CHAPTER 9: INDIVIDUALS AND SOCIAL CHANGE

In recent chapters, discussion of the Digital Revolution and Information Society has moved from technology, economics, and politics to broader social issues such as rural development, life-long learning, and working from home. Such issues are crucial, since to lose sight of the social dimension is to reduce the Information Society to computers and the market. This is a social transformation -- a transformation in the way people live, the way they relate to either other, and the way they perceive the world at large -- or else it does not warrant the attention that it has received. How are individuals’ lives outside of work changing, and are these changes significant or superficial?

9.1. Domestic Technology

One transformation, briefly discussed in an earlier chapter, is the collapse of the domestic/private life versus public life distinction which were, until recently, distinctly different domains. ‘Domestic’ space was private and individuals controlled what happened in their home, who could come in, and how activities were organised. Public space was beyond the control of single individuals; it was unpredictable and unregulated. There are clear boundaries separating the two spaces (“my home is my castle”), with different activities in the different spheres. New technologies are now blurring this distinction. Working from home is one example of this blurring, but this is only one of a host of ‘displaced’ activities. Tele-shopping, tele-banking, watching movies on cable are all activities previously associated with a shared public space but are now possible in an individual private space. As such activities move in the domestic sphere, people incorporate the technologies into the routines of everyday life, and transferring a previously ‘public’ activity to the home environment alters the activity (see Silverstone and Hirsch 1992 on ‘domesticating’ technology). It may be possible to watch a movie at home, but it is not the same experience, and is likely to be done for different reasons. There are different reasons for viewing movies in home rather than in a cinema, with different purposes to be achieved. It is possible to shop from home, but the experience is totally different. One does not meet people unexpectedly while shopping at home, one is less likely to browse the shelves and be tempted by new items. The very act of travel to a different location is avoided, but so also are all the new impressions or experiences that stepping out the door may provide (see also Forester 1987; Miles, Bessant et al. 1987).

Technology may be neutral, but its use is social and therefore technology is itself social. All objects have a biography, based on their social context: “The biography of a car in Africa would reveal a wealth of cultural data: the way it was acquired, how and from whom the money was assembled to pay for it, the relationship of the seller to the buyer, the uses to which the car is regularly put, the identity of its most frequent passengers and of those who borrow it, the frequency of borrowing, the garages to which it is taken and the owner’s relation to the mechanics, the movement of the car from hand to hand and over the years, and in the end, when the car collapses, the final disposition of its remains. All of these details would reveal an entirely different biography from that of a middle-class American, or Navajo, or French peasant car” (Kopytoff 1986). All objects in domestic space demonstrate, as they are bought and used, a web of social relations. Thus, to discuss the impact of technology in the home, one looks at the social patterns. Who is using the technology, what are other
people doing at the time, how was it purchased, and so on. consumed, doing what else, with what other people?

What kinds of activities will take place after this domestic information revolution? Commercial organisations hope that convergence, along with high speed data access, will mean a range of new services that will provide new sales markets: movies on demand, teleshopping, telebanking, and direct access to booking services (people checking a train timetable, booking theatre tickets directly, making plane reservations on line). These benefit commercial organisations because they increase sales and decrease labour costs, thus improving profit margins. However, the use of ICTs in the home is disembedding economic activities from a previous social context: shopping without social interaction. What are the benefits for consumers that make such activities popular? For some, the lack of social interaction is itself sufficient benefit. For others, there may be obvious convenience benefits, such as being able to bank when they do not have time to stand in a bank queue. People may not able to shop when the shops are open, or simply do not have the spare time to shop, so it is worth paying to have goods delivered to them. There may be a clear cost benefit if online shopping is cheaper (airline tickets at cut-rate prices are one example). There may be products must be delivered immediately, such as online orders of flowers that must arrive the next day. Or, it may be safer to order online than in person; internet-ordered, home delivered shopping is of great benefit for elderly who are too frail or too afraid to go out. On the whole, it tends to work best for standard products that consumers do not have to see or try on. This tends to decrease the occasions in which individuals see other people and feel part of a larger community, which is a social price for this new domestication of economic life.

That is not to say, though, that new technologies cannot provide a social benefit, just as the telephone did in an earlier century. For those who are unable to go out, chat rooms and discussion lists provide friendship and emotional support, and access to medical web sites provide concrete information. Individuals who suffer from an uncommon condition (or do not want to admit to suffering such a condition) may feel isolated in their local community, but can find other people in a similar situation by going online. As mobility becomes a fact of global life, such technologies become a useful as a means of keeping in touch with friends and family. There are many people whose first experience of computer technology is the use of electronic mail to keep in contact with children and grandchildren.

