

ETHERIC EXCHANGES AND HETEROTOPIC TECHNOLOGIES

Raul Pertierra / University of the Philippines

Introduction

Information overload is perhaps the most common frustration of our age. It strikes everyone, young and old, educated and uneducated, rich and poor, first world and third world. It manifests itself in diverse forms; philosophically as postmodernism, theologically as fundamentalism, economically as overproduction, politically as the rise of globalism. As a wit put it, 'never before in human history ... have so many been surrounded by so much that they can't follow' (Iyer, 2000:28). No wonder that the 'war on terror', however misapplied, aptly describes what everyone feels; Muslim, Christian, Jew, conservatives, non-conformists, migrants, women and gays. In Iyer's terms we have become nowherians, only at home elsewhere. What has brought about this condition?

Human communication has taken on the qualities of the supernatural. Indeed it has surpassed it! Zeus could only rely on Mercury's speed to convey his commands (Katz & Aakhus, 2002). Presently electronic messages zip around the globe and the universe at the speed of light. No wonder that the new communication technology often evokes the wonder of the supernatural.

This paper deals with some of the heterotopic effects of the new communication technology, in particular of mobiles. As the mobile has become the icon of connectedness, it also serves as the index of our disconnectedness with mundanity. The collapse of the social and its replacement by the network requires different communicative strategies. Sometimes these strategies include the recently passed away. It is these transgressions that generate heterotopias.

The rise of cultural democracies

H.G. Wells' novel (The Time Machine, 1895) provided the first fictional account of space/time disjunction, at a time when great social transformations were being experienced in Europe. For Wells' the age of technology would dismantle all the social subtleties generated over

time, resulting in a world of 'respectable mechanics' (Cochrane, 1966:11). Electricity was seen as the great leveler and threatened a major social transformation. Thomas Hardy describes a crowd in the British Museum in the 1880s as:

They pass with flippant comments the illuminated manuscripts – the labour of years – and stand under Ramases the Great, joking. Democratic government may be justice to man but it will

probably merge in the proletariat, and when these people become our masters, it will lead to more of this contempt and possibly be the utter ruin of art and literature (Carey, 1992:24)

A similar view is expressed by T.S. Eliot:

There is no doubt that in our headlong rush to educate everybody, we are lowering our standards ... destroying our ancient edifices to make ready the ground upon which the barbarian nomads of the future will encamp in their mechanized caravans (ibid:15).

Except for overcrowded parking lots, the consequences have not been so dire but it has resulted in the domination of the public sphere by popular culture, hitherto the preserve of the elite. The explosion of the electronic media has indeed produced a social revolution of tastes, values and ideologies. No wonder people are proclaiming the end of history, of politics and even the corporeal. Or are they simply confusing this with the democratization of the sphere of culture?

We seem to be on the cusp of a new age! Astonishing claims are being made by social theorists. According to Barlow (1995:36):

With the development of the Internet, and with the increasing pervasiveness of communications between networked computers, we are in the middle of the most transforming technological event since the capture of fire. I used to think that it was just the biggest thing since Gutenberg, but now I think you have to go back further.

The invention of movable print in Gutenberg in the fifteenth century was the impetus for modernity, with its reflective and abstract textuality (Pertierra, 1997). The text inserted the abstract, with its qualities of detachment from the immediately concrete, into the routines of everyday life. Reading became a major practice leading to an inner reflectivity as well as connecting these reflectivities into broad audiences whose members were unknown to one another. This resulted in a community of strangers. It was virtual communities such as these that allowed the construction of a national imaginary, whose members shared strong attachments to common sentiments even as they remained unknown to one another (Anderson, 1983).

But these virtual communities consisted of passive members, unable to communicate with each other directly. Most modern mass media has retained this passivity, whose members mainly share practices of consumption. While consumption can be seen as a form of appropriation (Miller, 1997), its generative structures largely remain inaccessible. The attempts to make these communities of consumption more participative or interactive such as talk shows, readers' columns and discussion groups have not been entirely successful. The technology needed to connect large numbers of interlocutors simultaneously did not exist before the age of computers. The World Wide Web connected computers into a network of communication whose participants have increased in geometric proportions. People now routinely participate in global networks enjoying a simultaneous present or in real time.

The Internet makes it possible to return to a more intimate orality on a global scale, with its chat groups and informal networks. The limits of community are confounded when the local, diasporal and global intersect. These new intersections produce distinct hybridities embodied in transformed subjectivities. The self is able to take new identities transcending corporeal limitations. The human and its

avatar become indistinguishable. Real and virtual identities interact in the cyber-world whose members include humans, cyborgs and even the dead.

