

Sarah Platt

University of Greenwich - Media and Communication Studies BA (Hons)

DIGITAL DIVIDE DISSERTATION: MAY 2001

“There are some gaps that are definitive and cannot be breached”

Jean Baudrillard

By discussing the social, cultural, economic and political implications of the digital age, is it possible to estimate how far our lives will be affected by our ability or inability to access and utilise information technology? Discuss the inequalities that are created by the digitisation of information, in light of recent debates surrounding the so-called “digital divide.” If such a divide exists will it close or widen in the coming years and what will be the significance of such divides within our society and communities? Is the Internet a new force for democracy or simply another medium for furthering the reach of capitalist ideologies?

In the post-industrial era modernity's continuing strive for progress, combined with the technological imperatives of governments and corporations, has created a world where there are huge and far reaching discrepancies between rich and poor individuals and nations; and between those who have the means and ability to access information technology and those who do not. For many of us living in the developed world, the pace of change and the speed of technological development seems almost impossible to keep up with, yet paradoxically, technology has infiltrated our lives in so many ways that we almost see it as an essential part of our existence. In this scenario it is all too easy to forget that millions of people are still living in relative or absolute deprivation. Hunger, poverty and lack of education are all still prevalent in many areas of the world – and even on our own doorstep. Those of us who are lucky enough to feel that we are a part of a 'digital age' should not feel guilty about our privilege, but instead use the knowledge we have to help others living less fortunate lives.

The very nature of our mediated world makes it more and more difficult for us to engage with critical thought, and our 'sound bite culture' allows us to switch off whenever we choose to do so, but as we progress we are likely to see a further disenfranchisement of those who are still excluded from the digital age – that is, unless we continue to address the many issues surrounding the gaps in information provision within our societies those gaps will simply widen and deepen.

This dissertation will focus on the current debate surrounding the issue of the so-called 'digital divide' in relation to popular discourse within the current media environment, and also making use of the ideas of several theorists. It is hoped to establish what is meant by the term 'digital divide' and then to explore the implications and significance of any existing technological divides, in relation to other factors such as literacy, age, location and so on.

The digital divide can be said to exist at many levels: locally, globally, economically, physically, mentally, and so on. It is important and necessary to understand the nature and focus of each of these levels in order to begin any useful argument on this complex subject and most importantly to work towards realistic solutions for closing the gaps that exist. Here, the issue of the "digital divide" will be addressed by looking at the current media environment, assessing recent UK government initiatives from a critical perspective and also in the light of recent reports which have been published in reference to this subject (Booz, Allen & Hamilton, Demos, and other surveys).

It is aimed to establish some clarity about the nature of a "digital divide" and also to raise questions about technology's possible future effects on human existence – culturally, socially and politically.

What do we mean by digital divide?

There is evidently a clear divide between those who have access to technology, and those who do not, however, as with most things in life, the situation is far more complicated than it seems on the surface.

Firstly, there are still vast areas where computers are completely absent and over half the world's population has never used a telephone¹. Secondly, only about 2% of the world's population are connected to the Internet.² We must also bear in mind people's attitudes to technology and the fact that their language, culture and way of life may make technological advances seem irrelevant or secondary to other, more pressing, day-to-day concerns.

Many communities around the world do not even have regular access to electricity, clean water and basic medicine. If your day involves a ten-mile walk to fresh water, it is difficult to imagine how a PC and a modem could make a difference to your life. If we contemplate the poverty gap alone, discussion of providing PCs and computer training can seem facile and meaningless, however the importance of the discussion becomes clear when we consider the benefits that information technology has brought to us in the last fifty years or so.

There has been considerable discussion of the real benefits of computers in areas of the world where people are still just struggling to survive. What is emerging is an idea that countries, which have not even reached the Industrial era, will simply leapfrog into the information society. This may seem idealistic, but could possibly be realised in the long-term if practical systems and policy are put into place. However, the very fact that even within the most developed countries - who are supposedly leading the 'digital revolution' - there are still thousands of people living in poverty, homelessness or leaving school unable to read, makes all this talk seem like blind optimism. The main difficulty in discussions of the digital divide is that there is no single divide, but many smaller ones, intrinsically linked together but individually multifaceted.

The notion of an underclass has caused a certain degree of controversy both within and outside the bounds of the academia. One critic points out that, "A good deal of this stems from the fact that the idea has been media and politics driven, having been taken up by journalists and amplified in books and

¹ www.unicef.org

² Keegan, Victor, Divide and Rule Out, in *The Guardian*, December 14, 2000.

newspaper articles.”³ It is true to say that there has been considerable attention paid to this subject within the media sphere, however, in order to place the ‘notion’ of an underclass within a more balanced and critical framework, we can look at the work of theorists such as Herbert Schiller, Manuel Castells, and Jurgen Habermas. The approaches of these thinkers serve to illuminate recent happenings in the world in relation to globalisation, capitalism, democracy, citizenship and the collective uses and influences of information.

In Manuel Castells work on what he calls the *Informational City* he pays considerable attention to the notion of a ‘digital underclass’ in regard to the development of vast IT networks. He argues that within modern societies most importance is placed on the information flows that organise our economics and social activity, and that these information flows reduce spatial and geographical boundaries. “The flow of information may indeed be emerging as the central feature of the ‘Informational Society’ and this reliance on networks is reducing the restrictions of place on contemporary activities.”⁴ In particular, Castells looks at the way that information organises our lives in large developed cities:

“The networks must have nerve centres, places through which the information does not merely flow, but where it is collated, analysed and acted upon. Castells suggests that these nodal points are to be found in certain metropolitan cities which, as they have recently developed, undergo changes in class formation that have major consequences for the conduct of urban life.”⁵

The changes in class formation, which Castells points to, are argued to be changes which have occurred in direct relation to the spread of networks which transcend any limitations once imposed by place. Social mobility today means more than just moving from a small town to the bright lights of the city; it means attaching yourself to a global network and interacting with information and people from all over the world. Internationalisation of economic and social activities means restructuring the way we work and live: for the poorest sections of society, this could have devastating consequences. Networks may allow corporations and individuals to expand their sights, but at the same time they can reduce social mobility for those left unconnected.

In the informational city, those unable to achieve access to elite information oriented jobs (or those termed the underclass) may suffer greatly if they are not in some way included in the trend towards a full the Knowledge Economy. From sociologists of the Right there has been a certain level of scepticism

³ Castells, Manuel, *The Informational City* – in *Theories of the Information Society*, Frank Webster, Routledge, 1995, p202.

⁴ Castells, Manuel, *The Informational City* – in *Theories of the Information Society*, Frank Webster, Routledge, 1995, p202.

towards the value of the underclass concept, even going so far as to say that those living in poverty today are feckless and lacking in initiative, "...the concept [of an underclass] at least in certain versions, fits easily with punitive attitudes towards those at the bottom of our society, regarding them as responsible for their demise."⁶ Of course, it has proved relatively easy to show that most poor people are neither feckless nor criminal as some would purport, but the danger of this type of sceptical attitude is that it could eventually seep into the unconscious of a large part of the population. The power of the media to misrepresent complex subjects and to demonise certain groups means that extreme caution and tact should be used when addressing the notion of any divide that affects human existence.