We take some behavioural changes that have resulted from technology for granted. For instance, the idea of eating dinner while watching television is a change in behaviour; the change is great enough to have led to the development of a new cuisine: the TV dinner. There are many studies regarding changes in domestic life as a result of television (e.g., Silverstone, Hirsch et al. 1991; Silverstone 1994). Instead of segregated activities in different rooms (washing dishes in one room, studying in another, reading the newspaper in another), there is now a more common life, as all sit around the television and organise the rest of their evening activities around the television schedule. A common life does not imply common attitudes, however, as different members of the family have different attitudes towards, and uses of, technology (Silverstone and Hirsch 1992). And now, with the decreasing cost of televisions and increases in family incomes, there are now families with multiple televisions in multiple rooms. Instead of children and parents watching the same TV programme on the single TV that offered only a limited choice of channels, there is a great diversity of programmes being watched by different members of the family in different rooms.
There is less overlap between parents and children in their worlds of electronic experience, and less control by parents of children's information intake.

Changed technology leads to changed domestic power structures. Previously, one phone meant that members of a family had to negotiate use of the common resource. As a by-product of this negotiation, parents knew who their children were talking to and when. With the development of separate phone lines for teens in some US homes, parents began to lose knowledge of their children’s interactions, although they could still monitor usage and phone numbers on the bills. With the advent of teens owning mobile phones and being able to affordably ‘text’ each other has come a change in control over communication patterns. Children can now communicate without parental approval or even parental knowledge, so a whole new social network develops which parents can neither monitor or control. And the rise of texting each other, just to stay in touch is a manifestation of a new social dependence. Like primates grooming, incessant texting provides reassurance and emotional support, showing the emotional strength of the community that is being created. This is a community that exists in parallel to the adult one, instead of two communities which previously intersected each other as parents and children fought for use of the single phone. The rise of chat rooms and unmonitored computer access from home means social groups not even restricted to the immediate locality of children’s school friends. Children have previously had unmonitored contact with peers (e.g., ‘hanging out at the mall’), but at least teenagers could only meet others in the same locality, and only during specific time periods (e.g., the afternoon). With texting and chat rooms, even the restrictions of time and distance on the creation of peer communities have been eliminated.

9.2. Family Dislocation

We live in a world where movement is an inevitable consequence of a global information economy. Corporations expect individuals to move to where they are needed, and individuals have go where they can find employment suitable for their specialisation (or else settle for a lower salary). Individuals may also have to move to gain new experience and expertise that improves their training and heightens their promotion chances. The human cost is individuals who have moved away from their extended family, and, as they continue to move, also continue to friends behind them. Even people considered to be part of one family may be scattered, as there is an increase in bi-local families (families with spouses working in different locations). We have all become familiar with the use of electronic mail, mobile telephones, and the World Wide Web as a means of keeping individuals in touch in this new scattered world. Electronic mail is not as effective as telephones for providing emotional support, but it is cheaper for very long distances, and also more effective for keeping in touch with people who live in different time zones and who may be home at unpredictable times.

Although these technologies solve the problem of maintaining contacts in a world where people are often quite distant from each other, such technologies have to be understood in their wider industrial context. The technology that produces these communications technologies (including traditional telephones) is the same technology that led to families moving out to suburbs and individuals moving halfway across the globe, in the first place. New technologies led to the globalisation of production, distribution and consumption, which in turn led to changed organisational structures, which in turn required the movements of families and individuals. If it had not been for technology that enabled an industrial production system dispersed throughout the
world, there would have been no need for a communication system to keep individuals in contact. This is the continual story of technology: solving problems that only exist as a by-product of introducing technology in the first place. These communications technologies are merely enabling the recreation of family and social relations that were disrupted by technology-induced economic change.

Although new technologies often capture the imagination, traditional means of maintaining contact remain crucial. The telephone has grown in importance, since reductions in telecommunications charges make cross-continent or even global telephone calls affordable on a weekly, and, for some, even on a daily, basis. Improvements in technology have also reduced the cost of physical transport, so individuals can afford to travel more often than previously. The days of someone emigrating from Ireland, never to be seen or heard from again, are over. Even before the advent of the Internet, for instance, Irish illegals in the United States in the late 1980s kept in touch by meeting people recently over from Ireland, reading regional and national papers, watching sports matches on video or via satellite. This enabled “the immigrant community to continue to identify instantaneously with national and international events and issues from a distance… [and]… the 'psychological' distance from home is minimized by the range of mass media available to them through the neighborhood bars” (Corcoran 1993:104). However, with the advent of new technologies such as electronic newspapers and radio broadcasts on the web, participation no longer requires going to the local bar. At home or at work, individuals use email and the web to keep in touch with individuals and events at a distance. The constantly decreasing cost of telephone calls and physical transport increases the amount of communication and further enhance that participation.