Barlow makes an even bigger claim. He equates the Internet with the domestication of fire, the very beginning of human culture and the start of our domination of nature. The control of fire gave humans a truly transforming technology, resulting in basic anatomical and socio-cultural changes (Goubsblom, 1992). Human evolution took on a distinctive path thereafter. The control of fire was followed by the domestication of plants and livestock. Thus began the human project of controlling and dominating nature. Some claim the end of nature since this domination is now complete. As Saunders argues:

In the modern world, where we work, sleep or take our leisure depends more in the created spaces we have manufactured – the factory, the semi-detached house, the seaside resort – than on the natural or inherent characteristics of different locations (1989:222)

Following Barlow, one assumes that the electronic revolution will transform the human either into the post-human or at least into the cyborg. Organically modified crops now include human, baboon and tomato genes in weird combinations. Cyber space and virtual reality are new ontologies, often subverting the former continuum of space-time. The global merges with the local into the glocal, disrupting identities based on territoriality such as the nation-state. Homogenous and territorialized cultures are rapidly hybridized, while Diasporas are localized.

The routine incorporation of dacron, steel and electronic devices (cochlear implant, pacemaker, silicon breasts, aluminum joints, artificial hearts and synthetic lenses) into the human body transforms it from an organic unity into a techno-formation. The seamless merging of human and machine generate problems for an earlier understanding of culture as distinct from and opposed to nature. In the cyborg, the dialectic between culture and nature is fully established and transcended. Culture not only informs but also constitutes nature, which in its turn disinforms culture. Brute facticity and human purposiveness merge into the human-machine. The post-human subject combines the corporeal intimacy of a tool with the effectiveness of a machine. For these reasons, social theorists (e.g. Kirby, 1997) are presaging the end of the corporeal and the birth of the post-corporeal or the replacement of the human by the post-human. H.G. Wells' fears may have been exceeded – we are becoming a nation not of mechanics but of machines. Society has been transformed into a technoformation where culture has been reduced to data.

Perhaps this is the source of our unease; the fear of being displaced and outmoded by machines. Others make equally astonishing claims: “We’re going to be Gods, we might as well get good at it” or “In another thousand years, we’ll be machines or gods” (Gray, 2002:9). These claims may be a bit premature for the Philippines, with its low rate of Internet (8%) and mobile phone penetration (40%) even if this usage is growing quickly (Pertierra, 2006). Nevertheless, new forms of technoscience have enormous potentials for social and cultural change. A leading electronic journal advertises its orientation as follows:

The Leonardo Electronic Almanac (ISSN No: 1071-4391) is inviting papers that address the complex relationship between technology and

difference. Technology is often conceived as an ability to "create", "innovate", "make"; all that which differentiates: 'man' from 'nature'; human from animal. It is seen as a path to 'God(s)' and 'community', sociality, spirituality, and consciousness.

Cultural differences are enacted in differentiations of 'technologically advanced' from 'technologically backward' cultural traditions, often evidenced in statistics on use and proliferation of such technologies...

In the past few decades, however, a new optimism has been propagated of a technology that is said to operate as a de-differentiating force: it builds bridges, it unites, it globalizes (for better or for worse), it brings us closer. It goes beyond 'old' differences: ethnic, sexual, cultural, animal, towards 'new' differences between human and (intelligent) machine, human and post-human, human and transgenic or artificial species.

Admittedly, evidence of these future transformations had been building for sometime. Hughes (1979) argues that:

There are certain periods in history in which a number of advanced thinkers, usually working independently of one another, have proposed views on human conduct so different from those commonly accepted at the time – and yet so manifestly interrelated that together they seem to constitute an intellectual revolution. The decade of the 1890s was one of such periods.

Quoting Parsons, he continues:

A revolution of such magnitude in the prevailing empirical interpretations of human conduct is hardly to be found occurring within the short space of a generation, unless one goes back to about the 16th century. What is to account for it? (Hughes, 1979:33)

Romain (1987) uses 1900 as the turning point for the end of the old European order and the beginning of the new one. This new age included a perplexing variety of events such as the wedding of Archduchess Maria Immaculata to Prince Ruprecht of Wurttemberg, the Paris-Lyons motor race, the outbreak of bubonic plague in Glasgow, the death of Nietzsche and the publication of Freud's Interpretation of Dreams, the meeting of the International Congress of Spiritualists, the use of statistics for public policy and the 8th issue of Durkheim's journal L'Annee Sociologique. These events had been preceded by the laying of the transatlantic cable in 1870 as well as the introduction of standard time zones (O'Malley, 1990). Together they welded a hitherto diachronic world into a synchronic one. This synchronicity now includes visual, aural and textual communication. Before long one expects this to include tactile contact.

