CHAPTER OVERVIEW

One of the claims about new information and communications technologies (ICTs) is that they can help to bring about a fairer, more equal society. Studies of technology suggest that assumptions about their impact are often unfulfilled. Nevertheless, arguments about a new information society have again elevated the importance of technology as a social force. Here we will examine the ways in which public policy making is bound up with assumptions about the kind of society we live in and the role of technology within it.

Key terms
- poverty and inequality
- information society
- meritocracy
- technological determinism

Issues
- Can new media technologies create a more equal society?
- Is the increase in information creating a new kind of society?
- What is the role of governments?
Introduction

There can be no doubt that the world exists in a state of staggering inequality. The United Nations reports some sobering statistics: the world's richest 500 individuals have a combined income greater than that of the poorest 416 million; the 2.5 billion people living on less than $2 a day account for 5 per cent of global income while the richest 10 per cent account for 54 per cent. Within individual countries, whether rich or poor, similar inequalities persist; inequality in both the USA and the UK is significantly greater than in Albania or Ethiopia (UNDP, 2005, pp. 4, 55).

Not surprisingly, these general material inequalities are reflected in levels of access to technologies. While in Sweden and the UK in 2004, for example, there were more mobile phones than people, in Mozambique just 3.7 per cent of the population had one; in North America, 62 per cent of people had Internet access compared with 2.6 per cent in Africa (ITU, 2005). The World Summit on the Information Society (WSIS), convened under the auspices of the United Nations, noted at its first meeting in 2003 that:

The benefits of the information technology revolution are today unevenly distributed between the developed and developing countries and within societies. We are fully committed to turning this digital divide into a digital opportunity for all, particularly for those who risk being left behind and being further marginalized.

The rapid progress of these technologies opens completely new opportunities to attain higher levels of development. The capacity of these technologies to reduce many traditional obstacles, especially those of time and distance, for the first time in history makes it possible to use the potential of these technologies for the benefit of millions of people in all corners of the world. (WSIS, 2003, p. 2)

In many countries governments seek to overcome this division by providing access to, for example, Internet-connected computers in public libraries.

Think about it

Should ICTs be considered a basic skill, alongside numeracy and literacy? What are the criteria by which we should decree an area of human activity an essential or 'basic' skill? Are there any other skills which should similarly be regarded as essential? How about driving? Are those who can't drive socially disadvantaged any less than those who can't do ICT?
While it is hard to imagine anyone arguing against opening up ICT access to all, the suggestion that a more equitable exposure to new communications technologies will lead to a reduction in inequalities more generally depends on a number of assumptions, firstly about an understanding of the term ‘equality’ and secondly about the role of technology in society. At an instinctive level, we may feel we know what an egalitarian society would look like, but in fact we probably know better what an *unequal* society looks like. Gross disparities in material wealth and possessions have been documented above; further, most would acknowledge the unequal nature of the barriers to acquiring wealth faced between those born into the poorest families in even the wealthiest nations and those growing up in families that are readily able to afford to pay for the best schools and healthcare. The intractability of social position is underscored by research revealing static or even reducing levels of social mobility. For example, Blanden and Gibbons’s (2006) study of UK adults found that those who had grown up in poor families in the 1980s were *more* likely to remain poor themselves in later life in comparison with children growing up ten years earlier. In other words, levels of poverty were increasingly persistent across generations. Equivalent studies in the USA also find low or reducing levels of intergenerational mobility (Corak, 2004; Hertz, 2006). Thus we have the compound inequalities of the absolute differences in material wealth and the obstacles, evidently increasing, which prevent those at the bottom easing their way out of poverty and closing the gap with the better off.

**Poverty and Inequality** Poverty can be absolute or relative. How thresholds of poverty are defined is contentious—what are basic minimum living standards? Relative poverty is defined in terms of inequalities: the poor in a wealthy country are likely to be better off than the poor in a developing country.

