organisation will have to be adaptable to meet the needs of a much more fragmented audience with needs that change according to different environmental factors.

The news media is well suited to take advantage of the capabilities of new communications technologies in enhancing the speed and efficiency of the transmission of information. Timeliness in both the production and transmission of news is accepted at every level of the news media as a fundamental priority and amounts to a defining characteristic of the news media. Even for those elements of the media where speed is not essential it remains important. The demands of the new MCT environment will most affect those media for which the delivery of up to date news and information is a critical factor. New MCT will permit consumers to access news media wherever they are, from whatever source they choose; for example, a tourist will be able to access news from their home and news from the place they are visiting, or are about to visit. While this is possible now with the Internet, the added dimension of the greater mobility of communications technology will further expand the potential for access to news and information and increase audience expectations of access to news and information. Consumers will expect to access news services wherever and whenever the technology allows rather than constructing access to news around fixed media schedules and deadlines. The mobile Internet, in particular, will allow consumers greater autonomy in determining how they can monitor events and situations of relevance with the assistance and support of Internet accessible, mobile media.

For producers of news via mobile communications, speed and brevity are the dominant issues related to the increased speed with which information is gathered, analysed and edited for the mobile environment. The use of mobile communications speeds the access to primary sources of information by journalists working in the existing media. For broadcast journalists, one effect of this has been the development of news delivery via mobile phone, live via radio or as part of a television news service. The consequence is that news organisations have even faster access to information from a distance. Radio has already adopted this method even to the extent where audience members are solicited to make calls with information about specific events such as traffic incidents and news events. News producers have also realised that, when news occurs in remote situations, they can often access information and reporting via mobile phone before a journalist can reach the location. Further developments in the fidelity of the technology will increasingly see amateur reports used in such situations. As the audience becomes more mobile and technically proficient, they will also become more actively involved in producing their own news from specific locations of events of interest. Media organisations are likely to tap into this as a resource which they can use either directly or to enhance the content produced by professional staff. The paradox is that some media professionals are likely to become increasingly confined to

their production offices and will spend more time sifting, checking and editing information. In this case they will truly become 'gatekeepers' of information as it flows in from the world around them and their job will be to redistribute it to a wider and more mobile audience. Michael Schudson (1995) argues that, in such a situation, the importance of the gatekeeping function of the media will be increased as people will need to authenticate the flow of information they receive. At the same time, the need for journalists and other media professionals to produce material from specific locations will see some of them working more from the field than from an office.

At present, however, because a majority of mobile news providers are also providers of news for older media, according to one analyst, they

> …. have this data that already exists. With a little bit of programming effort, it can be trimmed down, sliced and diced and put onto a cell phone. (Godell. in Jenner, 2000.)

Journalists are already debating what the outcome of this approach will be for news production values. Godell's explanation of how news might be produced for mobile devices is an approach that many journalists recoil from. Bruno Giussani (Stone, 2000) reported from a conference for on-line journalists that,

> …everybody at the NetMedia conference agreed that squeezing Web content into a mobile phone is just a low-cost, first-stage approach, in the same way that repackaging the printed page's content into a home page served the purpose of jump-starting Web sites a few years ago.

While the editing process for mobile news will be critical to its success, it is arguably an extension of existing processes and practices of journalism. Tasks such as headline writing already require information to fit a specific space and radio and television news is edited to fit a specified time span. It should be remembered, of course, that the task of reducing news to the smallest sense-making quantum possible for a given medium has been a function of journalism since the development of telegraphy (Carey. 1983).

Journalists and the media have managed the need to respond to the elements of brevity, mobility and critical time constraints associated with the development of new communications technologies. Contemporary mobile communication technology will require that media professionals bring existing modes of media production to a new platform. They will also be required to examine their own professional processes and practices to determine what the standards for the MCT environment will be. For example, the editing process and its impact on the content of news and information is already a key concern with critics of the 'sound bite' and 'headline grabbing', condemning the process where information can be distilled to the point where it loses meaning. This issue will become even more important as people consume more news in small bits via MCT. In responding to the surveillance function of news and the demand by consumers for news and information that is relevant to them, media professionals will have to ensure that the content produced retains the elements of authority and credibility that should set the media apart from other providers of content.