Etheric messages

Thomas Watson, Alexander Graham Bell's assistant described how he was fascinated by the power of the telephone:

I used to spend hours at night in the laboratory listening to the many strange noises in the telephone and speculating as to their cause. One of the most common sounds was a snap, followed by a grating sound that lasted two or three seconds before it faded into silence, and another was like the chirping of a bird. My theory at this time was that the currents causing these sounds came from explosions on the sun or that they were signals from another planet (Heumann, 1998).

Michael Heumann (1998: 1) writes:

There is, no doubt, a link between the telephone's otherworldly sounds and the voices and noises (Watson) heard during Spiritualist séances. That he approaches both the spiritualist and the scientific mediums with the same careful scrutiny suggests not merely the seriousness with which he held both subjects but also a willingness to see in the telephone the same supernatural forces that are conceivably at work during a séance. Sound, in Watson's case, is the medium through which science and superstition are able to converge.

Moving from the telephone to the phonograph, Heumann (1998) continues;

Just as the phonograph presents a new conception of communication based upon replication and reproduction, so it also questions the authenticity and authority of the human voice as maker and definer of meaning. The ambivalence generated by such disconcerting consequences is raised in the December 22, 1877 article in Scientific American, which ... emphasizes the phonograph's humanity as if to "deliberately magicalize the apparatus as if it were animated by a little human inside it," with a full knowledge of social customs, an eager concern over others well-being, and a calm and graceful demeanor.

For Heumann (1998):

Just as the phonograph has the potential to transcend death and heighten democratization (making music available to all citizens), it also alters the reality of a sound so that even "the illusion of real presence" cannot be certified without first checking with the phonographic recording. This is a point Theodore Adorno and Walter Benjamin, among others, make in the 1930s; however, by then, the focus had shifted away from the effacement of reality to fascism's manipulation of that "illusion" by technologic means. This results in a newly conceived "reality" that is wholly subsumed within the "virtual" realm of technology.

Antinomian Technologies

Technologies of displacement, whether spatial, temporal or communicative, inevitably

produce neurasthenia. No wonder that new technologies evoke antinomian and even eschatological fears.

The disengagement of time from space has led to the transgression of hitherto impenetrable boundaries. The divisions between life and death, nature and culture, male and female, human and machine have to be renegotiated. The hopes and fears initially accompanying the implementation of a new technology not only tell us much about how such novel technologies are embedded in existing practices but also about how such a novel technology comes to be culturally constructed in a particular context, time, and place.

While popular fiction and the cinema have often expressed the anxieties caused by novel technologies, this concern is also found in more realist, albeit non-western accounts. There have been reports in Nigeria that people die after receiving certain mysterious calls. Jane-Francis Agbu (2004) recounts the case of a woman who claimed to have received a call that almost led to her death. The phone flashed the name of a relative but without the number.

On the first day the phone rang, I picked it up and shouted hello, hello but did not get any reply. I was hearing strange noises in the background. The call came again at the weekend, when I picked it up, I lost control completely. I don't know who is behind this and I don't want any problems (Agbu, 2004).

A similar incident was reported in Lagos that same year. A young man received a call from a number 0172021127. Suddenly he shouted "Blood of Jesus, Blood of Jesus" before he collapsed. Fortunately sympathizers were able to revive him. A company in Lagos warned its employers about these killer numbers and posted them in its notice board:

Please beware of these strange GSM numbers: 0801113999, 08033123999, 08032113999 and 08025111999. In short any number that ends with 333, 666, 999. They are killing! This is nothing but reality, you are warned (Agbu, 2004).

Technology & society

The relationship between technology and society has always been problematic. On the one hand, all technology is a product of its contextual culture but on the other, technology threatens to bring about societal change, often in unpredictable ways. While technology does not itself determine socio-cultural change, it opens up new conditions of possibility hitherto unavailable (Katz & Aakhus, 2002). These new conditions of possibility, using a Weberian metaphor, act as rail switches enabling social change to proceed along new ways. According to Weber (1930), changes in the inner-world brought about by the Protestant ethic ultimately created the conditions for modern capitalism. This change in attitude was the product of the wide accessibility of the bible made possible by mechanical printing (Eisenstein, 1979).

This technological revolution ushered in a new spirit of inquiry enabling a renewed spiritual awakening as well as its eventual replacement by natural science. What started out as a new form of reflectivity made possible by the text (Ricoeur, 1971) resulted in inter-subjective as well as objective

structures known as modernity.

