

[Robin Mansell](#)

From digital divides to digital entitlements in knowledge societies

**Article (Accepted version)
(Refereed)**

Original citation:

Mansell, Robin (2002) From digital divides to digital entitlements in knowledge societies. *[Current sociology](#)*, 50 (3). pp. 407-426.

DOI: [10.1177/0011392102050003007](https://doi.org/10.1177/0011392102050003007)

© 2002 [International Sociological Association](#)

This version available at: <http://eprints.lse.ac.uk/3481/>

Available in LSE Research Online: May 2008

LSE has developed LSE Research Online so that users may access research output of the School. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LSE Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain. You may freely distribute the URL (<http://eprints.lse.ac.uk>) of the LSE Research Online website.

This document is the author's final manuscript accepted version of the journal article, incorporating any revisions agreed during the peer review process. Some differences between this version and the published version may remain. You are advised to consult the publisher's version if you wish to cite from it.

From Digital Divides to Digital Entitlements in Knowledge Societies

by Robin Mansell

Department of Media and Communications

London School of Economics and Political Science

Revised version published as Mansell, Robin (2002) From digital divides to digital entitlements in knowledge societies. *Current sociology*, 50 (3). pp. 407-426

From Digital Divides to Digital Entitlements in Knowledge Societies

This paper critically examines current constructions of the causes, consequences and appropriate actions to reduce the so-called 'digital divide'. Drawing upon discussions that have occurred in a number of intergovernmental forums, the analysis illustrates the limitations of policy debates that focus primarily on issues of access, affordability and capabilities and skills for employability in industry. An alternative framework for assessing the unfolding relation between the new media and society is developed drawing on Amartya Sen's concept of capabilities. This is applied to demonstrate the need for a shift in the emphasis of social science analysis away from digital divide issues and towards the potential for the new media to be configured in ways that could enable the majority of people to strengthen their abilities to make choices about how they wish to live their lives. As new media permeate global social networks more intensively, it is argued that a rights-based approach to new media policy is essential and that this must be based upon assessments of peoples entitlements in emerging knowledge societies.

1. Introduction

'New media' technologies and services are being developed as a result of the spread of digital networks and software platforms. In the introduction to this special issue, Judy Wajcman (2002: ??) points out that 'revolutions in technology do not create new societies, but they do change the terms in which social, political and economic relations are played out'. New media are implicated in these changes in a variety of ways. One of these has caught the attention of policy makers world-wide. This is the way the uneven spread of the new media or the so-called 'digital divide' and its consequences are a threat to those citizens who, for one reason or another, are not participants in electronically mediated networks. This paper suggests that most interpretations of the causes and consequences of this 'divide' are inadequate. Correspondingly, the appropriate actions to alleviate the manifestations of this 'divide' remain to be identified. These shortcomings are a consequence of failing to fully address issues of how new media applications may be used to empower those who are disadvantaged, disadvantages that stem from the way social and technical relations are working themselves out at the start of this century.

Paradoxically, the sociology of globalisation and its consequences is bifurcated between studies at the macro-analytical level such as those by Beck (1992), Giddens (1999), and Held et al. (1999), and studies at the micro-analytical level which suggest how social decision processes yield particular configurations of the technical (for instance, Bijker et al. 1989; Bijker and Law 1995; and MacKenzie and Wajcman 1999). Just as it is revealing to examine the mutually constituted relation between the technical and the social at the micro and macro-analytical levels, it is similarly interesting to examine this relation at the 'meso' or institutional level. Most studies of new media policy at this level take the technological configuration of the new media as a 'given' or prefigured system that needs to become more widely diffused to citizens (see Mansell and Steinmueller 2000, and MacKenzie 1996, for a critique of this view). Exceptions are to be found in examinations of Internet policy as, for example in Lessig's work (2000, 2001). However, his research does not examine the rhetorical forms that help to sustain the configurations of the new media that are favoured by an influential minority of technology developers and producers.

