Southern Cross University
ePublications@SCU

School of Arts and Social Sciences

2002

Meaning and place in the informational society

Angela Coco
Southern Cross University

Publication details

Coco, A 2002, 'Meaning and place in the informational society', *Australian Journal of Liturgy*, vol. 8, no. 4, pp. 121-149.
Copy of keynote address reproduced in ePublications@SCU with the permission of Australian Journal of Liturgy

ePublications@SCU is an electronic repository administered by Southern Cross University Library. Its goal is to capture and preserve the intellectual output of Southern Cross University authors and researchers, and to increase visibility and impact through open access to researchers around the world. For further information please contact epubs@scu.edu.au.

Meaning and Place in the Informational Society

Key Note Address for the Australian Academy of Liturgy

By

Angela Coco

University of Queensland 4072

a.coco@mailbox.uq.edu.au

14 January 2002

INTRODUCTION

When Hans Mol (1983) produced his book *Meaning and Place: an introduction to the social scientific study of religion* in the early 80s he was making the point that human beings interactively create and ritualise meaning at particular places and specific points in time. There is currently a lot of speculation about how our senses of *meaning* and *place* will be changed in the new hyper-realities and cyberspaces created with information and communications technologies (ICTs). Castells (1997), for instance claims that people's interactions in cyberspace may be 'emptied of meaning', presumably because those interactions are potentially transient and devoid of physical and sensual presence.

At the collective level it is claimed, and there is a wealth of evidence to support this, that industrial society resulting from the Industrial Revolution is now fast becoming an 'informational society' (Castells 1996, 2000). Where before work and leisure times and spaces in the Western world were organised around the production and use of material goods, they are now becoming reconfigured, as the highest proportion of production now centres around service industries, for example health and tourism (Winner 1998:229). These industries rely on the production, dissemination and consumption of *information*. Hence the 'informational society'. At the same time, those sectors of the globe called the third world are currently just beginning the process of industrialisation.

In my research I am interested both in the cultural changes that may be ushered in by the new ICTs as well as in the social inequities that they create. Indications of the latter, commonly referred to as the *digital divide*, reveal that in Australia, people from non-English speaking backgrounds, older people, people who live in rural and regional areas and those with a low levels of education and income are being bypassed in the creation and diffusion of ICTs (Ovington 2001. Lloyd and Hellwig 2000). Cross-cutting these sectors of society is the gendered nature of ICT diffusion and use (Wajcman 1991). I take a materialist feminist approach to these issues examining social processes by a variety of methods including phenomenological and ethnographic methodologies. This means I am interested in the everyday material practices and interactions between people by which they create and encode relations of domination and oppression between persons of different status, gender, race, religion and so on.

I have chosen to approach this presentation on technology by focussing on 'Meaning and place in the Informational Society' because I believe the technology literature is disproportionately occupied with de-contextualised claims about the revolutionary ways ICTs will alter our sense of ourselves as human beings. What I aim to do is subject some of the most common topics in that literature, identity, community and global consciousness, to phenomenological examination. This basically means putting them to the test of insights gained from sociological analysis of people's everyday lived experience.

I begin with a brief history of the internet and communications applications that will serve to anchor this discussion. This will touch on issues of inequality and cultural reproduction. The body of my presentation will discuss meaning and place and focus on the discourses about identity, community and global consciousness. It will conclude with a reflection about developing countries (third world) and ICT use.

BRIEF HISTORY OF THE INTERNET AND THE WORLD WIDE WEB

Castells (1996, 2000) records that the development of the internet in the last three decades "resulted from a unique blending of military strategy, big science corporation, technological entrepreneurship, and countercultural innovation". Its origins were a result of the work of the United States Defence Department's Advanced Research Projects Agency (ARPA) that gave its name to the first computer network ARPANET. ARPANET was designed as a communications system that would be invulnerable to nuclear attack and went online on September 1, 1969. The network was open to research centres cooperating with the US Defense department and before long people were using it for personal communication, and science fiction enthusiasts' messaging network. It soon "… became difficult to separate military-oriented research from scientific communication and personal chatting" (Castells 1996, 2000:45-46).

The world wide web (www) is an extension of the internet devised by commercial interests as an economic way around the need to teach employees complex programming instructions that they required to access the internet (Slevin 2000: 35). This included the development of protocols to enable different computers to communicate with each other. Codes are embedded behind hyperlinks that link computers with different addresses (or Uniform Resource Locators – URLs). People have only to click on an address to link to, or activate an informational program or databases.

A series of further developments, the advent of personal computers (PCs) and the commercialisation of network service providers among them, made the internet available to the general public by the early 1990s (Slevin 2000: 33-34). The development of applications for disseminating messages has spawned a variety of communications structures such as e-mail, newsgroups, multi-user dungeons (MUDs), internet relay chat (IRC) and Active Worlds type software (http://www.activeworlds.com/) with which we are familiar today.

Looking back in millenniums, in a lifetime.