One example displaying a worrying mix of scepticism and technological determinism can be found in an article by Ian Angell, writing in the London School of Economics Magazine. He begins with a depressing overview of the state of the world,

"The very nature of work, of institutions, of society, and even capitalism itself, are mutating. These mutations are confronting each other in the political power vacuum left by the fall of communism, and the increasing impotence of liberal democracy, as the utopia promised by science and technology has turned into a nightmare for the "common man". Poverty, unemployment, pollution, overpopulation, mass migration, global plagues etc, have left us with a world full of frightened people. For the masses will not win in the natural selection for dominance of an increasingly elitist world."⁷

Angell says all this as if our fate was predetermined and he neglects any notion or possibility of change in favour of a resignation to the 'fact' that the rich will triumph over the poor. This type of determinism is exactly what could see this vision fully realised, were it not for the efforts of those concerned with equality and democracy. It is therefore evident that it is the transference of human ideas, discourse and language and *not* the predetermined qualities of technology alone that will alter the world. In reference to globalisation and localisation, he begs the question, "But why is this happening now?" He continues, "The answer is quite simple: a new order (which many will call disorder) is being forced upon an unsuspecting world by advances in telecommunications. The future is being born in the so-called *information superhighways*."⁸

Angell falters again on several points: 1) The answer is not simple at all, but highly complex due to the innate complexity of life itself and the many sociological, historical and political factors to be

⁵ Ibid, p200.

⁶ Ibid.

⁷ Angell, Ian, *Winners and Losers In the Information Age*, London School of Economics Magazine, Summer 1995, Vol 7, No1.

⁸ Ibid.

considered. 2) Any new order (or disorder) to be ‘forced’ upon us is not really at all unsuspected, especially since the media’s penchant for all things technological seems universal. Many of us are all too aware of the advance and possible consequences of global techno-capitalism. 3) A future cannot be ‘born’ in electronic networks since it is the future, i.e. it has not yet happened. Perhaps this is just all too philosophical for Angell to consider. He continues his article by looking at a report from *The Guardian* which it seems surprising that he even read considering his obvious conservative tendencies:

“That the roles of governments and organisations are converging was unconsciously highlighted in the Guardian of 10 December 1993. They asked the question: “what’s the difference between Zambia and Goldman Sachs?” The answer: “One is an African country that makes \$2.2 billion a year and shares it among 25 million people. The other is an investment bank that makes \$2.6 billion...and shares it between 161 people. FAIR ENOUGH! Of course the “bleeding heart” liberals of the Guardian haemorrhage at such gross unfairness and make snide comments about “Goldmine Sachs”. Unfairness? They fail to see that the symbolic analysts of Goldman Sachs earned that money. Yes, they earned it, and they earned it fairly. To the knowledge workers, this call for fairness is the mere whinging of failures and parasites.”⁹

Angell and others like him, believe that knowledge workers should reap the benefits of their hard earned positions, and whilst no one would deny that they should be rewarded for their work, it is almost unbelievable that someone should suggest that anyone not involved in the Knowledge Economy should simply resign himself or herself to the fact that they cannot win. Angell is wholeheartedly encouraging the new meritocracy at the same time as the more liberal thinking commentators are warning of further exclusion from basic services and opportunities essential to achieving a decent standard of living. “We have always lived in information economies. What is really new is that we are now in a personal information economy – one that produces, manipulates, stores and trades personal data on a global industrial scale...This means the debate about information exclusion should really focus on the extent to which we want untrammelled meritocracy.”¹⁰

Angell rounds up his rant with a denigration of ‘the masses’ and general put-down of liberal democracy, “As far as global enterprises are concerned liberal democracy is an artefact of the Machine Age, an ideology from a time when the masses were needed – but it will soon mutate into

⁹ Ibid.

¹⁰ Demos, *Divided By Information*, Perri 6 with Ben Jupp, March 2001.p7.

This essay is licensed under Creative Commons (Attribution + Noncommercial (by-nc))

irrelevancy.”¹¹ So whom does Mr Angell think will cook and serve him his three-course dinner when the masses are no longer needed? Who will clear his rubbish, clean his office, make his suits or tiresomely create the databases by which he appears to so vehemently abide? It is this type of self-gratifying determinism that causes the future to appear in black and white, when in fact it will be a multitude of colours. Five years on from the time he was writing, liberal democracy may well be undergoing a crisis, but it is showing no signs of ‘mutating into irrelevancy’, indeed increasingly, people are becoming concerned with local empowerment, the encroachment of global corporations and the privatisation of government services. We may be moving towards a meritocracy, but awareness of this phenomenon can be seen as the foundations for a different future to that of which the determinists so easily conform.

There is a sense in which the bottom section of society is seen to be marginalized because of being trapped in a ‘culture of poverty’ or what is more commonly known as a ‘viscous circle.’ There is a danger that this view could also create further animosity towards those living in the worst conditions, since from this standpoint, people are seen as incapable of taking responsibility for their situation or doing nothing to augment their standards of living. “Above all perhaps we ought to be sceptical of ‘culturalist’ accounts of the underclass which explain it as a result of lifestyle choices while ignoring more robust ‘structural’ evidence which shows that those at the bottom of society are there largely because there are proportionately fewer jobs around nowadays than twenty years ago, because there is more part-time and casual work available and this translates into lower income going to those who have no choice but to take it, and because government policies since the late 1970s have benefited the rich while exacerbating the conditions of those in poverty.”¹²

Bearing this in mind Castells sees the creation of ‘global cities’ as developing concomitantly with the creation of ‘dual cities’ where the working class is practically abolished and the underclass (estimated to be about 5% of the population) grows. “In this way the ‘Informational City, the Global City, and the Dual City are closely inter-related.”¹³ He sums up the relationship between globalisation, localisation and information workers thus:

“At the outset we may contrast their orientation with that of members of the underclass. Here what is most striking is the global outlook of the information professionals which is opposed to the intense localism of the underclass...it is the localism of the underclass that most impresses. Members here are frequently locked into a familiar and fixed pattern of relationships, into a neighbourhood with distinct

¹¹ Angell, Ian, *Winners and Losers In the Information Age*, London School of Economics Magazine, Summer 1995, Vol 7, No1.

¹² Castells, Manuel, *The Informational City* – in *Theories of the Information Society*, Frank Webster, Routledge, 1995, p203.

¹³ *Ibid*, p204.

territories, and they often lack the means or motives to travel any distance from their own realm. It is astonishing that, amidst the 'global city', there are segments of the population that rarely leave it, for example never moving from Stoke Newington to visit say Buckingham."¹⁴

Herbert Schiller's Marxist analyses have been criticised for their lack of empirical evidence, however, where information exclusion is concerned. His insistence on looking *behind* information and in order to define the structures, such as ownership and other economic features can be useful in viewing information and technology as products of capitalist society. His argument is that class inequalities are a key dynamic in the debate about dissemination, access to and generation of information, and he sees corporate capitalism as the chief beneficiary of the 'information revolution'. Although he has been criticised for his model's failure to take into account *cultural* as well as economic capital, his work does expose the structures by which technology is developed and implemented and also by which, extreme wealth and power are generated. Schiller's work also centres on what he calls 'garbage information' and in terms of the digital divide; this notion opens up another avenue for consideration. At the beginning of the twenty-first century (in the developed world) the entertainment industry is booming and it is inevitable that as the costs of hardware come down with market forces, the Internet (or its future equivalent) could soon be much more universally available - whether through televisions, PCs or mobile applications. However, Schiller argues that a divide will also be widened between those who are educated, privileged or rich enough to access sophisticated information; and those who simply take in superficial mass entertainment.