There are comparatively few accounts of how those who inhabit the ‘meso-level’ institutions of policy are constructing prevailing conceptions of the new media and the associated norms for social organisation. Some of these conceptions are examined in this paper to illustrate how they are informing new media policy associated with the ‘digital divide’. The analysis suggests that many of the actors who participate in intergovernmental discussions tend to promote particular configurations of the new media. These configurations come to be regarded as the most effective way to develop new media applications and it becomes more difficult to envisage alternatives that are consistent with a goal of empowering the majority of citizens in their interactions with the new media.

Seeking greater variety in the configurations of the new media is desirable. To encourage this, however, there must be a shift in the emphasis of most social science analysis and policy debate about the causes of new media developments and their consequences for society. The contention in this paper is that a change in the rhetorical form of the ‘digital divide’ debate is essential. This means that much greater attention must be focused on alternative ways in which the new media might be configured so that the majority of citizens can begin to strengthen their abilities to make choices about alternative ways of living their lives.

The focus of policy debate on the ‘digital divide’ is overwhelmingly on macro-level issues of technology access and social exclusion. To a lesser extent there is consideration of micro-level issues but this focuses mainly on a narrow conception of the capabilities needed to function in a society that increasingly favours social interaction mediated by the Internet. This narrow conception of capabilities links issues of individual learning and cognitive development principally to human capital formation aimed at strengthening the contribution of the work force to the achievement of efficiency and productivity gains associated with the use of new media (see Mansell and Wehn 1998; Mansell 2001a). But if new media applications are also envisaged as offering tools for the empowerment of the majority of citizens it is essential to redefine the concept of capability to encompass forms of learning and cognitive development that are necessary for making sense of a social world of on-line spaces created by the new media. In this paper, the work of Amartya Sen (1999)

provides a basis for considering capabilities in a much broader context and for examining whether the dominant configurations of new media are consistent with a social goal of empowering the majority of citizens. This suggests the foundation for a rights-based approach to new media policy.

In section two, the reason that it is essential to examine the specificity of the relation between new media and society is discussed. Section three then examines the rhetorical form used by participants in intergovernmental forums in their discussions of the problem of the 'digital divide' and appropriate policy choices. This analysis illustrates the extent to which the rhetoric forecloses an assessment of the need for greater variety in the deployment of new media configurations. In section four, evidence of the biases of new media configurations based on the Internet is used to demonstrate the predominance of a familiar 'broadcast' mode of information provision over new media applications that would favour citizen acquisition of new media literacies. Amartya Sen's framework for evaluating capabilities and the entitlements of citizens is discussed in section five together with an exploratory analysis of new media developments that appear to be consistent with a goal of enabling the majority of citizens to acquire new media capabilities that may empower them. Finally, in the conclusion, the likelihood of a much needed shift in the rhetorical form and associated actions of new media policy is assessed.

2. New Media Technologies and Society

For the most part, new media policy discussions focus on market dynamics, governance procedures and regulation of the new technologies and services. These discussions are conducted in forums where the participants generally presume that the relation between the new media and the citizen is beneficial and that the main barrier to ensuring that all citizens benefit is created by an unequal distribution of new media (Internet) access. However, the implications of the new media need to be understood more deeply because of way in which innovations in digital technologies are contributing to the exercise and the distribution of power in society (Silverstone 1999: 153). The implications of the new media are contradictory. Once connected, there are no grounds for simply assuming that citizens will be empowered to be able to conduct their social lives in meaningful ways. There is, therefore, a growing need to examine

whether the deployment of new media is consistent with ensuring that the majority of citizens acquire the necessary capabilities for interpreting and acting upon a social world that is intensively mediated by the new media. New media literacies are crucial for sustaining a democratic dialogue (Silverstone 1999). These literacies or capabilities entail far more than knowing how to read and understand digital information products. This is because it is difficult to make sense of a social world that is mediated by the new media. The provenance of much information is increasingly unclear and the opportunities for citizens to contribute information and to engage in public dialogue are not promoted by the dominant configurations of the new media services.