Since at least 3000bce humans have sought to record their cultural wisdom in material ways. Spender (1995) traces the history of the written word in the west, first transcribed laboriously by monks in monasteries, they were possessions of the elite classes. When Gütenburg's printing press was developed, information became more readily available through books. Books allowed those who possessed them to construct and share a worldview in which they constructed others who were excluded. The printing of the *Malleus Maleficarum* - The hammer against witches (Institoris 1971), for instance, provided inquisitors with a ready-made handbook that described in graphic detail the sexual fantasies of two celibate men about evil women. The invention of the printing press in no small way facilitated the destruction of some women and the control of others in the late Middle Ages. Though sound and image communication are emerging, computers are predominantly a writing communications medium now proliferating in the developed world.

It is common for people, the public and scholars alike, prompted by the media, to voice their reactions to innovations that threaten to disrupt their taken-for-granted worlds. I am old enough to remember the social anxieties that accompanied the introduction of television in Australia in the 60s. Having been a class teacher at the time I recall the

propaganda that promised to bring the world into people's living rooms and enable teachers to run classes using video programs. Dissenters lamented the enfeebling of our minds, the break-up of the family, and the de-humanising of the teaching/learning or cultural transmission process (Levinsohn 1977). These reactions echoed those levelled against the introduction of books in the 15th century, and the telephone in the 19th century. Similar fears about the disintegration of society accompany the introduction of ICTs (Ryan 1997: 1).

History has taught us that new technologies invariable bring with them new possibilities as well as unforeseen social consequences (Wajcman 1991: 163). Those who have controlled the content, means and mechanisms by which information is packaged and disseminated also have held power in society. Their ideologies are then reproduced by material relations which encode their symbolic universes and produce patterns in human relating that pass as 'natural'. So when discussing the human effects of ICTs it is important not only to understand how and what information and communications are created, disseminated and shared but also to embed these reflections in the broader structural realities of dominant ideologies, as well as the infrastructural issues of computer hardware, software, access and ownership in the broader society (Wajcman 1991: 22-24). It is not inconsequential that behind the celebratory propaganda about technological innovations are struggles for power and control by certain males (Spender 1995, Miller 1998).

Much is made of the fact that the internet enables a kind of mediated communication that will change the meanings of identity and community. In cyberspace, people may use pseudonyms and give themselves different personas and physical features from those they possess in real life (RL) (Bruckman 1998: 174). One can play with different identities and learn what it is like to be responded to as that persona, for example a male parading as a female or a child presenting as an adult (Turkle 1997: 143-145). But the same could be said of the old pen pals system where people communicated only by letters. The world wide web (www) however enables one message to reach multiple others at once.

ICTs thus allow us to enter into a domain, place or 'commons' as some have called it (e.g. Barlow 1998: 166), where we can interact with a much larger number of other human beings than our geographical locations and telephones have permitted in the past. These places of interaction are also devoid of the sound and visual cues that mark such attributes as race, gender and colour (Lyles 1998: 114). People exchange information, play fantasy games, do religious rituals, discuss politics, share special interests or just chat with others from all around the globe. They may court and marry in cyberspace (Curtis 1997: 135). Since our places of interaction are changing and the variety of people we can interact with expanding, so also will the meanings we attach to our understandings of our roles in those contexts and in our local and global communities.

Our sense of time in relation to space alters because we can converse synchronously or asynchronously simultaneously with many people from any point on the globe. The difference internet communication makes lies in the real time effect where others (very different from ourselves) can respond almost instantly thus forcing us to develop higher levels of self-reflection to accommodate their difference and perhaps stretch our practical consciousness[1]. But these transitions, it is suggested, are not only engendering personal alienation (Wellman 1997 182-183) but they are also fuzzying the boundaries between Cartesian opposites, human and machine, mind and body, public and private, real and virtual,

[1] 'Practical consciousness' is an expression used by Anthony Giddens (1991: 36). It refers to non-conscious processing, the tacit beliefs/understandings that are brought into play without conscious reflection as people go about their everyday social activities.

individual and collective, authority and anarchy (Dallow 2001: 67). Such discourses have implications for the ways we think about personal identity, community, global consciousness and social justice.

Human or Machine – A Note about *Meaning*

ICTs, as well as offering virtual opportunities to play with different personas, may also be made to simulate human beings. Some technical enthusiasts go so far as to suggest that in time, human beings will be indistinguishable from artificial intelligences (AI). This would mean that AIs would need to be programmed with the interactive life history of an individual (or an imagined one) in order to have available at least the conscious experiences that a person may draw on to respond to objects and changes in their environment. (Turkle notes that this has been achieved only on the film screen in the movie *Blade Runner*, 1997: 154).

In a sense human bodies are already to some extent mechanised. Anyone who has a prosthesis, wears glasses, false teeth, hearing aids, not to mention implants of all kinds are already living with the need to accommodate the mechanical in our bodies. But does this mean that clever computers will be able to simulate human beings? The Turing test, first devised in the 1950s, but not used until decades later, aimed to find out whether judges could tell the difference between humans and artificial-intelligence programs, when they were online at the same time (Platt 1998). Participants and AIs were to interact for five minutes on a pre-chosen topic with a judge who asked relevant questions.