### The digital divide

There are two possible objectives in tackling these aspects of *inequality*: *equality of outcome* or *equality of opportunity*. The former approach seeks to ensure, through social policies targeted at both disadvantaged and advantaged groups, that levels of inequality between rich and poor are reduced; the latter meanwhile is more concerned with targeting the poorest in society through highly focused policies to support them in getting on the first rung of the social ladder, to set a basic minimum level of entitlement that therefore doesn’t directly affect those already
free from social deprivation. The outcome-focused approach tends to be associated with currently unfashionable, interventionist politics (based on redistribution of wealth through tax and welfare policies) while the equality of opportunity approach is popular with liberal (or neoliberal) politicians who favour governments playing merely an enabling role that seeks to impact minimally on the free market. While this characterisation is necessarily crude, its significance lies in the approach to new media technologies taken by governments and non-governmental organisations across the globe. Policy makers argue that we are in danger of developing, or deepening, a 'digital divide', a schism between those who are able to access and make use of new media technologies and those who, for a variety of reasons, cannot. Governments are increasingly migrating everyday services such as tax returns to the World Wide Web and conducting online consultations as part of the policy making process. Further, campaigning and political organisations outside government are using the Web to publicise and debate civic and political issues. The Internet is extensively used too for commercial transactions with all kinds of goods and services being traded. It is thus feared that those who do not have access to these communications technologies risk being marginalised, having restricted choice as consumers and also being left out of an important part of the democratic process (Lax, 2004).

In most industrialised nations, therefore, initiatives have taken place to secure public access to ICTs through public provision of Internet-connected computers. Examples include national projects, such as 'Networking the Nation' in Australia, in which rural communities were given funding to establish public access points, or the installation of 'the People's Network' of Internet-connected computers in the UK's public libraries. These are supplemented by countless smaller-scale projects in which public terminals are placed in schools or community centres and so in such places few people can be said to be completely 'disconnected' in the sense of having no material access to the Internet. For non-industrialised nations, as we saw earlier in the WSIS declaration, similar goals are defined for universal access through public provision of Internet terminals.

However, there is no guarantee that this provision will lead to more equitable use of the networks. The ways in which people use the Internet, and indeed whether they do so at all, are far more complex than simply a question of access to the technology itself. For example, countless market research studies show that in advanced countries like the USA and the UK, household access to the Internet via home computer is reaching a plateau of around 60 per cent—while computers and the cost of Internet access itself have both become cheaper, more than one in three households remain without Internet access (ITU, 2005; Ofcom, 2006, p. 157). Evidence about the ways in which public Internet terminals are used is variable.
Hardy and Johansen (2003) studied users of public terminals placed in libraries in Victoria, Australia, and concluded that users tended to be drawn more from lower-income groups or the unemployed than in the population at large, although the educational background of users was much higher than typical. Simpson et al. (2004) and Strover et al. (2004), in their respective Australian and US studies, both concluded that in many cases community provision of Internet terminals was characterised by a lack of clarity as to their purpose. The notion of 'access' is nebulous—is access about increasing the total number of users, or increasing usage among a particular social group? Such questions affect the choice of location for Internet terminals, and in the absence of an answer it is difficult to interpret, in terms of success or failure, the consequent usage.

**Think about it**

Leadbeater reckons our children will work with their brains, not with their hands. Can all manual labour be replaced with machines? If not, whose kids will do the dirty work?

Beyond questions about who actually uses these public terminals, evidence about the wider social consequences of Internet usage is variable. Studies of Internet users' political engagement suggests that those who are politically active online (for instance emailing representatives, taking part in consultations or political organisations) are generally the same people who were active in the absence of the Internet—the evidence that a new political engagement is engendered by access to the Internet is insubstantial (Gibson et al., 2004). Another area where the use of the Internet was anticipated to result in social gain was in education, in particular lifelong learning for adults. The UK government's view has been consistently positive about the effects of ICTs on educational provision—the education secretary has declared, 'sometimes people can't access the learning they need because courses simply don't fit around their daily lives. New technologies open up huge opportunities to give people access to the learning they want in a way that suits their needs' (Morris, 2002). While this may be an almost universal position among policy makers, again evidence suggests that ICTs in public places make almost no difference to the take up of educational provision in later life. Family, geography and other social factors are much more important and patterns of 'lifelong learning' in the new technological era are almost unchanged from the 'non-technological' past (Selwyn et al., 2006).
An information society