The global condition exacerbates this tension between society and technology since technology can now rapidly spread to cultures far removed from its origins. While this paper deals with the idiosyncratic use of mobile phones in the Philippines, we could as easily have stressed the commonalities of their uses found throughout the world. While technology always responds to its cultural environment, it may also reflect trans-cultural and universal features. Technologies may express the *zeitgeist* and hence may be described as *apparategeist* (Katz, & Aakhus, 2002). Such claims may be made of mobile phones, not only because of their rapid spread globally but also because of their common enabling effects.

Similar to its introduction in the West, the first steam locomotive initially unsettled the tranquility of the Philippine countryside but quickly established itself as integral to commerce and everyday life (Gonzalez, 1979). The railway line from Manila to Dagupan was inaugurated in 1892 amidst a great celebration which included a Te Deum mass. The event was seen as a great triumph of both the State and the Church. The telegraph, the motorcar and other inventions were quickly introduced in the Philippines, reflecting as well as exacerbating the rapid changes of late modernity. Colonialism and imperialism imposed alien forms of life in distant lands and a global economy brought everything into flux everywhere. No wonder that the present condition is ontologically insecure (Giddens, 1990) or as some have described the contemporary world – a surplus of meaning but a lack of sense (Markus, 1997). We need anchoring structures in such a shifting condition and perhaps the success of the mobile phone is due to its ability to meet this need.

In a parallel but opposite direction, modern technology such as mobile phones bring about changes in the inner-world of their users (Pertierra, et.al. 2002) that have significant social and cultural consequences. Mobile phones encourage a more privatized and personalized orientation to the world. They enable a discursive intimacy hitherto difficult if not impossible in traditional societies such as the Philippines. Moreover, private orientations may quickly coalesce into collective actions through the rapid transmission of information. These collectivities or smart mobs (Rheingold, 2002) easily mobilized, are capable of the micro-coordination of their hitherto unconnected participants. Some claim that this micro-coordination brought about the downfall of Philippine President Joseph Estrada in 2001. This political event was referred to as a coup d'text. Others credited its success as an act of God or more precisely as the intercession of the Virgin Mary, in whose honour a statue was established at EDSA where this event took place.

Perhaps the two most common explanations for EDSA 2 are that it was caused by mobile phones with their SMS messages or that it was a miracle brought about by the concern of the Virgin Mary for the well being of Filipinos. This conflation of technology with eschatology confirms the close links between culture and religion in the Philippines. It also indicates that new technology can easily fit into traditional schemes, in this case one might even suggest that texting, took on the efficacy of prayers.

Religion and the communication revolution

Following such global changes, it is no surprise that worldviews and other orientations of the *habitus* were significantly affected. But most of these changes arose out of earlier structures and often kept their traditional form if not their substance. The new technologies affected traditional religions, causing them to evolve into new and exotic forms. The spread of cargo cults worldwide, bizarre and futuristic groups such as Jonestown and Scientology as well as the use of media like television, the Internet and SMS to spread the faith, have become routine aspects of contemporary life.

While many of these new religious movements are a response to the material changes brought about by modernity, they also express new ways of relating to the mundane world. Heidegger (1977) has argued that technology does not only affect the world outside our existence but also enters into our being-in-the-world in new ways. We are thus 'in the world' differently, opening up new possibilities of being and becoming. Technology is not just a set of techniques but *techne*, a way of dealing with others in the world. New technologies allow us to relate to ourselves and to others in new ways. Technology is not only mechanical materiality or a body of techniques that stands in an exterior relationship to human subjectivity. Technology is also *techne*, the application of knowledge that connects us inter-subjectively to the material and the supernatural worlds. It enables new ways of being in the world (including the after-world), thereby revealing to us our human possibilities. As a recent conference on mobile phones concluded 'the machine becomes us' (Katz, 2003). The passive voice transfers agency from humans to machines.

Historically, the spread of religion has always been closely linked to the growth and proliferation of new technologies. The Gutenberg press marked both the entrance of a new age as well as the revival of an old religion. Literacy has since then been a primary condition for conversion. More recently, radio and television have become important channels for experiencing as well as for spreading the faith. While the contribution of technological innovations to economic change is widely known and accepted, how new technologies impact on the experience of the sacred and the supernatural in Asia is poorly understood.

The relationship linking society, technology and experiences of the supernatural in Asia involve complex structures. The Bali bombings and the fears of Al Qaeda in the Philippines are among the most dramatic examples of these complex structures. But preceding them, bands of western televangelists flooded the global airways with messages of superiority and warnings about Armageddon. Combining capitalist resources with new media skills, no one was beyond the reach of these global preachers. Religious conversion became another aspect of the competitive struggle for global domination. However, despite their underlying agonistic possibilities, expressions of the supernatural in this age of technological domination are mostly non-violent but often surprising.