For citizens to make sense of the information they receive, they need skills. In particular, they need the skills to discriminate between authoritative information and information whose provenance is detached from its originator. This is characteristic of most of the new media and it creates a need for citizens to acquire new capabilities for assessing the value, veracity and reliability of information if they are to participate effectively within the fabric of a global society. If, as Castells (2001: 1) suggests, 'the Internet is the fabric of our lives', and if those living within this fabric are to have the freedom to achieve the lifestyles they desire, then they must be able to acquire new media literacies. Without such literacies, social problems of alienation, poverty and ignorance are likely to worsen with the spread of the new media since the majority of citizens will not have acquired the capabilities needed to make choices or to express opinions about what they value. Castells (2001: 161) suggests that informational strategies are 'the new, and most effective, frontier for the exercise of power on the world stage'. Democratic processes, constructed around new media literacies, are essential. As electronic sources of information become pervasive, achieving improved control over the social and technical relation that is configured by the Internet and its digital information flows is, arguably, one of the most fundamental political issues at the beginning of the 21st century (Castells 2001).

The problem of the social control of media and communication networks is not new. Williams linked issues of control of the structure and content of the older generations of media and communication technologies to the organisation of society. He suggested that matters concerning the forms of communication are closely associated

with institutional form and with the organisation of social relationships (Williams 1976). But Thompson's (1995) analysis two decades later suggests that the social science community continues to display a profound neglect of how specific forms of media and communications are influencing the way that citizens experience their lives. Much research in the genre of 'Internet Studies' is not concerned with how alternative configurations of the new media might augment people's capabilities for living their lives (see Dawson 1999; Gauntlett 2000; Simon 2000). There has so far been little consideration of the conditions of people's lives or of their freedom to create positive changes in their lives within the fabric the 'global information society'. In many cases, it is simply assumed that the new technologies will facilitate democratic processes (see Dutton 1999 for a critique of this view).

The spread of the new media means that social processes of identity formation are being enriched by the new media's vast symbolic content. But, at the same time, social actors are becoming more dependent upon electronically mediated information flows that are largely beyond their control. Thompson (1995: 37) refers to this phenomenon as the 'double bind of mediated dependency'. The vast majority of citizens makes no contribution to the way that new media networks and their content are developed. The majority of citizens have few opportunities to express their views about whether the prevailing new media configurations are consistent with enabling them to acquire new media capabilities. Thompson suggests that the media are biased in various ways. In particular, he argues that they tend to disempower local forms of political organisation. They render traditional forums for democratic dialogue very difficult to sustain. There is, he suggests, a need to encourage a new form of 'publicness' (Thompson 1995: 10) and the new media, based in part on the Internet, are implicated along with other digital technologies and services.

Habermas's (1992/1962) advocacy of the creation of a public sphere within which informed public discourse might flourish has proved to be elusive. Thompson advocates legislation and regulation to create a foundation for new forms of publicness through 'regulated pluralism' and a 'deconcentration' of the new media through policy intervention (Thompson 1995: 225). His expectation is that such policy action will encourage new media providers to offer greater variety in the structure and content of their services thereby encouraging information flows and

debates that sustain a ‘deliberative democracy’ (Thompson 1995: 255). New media market structures undoubtedly influence the variety of content that is produced and the extent to which public dialogue is encouraged. But this is only one aspect of new media development. Equally important are the specific new media configurations that emerge as dominant forms. At present, the dominant configuration of new media supported by the Internet appears to favour a minority of citizens. This is because it is only a minority of citizens who are being provided with learning experiences consistent with functioning in a highly technologically mediated world.