Importantly, new communication technologies are location independent. Postal mail and traditional telephone lines connected places rather than people, and people had to be at the expected location to be contacted. If people were not at home, or moved, contact was lost. New communication technologies are not dependent on location; if someone has changed homes, jobs, or even countries; their email address stays the same, their personal web address stays the same, their mobile phone number stays the same, and (with the introduction of voice over internet telephony), even the traditional land line phone number might soon remain the same. If a person is moving locations during the day over the course of weeks or permanently, they can still be contacted. This change from location to person based communication now means that individuals can remain in contact over a lifetime, regardless of changes in circumstances.75 This encourages more intensive and frequent interaction, almost to the point where (especially for teenagers) not receiving messages or phone calls is cause for anxiety.

Person based communication facilitates the creation of virtual extended families. Cousins, scattered throughout the world, can now use the World Wide Web as a message board, as a family album for recording life events, for organising real meetings. As early as 1993, newspapers could report examples such as Fetternet, a family network of 50 relatives run over CompuServe, describing them as a close-knit group which stayed in daily contact through e-mail, despite wide-ranging locations such as Sao Paulo, Brazil; Berkeley, California, Corpus Christi, Texas; and South Bend, Indiana (Garreau 1993). As the penetration of new technologies increase (and the cost of digital photography and streaming video decreases), such virtual family homesteads are likely to increase. In the United States, extended families gather for Thanksgiving; in Ireland, for Christmas. Birth, deaths, and weddings also provide occasions for kin to reassemble in one physical location. These are the ceremonies or
rituals that help families maintain themselves. Now, if some of the family can’t attend, a CD, with digital photos and digitised commentary may be sent. Or perhaps photos will appear on the family web site. Telephone calls, on the day of the event, can help recreate the image of collective experience.

However, while new technologies often recreate the previously existing social networks of local communities, there are important differences between the traditional mode of face-to-face communication and electronic communication (including traditional telephone calls). Face-to-face communication is an ‘information-rich’ mode of communication, whereas the lack of non-verbal cues in electronic mail reduces the effectiveness of communication and increases the chances of misunderstandings (Kiesler, Siegel et al. 1984). Thus, while computer mediated communication may be better than nothing, there differences in social relations that are conducted electronically. The extent to which social relations can be sustained through electronic rather than face-to-face communication remains to be seen (Wellman, Salaff et al. 1996). Can strong bonds of affection be maintained when contact is largely electronic? Is a virtual Thanksgiving or Christmas as good as the previous assembling of the extended kin? Obviously not (except for those who want to avoid the ceremony in any event). Is it better than no contact or communication at all? Only future research will show how individual and family relations change as communication becomes electronically mediated.

9.3. Individual Empowerment

While changed relations with now distant family and friends are an obvious consequence of the demands of the global information economy, there are also less obvious changes in individuals’ everyday lives as a result of new work patterns. In the past, everyone went to work at about the same time, came home at about the same time, and relaxed at the same. Daily lives existing along parallel tracks; it was easy to contact people and it was easy to coordinate activities. Work patterns have changed as a result of the global information economy, with people going to work at differing times of the day, for different durations, and often in multiple locations, and with little advance planning. No longer is it possible to assume that two people would be off work at the same time and so would be contactable or available for a social gathering. In the face of lives that are no longer synchronized, new technologies enable the same coordination in private life that is commonplace in business life. If the person isn't at home when someone phones, the answering machine enables them to return the call, and organise a time when both are available. If the person is unexpectedly out of the home, they can be contacted by mobile phone, regardless of where they are. If the person isn't at home when a favourite programme is broadcast, they can record it for later viewing using a VCR. New technologies enable participation and interaction despite a new asynchronous life.