Texting God

The Catholic Church in the Philippines has not been slow in using mobile technology to spread its message. Apart from providing religious lessons on catextism, several text services provide an array of prayers, devotions and services. There is even a service known as Text God. The texter receives biblical quotations appropriate for the day or occasion. Religious messages, with suitable images are regularly shared by most Filipinos. Apart from personal greetings, religious sayings are undoubtedly the

most popular SMS texts. Filipinos have also formed religious text brigades, bombarding God with SMS requests for protection. Some claimed that this is the reason the Philippines was spared the tragedy of the 2004 Indonesian tsunami.

Fr. Robert is one of our major informants regarding the use of the mobile and the Internet for his congregation. In an interview he admitted his dependence on the new media.

Asked if he had any unusual experiences with cellphones, Fr. Robert replied that he has occasionally received miss-sent messages from people interested in becoming his friend. Whenever he sensed that such overtures may lead to inappropriate textual exchanges he ended it. He pointed out that he has a normally busy schedule and a rich texting environment involving family and friends. There is no need or interest in embarking in other texting exchanges.

But it is another matter when it comes to religious texting. Fr. Robert admits to receiving many religious texts from family and friends. These he readily sends to other people, including acquaintances. These messages are often inspirational and serve as ideal vehicles for fulfilling his congregation's spiritual mission. This includes not only evangelical ends but also broader social concerns such as justice, education and peace.

Fr. Robert admitted to sometimes feeling personally helpless and paralyzed when facing difficult tasks. The ability to communicate easily and instantly with friends, family and colleagues on a range of matters greatly relieved his sense of powerlessness. The new media increased his sense of communality and hence of greater solidarity with meaningful others.

In a study of religious texting, Roman (2005) confirmed the centrality of religious texts for a wide range of informants, even if this texting also involved more secular and less salubrious practices. God, sex and politics are inextricably entwined in Philippine life and attempts to separate them are futile. This conflation is based on the also inseparable domains of natural/supernatural and its correlate, the living/dead.

In a recent study of the role of science in Philippine culture, Pertierra (2003) discovered that even eminent scientists consider the supernatural and natural worlds to coexist. Understanding the latter is often assisted by belief in the former. A science professor claims that:

I have discussed this with my students in my science class. Most of them believe in miracles, but they also want to know the scientific reason behind miracles. And yet knowing the scientific reason does not make these events any less of a miracle. One student actually told me that life itself is a miracle (2003:100).

This view of students is shared by a mathematician:

There is nothing wrong in believing in miracles. Many people believe strongly in miracles.

It does not mean that just because they have a scientific orientation, everything will be explained systematically. There are such things as love, miracles, karma, and lust. They are part of life but you cannot explain them scientifically (2003:99).

Modernity has defused much (but not all) of the tension between the sacred and the profane by consigning the former into private belief and the latter into public fact. The boundaries between private beliefs and public facts are not fixed but are always shifting and contested. Deciding where the boundaries exactly lie is as much a practical (political) as it is a cognitive (rational) decision. It is also historical (Foucault, 1990). These boundaries have not only shifted significantly as a result of the new technology but have become exceedingly porous.

Supernatural connections

In the northern Philippines, as in most parts of Asia, the souls of the recently deceased are believed to hover near their earthly dwelling for a period of days or weeks. During this time, communications between the dead and their living kin are frequent. Messages from the dead are conveyed in a number of ways, from the strange chirping of birds, the presence of an unusual number of insects such as fireflies or conversations between a medium and the deceased. A favourite relative goes into trance (*naluganan*; Pertierra, 1988) and asks the dead person's soul what they need for the journey into the after-life. Previously, such communications were easily managed but since many villagers now work overseas, special arrangements have to be made. The mobile phone is a handy technology in such circumstances. The medium, often a relative who may be abroad, having been informed about the situation, goes into trance. In the village, the mobile phone is placed on a favourite item of the deceased. After the trance, the medium conveys the necessary information to their kin in the village.

If the early telephone and phonograph encouraged notions of the 'ghost in the machine', the mobile phone is an obvious device for contacting the supernatural. The personal nature of mobile phones conflates its owner with the communication process. Mobile numbers become extensions of their owners, including the deceased. The link between technology and supernatural forces has a long western literary genealogy and taken up recently in cinema. These representations in popular culture reflect many fears involving the new communication technologies. They threaten the hitherto impassable barrier between the natural and the supernatural or the living and the dead. In a society such as the Philippines, where the supernatural is often experienced as part of everyday life, it is no wonder that accounts of communicative exchanges involving the supernatural are becoming increasingly common.

Texts from the grave

Jaime Licaucó (2006) is a well known commentator on supernatural matters. Recently, he wrote about the case of a texting exchange between a man and his dead girlfriend.