There is a need to foster new media developments that will enable the majority of citizens to acquire the capabilities or new media literacies they need for functioning in such a world. This could be achieved by extending and deepening the capabilities for critical discourse about the origins and validity of information provided through access to Internet-based new media environments. However, policy intervention is necessary to ensure that the new media provide the kinds of electronic spaces where people can acquire capabilities to evaluate information, to offer their own views, and to discriminate between alternative choices. These capabilities are learned. They involve the cognitive capacities to recognise and evaluate choices and alternatives. In section five, this observation is developed and linked to an argument in support of a rights-based approach to new media policy. It is first necessary, however, to examine the extent to which the rhetorical form (section three) and the predominant configuration of the new media (section four) are biased in ways that favour economic growth more strongly than citizen empowerment and new forms of ‘publicness’.

3. Constructing the Digital Divide

The participants in intergovernmental forums on the ‘digital divide’ are drawn from the public and private sectors and civil society organisations. They tend to portray the causes and consequences of the ‘digital divide’ and the appropriate policy actions in ways that favour the extension of access to the new media mainly to support the development of the ‘digital economy’. The evidence in support of this claim is drawn from the writer’s experience as a participant in various policy forums. In these forums, the problem of how to overcome uneven access to the new media is often discussed alongside measures to promote the use of services for electronic commerce

or electronic government.¹ The argument in this paper is that the rhetorical form of participants' contributions to such forums encourages a focus on 'digital divide' issues that are predominantly concerned with how the new media create a need for capabilities that will enable people to participate more effectively in the economy. Consequently, the rhetoric rarely gives rise to a consideration of the new media literacies that might sustain a broadly-based deliberative democratic dialogue.

Since its initial use in the United States to describe uneven access to advanced information and communication technologies, and particularly to the Internet (US Department of Commerce 1995), the 'digital divide' has become a rhetorical device for focussing policy discussion in intergovernmental forums on how disparities in access to the new media between and within countries can be overcome. Although, many acknowledge that the 'digital divide' is not a new problem, this terminology is used to mobilise financial and other resources in an effort to remove barriers to wider adoption of the new media. As Schwab (2001: 3) suggests, 'you can't eat computers - and you can't prevent malaria with software. The debate over the so-called digital divide has taken many forms. It's not a new discussion, or a new global issue. It is, perhaps, more like a social and economic challenge with a new name - and with different actors and an invigorating sense of optimism'.

The new media, and especially the Internet, are often portrayed by participants in such forums as offering new opportunities for enabling improved access to skills acquisition and knowledge. As a senior speaker from one intergovernmental organisation observed 'in a globalising world, no government can regulate based on its own sovereignty. ...The world has become a real global place; not just a global market place ... The global distribution of skills and knowledge will be the precondition for the distribution of wealth in the world economy'. He added that 'it is important to listen ..., not just to transfer best practice policies ..'.

In the year 2000, representatives of the Group of Eight countries released the Okinawa Charter on the Global Information Society and created a Digital Opportunities Task (DOT) Force. This group reported in July 2001 (DOT Force 2001b). The motivation for this initiative was the realisation that the expansion of global trade and investment depends upon economic growth and global stability and

that it is in the 'enlightened self-interest' of the wealthy countries to address problems that lead to the risk of instability. One means of addressing such problems is believed to be encouragement of the spread of an inclusive global Internet fabric and the removal of barriers to its use. In the context of the DOT Force deliberations and in associated forums for discussion about the global information society, there has been consideration of a collective vision of the way the new media can be used to enable all people to improve their social and economic circumstances. But the emphasis in these discussions is on the role of the new media in enabling productivity and efficiency gains in the economies and regions that are disadvantaged. Thus, for example,

'...poor countries (and within them poorer segments of the population) are being further marginalised, as their access to opportunities for wealth creation is being reduced; considerable development opportunities are being missed, as productivity and efficiency gains are not being transmitted from rich to poor countries' (DOT Force 2001a: 3).