Given the present conditions in developed countries, whereby we are constantly bombarded by junk mail, advertising, twenty-four hour television and so on, it is easy enough to imagine how cyberspace could be taken over by 'information glut' – some would argue it already has. For Schiller, "...the 'information revolution' has given the 'information poor' titillation about the collapse of royal marriages, daily opportunities to gawp at soap operas, graphic discussions of the sexual prowess of sportspeople – but precious little information that may let them in on the state of their society, the construction of other cultures, or the character of and reasons for their own situations."¹⁵

There is not only a gap between rich and poor, but also a gap between those who have had the opportunity and time or even the *inclination* to become involved with computer technology. In the UK, the Which? Online Annual Internet Survey 2000 revealed that fifteen million Britons felt that the Internet was 'irrelevant to their needs.' Even in developed countries there could be said to be a gap between those

¹⁴ Ibid, p208.

¹⁵ Schiller, Herbert, *Advanced Capitalism*, in *Theories of the Information Society*, Frank Webster, Routledge, 1995, p92.
This essay is licensed under Creative Commons (Attribution + Noncommercial (by-nc))

who have just interacted with a computer for the first time and those who are comfortable with FTPs, MUDs, user interface, floppy disks and so on. A gap also exists between urban and rural areas, where those who live in cities are in a much better position to benefit from faster connections and the increased provision of cable and broadband networks. There is also a major concern regarding those who face being isolated from the digital age by a physical or mental disability. Even further down the line, there are also those who consciously choose to disengage. Every discussion of the divide must take into account psychological barriers; social and cultural factors that affect the way that people engage, ignore or miss out on technology's benefits. It is also of the utmost importance that we pose the most difficult existential questions, i.e. has digital technology really benefited our quality of life? Has it created a more democratic society or simply enabled the elite to advance even further from those at the opposite end of the scale?

When we address these questions it may first be useful to look at some definitions of the digital divide and reference to its existence that have appeared in recent publications, using the statements themselves as a guide to assessing common conceptions (or misconceptions) about the digital divide. The task of bridging the divide is currently being given much attention by various organisations and government bodies, particularly in the USA - the irony of it all is that most discussion of the subject has taken place in cyberspace. The Digital Divide Network (www.digitaldividenetwork.org) is a web resource for researchers, workers, and campaigners and basically anyone interested in this issue. Their definition is as follows:

“ We use the term “digital divide” to refer to this gap between those who can effectively use new information and communication tools, such as the Internet, and those who cannot. While a consensus does not exist on the extent of the divide (and whether the divide is growing or narrowing) researchers are nearly unanimous in acknowledging that some sort of divide exists at this point in time.”¹⁶

The definition above is broad and balanced, and focuses on effective use of new technologies and not simply access to them, in contrast, the digital divide section on Microsoft's website, with their usual air of euphoric platitudes, reads, “Technology today is enabling many Americans to reach their goals and realize their dreams. But although technology may seem widespread, many Americans still have little or no access.”¹⁷ Microsoft's efforts to help bridge the divide focus on access to technology and

¹⁶ The Digital Divide Network (www.digitaldividenetwork.org)

¹⁷ From www.microsoft.com/digitaldivide

unfortunately, as the statement below makes clear, they fail to recognise that it is obviously only the first step towards universal inclusion.

“For more than six years Microsoft Corporation has been committed to helping bridge this divide, and has created and supported a number of efforts designed to provide equal access to technology across the nation. In the past three years alone, Microsoft has given significant amounts of cash and software to help thousands of organizations provide technology access to undeserved communities, including public libraries, colleges and universities, and community-based non profit agencies.”¹⁸

Whilst it is fair to say that Microsoft has handed out valuable donations for various initiatives, there is no mention here of the sociological or psychological barriers to computers and digital networked information. Emphasis on access, whilst being reasonably encouraging, means that other issues such as literacy are overlooked. Considering the fact that according to Unicef, nearly a billion people entered the 21st century unable to read a book or sign their name¹⁹, it is amazing how such a burning issue can be swallowed by talk of ‘cash and software’:

“When it comes to the digital divide, literacy is an issue that is often overshadowed by access. But think of it this way: if every family, every community had Internet access tomorrow, would the digital divide be solved? Unfortunately, the answer is no. Unless all citizens are able to learn and apply a wide set of literacy skills, mere access to technology will mean very little to them.”

It is also interesting to note that Microsoft’s statement (although posted on the *world wide web*) talks of providing access “across the nation” and neglects to mention the rest of the world, where its transnational reach has evidently had an enormous effect on trends in the rise of computer usage. As a global corporation, operating in the so-called ‘global village’ and hugely responsible for developing the worldwide trend towards a digital economy, it seems inappropriate that Microsoft’s focus is so ethnocentric.

There is much concern that underdeveloped countries will fall further behind if their citizens and governments cannot keep up with advances in information and communications technology. Many parts of Africa for example are incessantly struggling to cope with famine, drought, and disease; if these countries’ governments have difficulty providing basic healthcare, how will their infrastructure and

¹⁸ Ibid

¹⁹ www.unicef.org

economy support investment in new technologies? At present, Internet access in Africa has barely scratched the surface:

“The total number of computers permanently connected to the Internet in Africa (excluding South Africa) finally broke the 10 000 mark at the beginning of 1999 and in Jan 2000 it stood at almost 12 000, an increase of 20%...Nevertheless this still means Africa has about as many hosts on the Internet as a small eastern European country such as Latvia, which only has a population of 2.5 million (compared to the 780m people in Africa as estimated by Unicef 1998, about 13% of the total world population.”²⁰

In the UK, the latest reports show that Britain is certainly not leading in terms of Internet penetration and is described by Booz Allen Hamilton as being ‘top of the second division’, with the United States, Sweden and Finland much further ahead. In the opening summary of their *Achieving Universal Access* Report (March 2000) they state that:

“While the UK has become Europe’s leading e-commerce market, research shows an emerging ‘digital divide’ that threatens to leave 20 million people excluded from the Knowledge Economy in three years time, a gulf with severe economic, educational and social implications.”²¹

The implications of the digital divide are set out in the report and 10 major initiatives are suggested for the UK government to follow, the goal of universal access however still remains a long way from being realised. One key feature of the Booz Allen report is echoed in other publications, “If a significant set of the population remain offline, government will have to run parallel structures, adding to the cost and complexity and reducing the potential savings of e-government.”²² It is obviously of benefit to the government to get all services online, but if the cost of running parallel structures becomes too great before the poorest sections of society are connected, then will sufficient measures be taken to subsidise their needs? The paradox of this situation is that those most in need of government services are likely to be lowest on the commercial sector’s list of priorities and as governments seem to be increasingly favouring big business, there could be a distinct lack of investment unless adequate policy measures are taken.

²⁰ African Internet Status report <http://www.picnet/articles.php3?id=459> news article by Mike Jansen.