Two weeks ago, Carmina, who became my girlfriend through text messaging, died. After her death, she started sending me text messages. During her wake, she continued to text me, telling me how much she loved me. In one of our conversations, she told me she was not dead. After her burial, I thought she would stop sending text messages. I was wrong. She would usually send me text messages around 11 in the evening or at midnight. Her cousin is now using her SIM card, per Carmina's request. I asked her cousin to turn off the phone but Carmina was still able to get through to me.

It's funny that she found herself in different places, like her home or a resort. I want to ask: Should I continue talking to her? Please enlighten me on this strange event. Thank you (Philippine Daily Inquirer).

Licauco advised the young man to inform his dead girlfriend that he still loved her but that she should accept her new condition and move on. Similar cases of supernatural communication via mobile phones have been reported for Indonesia (Barendregt, 2005). This example is a logical extension of extended communication, from corporeal to non-corporeal absence. It is not clear if the two ever met, perhaps the whole relationship was conducted via texting, in which case, the example simply refers to a cyber relationship, independent of the corporeal.

On 26 February 2004, a passenger ferry bound for Bacolod departed from Manila. Barely an hour away, the ship caught fire and sunk with the loss of 116 passengers and crew. A member of the investigating committee wrote the following account about the incident:

Two families whose relatives perished in the incident reported having received text messages of a disturbing nature. One was living in the United States when she got a call that her sister was trapped in the ship's comfort room. At the time of the alleged call, the ship had been burning continuously for the past 24 hours and was submerged on its side in Mariveles, Bataan.

The second story also reported a similar situation where the caller was trapped in the comfort room of Deck A. The relatives in Mindanao got the call sometime after the ship had caught fire and had sunk (Ferdinand Flores; personal communication).

While the incidents described above could well have been emergency calls made by the trapped victims, their relatives believed that the callers were dead and that they were informing relatives of their situation. In a popular T.V. show (The Boy Abunda Show, May 2005), members of the audience were asked to relate strange experiences with their cellphones. Several participants volunteered information that they had received texts or calls from dead relatives. These calls came immediately after the callers' death or some time after. The purpose of the calls was to inform or warn relatives about the death of close kin. Traditional culture has provisions for such communicative exchanges which the mobile phone readily accommodates.

Mobiles and Popular Culture

While the new mass communication technologies did not cause the cultural havoc that European intellectuals such as Hardy, Eliot and H.G. Wells predicted, they have nevertheless changed the cultural landscape significantly. Ratings, rather than aesthetic standards, have become the main index for success. But not all media are equally indiscriminating. The print media is still highly specialized, radio and cinema retain their sophisticated followers but television mainly addresses a mass audience. The Internet breaks all these conventions and boundaries, including highly specialized and esoteric sites, pornographic invitations, government propaganda, advertising scams, terrorist appeals, mass entertainment, personal messages and business transactions. Since the basis of communication is a digital code, there is no guaranty that one's interlocutor is a human subject since programs can as easily respond to queries. An example is George (www.jabberwacky.com), a talking Internet robot who speaks 40 languages and can talk simultaneously with 2000 people (Philippine Daily Inquirer 18 Sept. 2006). George is an improvement on an earlier device described by Scientific American in 1877.

It is already possible by ingenious optical contrivances to throw stereoscopic photographs of people on screens in full view of an audience. Add the talking phonograph to counterfeit their voices, and it would be difficult to carry the illusion of real presence much further (Heumann, 1998).

Modern communication media arrived in the Philippines surprisingly early. In 1876 the first telegraph line was established and extended to Hong Kong in 1881. The telephone arrived in 1890 and prompted Jose Rizal to write a short play depicting its capacity for unmediated information. In 1897 Pertierra was showing movies in his Escolta studio and a few decades later Filipino films were being exhibited. In 1922 the first radio stations began broadcasting and in the early 1950's television started. It was this latter according to Randolph David (2004) that finally created a national mass audience.

A national media

David (2004) argued that the *masa* (poor people's) vote as expressed in the support of President Estrada in 1997 is a new phenomenon in Philippine political life. Prior to this, the masa was divided by local and hierarchic loyalties, supporting ward leaders or powerful patrons. In other words, the masa were localized and only influential within local bailiwicks. According to David, this important transformation from local personal loyalties to a national and hence de-localized perspective was the product of the mass media, in particular television. Naturally, this important change in personal orientation must have also been accompanied by appropriate changes in the material conditions of life of the masa.

Nevertheless, the important role claimed for television in a media-saturated society like the Philippines is an interesting suggestion and merits serious attention.