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References

News beats porn online (2002). BBC Online. Retrieved April 30, 2003, from the World Wide Web: http://news.bbc.co.uk/2/hi/technology/2278743.stm

UN: Wireless Internet Promoted For Developing World (2003). Radio Free Europe. Retrieved July 28, 2003, from the World Wide Web: http://www.rferl.org/nca/features/2003/07/02072003154546.asp

Latest Global, Handset, Base Station, & Regional Cellular Statistics (2003). Cellular Online. Retrieved July 8, 2003, from the World Wide Web: http://www.cellular.co.za/stats/stats-main.htm

Text Alerts and PDAs (2003). Guardian Unlimited. Retrieved July 21, 2003, from the World Wide Web: http://www.guardian.co.uk/index/platforms/0,3109,342891,00.ht ml

CBC Mobile News Updates (2003). Canadian Broadcasting Corporation. Retrieved May 3, 2003, from the World Wide Web: http://cbcnews.zim.biz/cbcnews/login.inc

Mobile Streaming (2003). Nokia Corporation. Retrieved May 3, 2003, from the World Wide Web: http://www.nokia.com/cda1/0,4879,401,00.inc

'yes' Optus News (2003). Optus. Retrieved May 4, 2003, from the World Wide Web: http://www.info2you.com.au/cgibin/info2you/static_file/inter_page.cgi?service_id=1 7

Carey, J. W. (1983). Technology and Ideology: The Case of the Telegraph. In J. W.

Carey (Ed.), Communication as Culture: Essays on Media and Society (pp. 201-231). London: Unwin Hyman.

Castells, M. (1996). The Rise of the Network Society (Vol. 1). Oxford: Blackwell Publishers.

Castells, M. (1997). The Power of Identity (Vol. 2). Oxford: Blackwell Publishers.

Castells, M. (1998). End of Millenium (Vol. 3). Oxford: Blackwell Publishers.

Cherry, C. (1977). The Telephone System: Creator of Mobility and Social Change. In I. d. S. Pool (Ed.), The Social Impact of the Telephone (pp. 112 - 126). Cambridge, Mass: The MIT Press.

Davie, W. R., Upshaw. James. R. (2003). Principles of Electronic Media. Boston, MA: Pearson Allyn and Bacon.

Jenner, E. (2000). In Europe, Media Companies Are Seeing Phones as the Future. The New York Times On-Line Technology Cybertimes. Retrieved January 13, 2000, from the World Wide Web: http://www.nytimes.com/library/tech/00/01/cyber/articles/12mobile.inc

Ling, R., Haddon, Leslie. (2001). Mobile Telephony, mobility and the co-ordination of everyday life. Paper presented at the Machines that become us, Rutgers University.

Ling, R. (2001). Adolescent girls and young adult men: Two sub-cultures of the mobile telephone. Unpublished manuscript.

Marvin, C. (1987). When old technologies were new : thinking about electric communication in the late nineteenth century. New York: Oxford University Press. 10

Moores, S. (2000). Media and Everyday Life in Modern Society. Edinburgh: Edinburgh University Press.

Plant, S. (2001). On the Mobile:The effects of mobile telephones on social and individual life: Motorola.

Rainie, L., Fox, Susannah., Fallows, Deborah. (2003). The Internet and the Iraq War: How online Americans have used the Internet to learn war news, understand events, and promote their views. Pew Internet and American Life Project. Retrieved July 18, 2003, from the World Wide Web: http://www.pewinternet.org/reports/pdfs/PIP_Iraq_War_Report.pdf

Rakow, L. F., Navarro, V. (1993). Remote Mothering and the Parallel Shift, Women Meet the Cellular Phone. Critical Studies in Mass Communication, 10, 144-157.

Reed, J. (1961). Ten Days That Shook The World. London: Lawrence and Wishart.

Rheingold, H. (2002). Smart Mobs: Perseus Books.

Schudson, M. (1995). The Power of News. Cambridge, Mass: Harvard University Press.

Shoemaker, P. J. (1996). Hardwired for News: Using Biological and Cultural Evolution to Explain the Surveillance Function. Journal of Communication., 46(3), p.32 - 47.

Singer, J. (1998). On-line journalists: Foundations for research into their changing roles". Journal of Computer Mediated Communication., 4(1).

Stone, M. L. (2000, November 15.). Will Interactive TV Threaten News Web Sites. Editor and Publisher On-Line. Retrieved 5 December, 2000, from the World Wide Web: http://www.editorandpublisher.com/cgi-bin/easyrefer.cgi

Virilio, P. (1997). Open Sky (J. Rose, Trans.). London: Verso.

Williams, R. (1975). Television: Technology and Cultural Form. New York: Schocken.

Winston, B. (1998). Media, Technology and Society. A History: From the Telegraph to the Internet. London: Routledge.

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