Charles Platt who participated as a 'human' in the test found himself wondering how he could appear human! What can we make of his reaction?

For humans every situation/proposition is instantly subject to their meaning structures. Meaning structures are developed and altered through the cumulative effects of experiences over the life course (Stanley and Wise 1983: 131). They are embedded in our consciousness by our senses, the emotional tones surrounding the situations, our perception and judgements, our motivations, dispositions and private wishes. Our bodies encode and carry the memories of these complex constellations (Coco 1998: 32-37). Whenever a situation presents itself the body remembers the whole gamut of the associated experience from previous times. However, much of what the body remembers is not entirely manifested in conscious thought. So people are puzzled by their emotional reactions to 'rational' suggestions that they expect will remain only an activity that their minds can play with. This is seldom the case.

Platt, like most of us, had been raised in an educational system and later in the business of job applications where one is 'tested', which means one might 'fail' which means that one might not come up to scratch with others which means social ostracism which means etc, etc, etc. Further these meanings remain intact because in every similar situation, the same routines are invoked (Mol 1983: 103). The ritual re-enactment of the 'situation of a test' means that people seldom need to raise to consciousness the separate mental, affective and physical aspects that combine to form its meaning.

It is only when an incongruous event, such as Platt's competition with AIs in a test of humanness, meets their meaning structure that people are stopped in their tracks and forced to 'rethink' and perhaps revalue some aspect of the situation (Dervin 1983, 1997: 4-5). In the Turing Test it took Platt a while to discern the ludicrous proposition that was implied for the human beings in the experiment. He finally reflected, "I'm human so why should I need to fake it? Is it possible for me to seem more human than I really am?" (Platt 1998:13). (He

resolved to act in the emotional way a human would who was being asked 'stupid' questions, and was judged to be human.)

Meaning is embodied. It is anchored by interactions with others and objects in times and places. The body carries the memories forward and backward in time and mediates between inner and outer realities in ways that are not just mental connective gymnastics. Human beings can potentially make unique moves or choices, they possess a self-consciousness as yet unable to be reproduced in machines.

IDENTITY

Social theorists (e.g Giddens 1991) maintain that the artful cultivation of 'self' has become the life project of human beings in the late modern (post-modern, high modern) era . Turkle (1995) sees the internet as a means of facilitating this project. She suggests that to resort to the 'embodiment' argument (as I have done above) is a romantic diversion that will be made redundant when identities are formed and played out in cyberspace. Thus for Turkle, the notion of 'identity' is conflated with discussions of 'self'. But this self, she suggests, is likely to become decentred, a situation that potentially has both freeing and constraining effects for the individual.

Unitary or fragmented 'self'?

Turkle examines the ways the Windows software environment enables people to be present in various cyberspaces at a time through the number of windows they can have active on their desktops. She quotes a young male student as saying,

> I split my mind. …I just turn on one part of my mind and then another when I go from window to window. I'm in some kind of argument in one window and trying to come on to a girl in a MUD in another, and another window might be running a spreadsheet program or some other technical thing for school… And then I'll get a real time message [that flashes on the screen as soon as it is sent from another system user] and I guess that's RL. It's just one more window" (1998:9).

Turkle says, "[t]he life practice of windows is that of a decentred self that exists in many worlds and plays many roles at the same time" (1998:9). But one has to wonder if, in cognitive terms, this is such a new feat. Any mother, for example will tell you that she can carry on an argument with a stubborn child, console herself with erotic thoughts about her partner, work on the household budget and wash dishes while standing at the sink and looking out of the kitchen window. Turkle's student may be *present* in screen terms to a number of 'others' but he is only *attending* to these others and playing his associated roles in serial fashion. However with many kinds of mediated experiences easily accessible through the internet, it is suggested that people may experiment with so many identities that their 'self' becomes 'fragmented' and therefore they lose the capacity to maintain stable and meaningful forms of relating.

On the positive side, Turkle (1995) suggests that ICTs may play a therapeutic role in people's lives as there is the potential to act out situations that trouble them and test consequences with real people responding, albeit only verbally and at a distance. She observes that ICTs can act as a mirror much as the psychotherapist, thus facilitating reflexivity, that is, human beings' capacity to reflect on their behaviours and adjust them. She maintains that the internet allows us to experiment with an unprecedented number of different personas through mediated experience and thus 'try out' avenues of action and the reactions of others before acting in RL.

There is much slippage of language between the words ‘self’, ‘role’ and ‘identity’ in Turkle’s work, and the technological literature generally, which obfuscates theoretical discussion. The ‘self’ is often understood as a ‘unitary’ construct which may then become ‘fragmented’, or a centre which becomes ‘decentred’. A clear distinction needs to be made between one’s ‘self’ and one’s ‘identity’.