The DOT Force participants were seeking to mobilise action that will contribute to bridging the 'digital divide', to secure the participation by non-members of the Group of Eight, and to integrate digital technology initiatives within more broadly based development initiatives. In this context, it was recognised that 'one size fits all' policies are inappropriate and that simply acquiring knowledge of 'best practice' is an insufficient foundation for development because certain human capabilities are essential in order to absorb knowledge and put it to effective use. A senior public sector spokesperson attending one intergovernmental forum extended the discussion of policy issues beyond those of capabilities for economic development. He observed that 'ICTs [information and communication technologies] must be seen as a tool for empowerment of people and which could help bridge other divides of society ... Services must be citizen focussed and fully integrated. Delivery must start from needs of citizens and business ... Special attention must be given to human capital development through knowledge advancement and training'. He emphasised the needs of citizens and business, but this balanced treatment of the issues by a senior representative of government was a somewhat unusual occurrence in the context of such forums.

When representatives of government, firms, and civil society organisations from around the world meet in these institutional settings, they often compare their common interests and different experiences with new media and the ‘digital divide’. They often agree about the importance of investment in the technical infrastructure of the new media and in content to achieve a range of economic and social goals. They also frequently observe that the opportunities associated with the new media must be considered in the light of the risk of reinforcing existing economic and social problems. But above all, they tend to suggest that knowledge gaps are the greatest barriers to economic development and that these must be alleviated through the provision of efficient infrastructure, affordable access to new media, the production of relevant content, and increased attention to education provision and skills development. In addition, they generally insist that policy measures to promote more inclusive access to the new digital technologies must be linked to overarching policy goals for development.

The rhetorical form that tends to be adopted in such policy forums is not only constructed to promote convergent viewpoints. The differences in the views of participants representing various organisations are not entirely swept away. But the rhetoric tends to acknowledge and encourage the use of the dominant technological configurations of the new media. These configurations are strongly biased to give priority to building capabilities consistent with the goal of strengthening the contribution of new media users to economic growth and development.

And, as a senior public policy representative from the industrialised world put it during one forum, ‘the danger of the digital divide is real. There are possibilities to use these technologies to close the gap. We need to turn possibilities into probabilities’. Education is essential and international cooperation and sharing of experience can help governments to avoid mistakes and adopt ‘best practices’. Although a senior government representative of a developing country might argue for legislative reforms ‘with a human face’, he might also observe that ‘this decade belongs to software and other services’. Little attention is given to whether the technical configuration of the new software and services is itself consistent with building capabilities that will empower citizens. Instead, the visions of the global new media and their consequences are informed the premise that the ‘digital divide’

manifests itself in many ways, 'dividing one business, region, or social group from another and affecting the ability of some countries to participate in the development process and market growth that others enjoy'. Problems can therefore be addressed by providing access to technology.

Occasionally, the issue of human needs comes onto the agenda for discussion as in the case of a DOT Force discussion forum in South Africa. 'Looking at the "new economy" in isolation (dot.com fascination syndrome) is a recipe for failure: rooting efforts in good management, good governance and "*real needs*" is the proper way to contribute to various countries' development efforts while respecting their differences' [emphasis added] (DOT Force 2001a: 10).

During one policy forum, a South African researcher suggested that the 'digital divide' discussion was overly focused on 'costs and affordability', arguing that the most important question is 'not what use of the internet, but whether initiatives are addressing community needs for information'. Another spokesperson from a northern African country argued that there is a 'need to deliver the hope and the opportunity provided by equitable access to new technology. An emphasis on 'people.com is better than dot.com'. He went on to observe that 'the world will not be that different just by having the 'e' in front of commerce or government'. A spokesperson for a global technology and service provider also emphasised the importance of 'lifelong' learning, but he argued that this was the responsibility of employees who should take advantage of the re-skilling opportunities offered by their employers. Again, the discussions and the rhetoric are mainly concerned with economic development and the contributions of the existing new media network configurations to this goal. Very occasionally the rhetorical form of these discussions highlights the possibility that the technological configurations of the new media may themselves be inappropriate to promote learning and the acquisition of the cognitive capacities necessary for citizens to achieve their goals and aspirations in society. Insofar as new media configurations are considered, it is only to the extent that it is recognised that 'the choice of technical components must take into consideration the specific infrastructure, demographic conditions, organizational capacities, and policy contexts of the region' (TeleCommons Group 2000: 23).