So how do we begin to explain the enthusiasm with which new technologies like the Internet are proposed as furthering the cause of equality and fulfilment of individuals? The explanation lies in a particular view of a new technological society. Influential thinkers have been prominent in the past few decades in describing far-reaching social changes, in part wrought by new technologies, heralding a new stage of social evolution following the agricultural and industrial phases (Toffler, 1980). While there is no coherent account of this new era, it is generally labelled the information society. This notion identifies information (and knowledge) as the central feature of society: your place in that society is bound up with your relationship with information, your access to it and what you do with it (May, 2002).

Information society  A society where access to and manipulation of information becomes the key determinant of one's place in society.

Industrial society  A society where position depends on social relations under capitalism.

Agrarian society  A society where position depends on feudal relations such as land ownership.

The information society idea can be traced back to Daniel Bell. He began writing in the late 1960s of the 'post-industrial society', one in which the reliance on manufacturing as the main source of wealth was being replaced by the service industries. These depend far more for their success on access to information rather than the raw materials of industrial manufacturing. For Bell this heralded a new kind of social order, with shifts in the balances of wealth and power. These transformations would be every bit as important as the change from an agrarian society to an industrial society in the seventeenth and eighteenth centuries, in which the absolute rule of feudal landlord (the aristocracy, who assumed power solely by birth) was replaced with the rise of a capitalist class (where power was conferred by monetary wealth) and its own form of rule (parliamentary democracy). In the 'post-industrial society', power no longer depends upon access to wealth and physical labour, but instead on access to knowledge and the skills to select and manipulate that knowledge (mental labour).

It becomes clear that the 'old' industrial order is passing and that a 'new society' is indeed in the making. To speak rashly: if the dominant figures of the past hundred
years have been the entrepreneur, the businessman, and the industrial executive, the ‘new men’ are the scientists, the mathematicians, the economists, and the engineers of the new computer technology. And the dominant institutions of the new society—in the sense that they will provide the most creative challenges and enlist the richest talents—will be the intellectual institutions. The leadership of the new society will rest, not with businessmen or corporations as we know them (for a good deal of production will have been routinized), but with the research corporation, the industrial laboratories, the experimental stations, and the universities (Bell, 1970, p. 394).

The ‘post-industrial society’ became translated during the 1980s and 1990s into the ‘information society’, a term which Bell himself also came to use, though it should be noted that Bell’s explanation of modern society was not as exclamatory as many of the more recent ‘information society’ advocates. While the notion of ‘post-industrial’ society is clear and precise in that it implies a break with the previous industrial society, the term ‘information society’ is more vague, and this is part of the problem in dealing with it.

However vague we may find the idea, and Webster (2005) points out clearly the lack of precision in most attempts at definition, it has nevertheless captured the hearts and minds of political leaders and advisers. Shortly before becoming the UK’s Chancellor of the Exchequer, Gordon Brown wrote about equality in the ‘fast-changing information-based economy dominated by the importance of knowledge’. He continued, ‘the defining characteristic of economy is less an individual’s ability to gain access to capital and far more his or her ability to gain access to knowledge and to use it creatively’ (Brown, 1996). Here was a new kind of economy that offered a new kind of politics, the ‘Third Way’. Keenly adopted by US President Clinton and the UK Prime Minister Tony Blair, it was articulated by Antony Giddens as a rejection of both ‘old left’, social democratic politics and the neoliberalism of the ‘new right’ (Giddens, 1998). In fact, Third Way ideas embrace much of the neoliberal economic agenda (Callinicos, 2001). A fascinating insight is given by Charles Leadbeater, a former adviser to the Blair Government and member of the think tank Demos, which was highly influential on UK government thinking in the late 1990s. Indeed, Leadbeater’s book, Living on Thin Air (2000), carried an endorsement by Prime Minister Tony Blair on the front cover: ‘…an extraordinarily interesting thinker. His book raises critical questions for Britain’s future’. Two passages give a flavour of the ideas:

Most of us earn our livings providing service, judgement, information and analysis, whether in a telephone call centre, a lawyer’s office, a government department or a scientific laboratory. We are all in the thin-air business. That should allow our economies, in principle at least, to become more humane; they
should be organized around people and the knowledge capital they produce. Our children will not have to toil in dark factories, descend into pits or suffocate in mills, to hew raw materials and turn them into manufactured products. They will make their livings through their creativity, ingenuity, and imagination (p. ix).

An economy which becomes more knowledge-intensive has the potential to become more inclusive and meritocratic. Everyone with an education can have a go. … In an economy which trades know-how and ideas, everyone seems to have a chance to make it, working from a garage, their kitchen or their bedroom. Twenty-five-year-old drop-outs can create best-selling computer games; a nerd fresh out of college can create the Internet’s best browser; a boy with no formal education can become Europe’s most precocious fashion designer (Leadbeater, 2000, p. 33).

A knowledge economy

This new knowledge economy then is one which is overhauling social institutions, and in the process, becoming more equal, ‘in principle at least’. It is a seductive argument. Leadbeater outlines how he himself deliberated long and hard before deciding to become a ‘portfolio worker’, but having made the leap is now reaping the rewards. No longer having to work for an organisation where ‘some ambitious manager points the spotlight at you’, he can organise his life around his family and earn his living ‘by finding people who will pay me to do things I am interested in’ (2000, p. 2). While acknowledging that he is helped by having a good degree and a list of useful contacts through his earlier career as a journalist, for Leadbeater this simply helps make his argument: there are no barriers to this kind of life provided a good education is available to all.

Again we see the importance of new technology to the claims made about the new economy. When wealth is derived from manipulating and trading information, access to technology becomes vital.

12.1

Think of some more examples of ‘thin air’ kinds of employment. Try and envisage what living in a society that relies only on these categories of work would actually be like. Will any other workers be required? What will those people be doing? Develop a short description of such a society.
Whereas in an industrial society 'access to technology' (in the form of factories and machinery) could equally be argued as key to wealth, access was also required to raw materials (including labour) and markets—and access here meant physical transportation of goods. In an industrial society, then, this kind of access was inevitably privileged and uneven. But the technologies of the new economy are different. Leadbeater chastens those who are pessimistic:

Yet this ought to be an age of excitement and optimism. Consider, first, the breathtaking possibilities of technology. By 2007, the hard disk in the average television set top box should have enough memory to store all the songs ever recorded. By 2010, it should be able to take every film. Telecommunications bandwidth is doubling every 12 months. The capacity of fibre to transmit information has increased by a factor of 16,000 in less than five years; it will soon carry everything we can say, write, compose, play, record, film, draw, paint or design. The entire contents of the US Library of Congress could be passed through an optical switch in less than three seconds (Leadbeater, 2004, p. 30).

Not only is this an impressive list of technological achievements, for the new economy the point is that these are relatively cheap and therefore accessible technologies. Leadbeater’s college drop-outs can be on a similar footing with long-established corporate giants when it comes to creating some best-selling software. It was no surprise when the meritocracy that Leadbeater alluded to in 2000 became a topic of earnest debate in Third Way economies. In the lead-up to the 2001 general election, Tony Blair declared that the UK would become a truly meritocratic society, a natural consequence of the emergence from industrial society into an information society. The contrast with old industrial societies seemed clear. Inequalities and unfairness are endemic to industrial society, where prosperity resulted from ownership of large capital assets. These assets were often acquired not through any mechanism that rewarded skill, capability or effort, but more often were inherited through accident of birth, however poorly suited the recipient might be to the role. Now, thanks to the accessibility of the tools of the information economy, the new ICTs, it would be possible to open up its wealth-creating potential to all. This logic underpins the policy objective of providing public access to ICTs for those who do not have access elsewhere.