²¹ *Achieving Universal Access*, Booz Allen & Hamilton, London, March 7th 2000.

²² *Ibid.*

Once we have established what the digital divide can mean, we can then begin to look at the effect it will have on those left behind by technological advancements. Will lack of access and skills immediately mean a poorer quality of life than those connected? Equally we must ask the same for those connected – how will an increasingly digital life affect our realities, identity, relationships, communities and so on. Will these gaps close or widen during the coming years? The fact that users will need much more than mere availability is touched upon in the Booz Allen report, “to fully capture the benefits of the Knowledge Economy users ... must move beyond passive browsing. They must become active users – participating in discussions, educating themselves, making transactions and engaging in commerce.”²³

The reality of people quickly becoming highly engaged ‘active users’ is probably a long way off. But this factor provides the basis for later discussion within this study relating to the Habermasian notion of an Ideal Speech Situation and other debates surrounding issues of political engagement and social interaction.

Media Culture and the Digital Divide

The ways in which we form our beliefs and identities within the realm of mediated experience certainly deserves some discussion in relation to the digital divide. Media culture in the developed world presents capitalist ideologies and reinforces stereotypical Western ideas, for example, about ‘ideal beauty’ or ‘being rich’. There is much concern that these beliefs will be spread by new technologies to the detriment of indigenous cultures and local communities. As Douglas Kellner states, “Media culture provides the materials to create identities whereby individuals insert themselves into contemporary techno-capitalist societies and which is producing a new form of global culture.”²⁴ Some argue that media culture is ‘undermining human potentiality and creativity’ and it is this process which can be said to be producing new societies in which ‘media and technology become the organising principles’ of everyday existence, therefore supporting any existing structures of control and repression. The argument is that our increasingly mediated forms of communication neglect to emphasise qualities of human nature such as instinct, impulse and other random existential factors.

Much like Schiller’s notion of ‘garbage information’, Baudrillard was greatly concerned with the ‘ceaseless circulation of signs’ and he asserted the disappearance of the subject, political economy,

²³ Ibid.

²⁴ Kellner, Douglas, *Understanding Media Culture*,

This essay is licensed under Creative Commons (Attribution + Noncommercial (by-nc))

meaning, truth, and the social in contemporary social formations.²⁵ He argued that individuals in the post-modern world have abandoned the “desert of the real” in exchange for *hyperreality* and technical mediated experience. When we consider that, “In one hour’s television viewing, one is likely to experience more images than a member of a non-industrial society would in a lifetime.”²⁶ We must surely wonder what the ultimate consequences of the explosive growth of mass visual culture and signification will be. It has without doubt had a great effect on our perception of reality, but what is not yet clear is how far this effect is positive or negative. What we can say however is that under capitalist conditions, mass media and image-based culture have created a population greatly concerned with aesthetics, material wealth and image.

In relation to the digital divide, Baudrillard’s notion that the ‘real is abolished’ by contemporary mediated experiences deserves some attention for two reasons:

1) Because the further citizens move their everyday experiences online, the further it will be possible for them to bypass any information which they do not feel is relevant to their lives. In a world that provides entertainment for almost every niche market, offers chat rooms for the weirdest of fetishes and gives us amazing connectivity to our friends and family regardless of geography, then why would anyone choose to view lengthy investigative news items or get involved in an online community project which does not cater to their individual tastes?

2) If universal access were achieved there is a danger that our reliance on mediated information would grow exponentially and that the ‘authentic’ would disappear altogether.

Similarly, Debord’s analysis of capitalist society has a notion of an ‘integrated spectacle’ but he also promotes the idea that because the masses are removed from the process of image production, they are “forced into a form of stupefied passivity”²⁷ If this is the case, then we can see that new technologies (such as digital imaging and the ability to endlessly reproduce electronic information) could possibly allow for a new type of engagement with media production, moving the process nearer to the end-user rather than the traditional top-down model of dissemination of information. However, it is difficult to see what ‘freedom’ will be gained by this, since traditional patterns of media ownership are already being reflected in online media and furthermore, any powerful organisation that wishes to reach out to the

²⁵ Ibid.

²⁶ *Information and Postmodernism in Theories of the Information Society*, Frank Webster, Routledge, 1995, p177

²⁷ ²⁷ Kellner, Douglas, *Understanding Media Culture*, p 147.

masses can now produce their own media products and market them directly to their target audience. The cost of producing digital text, audio and video may be minimal, but the costs involved in making people aware of your website and considerations such as the endless updating of search engines are another matter entirely. With so much competition, unless we know what we are looking for we may find ourselves absorbing more and more media imagery without any regard for whether it is actually, fundamentally useful to us or not.

Technology: good, bad or neutral?

A dominant perception of technology today is that it has somehow run away with us and we are led to believe that technology *itself* is driving our lives in certain directions. If this is the case, then surely we must wonder who or what is the driving force behind technology? Somebody has to put the plans into place, create relevant policy and invest in each new step we take. Unfortunately, this question gets lost amongst the hype of 'surfing the information highway' and the overarching media image which presents computers as being the absolute way forward for progress and increased quality of life for all mankind.

The Internet hype that continues to surround us in ubiquitous advertising campaigns from the likes of Microsoft, Intel, Hewlett Packard, British Telecom and so on, paints a very different picture of cyberspace to the reality of sitting at a desk staring at a screen for hours on end. The media culture which dominates developed societies in the West today continues to support a vision of the Internet as a Utopian, liberating phenomenon, and yet the actual experience of using it, for many individuals, can be greatly hampered by poor connection speeds, badly designed interfaces, and information overload. Surrounding us every day in the city, on billboards, in tube stations and on our televisions; there are literally thousands of advertisements hailing the Internet as the final frontier for humankind and the prefix www. has become so commonplace that it is already being dropped from some advertising campaigns.

The majority of advertising images today portray the Internet as a liberating technology (e.g. Nortel Networks latest campaign "What do you want the Internet to be?"). With special effects and futuristic iconography, the image of the Internet has been constructed for us as being a place of boundless new frontiers and all encompassing global reach. Of course, nowhere in Intel or MSN's advertising would we be likely to find evidence of the current disparities in Internet provision: we are simply, gently urged to log on, get connected and 'surf'. Whilst the benefits of networked technology are clear, in popular culture, there has so far been little attention paid to the dark side of cyberspace.

This essay is licensed under Creative Commons (Attribution + Noncommercial (by-nc))

The potential capabilities of virtual reality and image manipulation have now also been brought into the equation of media effects and the subject of 'our growing separation from reality' has been explored thoroughly by Mark Slouka in *War of the Worlds, Cyberspace and the High-Tech Assault on Reality*. Although the current situation, (with the Internet apparently only reaching 98% of the world's population), means total assimilation into cyberspace is a long way off, his ideas raise some vital concerns regarding the possible effects of the spread of computer technology: Slouka does not mince his words: "When a significant number of powerful individuals – scientists, academics, authors, engineers, computer programmers – following the scent of a potential \$3.5 trillion industry begin referring to the human body as meat (the expression is common among the digerati), it's time for those still foolishly attached to theirs to start paying attention. When a subculture of enthusiasts yearning for the technological equivalent of rapture begins labelling the unhived (in a weak attempt at digital wit) PONAs (people of no account), the PONAs may want to start asking what counts and what doesn't"²⁸

Slouka's argument extends to include the consideration of evidence that mediated experience and the removal of nature and reality actually cause a level of neuroses within the modern mind. He argues that the current state of affairs, with isolation and stress seen as direct by-products of digital life, could have disastrous results on the very nature of human interaction and psychology.