This transition to electronic, rather than face-to-face, communication has led to important changes in social interaction and participation. Previously, interaction with others was unavoidable - one met people on the street, or they called to the house. It was very difficult to avoid meeting someone, whether you wanted to or not, as one shopped, socialized, went to work, or even relaxed. For many, growing up in a village or small town meant a series of these involuntary relationships and interactions. This lack of privacy and lack of control over interaction can become very irritating. Technologically mediated communication (including telephone, as well as email) permits individuals to decide whether to interact or not. They can use caller id to see
who is phoning, or use the answering machine to screen calls. If a message has been left, people can return the call at a time of their own choosing (when they feel rested or able for interaction). For many, this is far better than having to talk whether you like it or not. One can even pretend a malfunction of the answering machine, and not return the call at all. Similarly, electronic mail messages can be read at one’s own leisure, and either ignored, or responded to at a later time. If desired, one can shop or bank from home, and avoid interactions with people on the street. Social interaction is by choice not necessity, and there has been a move from involuntary social relations to voluntary ones. People can avoid contact and so communicate only with those with whom they wish to. This decreases peoples’ ability to deal with conflict. Two recent studies of Internet use confirm that people intentionally use electronic mail to avoid saying unpleasant things to friends or relations (PEW Internet and American Life Project 2000; 2001a). Instead of confronting conflict and disagreement face-to-face, or even over the telephone, people preferred technologies that enabled unpleasant responses to be ignored. There is a real danger that individuals forget how to deal with interpersonal situations that involve conflict or disagreement.

This technology can also be used to communicate with people previously inaccessible and, potentially, create new relationships. We are all now familiar with electronic chat rooms, in which strangers can strike up ‘conversations’ with others. While chat rooms have become associated, for many people, with unsavoury activities (such as adults using chat rooms to exploit children), this leisure activity can also become the basis for long-term beneficial social relationships. People who feel isolated in their locality can make electronic contacts that provide an important remedy to this isolation. Imagine someone suffering from a disease. In some cases, it might be something that they do not want to reveal to others, whether it is cancer or AIDS or a learning disability. Perhaps they do not want their neighbours to know about it, but still need someone to talk with. Suppose, even if they did want to talk with someone, there was no one in the locality who know what the disease was or could understand the impact that disease was having? Such people can now find others, anywhere in the world, who share the disease and understand the impact it is having. These are people with whom one can share experiences, ask questions, complain to, and get emotional support from. Anyone who feels isolated and alone can electronically find emotional support, as well as information, that they could not obtain in a face-to-face community. Individuals who felt different and alone no longer have to suffer that isolation, they can break free and create new relationships in a wider world.

New technology has been enabling individuals to exercise more control, choice and autonomy; it can enable greater interaction and communication or it can enable isolation and privacy. People usually combine both, sometimes using mobile phones and answering machines to maintain contact, while other times using the same technologies to avoid contact. This is part of a general trend to life styles by choice rather than accident. Assuming sufficient access to economic resources (money), one can purchase the freedom to choose the personal identity that one wishes to present to the world. This is obvious when communication is via the computer, where people can choose false nicknames, but it is even more true in everyday interactions. Technologies such as contact lenses, lippo suction, tanning beds, hair colouring, are all used to create the identity presented in face to face communication. With increased buying power and decreasing cost of consumer good, additional identity choices are available through the clothes one wears, the food one eats, the recreational and entertainment choices ones makes. New technologies make such option cheaper to exercise and more effective.
Research in the United States gives a vivid picture of the extent to which individuals live their lives via new technology. As a recent survey of Internet use in the United States suggests, the Internet is becoming an integral part of social life. For instance, life decisions are now made with the help of the Internet:

- 29% of the Internet users who got additional education or training for their career say their use of the Internet played a crucial/important role.
- 27% of the Internet users who bought a car say their use of the Internet played a crucial/important role.
- 25% of the Internet users who changed jobs say their use of the Internet played a crucial/important role.
- 22% of the Internet users who found a new place to live say their use of the Internet played a crucial/important role.

Personal lives are also altered by the Internet:

- 24% of the Internet users who dealt with a major illness themselves say their use of the Internet played a crucial/important role.
- 26% of the Internet users who helped another person deal with a major illness say their use of the Internet played a crucial/important role.
- 33% of the Internet users who started a new hobby say their use of the Internet played a crucial/important role.
- 15% of the Internet users who started a new romantic relationship say their use of the Internet played a crucial/important role.
- 15% of the Internet users who ended a romantic relationship say their use of the Internet played a crucial/important role.
- 14% of the Internet users who got married say their use of the Internet played a crucial/important role.

These statistics (PEW Internet and American Life Project 2002) portray a picture of everyday life in which new technologies are important as earlier technologies such as the telephone or face-to-face communication. The same research group reports that new technologies are an integral part of the communications resources used to keep in touch with family (PEW Internet and American Life Project 2000), with over half of internet users reporting they have more contact with their family than before. Indeed, research from the same organisation (PEW Internet and American Life Project 2001a) of teenage use of new technologies in the United States paints a picture of a generation that shifts from one mode of communication to another constantly and effortlessly.