Media as presentation of everyday life

Philippine society has become media saturated, where popularity contests determine everything from reality shows to presidential elections. Both are seen by most Filipinos as media-constructs. While the print media provides serious analyzes of contemporary events, TV and radio remain the favoured media for the masa. Television not only provides escapist entertainment for its national audience but also interprets national and global events in a language accessible to most Filipinos. Discussions of current events, including investigative programs, are popular and regular aspects of everyday life. Combining entertainment and information, often not distinguishing between the two, television brought the outside world into the home more effectively than earlier media such as theatre, cinema or radio. EDSA has been called the first electronic revolution since its success depended crucially on the control of the news media (Brisbin, 1988). Images of soldiers taking over television stations and crowds massing in front of tanks were watched globally. The same emphasis on media images characterized EDSA 2 (Pertierra et al., 2002), with its detailed cover of the rallies and scores of people marching towards the presidential palace. EDSA 3 received much less television coverage and its participants were portrayed as paid Estrada hacks and loyalists. Years earlier (1983), during the dark days of authoritarian rule, Aquino's funeral procession, despite attracting large crowds, received minimal mention in the mainstream media except for the Catholic radio station Veritas. These examples show that media portrayals of mass actions are crucial but not always determinant of success. Media is itself embedded within political interests and its role is neither impartial nor autonomous. When the general media approve of demonstrations they refer to them as the actions of civil society but when they disapprove, demonstrations are dismissed as Leftist agitations or irresponsible acts of the masa.

The new media

While the Internet is only accessible to a small (8%) number of Filipinos, cellphones have taken the country by storm, exceeding the wildest predictions. Presently about 50% of Filipinos own or have direct and easy access to cellphones. There are about 42 million cellphone subscribers in a population of 82 million. No other technology has been accepted with such enthusiasm. It took television nearly fifty years to reach a penetration rate that cellphones achieved in 5 years (Lallana, 2004). Moreover, cellphones are not only mobile, allowing perpetual contact, but highly interactive. They connect to virtually all existing electronic services.

They also connect hitherto unconnected aspects of the inner-self and its relations with alter. Interactions between interlocutors are not the result of a prior agreement of a given situation but may be pursued independently. Thus, they facilitate the development of new discursive fields, resulting for example in intimate exchanges. The traditional constraints of speech in oral communities are transcended, allowing even strangers to be included within this new network of intimacy. This results in new forms of urbanity. SMS has generated new modes of writing, combining numbers, letters and new expressions such as c u 2nyt (see you tonight) or got l8 tnx (got late thanks). It has also enriched the vocabulary of interaction with words such as *lobat* (low battery), *nolod* (no load), *eyeball* (face to face meeting), *miscal* (missed call), *textmate* and acronyms like NASL (name, age, sex, location) and SOP (sex over phone). It has also spawned a new literary genre – *textula* – a traditional verse form using SMS. Filipinos have also followed foreign trends such as making movies using their mobiles. These practices have transformed ordinary people into producers of media. In a recent survey of the most important inventions, the readers of the Philippine Star (8 October, 2006) nominated the cellphone ahead of all the others, including the

computer and electricity.

All previous media have had to adjust to the cellphone. TV and radio shows are now routinely assessed by their audience via cellphones. TV has also become a connecting node for mobile phones. Several channels display text (SMS) messages on their screens, allowing texters to contact one another. While the earlier communicative technologies (e.g. print, radio, television and cinema) were mainly disseminative, the cellphone empowers its user to express and share opinions, perspectives and strategies. The social, cultural and political implications of these new local, national and global interactions may transform the Philippines from being a conservative, elitist and poor society to a more open, egalitarian and dynamic one. But - a word of caution - the transformative potentials of earlier technologies was quickly controlled by conservative power holders to ensure their dominance. Existing cellphone services are mainly geared to the entertainment sector, encouraging private consumption rather than public commitment. But, there are also signs that this technology may upset traditional hierarchies by subverting old verities and leveling access to the public sphere. Spreading gossip, rumor and scandal as well as the capacity to mobilize and network are greatly enhanced by this technology. They convert aimless crowds into smart mobs or individual protesters into organized demonstrations (Rheingold, 2002).

The mobilizing potential of cellphones was shown in EDSA 2 and 3 but their effects have been greatly exaggerated (Pertierra et al., 2002). Their greatest use still seems to favor private rather than public networks. This is because Filipinos have very low levels of trust and are unlikely to accept information from unknown sources. Politicians have to be careful in exploiting its use knowing the Filipino's irreverent sense of humor. But what the mobile phone seems to encourage is a greater sense of individualism. This individualism is expressed in the establishment of novel relations with strangers. Whereas the stranger is assiduously avoided in traditional societies, the cellphone opens the possibility of cultivating virtual relationships.