In the best of philosophical and theological discourses the ‘self’ is understood as what Deikman (1982) refers to as ‘the observing self’. It is not unitary or anything else, it is simply that aspect of a person which stands back and observes as they perform in all dimensions of inner and outer life. From a sociological perspective, a person’s behaviours and performances constitute attributes of their ‘identity/ies’. People quite customarily enact different identities according to the social context and associated roles in which they are moving, mother, shopper, manager or worshipper (Mol 1983: 108).

The point is that the recognition of threats to the ‘self’ or soul or spirit as it may be referred to in other contexts has been common throughout human history (Kinney 1995: 774-775). ICT constitutes another form of communication that increases the amount of information and the number of persons one may have to attend to. So where lies the difference? As Turkle intimates ICTs may do something more. They enable us to distance ourselves from our interactions and identities because they are objectified on a screen. This idea resonates with the effects of some forms of meditation that allow us to stand back and observe ourselves acting and reacting. The student quoted above was able to observe his different identities in action, he clearly was distinguishing between his observer self, the identities he adopts, and the roles he plays even in RL (just another window).

My concern about Turkle’s therapeutic suggestion is that as yet, there are no really safe environments in cyberspace where individual privacy is guaranteed (Bruckman 1998: 174). While she proposes the usefulness of ICTs as a testing ground for RL situations she seems not to appreciate people’s unavoidable and necessary concomitant embodiedness that contributes to meaning construction. The body carries a vulnerability which it cannot leave behind when the self is cavorting in cyberspace.

In religion and therapy environments where traditionally reflexivity has been encouraged and practised there are recognised codes of conduct that protect the space and privacy of individuals. Further, their personal transformation occurs in a community context which supports the kinds of changes they are trying to embrace and renders them meaningful through day-to-day rituals (Mol 1983: 107-108). We can not be so sure of these protective mechanisms on the www (Carnevale and Probst 1997: 248-250). A competent computer operator, for example, can track any mailing to a person’s geographical address (Bruckman 1998: 174). Though rules are established to maintain ethical practices in virtual environments (See for example Gregson 1998) the rituals may be transient and the rules up for question at any time.

Public or Private - A Note about *Place*

For Mol, place is largely a geographical concept associated with human habitation, interaction and meaning construction. But to be in a place is also to take up space. The new ICT media enable human beings to create new spaces, which then function as *places* of association (Dallow 2001: 67-69). E-mail discussion lists, MUDs and Newsgroups are virtual spaces, given particular names and addresses, where numbers of people meet to communicate. The identity of these virtual places/spaces is shaped by similar considerations about human behaviours as those associated with geographical ones. Who is permitted to participate in or occupy this space? What are the rules for activity in this space? What is permitted in the

public space and what should be kept private? The establishment of rules and questions of privacy continue to be a matters for concern.

All online interaction is potentially visible. As Foucault (1977) warns us the logics of power and capitalism rely on human needs, wishes and desires becoming visible. Once in the public arena they can be regulated, modified, commodified and used to make profit. MUDs enable others to participate in our mind space which is therefore made visible and recordable in databases in ways never before envisioned (Bell 2001:81). People may choose what they make public, but it seems that many, enjoying the satisfaction of finding others of like mind, and frequently non well-versed in the capacities of computer technology, are unaware that their intimate discussions may be viewed and traced by unknown others.

However a shared conceptual and imaginative public space devoid of traditional kinds of institutional rules and regulations may be just the realm needed to generate symbols and narratives for a new social order. Slevin argues for the potential of ICTs to facilitate the imagining of a new human ethics. He says that in public, in the *space of the visible* we are mandated to reconstruct and account for our collective morality. He sees ICTs as providing a new space for *deliberative mediated publicness* which, while not the same as dialogic forms of interaction (eg. the telephone), may complement them (Slevin 2000:185). The communicative structures enabled by the internet provide the potential for more people to participate in democratic negotiation (Slevin 2000:197).

Questions about ethics and the boundaries between public and private are generally raised and debated in particular types of communities. If individuals imagine different ways of being in the world as a result of their interactions online it follows that they may also attempt to create new collective identities or communities both online and offline (Dallow 2001: 67). However the extent to which a 'virtual' community of the type facilitated by www interaction can function as a 'real' community has also been the focus for considerable reflection.

COMMUNITY

'Virtual' communities are mooted to become the new places where human beings find meaning and belonging long lost from their RL communities. Howard Rheingold, a long-term virtual community member in WELL (Whole Earth 'Lectronic Link), has hailed in the new era of 'virtual communities' where he says, "we do everything people do when they get together, but we do it with words on computer screens, leaving our bodies behind. Millions of us have already built communities where our identities commingle and interact electronically, independent of local time or location" (Rheingold 1999:414). Such predictions have sparked debates about the nature of 'community' and the difference between virtual communities and real communities. However the tendency to cast the discussion in dualistic opposites, virtual versus real, obscures the social actor who is the same bodied person moving between the two (Horner 2001:71- 81).