"An evening spent with friends, researchers are showing, can measurably enhance the human immune system for two days: cancer support groups that actually meet in real life can double the survival time of their patients. Social life, in other words, whatever its strains and difficulties, is a life-enhancing thing. Isolation and stress, on the other hand, demonstrably take their toll."²⁹ We all know how exhausting sitting down at a computer for hours can be and, since stress is also the hallmark of the modern city, we must consider if computers really solve all life's problems.

"All technologies are the mirror of their society and do those things that the society wants. " says Kirkpatrick Sale are modern day 'Luddite' who believes that the 'techno-structure we have created is fundamentally "destructive to both human societies and to natural environments."³⁰ He argues that although we are in an age of transition, this transition is nothing except a move towards 'more of the same.' He believes that if the computer revolution goes unchecked, there will simply be an increasingly advantaged section of society, with more power, money and influence than ever before. Whilst his views

²⁸ Slouka, Mark, *War of the Worlds - Cyberspace and the High-Tech Assault on Reality*, Abacus, 1996, p11.

²⁹ Ibid, p123.

³⁰ Robin, Michael, *Technology for the Coming Millennium, Micro Times.*, www.gn.apc.org/pmhp/dc/activism/saleludd.htm

can be seen as highly pessimistic and perhaps a little hypocritical since the 'Neo-Luddites' themselves occupy a fair amount of cyberspace, his argument should be taken into consideration. Although the benefits of computers are wide-ranging it is also true that we can in no way understand the full complexities of the so-called 'Information Age'. Digitisation, networked technologies and mobile communications are already having significant effects on the daily lives of citizens in the developed world: what is important to note here is that computer technology not only affects *how* humans communicate with each other and the world, but also, it affects the relationship between self and reality and the fragile construction of identity.

James B. McOmer, writing in the *Journal of Communications*, offers three definitions of technology; one of which is 'technology-as-novelty.' 'Technology-as-novelty' means viewing technology as the *all-new solution for everything*, or what McOmer calls a '*narrative of continuous discontinuity*.' The emphasis here is on the sense of ahistoricism, which can be found in the writing of many digital optimists or those who some call the 'digerati':

"For them, the newest technology sweeps away all the problems of whatever it replaces. The obvious lesson of past technological development - that few technologies solve problems without creating new ones - is forgotten as quickly as earlier technology. Negroponte (1995) celebrated the coming information age with cheerful predictions about how computerization will solve the problems of human kind. At no point did Negroponte recall that many of the technologies he consigned to obsolescence, such as the printed page, were once celebrated for solving many of the problems he claimed the digitisation of information will solve yet again. Once one focuses on the new, the past holds few lessons. It is hardly surprising therefore that technological pessimists often appeal to history to illustrate the over confidence of their counterparts."³¹

In regard to the Clinton, Gore administration McOmer argues that the dominant portrayal of the Internet focuses on its novelty: "Instead of offering us a choice about whether to have a revolution or to construct a different kind of revolution with the same technological materials, Gore offered only the options of attending to the revolution or sleeping through it. This casts an aura of inevitability around the changes."³² The inevitability mentioned here is the hallmark of the technological determinist. The danger of this stance is that wider issues are ignored and attention focused on tackling the wrong problems. As a report from Demos concludes in relation to the issue of access, "The governments of western Europe

³¹ James McOmer, *Technological Autonomy and Three Definitions of Technology*, *Journal of Communication*, Summer 1999.

and North America are putting resources into solving a problem that is likely to solve itself, while leaving the really important one. Most of the effort by governments around the world has been put into enabling people on low incomes get access to hardware...But this is a short-term challenge, largely irrelevant to the underlying issues about how exclusion and poverty are generated and can be tackled in the economy we are now living in.”³³ Technological determinism can remove focus away from real long-term solutions and many critics argue that it is only by understanding what we actually mean by ‘technology’ and seeing it in relation to other forces for change, can we begin to solve the problems we have created.

Amongst the theorists whose work focuses on the critique of technology, there has been a distinct split between utopian Liberalism and Marxist pessimism – with other writers falling somewhere in the middle. Jurgen Habermas has become a very influential thinker in this area and his ideas provide us with an excellent framework for viewing technology.

Habermas sees technology as “an application of a purely instrumental form of non-social rationality” and his approach implies that in its proper sphere, technology is neutral, but outside that sphere it causes “the various social pathologies that are the chief problems of modern societies.”³⁴ Habermas identifies technology with rationalised capitalist forms, such as exchange, law and administration, which allow citizens in advanced societies to co-ordinate themselves at the same time as pursuing individual success. His theory is based on the notion that mediated interaction removes the process of arriving at shared beliefs via personal understanding and altruistic linguistic exchanges. His aim is to promote the idea of balance between those rational forms mentioned above and the “ideal speech situation” which he sees as essential for democratic processes within the public sphere.

Where the public sphere and the Internet are concerned, Habermas’ concerns echo that of Baudrillard and Schiller. His account of more recent developments in the informational realm is sincerely unenthusiastic: “Capitalism is victorious, the capacity for critical thought is minimal, there is no real space for a public sphere in an era of transnational media conglomerates and a pervasive culture of advertising.”³⁵ Although this may be the case, the notion of a public sphere is relevant nonetheless: it may be a lost cause, but even if it only serves to provide us with an ideal to work towards, it is an ideal that should be consistently referred to.

³² Ibid.

³³ Demos, *Divided By Information*, Perri 6 with Ben Jupp, March 2001.p8.

³⁴ Feenberg, Andrew, *Marcuse or Habermas, Two critiques of Technology*, Inquiry 39, 1996, pp 45-70.

The significance of the digital divide within the UK will certainly become more salient as we get closer to the analogue switch-off planned for the year 2010. The Labour government's Communications White Paper states that, "We remain committed to ensuring public service TV channels are available to everyone, as now, free at the point of consumption, both before and after the switchover from analogue to digital television." We can only hope that this will be the case. Many people are concerned that the switch-off will create exclusion, particularly if competition in the market has not brought down the costs of digital sets. At present, it seems unfeasible to even consider reallocating the entire analogue spectrum to digital: the reality is that many people still use old sets and they would probably continue to do so for many years to come – unless they are forced by progress to change.

The expansion and investment in networks on the one hand seems like a very good idea, for who could argue with the idea of increasing the national communications infrastructure? But as convergence occurs and more and more traditional media become available via cable, satellite and broadband networks, those who still use old sets are surely going to miss out, particularly if all government services move online and we begin to use electronic devices for everyday transactions, education and so on. People who want to stay in touch will have little choice but to invest in a new set, or face being left behind even further.