9.4. Autonomy or Subservience?

Although new technologies enable increased control and autonomy, there is a disguised price. A more accurate description might be the illusion of freedom, autonomy, and choice, but the reality of dependence and control. Perhaps the increased choice is only about superficial things. Consumer benefits, such as computers, mobile phones, fashionable clothing, exotic foods, are only available to those in earn sufficient income from participation in a world economic system. We have little choice but to work, and often have few decisions about fundamental issues as the kind of work available, the salary for such work, or the location of such work. We are all enmeshed in a market economy that we are unable to opt out of. There may be decreasing choice about fundamental issues over which individuals have little control and little policy input.

Our dependence is technological as well as economic. Traffic lights, dishwashers, answering machines, mobile phones, cars -- all of these are technology
activities in which embedded chips with pre-programmed software limit and constrain choice. How often, when using a word processor, do we change our behaviour to suit the programme, instead of getting the programme to do what we want? Yet, opting out of such control is difficult if not impossible, one can't ignore traffic lights, one can't re-programme the dishwasher, and one can not avoid word processors. One can hardly remain in office employment if unable or unwilling to use electronic mail (and promotion may be linked to technological proficiency). People who do not have a mobile phone may find themselves without a social life, since more social life is impromptu and it is difficult to organise such events without mobile phones. With embedded chips everywhere, more and more of our behaviour is governed by technology, and we are ceding control to those who design the technology. Furthermore, many of these technologies have an element of surveillance built into them. Mobile phones enables companies to track movements of individuals with increasing accuracy. Credit card transactions enable the tracking of purchases. Supermarket loyalty cards enable organisations to link individuals with specific commodity preferences. There may be an increased choice in information content and people with whom one communicates, but this requires standardisation of hardware and software that is sold by international providers such as Microsoft, Dell, Compaq/Hewlett Packard or IBM (who are themselves usually based in the United States). Increasingly, our lives are governed by technology that reduces our freedom and privacy, which we are unable to opt out of, and which is designed to suit organisations rather than individuals.

As economic activities become disembedded from social life, it is easier to accomplish more things during a day without human interaction. One can shop for good, pay bills, watch a movie, book a train ticket, all without dealing with human beings. As social skills decrease and stress levels rise, machine interaction becomes easier because it is more predictable and more controllable. There is a danger that individuals will there develop a preference for interacting with machines rather than people. Silverstone (1994) has already suggested that children can find the television more reassuring than individuals: it is always available, it does not get moody, and it does not respond negatively to the child’s behaviour. Similar concerns have been raised about children playing video games (Greenfield 1984; Turkle 1995; Turkle 1984). Many of our human skills focus on dealing with conflict and learning to live with diversity; we had to learn how to get on with people we didn’t like because we had to work with them or we had to live near them. If new technologies enable us to avoid such situations by opting out and we lose the social skills that develop out of such situations of unavoidable interaction, will we begin to prefer machines over humans?

There has also been a subtle change in the nature and range of social relations, as a result of new technologies. People have close friends or kin with whom we keep in touch, regardless of changes in employment, residence, or marital status. Then there are acquaintances that are easier to lose track of. Such contacts constitute ‘weak ties’ (Granovetter 1973; 1982); they are people you might go to for information, but would not ask for significant assistance. In the ‘wired’ society of global communication, individuals have links to other individuals scattered all over the world, following, almost physically, the spaghetti-like growth of wires connecting computers all over the world. We keep in contact with distant people and places, when we would previously have lost contact with both. We transfer messages amongst friends, so that friends of friends themselves become friends, and we have an impressive range of latent acquaintances that can be called on, as necessary (Wellman, Salaff et al. 1996).
has even been a growth in websites that will record an individual’s name, current email, and schools attended, so that people who attended the same school at the same times can contact each other. Educational institutions, especially Universities, are beginning themselves to encourage former students to maintain contact with each other, especially through the institution; such groups can be useful benefactors to the institution. There has been an impressive growth in the number of ‘weak ties’ which people can maintain using new technologies (and often using electronic diaries to maintain the list of such people).