These virtual relationships can be transformed into more conventional ones should the circumstance arise or they may remain virtual as a choice. Virtuality may allow forms of intimacy normally disapproved. Mobile phones and the Internet have resulted in an explosion of virtual relationships in the Philippines, many of them explicitly sexual in nature. This virtuality takes on particular saliences in an urban context, where hitherto unknown interlocutors can arrange to meet. As others have noted (Kopomaa, 2000), the mobile phone allows you to put the city in your pocket.

Conclusion

This paper has raised several points. It began by noting the excess of meaning in the contemporary world and our easy access to it. This excess often leads to a lack of sense. We are overwhelmed by the availability of information. This informational saturation of the public sphere has also led to its pauperization. Leading intellectuals pour scorn on this shallowness of meaning and predict that a democracy of tastes will result in the end of manners and civilization. While modernity has withstood this challenge, much of popular culture certainly undermines the earlier primacy of elitist genres, simply through the extent of its circulation.

The Internet and the mobile compound an already overloaded public sphere, causing its boundaries to disappear and new antinomies to take their place. This is the age of heterotopias, where things are not what they seem. This knowledge revolution is seen by some as a radical rupture from the

past and as leading to our transformation into machines or gods. Human social evolution has important markers of which the discovery of fire and later of writing is among the most important. The industrial age ushered fundamental changes in society and culture with unprecedented speed. These changes have been compounded with the new communication technologies. No wonder that chiliastic claims and millenarian hopes characterize modernity. Postmodernism, fundamentalism, consumerism and globalization are expressions of the age. New fictions are necessary and traditional religion is put to novel uses. Televangelists, terrorists, pornographers, politicians and a host of others post their messages next to one another in the web. This conglomeration, like Borges' imaginary Chinese Encyclopedia, stretches the limits of our comprehension resulting in a state of hysterical bewilderment if not terror.

Indeed, the new communications technologies often provoke the supernatural, initially in the West and more recently in Asia. The latter has imported these technologies while still adhering to earlier beliefs about the natural intercourse of spirits and humans. While in Europe these technologies sprouted from an attitude of secularism, in Asia their introduction reinforced many traditional beliefs. Hence mobiles and religion coexist happily in the Philippines. One may even describe mobiles as conveyors of spirituality. Religious texts, like prayers, are directed to their supernatural solicitors.

Moreover, the new forms of communication also give rise to new authenticities. Subjects are better able to express their innermost needs and to share them with others. Even the dead are allowed to participate in this new form of discursive communion. Just as the telephone enabled long distance relationships, mobiles allow absent others to maintain a presence in their home communities. They also reveal aspects of inner reflectivity not normally possible within the confines of local society. While technology alters our relationship to the material world, it also re-shapes our relationship to ourselves and to others.

Finally, modern media has also generated new publics, of which the national is a major actor. In the past, only wealthy and educated Filipinos generated public opinion. The poor or masa could not express a public voice or exercise public action. Modern media has empowered the masa, converting their numbers into a formidable expression of public opinion. As a result, most of public life consists of performances aimed at obtaining the highest ratings. Political life is enacted on the stage, transforming politicians into performers and media stars. Conversely, media stars are transformed into politicians. Performativity has become the hallmark of public life. The democratization of tastes, values and competencies made possible by modern media has had both emancipatory and contestational consequences. Human and animal rights are now routinely defended in the media, soon to be followed by more controversial issues such as the rights of machines and objects. But these advances are also threatened by equally strident claims made by crusaders, jihadists and the purveyors of purity and absolutism. The reputed Chinese curse – may you live in interesting times – has come home to roost.

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Heterotopic ossification refers to the presence of bone in soft tissue where bone normally does not exist. The acquired form is usually secondary to musculoskeletal trauma, spinal cord injury, burns, or traumatic brain injury. Clinical presentat... The pathophysiology is unknown but most theories describe a cellular response to local tissue injury which leads to the release of chemical mediators that stimulate exaggerated bone proliferation. Muscle trauma seems to be a significant triggering event. Approximately 90% of hip joint replacement patients may have heterotopic ossification 12. Classification. The severity of heterotopic bone formation has been classified according to several systems. Heterotopic ossification (HO) is the pathologic development of ectopic bone in soft tissues because of a local or systemic inflammatory insult, such as burn injury or trauma. In HO, mesenchymal stem cells (MSCs) are inappropriately activated to undergo osteogenic differentiation. Through the correlation of in vitro assays and in vivo studies (dorsal scald burn with Achilles tenotomy), we have shown that burn injury enhances the osteogenic potential of MSCs and causes ectopic endochondral heterotopic bone formation and functional contractures through bone morphogenetic protein-mediated canonic