Again, we have the problem of running parallel systems. Just as with government services, there will come a point when the majority are digitally connected and so the cost of old broadcasting systems will become expendable. It seems inevitable that this scenario will occur. If the most affluent sections of society are online, and Internet usage has reached critical mass, then how will governments justify supporting 'old fashioned' systems and technologies? Indeed, why would the average taxpayer want to subsidise a system going that has become outdated or irrelevant to their life? This is when we will see a clear disparity between those who have been absorbed into the digital age and those who were so busy struggling to survive that they were left behind by the speed of technological advancements.

Is UK Online offering a new democracy?

The Internet is now being venerated as the ideal medium for a new form of participation and engagement with politics, but as commercialisation and media outlets proliferate, we must ask exactly how a service such as UKOnline could really make our lives more 'democratic'. It has been hoped that as Internet penetration increases, citizens will create their own websites, start up chat rooms and

³⁵ *Information Management: Jurgen Habermas, in Theories of the Information Society*, Frank Webster, Routledge, 1995, p104
This essay is licensed under Creative Commons (Attribution + Noncommercial (by-nc))

engage in critical debate with like-minded individuals, although whether the non-profit sector of cyberspace will really transform our communities and societies for the better remains to be seen. Debate outside the realm of political or commercial control is certainly to be wished for, but in reality such a situation is difficult to imagine without some regulation from governments or independent watchdogs. The very nature of the Net means any discussion could be hijacked and corrupted by one individual, unless measures and rules were put into place to prevent this from occurring.

The democratic potential of the Internet has been celebrated by those who see it as a means for the reconstruction of a Habermasian public sphere, but of course this view has also been afforded considerable doubt. Mark Poster abandons Habermas' concept for the following reason,

“For Habermas, the public sphere is a homogenous space of embodied subjects in symmetrical relations, pursuing consensus through the critique of arguments and the presentation of validity claims. This model, I contend, is systematically denied in the arenas of electronic politics.”³⁶

Poster's position is that the media has always been seen as a threat to true democratic societies, but the Internet, and its inherent nature of decentralized control, can be seen as opening up new channels for individual causes, empowering previously excluded groups and enabling new aspects of social life to become part of the political process. He continues, “For too long critical theory has insisted on a public sphere, bemoaning the fact of media “interference” ...But the fact is that political discourse has long been mediated by electronic machines: the issue now is that the machines enable new forms of decentralized dialogue and create new combinations of human-machine assemblages, new individual and collective “voices”, “spectres” “interactivities” which are the new building blocks of political formations and groupings”³⁷

Whilst recognising the possibilities of networked mass communication, he also supports the argument that the Internet, by its very nature, removes the basic conditions for unbiased viewing of technology and its effects. But whilst this may be true, it is undeniable that these new forms of communication have the ability to create platforms for the interests of a multitude of different groups, who previously may have been invisible in the traditional media arena.

A burning question with regard to e-politics, is whether or not our government will become more transparent and also, if their media output will simply conform to existing paradigms which demand certain levels of celebrity or entertainment value. Politicians are not at all unfamiliar to being in the media spotlight and in recent years the value of spin and Public Relations tactics have become increasingly

³⁶ Poster, Mark, *Cyberdemocracy: The Internet and the Public Sphere*, www.hnet.uci.edu/mposter/writings/democ.html

³⁷ Ibid.

important to MPs, Prime Ministers and Presidents alike. It is hoped that all MPs will one day have their own websites, providing efficient means whereby constituents can comment on the issues that affect them. The problem with this ideal is that increased media attention already seems to have created a situation of bland populism or *sound bite politics*: cyberspace could simply provide a further space for politicians to engineer information and tell us what we want to hear. “Governments and politicians seem to have responded to the new accountability and openness with even more bland and harmless statements...In other words, the mass media now make it difficult for governments to be fork-tongued or two-faced, but this simply encourages them to be vague, cautious and non-committal.”³⁸

In recent years, public relations, political marketing and media management have been a top priority for politicians, and unfortunately, it is likely that the new digital media will be used more as additional space for the current trend where, “looks and appearance count for more than ideology and policy...packaging, presentation, dress, manner and style are more important than beliefs and principles.”³⁹

“Never before in the UK, and quite possibly not in any other democratic country, have circumstances so strongly favoured the public relations efforts of a government leader; rarely can any politician in a democracy – or Hollywood film star or commercial product, for that matter – have had so many people spend so much time, effort and money on nurturing their public image.”⁴⁰In the developed world it seems that, generally speaking, image *is* everything. Amongst other factors the rise of a fixation with celebrity, and the sophistication of advertising agencies have created a world where we are more interested in what’s on television than what is happening outside. In America, it is unsurprising that more young people know who Bart, Homer and Marge Simpson are than who the Vice- President is. The role of consumption and commodification in the construction of identity and the mass media’s framing of social experience must be addressed if the current crisis of democratic politics is to be overcome. “The evidence for such a crisis includes falling levels of participation and electoral turnouts attended by reportedly high levels of citizen disaffection and cynicism within political and public life, and a ‘dumbing down’ of political communication.”⁴¹

It now seems impossible to deny that mass media have removed reality from major parts of our lives, and it is therefore no surprise that a general consensus has been reached, where democracy is seen to be undergoing a crisis and to some extent that media culture is producing non-political apathetic citizens, particularly amongst the young. “The idea that young people display levels of cynicism, apathy

³⁸ B. Axford and R. Huggins, Eds, (2001) *New Media and Politics*, Sage, p165.

³⁹ Ibid.

⁴⁰ Ibid. p157

and disengagement with the formal political process that are higher than average is widely held... A report for Demos in 1995 found that only 6 per cent of people between the ages of 15-34 described themselves as very interested in politics. In terms of actual voting behaviour young people do appear to vote proportionately less than other groups."⁴²

Although the subject of the democratic potential of the Internet has become familiar in popular discourse, several critics have pointed out that technologically deterministic ideas have produced ignorance to the fact that similar 'new democracy' claims were made for earlier technologies. What is clear is that focus on technology itself, as the creator of equality is at best idealistic and at worst profoundly myopic. "For all its totemic significance, technology is not the main determinant of inequality. For example, the widening of access to television over the post-war decades has not brought about a reduction in wider inequality, despite the high hopes of the 1940s and 1950s that television would raise standards of education, improve social mobility and produce an active, informed citizenry. What really matters are the institutions, laws, practices, principles, codes and policies by which we govern the uses and applications of technology."⁴³

Democracy itself cannot be found in technology alone, and this is something that Kirkpatrick Sale also points to in his ideas on the potential of the Internet to create a more equal society,

"...This technology does not come with democracy in it. Take a nuclear power plant; it cannot be personal, democratic, just, fair, simple, open to all. It is by its very nature inevitably the expression of the society that sponsors it."⁴⁴

Whilst a networked computer may have more capacity than a nuclear plant to be 'personal' and 'open to all', Sale's argument that technology itself is not the root of any progress or move towards democratic empowerment is very true. Technology itself is often seen as an autonomous entity, a powerful force driving the modern world in its endless pursuit of progress: but technology alone cannot create the conditions of democracy which many feel are still absent from political processes. Policy, market conditions, and social organisation - these are the driving force behind the progress we see all around us. It is only through the actions, ideas and aspirations of the citizens of the modern world that progress is actually made, but for some reason 'technology' has taken on its own character and it is fair to say that this is partly to do with its use in advertising.

⁴¹ Ibid.

⁴² Ibid, p129.