These changes in participation and communication are not restricted to small elites; evidence indicates that an increasing percentage of the population of most industrial societies are participating in these new technologies. Seventy-five percent of households posses a mobile phone, residential internet access is nearly 36 percent, home computer ownership is 42 percent, and 33 percent of households own a DVD player (Central Statistics Office 2003a). These rates are not the highest in the world (Norway, Sweden, Italy, Portugal, Iceland, Luxembourg all have mobile phone rates above 84 percent, while, in terms of Internet usage, Austria (48 percent) Finland (53 percent), Luxembourg (54 percent),and Sweden, Denmark, the Netherlands (about 64 percent) are all higher than Ireland. However, Irish usage rates are still significant, considering that Internet usage in the United States is 60 percent, and the Irish mobile phone rate is significantly above the US rate of 60 percent (http://www.nua.ie). Most significant is the rate of increase. Mobile phone usage in Ireland rose from 43 percent in the first quarter of 2000 to 78% in third quarter of 2002. Furthermore, as of Feb 2001, 95% of 15-24 year olds had the use of a mobile phone. Use of the short message service (SMS or ‘texting’) rose from under one million messages during the first three months of 2000, to just under six million in the latter three months of 2002. Internet usage rates have nearly doubled in the same period of time (http://www.nua.ie). This is a transformation that is not restricted to a small segment of the industrial world and the social consequences will apply across gender and class divisions.

9.5. Virtual Reality

Technology has blurred the division between home and work, it has removed the limitations of place from interaction, and it has even blurred the very distinction between reality and illusion. Everyday experience has always had an authenticity that could not questioned, it combined visual, audio, and tactile information that could not be faked and so was authoritative because it was authentic. It is the ultimate multi-media environment, whereas technologically mediated communication is restricted to single-media with limited information content (radio plays audio information only; television relies largely on visual images). Electronic information could masquerade as anything other than a representation of reality, whereas ‘authentic’ reality was transparently obvious. Virtual reality technologies which try to blur this by creating convincing simulations of real experience have always been derided. Kids playing on video machines, pilots in flight simulation cabins, surgeons training on virtual bodies engaged in simulation that are transparently not real. Only desperate or gullible people would accept this substitute for everyday life as ‘real’. Thus, there is the technological world of imagination, and the everyday world of experience, and never the twain shall meet.

In fact, we all live in virtual realities. The term ‘virtual’ refers to the essence of an object or action. A person is the ‘virtual’ ruler or decision maker because they are the actual or effective ruler, whatever the formal trappings, or outward appearance. If
something is ‘virtually’ true (like the company is closing or the employee is being laid off), then it is true in essence, but usually not true in appearance. So, virtual reality is to abstract the essential bits of reality and represent them. In a way, maps and scale models are a ‘virtual’ reality - they are a representation that has captured the essential characteristics. A virtual reality is never expected to be a complete representation of experience, just a representation of the essential or crucial bits of experience.

Part of the process of experiencing such ‘essential’ aspects of reality is to suspend disbelief, often aided by technology. Voluntarily entering into an artificial experience is nothing new. This ability, and willingness, to suspend disbelief and thus enter into an imaginary world has been part of human life for centuries, with stories at bedtime, books, movies, plays, and so on. People have always not only suspended their disbelief but assisted in making the process easier. People watch movies in a specially darkened room with a large screen and high quality speakers because it is easier to ‘lose oneself’ in the theatre. People read books but turn off the radio, so as to lose themselves in the book more easily. The significance of new technologies has been to make it easier to suspend disbelief because the electronic creation is becoming more convincing. New technologies are increasingly multi-media and authentic, and the boundary between reality and illusion is becoming less clear-cut with every passing day, especially as many new technologies start with ‘authentic’ images that are then manipulated.

This has a number of implications. We are already dependent on technology for our picture of the outside world: we look at visual footage on television and believe that we are seeing real events. At one point, such images had to be real because we lacked the technology to create convincing replicas. However, the digital technologies that now represent reality (e.g., photos and TV coverage) enable those representations to be manipulated. Real photos can be altered, false photos can be made to look real, and entire movies can look real, but actually be made with computer animation. Gone are the days of watching a science fiction movie and seeing the zipper of the costume, or watching a news event and seeing the participants being prompted to engage in theatrically fake actions. It is perfectly possible for people to look at images on a screen, which are deemed ‘real’ because they are part of a news programme, even if the images are fabricated. People make the leap of faith and imagination to see them as real and react to them as ‘real’ events. They trust that journalists and news editors have vetted the images and deemed them authentic. We are increasingly dependent on the context of information as a means of authenticating it: it is real not because of any internal authenticity, but because it is validated by its context of being part of a news programme. Yet, this can go wrong. The fright of the War of the Worlds broadcast by Orson Wells in 1938 was because people believed in the authenticity of radio. It was understood to be a ‘live radio broadcast’ and so listeners imagined the world described by the broadcast to be real (Koch 1970). One has to trust that the source of information is providing accurate images and sounds; there is no way to tell, from the images themselves, whether the material is accurate.