Rheingold, for example, also has an interest in meeting the people from WELL in RL, he says that with electronic communities the difference lies in how you get to know people. For him, the computer is one of most important vehicles for making new friends. In virtual reality you can get to know people and then choose to meet them, whereas in RL you meet them first and then get to know them (Rheingold 1998:159). Rheingold's contradictory reasoning invokes activities in RL, including the need for the physical presence of friends, while claiming that 'virtual communities' can replace other kinds of communities.

The word 'community' has been used in so many contexts as to become somewhat meaningless. We refer to a 'community spirit', 'the local community', 'community jobs plan'

(An Australian government work for the dole initiative), 'worshipping community' and so on. The symbolic power of these expressions means that the word 'community' is not only a description but also has strong ideological and normative connotations (Bell and Valentine 1997:93). People need to 'belong' to communities in which they also generate and ritualise the values, beliefs and goals that inform their lives (Mol 1983: 106 – 108). Without participation in community people are said to be 'alienated', a condition that is felt to undermine general social cohesion (Durkheim 1952). But Mol makes a distinction between geographical communities, and social communities, such as clan, kin, work and religious associations (1983: 7–10). For him what makes a group function like a community for an individual, is not the type of community but the individual's commitment or faith, their 'emotional attachment' to the group (1983: 106).

Communities, real or virtual?

Clearly if the idea of 'community' is tied to a geographical place a virtual gathering cannot become a 'real' community. Delanty (2000) provides a more workable definition of community that allows us to move beyond the dilemma. He argues, that in post-modern society, community can be identified according to three characteristics; "(1) solidarity in the sense of togetherness, a feeling of collectivity and mutual attachments; (2) trust, as opposed to the secrecy and the distance that characterized life in the social; and (3) autonomy, in that community involves recognition of the value of the person as a social being" (2000: 117). This way of understanding community describes a set of social processes rather than linking the notion solely either to other people with particular attributes or to territories. Delanty's characterisation of community, and Mol's identification of the actions of persons who understand themselves to belong to a community reveal that the distinction made between 'real' and 'virtual' communities is not very useful when trying to understand the meaning of such groups for individuals. The debate is founded upon different theoretical formulations of what constitutes a community rather than on people's experiences and interactions in a group they call 'community'. A more promising research question is 'how can an online group function in some sense like a community for participants?'

When I asked members of the BrisbaneWitches e-mail discussion groups (BrisbaneWitch@yahoo.com; BrisbaneWitches@yahoo.com) what they considered makes them a community (a term they frequently used in their discussions) they reported experiences similar to those described by Rhinegold. They declared that they were committed to 'communing together' on an open-ended and flexible basis. Involvement in online discussion made them feel part something larger than themselves, a group of like-minded people who responded to needs, calls for informational and physical help and provided general companionship. They experienced belonging, and the knowledge that they were not alone. My content analysis of list postings also revealed considerable discussion and debate about ethical concerns surrounding sexuality in ritual and commercialisation of the pagan craft.

Virtual communities therefore, may provide another *place* where meanings are generated and challenged and new individual and group identities are formed. But we can see also from the example, and from Rheingold's ideas of relationships, that online meeting places are often the sites for negotiation of offline gatherings and relationships.

Negative reactions to virtual communities claim that they will become the homes of specific and narrow special interest groups and proliferate in cyberspace to such an extent that the result will be social anarchy (Mueller, 1987). However such criticisms are made in absence of the material facts of life. When it comes to the maintenance of self, human beings

participate in many forms of association, committees, families, workplace relationships, self-help groups, coffee meets, religious groups and so on. Each of these in their own way contributes something to the person's life needs and in each they will play out a role with identity attributes appropriate to the group they are attending. Much of this activity occurs prior to and apart from their position in front of the computer.

Authority or anarchy?

Historically the idea of community was bound up with centralised authority, universal truths and defended in hierarchically organised social settings (Slevin 2000: 46). Individuals and smaller groups in the current era, focusing on self and identity projects, question forms of authority that they perceive have lost their legitimacy. This has led to further social conflict and struggle. The individual is left with the choice of creating meaning through continued risk and sampling of mediated experience and perhaps participating in new social movements (such as the environmental movement) or retreating to the safe black and white world of fundamentalism (for example the white supremacy movement - http://www.kukluxklan.org) (Castells 1997). We see both of these social trends in associations online and offline.

The decentering communicative mechanisms enabled by ICTs permit ephemeral forms of association in which individuals learn and become accustomed to different ways of communicating their wishes and being heard. They are more able create and disseminate images of themselves that challenge those circulated by traditional hierarchical and hegemonic institutions (Sanderson and Fortin 2001: 202-203). Such intensive detraditionalisation has meant that at the societal level neither governments nor other organisations, such as traditional religions, know how to run these new forms of association (Slevin 2000:98). This kind of subversion and disruption of traditional institutional mechanisms reverberates in our sense of national identity and the meaning of global citizenship.