Issues of culture and differences in perceptions of trust in the products and services supported by digital technologies surface in these policy discussion forums from time to time. For instance, a spokesperson from South Africa observed that ‘many leaders of developed countries do not understand the need to recognise cultural differences’ or the desire of Africans to assert their ‘Africanness’. ‘Developing countries want to be equal citizens in a global information society, not just citizens; and to develop a vision to provide a better and full life for all our citizens’. The view of the problem of the ‘digital divide’ that tends to prevail is captured by a contribution of a private sector representative who claimed - the only response to the technological changes in the new media is to ‘adopt or perish! There are not many choices, there is only one way to go’.

The social construct, trust, is an important factor that influences whether citizens are likely to regard new media developments as enhancing their ability to participate in society. The more or less taken for granted trust that citizens place in banks, credit agencies and governments in the industrialised countries, is sometimes compared in these policy discussions about the ‘digital divide’ with the different conditions that are present in other countries. In one forum, for example, a private sector representative from an eastern European country pointed out that for more than two years the banks in his country had been considering the use of electronic payment systems but ‘most people simply do not use a credit card’. He suggested that there are other systems that are not based on credit cards but that little effort was being given to the development of any technological alternatives.

Another commentator representing a civil society organisation in a discussion forum observed that ‘there are questions about the extent to which consumers are sophisticated enough not to sign away rights because they may not be aware of the implications’. He suggested that there is a need to ‘rethink the underlying structure of consumer protections. Not as a way of promoting e-commerce, but rather as *rights* in the marketplace’ [emphasis added]. In this instance, the issue of human rights becomes incorporated within the rhetorical form but only insofar as this applies in the economic sphere of producers and consumers.

An emphasis on education and skills acquisition in these discussion forums occurs frequently in the rhetorical form of the debates but these issues are often framed in terms of a skills crises or in terms of the potential for the new media to support economic 'leap-frogging'. As one participant from an intergovernmental organisation suggested, 'preventing the digital divide means that time is of the essence, but time is becoming shorter and shorter' if leapfrogging is to occur in a way that stimulates economic growth and a catch-up of poor countries with the wealthy ones. Another participant with expertise in international trade commented that 'the key factor is e-competency ... Leapfrogging is real, not just conjecture. We have moved onto e-management; it a fast charging train'. Here the emphasis is on speed, rapid investment in access to the new media, and in learning and capabilities development oriented towards growth.

These illustrations of the rhetoric employed by those who participate in the intergovernmental policy community that is concerned with the 'digital divide' are to a degree anecdotal. Greater insight could be derived from a more systematic analysis of the content of such debates. Nevertheless, the evidence presented here does suggest that in the race to remove barriers to global information society access, the emphasis is on the new media configurations that are achieving the widest diffusion in the industrialised countries and their transfer to bridge gaps in disadvantaged regions and countries. The use of these configurations of new media is expected to benefit users because of their improved access to digital information. The rhetoric is consistent with an emphasis on the economic importance of the global interconnection of people and markets. It is consistent with a focus on the knowledge economy where hardware, software, and human capital become replacements for raw materials and for certain kinds of workers (Romer 1995). The rhetoric privileges the 'new' economy and implies that policy should focus mainly on how the workforce can acquire new capabilities for managing electronic businesses since the prospects for economic growth depend on reaping benefits from the organisation of commerce around networks (Romer 1986). The rhetorical form of the 'digital divide' discussion echoes this narrow conception of issues that are at stake in the global information society. It emphasises economic growth and the deployment of prefigured technologies, over issues of equity, social development and the need for a broader conception of the potential of the new media.