⁴³ Demos, *Divided By Information*, Perri 6 with Ben Jupp, March 2001, p 8.

⁴⁴ Robin, Michael, *Technology for the Coming Millennium*, *Micro Times.*, www.gn.apc.org/pmhp/dc/activism/saleludd.htm

This essay is licensed under Creative Commons (Attribution + Noncommercial (by-nc))

The actual meaning of technology has become so blurred by media representations that it seems almost impossible to pinpoint an exact definition. We can attempt, within the framework of several theorists' ideas, to analyse the nature or 'essence' of any given technology, whilst bearing in mind that each technology will have its own features and properties. But outside academic circles, as Baudrillard would argue, 'technology' is merely a sign of something else, a sign that symbolises the modernist ethic of progress at one level and which is used superficially to sell shampoo and trainers at another.

E-democracy has so far been mainly associated with e-voting, which is now being heralded as revolutionising general elections, particularly since the farce of the recent US Presidential race between Al Gore and George W Bush. The encouragement of online voting is considered by many to be absolutely necessary for twenty-first century politics, although the viability of the process remains to be seen. Here, Labour's 'commitment' to getting the UK online means online voting is definitely on the agenda and some local trials have been initiated. But what really lies behind the government's drive for UK Online, democracy or e-commerce opportunities? Of course politicians are keen to be seen to be 'responding to technological advances' and will make all the right noises to keep the private business sector happy.

E-voting has not been welcomed by the Electoral Reform Society (ERS) which still does not endorse Internet ballots. The implications of online voting have been examined by the ERS, whose main concerns are issues of fraud and privacy and as yet they do not see online voting as a real possibility. The government in the UK would surely be the first to promote an idea of e-democracy, just as they have embraced the whole e-world so whole-heartedly, but at the end of the day if we were all able to privately and securely vote from our armchairs by pushing a button on the remote control, that's just a little *too* democratic. As one critic points out, "For any government, the prospect of letting the public have a say in decisions that affect them on a regular basis is an unappealing thought."⁴⁵

In fact, although new media potentially could open up new spaces for public discussion, it could also be used as a platform for carefully constructed government propaganda. If we take into account the current situation, whereby we have a growth of media culture and a trend of huge disengagement with politics in general, then it seems that government's websites will have to be as appealing as other media products if they are to compete in the global arena of entertainment. E-government should be about breaking down the existing hierarchical nature of government institutions and changing the nature of

⁴⁵ Stuart Lauchlan, E-Democracy: Power to the People, Internet World Magazine, January 2001.
This essay is licensed under Creative Commons (Attribution + Noncommercial (by-nc))

relationships between citizens, communities and private organisations, but only time will tell if the Internet can produce acceptable results for all members of the population.

Unrealistic assumptions about the level of participation could mean that inequalities are produced as services move online. If, half way through the year 2001, only 2% of the world's population are connected to the Internet and turnout at elections is decreasing, the reality of e-democracy could be a long way off. "The "cyberspace divide" based as it is on material conditions, may well prove to be a key issue regarding the social grounds of citizenship. The growing gap between information haves and have-nots in the digital age threatens to become a serious destabilising factor for democratic life."⁴⁶

If all government services were online this would surely have great benefits in terms of speeding up processes and transactions. For example, if we imagine a time when downloadable and printable versions of every form for tax, health services, social security etc were available online, the time and effort saved would be welcomed by many. At many levels, the digitisation of government holds great potential indeed, but as Stephen Coleman points out, "Even if citizens have formal access to information, it is not always clear where to find specific kinds of information, what it means when it is found and how to keep track of updated information...(One of the great paradoxes of free information is that people often do not know what they need to know.)"⁴⁷ Just because the information is accessible doesn't mean that people will make use of it.

Even in those countries with relatively high Internet access amongst ordinary citizens, lack of penetration within the poorer sections of society will lead to further neglect of huge sections of the population. We should be asking whether we should be concentrating on getting everyone access before we focus our attention on the services that can be provided via the net. For, as the situation stands, there will be an increased privilege amongst those who are already in a more powerful position, particularly if all government services go online. It is no good having an e-government if that service is only available to the privileged elite and if services are unavailable to those who need them most.

Economically sound areas face major social exclusion problems, in terms of income distribution and deprivation. Although many local authorities in the UK are apparently keen to 'nurture and develop...new cyber communities for their regeneration potential' the actual practicalities of providing adequate training, facilities and support for all members of society could mean the process of creating 'cyber communities' will be delayed or ultimately insufficient. It is evident that in order for cyber communities to

⁴⁶ B. Axford and R. Huggins, Eds, (2001) *New Media and Politics*, Sage, p 77.

⁴⁷ Axford and Huggins, Eds. *New Media and Politics*, Sage 2001, p119.

flourish, citizens must want to be involved with them; and since communities in 'real life' have been broken down by ever increasing mass entertainment, it is difficult to see how people will be encouraged to recreate them in virtual life. Although many would argue that local areas are rendered totally meaningless by networked technology, several pilot schemes are underway to encourage local communities to get connected and use the Internet as a way towards social inclusion

A good example of this is the London Borough of Camden where social *exclusion* is high on the agenda for local government. Camden ranks in the Top 20 most deprived local authority areas in Britain and also ranks in the Top 10 most unequal local authority areas in Britain in terms of income distribution. The area was part of the 1999/2000 round of Local Internet Futures (LIF) research programme, which aims to address the challenges and issues surrounding the 'strategic vision of electronic governance' set out in the *Modernising Government White Paper*. *Camden Connect* is an initiative designed to meet objectives through a 'joined-up approach' towards the goals of, "democratic renewal, economic competitiveness, social inclusion and environmental sustainability." The Council explored the 'regeneration potential' of ICT and Camden Connect by focusing on a large social housing district called Gospel Oak and has laid out many goals for improving the life of residents, at the same time as recognising that, " There is still a tension between the government's national strategy for making electronic services universally available to the consumer and the practical realities of delivering services on the ground."⁴⁸ Again, ideas and visions are at odds with reality, but at least we can see that local councils are aware of the situation, since they are the ones who have to deal with the housing problems, crime and general malaise found in the poorest areas of developed cities. As the report makes clear, only when there is evidence of real change in the attitudes and social relations of people and communities, will we know if a computer can really make a difference: "A friendly, open community centre would be one sign of progress, but a crucial indicator would be success in making people 'want in' to Gospel Oak – as opposed to the current situation in which most people would leave if they could."⁴⁹

The Camden report talks of 'empowerment at the grassroots of service users', which is an excellent but rather idealistic goal but at least it does take into account people's attitudes to technology, which of course is absolutely essential when considering the provision of electronic services within the public domain.

Closing the Divide: Practical progression or a fat pipe dream?

⁴⁸ Local Internet Futures Group, Camden Connect Report, February 2000.

⁴⁹ Ibid.

According to recent reports from the United Nations half the world's population have yet to use a telephone.⁵⁰ This fact would lead one to surmise that, at least on a global scale, closing the gap between connected and unconnected will be a long and complicated process: if indeed it can ever be overcome.