GLOBAL CONSCIOUSNESS

According to Castells there are two contradictory movements taking place worldwide which impact on our individual and collective identities. On the one hand, huge transnational conglomerates, "enacted by networks of wealth, technology, and power" are forming and delimiting the powers of individual nations (1997:68). The market flows to where concentrations of capital are the most likely to occur, in large cities and global corporations. A recent example in Australia is the centralisation and digitising of banking services. Not only have many banking branches closed down in rural as well as suburban areas, but bank personnel, in the remaining bank premises, insist that one uses the auto-teller machines rather than enter the bank building for personal service.

On a national scale these corporatising moves mean that sectors of populations increasingly desert country areas and migrate towards large cities looking for work, while immigrants and refuges enter to occupy the abandoned places. It takes little reflection to recognise that existing social inequities are being exacerbated, with a growing body of people being identified as the 'information poor'. Globalising political and economic trends threaten to empty our lived world of personal meaning (we interact with machines rather than people), which is the reason for the second trend observed by Castells.

Empirical evidence around the world shows social movements emerging from communal resistance to these globalising tendencies. These *resistance identities*; include ecologists, feminists, religious fundamentalists, nationalists and localists. Castells predicts that such movements with specific, but globally meaningful identity projects are the potential

subjects of the Information Age. He suggests that if cultural codes are to change in ways that generate more equitable ways of organising, the revolution will need to be led by such 'symbol mobilizers' (Castells 1997:361).

My discussion so far has focused on ICT issues that have been the preoccupations of activists, politicians and scholars in developed countries. However the increasing inter-dependency of all nations, in part brought about by globalising trends, makes it less possible to form Western individual and collective identities as if other nations did not exist. Some researchers are attempting to bridge the ICT gap between the situations in developing countries and those in developed nations.

SOCIAL JUSTICE

It makes little sense to talk of the information society in countries where starvation, access to clean water and health care are the main day to day concerns (Spender 1995:250). Most rural sectors of developing (third world) populations are not connected to telecommunications services such as telephone lines, radio or satellite and many inhabitants have never used telephones (Hossain and Sanyal 2001; Sentongo 2001). Any talk of ICT use means attending to these structural issues. At a 2001 conference in Rockhampton, Australia (ITiRA) several speakers outlined projects being undertaken in India, the Asia-Pacific region, Papua New Guinea and Africa.

Dr Sentongo (2001), a member of the Association of Uganda Women Medical Doctors, described a project which aimed to train five female Ugandan medical doctors in the use of email and the internet. Their aim was then to seek information about women's health, and package and disseminate it electronically to non-government organisations (NGOs) in Uganda. They maintained that the technology was invaluable for keeping them updated on improvements in their medical profession that had direct and positive health consequences for the villagers served by the NGOs.

The difficulties under which this project worked are unheard of in most parts of Australia. For example the five doctors had access to only two computers, only one of which was connected to the internet. Many rural areas in Uganda were disadvantaged by lack of electricity to run IT equipment, and in those areas where servers were available they continually broke down. But more foundational issues concerning the role of women as home keepers and their resultant exclusion from formal education, militated against women's use of technology where it was available, for example in urban areas (Sentongo 2001:296). These are attitudinal and cultural issues which cannot be changed by provision of funds and infrastructure alone.

In a different project, the Grameen Bank in Bangladesh took a gentle approach to engineering a "delicate social transformation … to changing perception" of the roles of rural women in African society (Hossain and Sanyal 2001:31). The main goal of its 'Village Phone' project was to ensure that even if a person did not own a telephone "he/she should have access to a telephone within a ten minute walk" (Hossain and Sanyal 2001:33). The values of this initiative lay in that it established a new income-generating source for those villagers who purchased a phone from the bank and made it available to fellow villagers for a small fee. Hossain explained that the availability of a telephone also provided local women with a means to check market prices in different venues and therefore to convey and sell their crops to the highest bidder (Information Technology in Regional Areas Conference 2001).

These examples suggest that ICTs used in specific and targeted ways may facilitate the critical consciousness[2] of people in developing countries and enable them to mobilise resources on their own behalves. Certainly the empowering and democratic potential of ICTs is the utopian hope of enthusiasts (See for example, Kedzie 1997).

At the same time there is also a significant and growing proportion of poverty in western nations that militates against the dream of equity in an information society. In my geographical area the Council has attempted to alleviate the situation of the technology 'have-nots' by providing computers and training programs to specific disadvantaged communities. As project officer for one of the programs I investigated the way the community responded to the advent of ICTs. Many residents conveyed to me that they had no need for a computer and could not afford one even if they did (reinforcing Ovington's 2001 findings). They indicated that even if they acquired a computer, they would never be in position to use ICT for such things as internet banking as they were unable to acquire credit cards, and the maintenance of internet connections would also present financial difficulties.

Castells groups what he calls the 'third world' and low socio-economic areas in the 'first world' into a Fourth World; a disconnected strata of people who are suffering similarly from changes accompanying the growth of ICTs . He writes that in recent decades,

> … networks of capital, labour, information, and markets linked up, through technology, valuable functions, people and localities around the world, while switching off from their networks those populations and territories deprived of value and interest for the dynamics of global capitalism. There followed the social exclusion and economic irrelevance of segments of societies, of areas of cities, of regions, and of entire countries, constituting what I call the 'Fourth World' (Castells 1998, 2000:368).