Cultural differences and social needs are not entirely absent from the dominant rhetoric of the ‘digital divide’ debate. But these issues do not inform the overall vision of what must be done in terms of new media policy intervention. Policy interventions to reduce the ‘digital divide’ are understood to involve a process whereby, as a private sector spokesperson in one forum stated, ‘implementation is rapid; there are no decades any more ... Countries are expected to set targets and begin to move’.

As a representative of one global company put it, ‘you cannot win by stopping, but you can *choose* where to move’ [emphasis added]. This spokesperson is assuming that the capacity to choose exists, that is, that the majority of people do have the capabilities to choose between alternative ways of incorporating new media into their lives. It is also implicitly assumed that there is scope for choice in the technological configuration of the new media and over the types of information environments that emerge as a consequence of such choices. Yet a United Nations Human Development report states clearly that ‘a global map for the new technologies is being drawn up faster than most people are able to understand the implications - let alone respond to them - and faster than anyone’s certainty of the ethical and developmental impacts’ (UNDP 1999: 1). The next section assesses the issue of whether the dominant configurations of new media provision are consistent with enabling the majority of citizens to acquire new media literacies.

4. Dominant New Media Configurations

A growing minority of policy makers, businesses, consumers and citizens is benefiting from Internet-based discussions and information resources that comprise a significant portion of new media activity (Commonwealth Secretariat 2001). In August 2001 there were an estimated 512.41 million users of the Internet (Nua Internet Surveys 2001). In some developing countries, the growth rate in users is faster than the rate of growth in the industrialised countries. However, as the preceding discussion suggests, the biases in the configuration of the new media and their implications for building capabilities for informed debate are rarely acknowledged. To the extent that the bias of new media configurations is considered, this is usually only with respect to the statistic that some 68 per cent of the Internet’s

content is in the English language. This creates an obvious barrier for people who may wish to acquire capabilities through their use of new media (Global Reach 2001). However, other biases of the new media are deeply embedded in the specific technical configurations that are becoming predominant, especially in the case of the Internet and the development of information applications using the World Wide Web.

An examination of Internet-based information intermediaries offers insight into the way that technical design decisions reflecting the social and economic interests of new media developers are favouring certain new media applications and discouraging others. A vast number of information intermediaries are establishing sites on the World Wide Web. The private sector owners of these sites often claim that they support commercial transactions by any individual or firm seeking to buy or sell goods and services, regardless of their geographical location. Yet Paré's (2001) analysis of over 350 sites in the horticulture and garment sectors shows that the majority of these are 'walled' sites, that is, they are for members only.² Even when these sites are open to all potential buyers and sellers, they do not always deliver the information and business support services they claim to provide at their home pages. It may appear that the owners of these web sites offer services such as logistics, assistance for goods producers to meet industry standards for quality or environmental protection, or help in verifying the identities of firms. But scrutiny of these sites indicates that few actually provide all these services and that the services which are offered are available mainly to a minority of firms that are members of closed clubs. Thus, the dominant trend or configuration bias of new media services in the commercial world of electronic commerce and electronic markets is exclusivity. This is inconsistent with the goal of ensuring that the new media offer opportunities for learning and participating in the global economy that are inclusive.

A new media configuration bias is also suggested by the dominant forms of new media provision of services for citizens. Examination of information intermediary web sites in the health and education sectors and of web sites focusing on issues of environmental protection or globalisation suggests that these sites, operated by institutions including governments, schools and development agencies, mainly provide structured, authoritative information.³ Although some of the sites in the sample examined appeared to support limited interactivity between citizens and public

organisations, few were designed to enable citizens to contribute their own information, or indeed, to participate in a learning process that would enable them to acquire capabilities for deciding how the information that is available should be valued or acted upon.