Global capitalism is not best known for its kindness to natural environments, indigenous cultures or deprived areas and some believe it now has such a strong hold on political and economic structures, that there is little room for resistance or improved equality between humankind. "The economic thrust of global capitalism is one of deteriorating public sectors, environmental recklessness, stagnation, instability, and widening economic stratification. For those lucky enough to sit atop the global pyramid, the future never appeared brighter; for the bulk of humanity, the present is grim and the future is an abyss. Nothing on the horizon suggests any other course."⁵¹

For the optimists among us, this may seem like a very depressing and fatalistic attitude to adopt, but nevertheless it is understandable, given the current environment. On a more positive note, one central feature within all the reports and recent comment on the digital divide is that a common goal has emerged. The general consensus is: if we don't do something, address this issue and ACT soon, then the divide will persist and perhaps even widen in coming years. The very fact that this subject is now being afforded considerable coverage in the broadsheet and trade press is encouraging in itself. If Victor Keegan, editor of *The Guardian Online* is right, then at least we have solid foundation to build upon. "The single most pervasive theme of the 21st century has already been decided. It is the Digital Divide and whether it can be bridged."⁵²

The technological determinists (like this quote from Ian Angell) will persistently remind us of huge sweeping notions such as, "Global commerce will force through the construction of multi-media highways, and anyone bypassed by these highways faces ruin." However, this has not yet happened and if relevant, practical measures are taken, and sufficient policy put into place, then there is at least some hope that people will be able to get involved in the 'digital revolution' or if not, they will be none the worse for it. The most important thing now is that we remember that the future is ours and if we do not immediately resign ourselves to the fact that we are all doomed, then there is a chance that the world can change. The digitisation of life has only just begun, and as Langdon Winner reminds us in "This process amounts to a vast, ongoing experiment whose long term ramifications no one fully comprehends."⁵³

⁵⁰ *Media urged to help bridge digital divide as world TV Forum opens at UN*, posted November 17, 2000.

⁵¹ Robert W. McChesney, *The New Super Powerful Democratic Technology?* From: *The Internet and U. S. Communication Policy Making*

⁵² Keegan, Victor, *Divide and Rule Out*, in *The Guardian*, December 14, 2000.

⁵³ Winner, Langdon, *Cyberlibertarian Myths And The Prospects For Community*.

BIBLIOGRAPHY

- *New Media and Politics*, B. Axford and R. Huggins, Eds, Sage, 2001.
- *Demos - Divided By Information: The Digital Divide and the Implications of the New Meritocracy*, Perri 6 with Ben Jupp, 2001. www.demos.co.uk
- *Theories of the Information Society*, Frank Webster, Routledge, 1995.
- *War of the Worlds: Cyberspace and the High-Tech Assault on Reality*, Mark Slouka, New York: Basic Books, 1995.
- *Understanding Media Culture*, Douglas Kellner, Routledge, 1995.
- *Cybersociety: Computer Mediated Communication and Community*, Steven G Jones, Ed. Sage 1995.

- *Power Without Responsibility*, Curran and Seaton, Routledge, 1997.
- N.Negroponte 1995. *Being Digital*. Hodder & Stoughton
- D.Rushkoff 1994. *Cyberia**. Flamingo
- C.Stoll 1995. *Silicon Snake Oil.** Macmillan
- *The Consequences of Modernity*, Anthony Giddens, Stanford University Press, 1990.
- *The Society of the Spectacle*, Guy Debord, Zone Books, 1994.

- Digital Divide Network –
- *Content and the Digital Divide: What Do People Want?* By Kade L Twist
- *Is closing the Digital Divide more important than providing healthcare?* By Mugo Macharia.
- *The Arts Online: The Role of the Arts in Bridging the Digital Divide* by Victoria Bernal
- *Cyber-Tricksters and Cyber-Shamen: The Other Side of The Digital Divide* by Kade L Twist.
- www.digitaldividenetwork.org/mugo.adp

- *Working together to deliver Information Age Government* – Speech by Mo Mowlam MP, Minister for the Cabinet Office at the LGA/IdeA Information Age Government Conference, 24 November 1999.
- Which? Online Annual Internet Survey 2000 – 11/07/2000 – www.which.net/whatsnew/pr/jul00/general/survey.html
- *Broadband Proliferation in Europe: Bring on the Competition*, Keith Waller, September 20, 2000 – www.streamingmedia.com
- *Broadband Britain is losing its bundle* by Darryl Nelson <http://www.netimperative.com/redirect.asp?i=28033>
- *New Media Age Alert* – December 7 2000, *Pensioners lack of interest in Web, says KPMG*. www.nma.co.uk
- *Towards Digital Inclusion...Why Not Broadband?* Jamal Le Blanc – 12/07/2000 – www.benton.org
- *African Internet Status Report* –Lahra Smith December 7, 2000 www.picnet.net/articles
- *Achieving Universal Access* – Booz-Allen & Hamilton, March 7th, 2000.
- *Enthusiasm and Concern: Results of a New Technology Poll* – Langdon Winner, February 29, Tech Knowledge Revue www.nettime.org
- *A Load of old flannel?* Amy Vickers, 13 December 2000, Media Guardian, www.mediaguardian.co.uk
- *A Bridge Builder for the Digital Divide*, Severin Carrell, 11 December 2000, www.netaid.org
- *Americans in the Information Age – Falling Through the Net*
- Keegan, Victor, *Divide and Rule Out*, in *The Guardian*, December 14, 2000.

- Robert W. McChesney, *The New Super Powerful Democratic Technology?* From: The Internet and U. S. Communication Policy Making
- Langdon Winner, 1997, **CYBERLIBERTARIAN MYTHS AND THE PROSPECTS FOR COMMUNITY**
- Langdon Winner: How *Technomania* Is Overtaking the Millennium
- **THE INFORMATION SUPERHIGHWAY: PAVING OVER THE PUBLIC** Interview with Herbert Schiller – *From the March, 1994 issue of *Z Magazine**
- An interview with Herbert I. Schiller, Posted by Geert Lovink on March 09, 1997 at 16:40:17: <http://www.yilmazguney.com/media/writers/schiller/interview.htm>
- James McOmer, *Technological Autonomy and Three Definitions of Technology*, **Journal of Communication**, Summer 1999.
- Robin, Michael, *Technology for the Coming Millennium*, *Micro Times.*, www.gn.apc.org/pmhp/dc/activism/saleludd.htm
- Kirsten Rodenhizer, **List Compilers and Consumer Privacy: A Case Study of ICOM Information and Communications**, www.cous.uvic.ca/poli/bennett/courses/456/fm/messages/6.htm.
- Stuart Lauchlan, E-Democracy: Power to the People, Internet World Magazine, January 2001.
- Angell, Ian, *Winners and Losers In the Information Age*, London School of Economics Magazine, Summer 1995, Vol 7, No1.
- The Internet and the Public Sphere: Revitalization or Decay? The Internet and the Public Sphere: Revitalization or Decay? by Christopher D. Hunter Copyright © - All Rights Reserved May 1998
- The World Wide Web as Political Public Space Last edited: 05/23/00 Keith Abouchar, The Benton Foundation
- Feenberg, Andrew, *Marcuse or Habermas, Two critiques of Technology*, Inquiry 39, 1996, pp 45-70.
- Poster, Mark, *Cyberdemocracy: The Internet and the Public Sphere*, www.hnet.uci.edu/mposter/writings/democ.html