MEANING AND PLACE IN THE INFORMATIONAL SOCIETY

So what of *meaning* and what of *place* in the informational society? I have been trying to demonstrate that individual identities are shaped by personal, territorial and global conditions. Meaning is constructed by individuals in situated conditions, virtual and geographical, and is not discontinuous with personal and collective histories. Most of the claims for the revolutionary nature of ICTs and reactions to those claims are made in the absence of due consideration of the body that comes and goes from the computer, and engages in activities like eating, sleeping, working, worshipping and socialising. These activities form the context and content for meaning-making and to a large extent influence the types of identities and communities that people create and participate in both online and offline.

Talk of multiple identities and virtual communities as if they were an overwhelming source of information and mediated experiences proceeds as if people were culturally inept, passively reacting to or absorbing all that is placed before them. Far from making the virtual world their 'real' world, most people will selectively use ICTs as another communicative tool to meet their everyday needs for belonging, stability, creativity and personal growth.

The internet enables a new kind of *place* that allows people to create associations of like minded others across the organisational and ideological boundaries that have traditionally

[2] Paulo Freire (1974) coined this expression. His main argument was that oppressed peoples are isolated and given only particular kinds of information sufficient to keep them in their places. He recommended that they were provided an education that raised their awareness of the facts of social life that would set them questioning the inevitability or necessity of their situation. Armed with such an education they would develop a 'critical consciousness' which would lead to empowering actions.

defined and policed the limits of identity construction and human association. Through the concomitant explosion of information dissemination moral authorities have lost their major source of legitimation which lay in their possession and control of information (Castells 1997). ICTs, as phenomenon of the post-modern condition, have opened a space between text and context in which the potential lies for individuals and collectivities to begin to negotiate new forms of ethical relations (Finn 1992: 113-114).

On the other hand ICTs are a means of cultural transmission and as such they are bound to reproduce the inequities already existing in society. But as people from different racial backgrounds, genders and social positions gather in virtual places like online forums perhaps they will routinise alternate interactions which will encode new meanings. Those meanings will inform the creation of fresh rituals and out of those rituals may emerge a new symbolic cosmos.

References

Barlow, John Perry (1998) Is there is cyberspace? In R. Holeton (Ed.), *Composing cyberspace: identity, community, and knowledge in the electronic age*. Boston: McGraw-Hill

Bell, D. (2001). *An introduction to cybercultures*. London: Routledge.

Bell, D., & Valentine, G. (1997). *Consuming geographies: we are where we eat*. London: Routledge.

Bruckman, Amy. Finding one's own in cyberspace. In R. Holeton (Ed.), *Composing cyberspace: identity, community, and knowledge in the electronic age*. Boston: McGraw-Hill

Carnevale, P. J. and Probst, T. M. (1997). Conflict on the internet. In S. Kiesler (Ed), *Culture of the internet*. Mahwah, NJ: Lawrence Erlbaum Associates.

Castells, M. (1996, 2000). *The rise of the network society*. Oxford: Blackwell.

Castells, M. (1997). *The power of identity*. Massachusetts: Blackwell.

Castells, M. (1998, 2000). *End of millennium*. Oxford: Blackwell.

Coco, A. (1998) *Catholics' meaning-making in critical situations.* Unpublished doctoral thesis, Brisbane, Australia: School of Social Sciences, University of Queensland.

Curtis, P. (1997). Mudding: social phenomena in text-based virtual realities. In S. Kiesler (Ed), *Culture of the internet*. Mahwah, NJ: Lawrence Erlbaum Associates.

Dallow, Peter (2001). The space of information. In S. Munt (Ed.) *Technospaces: inside the new media*. London: Continuum.

Deikman, A. J. (1982). *The observing self: mysticism and psychotherapy*. Boston: Beacon Press.

Delanty, G. (2000). *Modernity and postmodernity: knowledge, power and the self*. London: Sage.

Dervin, B. (1983, 1997) *An overview of sense-making research: concepts, methods, and results to date.* International Communication Association Annual Meeting, Dallas, TX. http://communication.sbs.ohio-state.edu/sense-making/art/artdervin83.html

Durkheim, E. (1952) *Suicide: a study in sociology*. translated by J. A. Spalby and G. Simpson. London: Routledge and Kegan Paul.

Finn, G (1992). The politics of spirituality: the spirituality of politics. In P. Berry and A. Wernick, (Eds), *Shadow of spirit: postmodernism and religion*. London: Routledge.

Foucault, M. (1977). *Discipline and punish the birth of the prison*. New York: Pantheon Books.

Freire, P. (1974). *Education for critical consciousness*. London: Shead and Ward.

Giddens, A. (1991) *Modernity and self-identity: self and society in the late-modern age.* Cambridge, United Kingdom: Polity Press.