**Meritocracy** A meritocracy is a social order in which each individual acquires social status on the basis of merit: skill, ability and effort, rather than gender or class. Superficially a fairer society, the notion is in reality hypothetical due to complexities of defining merit and tends to cement social position, consigning 'non-elite' members of society to unfulfilling manual labour.
A meritocratic society?

The same logic of a meritocratic society explains the changing role of education in many industrialised nations. In the UK, information and communications technology has been placed at the centre of educational policy, not merely as a tool for learning but as a subject in its own right as one of the only three subjects (alongside maths and English) required to be taught to all throughout compulsory schooling. Amid much publicity in 1997, a National Grid for Learning was established and plans put in place to connect all schools to the Internet—the importance of ICT was in no doubt (Lax, 2001). The government could claim that it had set in place the basis of an egalitarian society—one in which all would have access not only to the technologies of the information society but also to the basic skills needed to exploit them. Having established a level playing field, whatever anyone chose to do with those skills and technologies was their own choosing. If they applied their skills successfully, then they deserved whatever reward came their way; should they be unsuccessful, then really they could not complain. In Leadbeater’s words, ‘everyone with an education can have a go’. Michael Young, who coined the term in 1958 in The Rise of the Meritocracy 1870–2033, was concerned that the point of his satire had been missed: the meritocracy would be a divided society. When those at the top were able to believe (wrongly) they had truly acquired their status on their own merits, then equally those beneath them deserved their lot and certainly no sympathy nor, logically, any assistance (Young, 2001). Yet here we can see why a belief in the possibility of meritocracy means that calls for equality are in terms of opportunity rather than outcome. If one believes in the possibilities of an information society, then the role of government is limited to providing equality of opportunity, and that is delivered by equalising access to technology and the requisite basic skills. One can readily extend the argument to accept the logic of ‘laptop welfare’ where, rather than cash benefits, welfare provision might be more valuably conferred by giving the poor incentives to buy laptop computers; such schemes were proposed in 1995 by US Senate leader Newt Gingrich and in 1999 by UK Chancellor Gordon Brown.

The foregoing has suggested that to believe we live in an information society can imply that the conditions exist in which a true meritocracy can be achieved. In such circumstances, governments can justify intervening only minimally in the workings of society, ensuring that there is a basic provision of access to ICTs and skills. As the entry costs to ICTs are so low, equality is achieved as everyone has the same opportunity to acquire wealth. But such beliefs are readily challenged on two grounds: firstly on the singling out of technology as the main driver in this social change; and secondly on interpreting general shifts in economies from manufacturing to service industries as signifying more fundamental social changes.
The first objection focuses on the assumption that the technologies of communication (such as those listed by Leadbeater) are themselves independent entities in this process of social change. In other words, the technologies merely exist, evolving according to some internal logic of technical change. This view, labelled **technological determinism**, sees technology as autonomous, largely outside of social forces, but nevertheless having far-reaching social consequences. This claim seems intuitively true; in some instances it is even enshrined in dictums such as ‘Moore’s Law’ (which states that computer processing power doubles every eighteen months). No doubt computers and networks will get faster and generally more capable, and this can seem like some natural process. However, it doesn’t require much investigation to see that technological change is most certainly impacted upon by social forces. Economic forces selectively impel some technologies forward, such as ICTs today, just as different economic needs were crucial to developing and establishing other technologies such as radio communication 100 years ago, and the prime funders of scientific and technical research are governments and large industrial enterprises. Thus instead of seeing the technologies of the information society as somehow *naturally* progressing along the particular trajectory they currently follow, we should recognise that this path is socially shaped. The progress of a particular technology and its consequences are reflections of the society from which they emerge as much as any inherent capabilities of the technology.