Almost as worrying, people can also watch real events and presume them to be fake. In the first US led war against Iraq (Galvin 1994), there was excellent coverage of tracers of missiles over the sky. For many, there was little difference between those images and images in a video game. The visual images that came from the September 11th 2001 events in New York were horrific, but many people initially assumed that they were watching the special effects of a very good movie. Our reality is increasingly one in which telling the difference between reality and illusion is problematic. We can
no longer depend on the intrinsic characteristics of the information to decide if it is true or not - real events can look false and false events look real (c.f., Slouka 1995). We depend trusting broadcasters to have verified the material. Increasingly, however, as ‘news’ broadcasts come from a variety of sources, it is difficult to trust that such material has actually been vetted. As already noted, although we are also less and less willing to trust in the accuracy and impartiality of journalists or editors.

The blurring of ‘fact’ and ‘fantasy’ is especially dangerous for young people. Adults have learned to usually be able to tell the difference between real and illusory experiences. Although we can be mislead, if the material is presented in an authoritative manner, most of us can usually guess when an event ‘rings true’ or not. When we go to a movie or a play, we know that we are entering a world of illusion, we do not confuse actors with their persona on the stage. However, children playing video games may not be so experienced in telling the difference between reality and illusion. Furthermore, the video games are so convincing in their reality that it may be more difficult for children to learn the difference. All too often, now, children who see disasters on television may not be able to understand the people being filmed are not going to simply get up afterwards and go back to their everyday lives. This is all the more worrying in the case of children accessing pornographic images or movies on the Internet; the activities may be faked and, whether faked or not, presented as though they were a ‘normal’ part of everyday life. Children who are still learning what is ‘normal’ are in no position to dispute such implicit claims when watching pornography. The violence or sexual activity that children see on video may seem transferable to everyday life, as children act out what they have observed electronically. The debate is on going about the long-term impact of video games (Greenfield 1984; Herz 1997; Provenzo 1991; Sheff 1994; Turkle 1995; Turkle 1984), but it is obviously a concern for the future.

There is also a concern that adults might find virtual reality to be an all too satisfactory alternative to the problems of everyday life. Just as electronic mail is not a convincing alternative to face to face communication but simply better than nothing, virtual reality may be unconvincing but still better than the alternatives. There tends to be an assumption that technologically mediated communication could never be as ‘real’ or satisfactory as face-to-face communication, but the truth is more complex. People find themselves emotionally involved, and moved, by books they read or movies they watch. It is possible to have a significant emotional reaction to a fabricated and artificial experience, depending of the extent to which one ‘suspends disbelief’. Family members are well able to sustain emotional relations via telephone or letter, despite the technological limitations of each. People are well able to project emotional values onto the relatively ‘flat’ communication content of a letter or phone call (as compared with the richer content of face to face communication). Technology is making it easier to recreate the media richness of face-to-face communication, thus making it easier to project emotional or personal content onto messages.

New technology also enables people to presume a familiarity and intimacy with strangers. Public figures sometimes encourage this, as when Franklin Roosevelt, President of the United States, had ‘fireside chats’ with the nation over the radio in the 1930s (Beniger 1986). This enabled people to feel they had a personal relationship with a distant and impersonal government. Many media personalities cultivate this sense of ‘personal presence’ to sell their products and thus enhance their commercial value; they may encourage stories of their personal life to appear in public press; they may hold ‘chats’ on the internet, or they may encourage personal web sites. Sometimes there is
an illusion of a two-way communication flow, with some email messages being answered or some personal appearances being made. Individuals themselves may want to presume intimacy and familiarity, as though they personally ‘know’ news presenters or soap opera stars. Such a sense of personal contact may actually be a good thing, especially in so far as it gives people a sense of personal participation in an increasingly distant political and social system.