Gregson, K. (1998). Conversation and community or sequential monologues: An analysis of politically oriented newsgroups. Proceedings of the American Society for Information Science, Pittsburg, PA.

Horner, D. (2001) Cyborgs and cyberspace: personal identity and moral agency. In S. Munt (Ed.) *Technospaces: inside the new media*. London: Continuum.

Hossain, A. I., & Sanyal, G. K. (2001). Community development - A Grameen Bank approach of village phone technology in rural Bangladesh. In S. Marshall, W. Taylor & X. Yu (Eds.), *Information Technology in Regional Areas Conference (ITiRA 2001)* (pp. 31-37). Rockhampton, Queensland, Australia: Central Queensland University.

Information Technology in Regional Areas Conference (2001). *ITiRA 2001*. Rockhampton, Queensland, Australia: Faculty of Informatics and Communication, Central Queensland University.

Institoris, H. (1971). *The Malleus maleficarum of Heinrich Kramer and James Sprenger*. New York: Dover.

Kedzie, C. R. (1997) A brave new world or a new world order? In S. Kiesler (Ed), *Culture of the internet*. Mahwah, NJ: Lawrence Erlbaum Associates.

Kinney, J. (1995) Networth? Religion, cyberspace and the future. *Futures*, 27(7): 763-776.

Levinsohn, Florence Hamlish (1977). Is TV really the plug-in drug? *School Review*, 85(4): 566-576.

Lloyd, R., & Hellwig, O. (2000). Barriers to the take-up of new technology. Canberra: National Centre for Social and Economic Modelling, University of Canberra.

Lyles, Charlise (1998) Cyberfaith: promoting multiculturalism online. In R. Holeton (Ed.), *Composing cyberspace: identity, community, and knowledge in the electronic age*. Boston: McGraw-Hill

Miller Laura (1998). Women and children first: gender and the settling of the electronic frontier In R. Holeton (Ed.), *Composing cyberspace: identity, community, and knowledge in the electronic age*. Boston: McGraw-Hill.

Mol, H. (1983). *Meaning and place: an introduction to the social scientific study of religion.* New York: Pilgrim Press.

Mueller, M. (1987). Technology out of control. *Critical Review*, 1(4): 24-39.

Ovington, J. (2001). Household use of Information Technology. Canberra: Australian Bureau of Statistics.

Platt, C. (1998). "What's it mean to be human anyway?". In R. Holeton (Ed.), *Composing cyberspace: identity, community, and knowledge in the electronic age* (pp. 12-20). Boston: McGraw-Hill.

Rheingold, H. (1998). The heart of the WELL. In R. Holeton (Ed.), *Composing cyberspace: identity, community, and knowledge in the electronic age* (pp. 151-163). Boston: McGraw-Hill.

Rheingold, H. (1999). A slice of life in my virtual community. In P. Ludlow (Ed.), *High noon on the electronic frontier; conceptual issues in cyberspace*. Cambridge, MA: MIT Press.

Ryan, A. (1997). Exaggerated hopes and baseless fears. *Social Research*, 64(3): 1167-1190.

Sanderson, D. & Fortin, A. (2001) The projection of geographical communities into cyberspace. In S. Munt (Ed.) *Technospaces: inside the new media*. London: Continuum.

Sentongo, H. L. (2001). Providing information electronically on reproductive health for women NGOs. In S. Marshall, W. Taylor & X. Yu (Eds.), *Information Technology in Regional Areas Conference (ITiRA 2001)* (pp. 293-298). Rockhampton, Queensland, Australia: Central Queensland University.

Slevin, J. (2000). *The Internet and society*. Cambridge, UK: Polity Press.

Spender, D. (1995). *Nattering on the Net: women, power and cyberspace*. Melbourne: Spinifex Press.

Stanley, L. and Wise, S. (1983). *Breaking out: Feminist consciousness and feminist research.* London: Routledge and Kegan Paul.

Turkle, S. (1995). *Life on the screen: identity in the age of the internet*. New York: Simon and Schuster.

Turkle, S. (1997). Constructions and reconstructions of self in virtual reality: playing in the MUDs. In S. Kiesler (Ed), *Culture of the internet*. Mahwah, NJ: Lawrence Erlbaum Associates

Turkle, S. (1998). Identity in the age of the Internet: living in the MUD. In R. Holeton (Ed.), *Composing cyberspace: identity, community, and knowledge in the electronic age* (pp. 5-11). Boston: McGraw-Hill.

Wajcman, J. (1991). *Feminism confronts technology.* University Park, PA: The Pennsylvania State University Press.

Wellman, B. (1997) An electronic group is virtually a social network. In S. Kiesler (Ed), *Culture of the internet*. Mahwah, NJ: Lawrence Erlbaum Associates.

Winner, L. (1998). Mythinformation. In R. Holeton (Ed.), *Composing cyberspace: identity, community, and knowledge in the electronic age* (pp. 450). Boston: McGraw-Hill.