**Technological determinism.** A belief that technology develops independently of society and in so doing is the central cause of consequent social ‘impacts’. Widely challenged, nevertheless the idea is found in many historical accounts of social change and lies behind countless predictions of future social trends.

The second problem with the claims about the information society is that it is assumed that the changes that have undeniably taken place over the past few decades, in particular the increase in the quantity and speed of information in its many guises, imply fundamentally new social forms. For example, the new information workers identified by Leadbeater above include those in ‘a telephone call centre, a lawyer’s office, a government department or a scientific laboratory’: all are lumped together in the ‘thin air’ business. Meanwhile, the factory worker, the weaver and the miner are all from a past age. Leadbeater believes that the divisions of old, between manual worker and manager, are swept away in the new age of information. Yet working conditions in today’s call centres share far more with twentieth-century factories or nineteenth-century weaving sheds than a lawyer’s office or government department (Poynter & Miranda, 2000). That a call centre...
worker should see herself as aligned with lawyers and scientists in an information economy is readily dismissed.

More fundamentally, we have seen already that despite the growth of service industries over several decades, traditional inequalities persist doggedly. Whether we study social mobility, participation in political activity or the take-up of educational opportunities, we find no convincing evidence of novel trends that might suggest some social transformation. The alternative conclusion is that we are simply witnessing a particular phase of the continuing social order known as capitalism. Webster makes the connections explicit. He suggests that, rather than today's society requiring redefinition, it is enough to look at the historical nature of capitalist society to explain the present. For if we look at what characterises capitalism, we see a number of tendencies: access to goods and services being dependent on ability to pay; private rather than public provision; market criteria (profitability) as the dominant factors in deciding whether something is available; wage labour as the norm in the workplace (Webster, 2000). There is little here that does not apply when we include the growth of information availability and the growth of information work. For example, the growth in the numbers employed in the service industries or information work has not substantially (if at all) altered the relationship between employer and employee. The increasing numbers entering (or staying in) education is part of a long-term trend of professionalisation of work roles rather than a feature just of the past few years (and it is significant that many of these professionals, teachers and doctors for instance, now find themselves in conditions of less professional autonomy and more subject to metric and prescriptive practices historically associated with manual workers). Hence it is quite possible to explain today's information-rich age as fully part of a continuing but ever-transforming capitalist system.

Think about it

- The information society debate obviously keys into a discussion of globalisation. Although globalisation is a big area, we haven't had time to consider it here, but it is worth thinking a little about the connection between the two.
- When the telephone was introduced over 100 years ago, the telephone companies issued advice and instructions in its usage (e.g. how to speak into the microphone: 'distinctly and directly'). The idea seems laughable now. Is it just a matter of time then before everyone can use the Internet without giving it a moment's thought?
Conclusion

If we are to seek a society that is more equal, in which more people not only have greater opportunities to improve their own lives and those around them, but also are actually able to achieve those objectives, then we cannot rely simply on the provision of access to technology. Technology here is a distraction. Despite the ubiquitous presence (in industrialised nations) of ICTs and the information they process, there is no reason to see this as changing our understanding of society. Instead, as has been debated (and fought over) for decades or even centuries, the route to equality and fairness requires us to look more fundamentally at the ways in which society is divided, and to seek to overcome the assumptions and activities that give rise to those divisions.

- This chapter has described how communications technologies are claimed to deliver social change.
- In particular we have seen that public provision of Internet access is seen as a public policy goal.
- It has explained that such policies are based on assumptions about the role of technology in society and about the kind of society in which technologies develop.
- We have explored issues such as the information society and technological determinism.

Tutorial questions

- Can access to new media technologies create a more equal society?
- Which characteristics were argued in this chapter to be indicative of a new kind of society and economy?
- How can the notions of an ‘information society’ and a ‘meritocratic society’ work together to justify limited government intervention in the provision of access to ICTs and skills?

Recommended reading


### Websites

Digital Divide: see www.benton.org and www.digitaldividenetwork.org


### References