The debate on technologically mediated communication and personal relationships continues. Some suggest that individuals will use technologically mediated communication to create and maintain emotional relations that are ‘virtually’ (pun intended) the same as ones that depend on face-to-face communication. Others argue that the limitations of technology will always constitute a barrier to such rich relationships. It is not yet clear whether these technologies will make it easier to people to maintain rich emotional relations with distant family and friends, or simply serve as a complement to existing face-to-face relations. The anecdotal evidence, however, suggests clearly that some people are quite able to project strong emotional feelings onto the messages that circulate on the Internet. Stories abound of long lost friends reuniting over the Internet, and even long lost loves that re-establish their relationship via email and mobile phone calls (Weale 2002). It is clear that technologically mediated communication differs from face-to-face communication not only in its content, but, as with any technology, how it is appropriated into everyday life. For example, it enables private communication without observation. It is difficult to ‘meet’ someone in a pub or party without spouse, friends, or family knowing, but it is relatively simple to privately meet the same someone electronically. It may also take quite a long time to exchange personal information, when face-to-face meetings are short and unpredictable; quite a long of information can be exchanged during solitary and uninterrupted sojourns in front of a computer. Verbal speech did not replace non-verbal communication and can not be analysed in the same way as non-verbal communication and writing is similarly different from speech; technologically mediated communication is not a replacement for face-to-face communication, but a hybrid that must be analysed in its own terms (Lea 1992; Mantovani 1996).

9.6. Reality and Authority

The discussion of virtual reality emphasized our dependence on authorities to help us decide if news, or any other information, is ‘authentic’ or not. This is true of information on the World Wide Web, where fake or unsupported claims can look as accurate as well documented claims; we are dependent on the source of the information to determine the accuracy of the information. This dependence on authoritative sources is developing just as the very basis of ‘authoritative’ sources is being questioned. The Information Age has witnessed an increased amount of information in circulation, but also an increased diversity of information. With increased choice, there is now conflicting information circulating on any issue or any perspective under the sun. Previously, when faced with conflicting information, people trusted a single authoritative source. However, recent decades have seen a decline in people’s trust of science as an authoritative source. Scientists were once seen as disinterested researchers, and science proclaimed undisputed facts. Now, scientists are often seen as having their own vested interests, and science has been responsible for getting things wrong as often as right. For some, science increasing the extent to which we are all at risk. Pesticides which were supposed to enable greater food production at less cost are now seen as poisoning both the environment in general and food in particular. Nuclear
energy was supposed to be a safe and clean source of energy, but is now seen as creating residues that will take centuries to disappear. Opposing factions now find ‘scientific evidence’ as well as scientists to support their position; in the “right to life”/abortion referendum in Ireland in March 2002, opposing sides were able to find both scientists and scientific facts to bolster their opinion. Since both parties claimed the authority of science in media reports (television, radio, newspaper reports), voters had to evaluate these claims and counter-claims using other criteria.

The perception of danger and risk has been increasing while the credibility of scientific authorities decreases. Medical information illustrates the demise of a uniform, authoritative, viewpoint. In the past, one went to a local doctor who made an accurate and impartial diagnosis and then provided an up-to-date and relevant treatment. Now, some people see doctors as making prescribing medication simply to satisfy the patient or because the doctor has been encouraged by drug companies to use a particular medication. Some doctors may make accurate diagnoses, but others may make mistakes; some may provide the best current treatments, but others may prescribe inappropriate or outmoded treatments. People often use the Internet to reduce their dependence on local doctors, and try to make their own diagnosis or look for alternative treatments. The local doctor is no longer the single source of information about all medical matters, but simply one of a number, and it is the patient who decides which source of information is to be used. While some doctors encourage patients to seek alternatives, and then participate, with the patient, in determining the best course of action, it is often the patient who makes the decision. Sometimes, the decision is accurate, but the patient just as likely to inaccurately diagnose the condition or decide on an inappropriate treatment, with consequences for the patient’s health.

We live in a differentiated society in which we are all dependent on specialist information outside of our own control and knowledge. Yet, people are also less trusting of others as providers of accurate information. Individuals must decide for themselves what constitutes an authority, often with insufficient knowledge or experience of the area on which to base a decision. We all have the experience of asking friends for a ‘good’ plumber or a ‘good’ doctor, or trying to leverage one’s own position or connections to get ‘better’ treatment; these are consequences of combining dependence with insufficient experience to evaluate experts. Then has been a growth of web sites that are intended to provide users with exactly such expert opinion: medical sites to help diagnose illness, computer sites to help buy the best computer, financial sites to help make investment decisions and so on. You can buy online but first see whether have been satisfied with the supplier. There are even sites which record collate opinions about service providers (plumbers, electricians, and so on) in the local community, so the individual can find a ‘good’ plumber if there are no recommendations from friends or family (Power 2001). New technology is trying to overcome yet another problem that is a by-product of the digital revolution: how can individuals find and evaluate the information on which they are increasingly dependent when living in a diverse and conflicting information universe?