There is also a growing number of web sites of organisations that claim to represent citizens (Centre for Civil Society and Centre for the Study of Global Governance 2001). These civil society organisations confer authority on the information they provide through their web sites, but a cursory examination of many of these sites suggests that they are mainly ‘pushing’ information *to* users.⁴ They did not appear to be configuring their new media applications in ways that will support the majority of citizens to acquire capabilities for making their own information contributions or to learn how to employ available information to choose between alternative courses of action. Most Internet-based information intermediaries keep track of information or enhance it with annotations and various kinds of personalisation. But these web-based intermediaries appear to be providing very few resources that enable the majority of citizens to acquire the cognitive capacities for discriminating between alternative social choices. Yet this is essential if the new media are to assist in fostering new forms of ‘publicness’.

These biases of new media configurations are inconsistent with claims that the new media are technological innovations with the potential to empower the majority of citizens. This suggests that there is a need to move the rhetoric of debates about the new media and social relations towards an examination of the range of capabilities and associated new media configurations that would be more consistent with the encouragement of deliberative democracy.

5. Towards New Media Rights and Entitlements

Too little emphasis is being given to whether the new media can be developed in ways that are likely to contribute to the reduction of poverty and to support socially productive networking among informed citizens (Pratt and Gill 2001). Policy intervention is required to encourage new media developments that can help to

encourage the majority of citizens to acquire the capabilities or new media literacies necessary for a democratic dialogue.

As Amartya Sen (1999) argues, citizens have an entitlement to acquire such capabilities and this is a fundamental human right. ‘Functionings’, he suggests, are what people value doing or being, and they may be basic such as being free from hunger or illness. They may also be complex such as being able to participate in the life of a community or having self-respect. Sen argues that ‘capabilities’ should be understood as the functionings that an individual is actually able to achieve. Capabilities in this sense are the underpinning of the freedom of citizens to construct meaningful lives.

Extending the idea of capabilities to the issue of new media development and policy requires a shift away from a focus on the causes and consequences of the ‘digital divide’. It suggests the need for a focus on what citizens are able to do as a result of their interactions with the new media and what capabilities they are able to acquire as a result of those interactions. Sen’s (1999: 293) capabilities approach focuses on ‘the substantive freedom – of people to lead the lives they have reason to value and to enhance the real choices they have’, in this instance, through the dynamic of the relation between new media and social organisation.

Sen’s approach starts with a concern for human well-being and from the view that human choice and the freedom to act are essential human rights.⁵ The main concern is with the individual’s capacity for social growth and with the acquisition of cognitive capabilities through learning. If the use of these cognitive capabilities is threatened so too is the satisfaction of basic human needs. If the configuration biases of the new media are not enabling the majority of citizens to acquire the cognitive capabilities for participating in deliberative democratic processes then there is an argument for a rights-based approach to new media policy.

In the field of telecommunications policy, Garnham (2000) has drawn upon Sen’s work to argue that policy decisions about citizen’s entitlements to telecommunications service access should not be based upon assessments of merit or absolute wealth. Instead, they should be based upon an assessment of whether citizens should be

entitled to such access in order to develop their capabilities. A similar argument applies in the case of the new media. There is a need for an evaluation process which is an exercise in social choice that requires public discussion, understanding and democratic acceptance. In his work on *Development as Freedom*, Sen (1999) observes that communication and exchanges between people that are valued require basic education and training. He suggests that capabilities for being well-informed and able to participate freely in society are essential. However, in the absence of an assessment of how the new media can be configured to support the acquisition of such capabilities, the application of Sen's argument about entitlements yields little more than a call for the new media to play a greater role in fostering informed dialogue. It does not provide insight into the actions that would be essential to encourage the configuration of new media in ways that foster the capabilities that Sen regards as being essential.

Research on the development of capabilities required for using new media services provided by the public and private sectors is being undertaken (see Mansell 2002 forthcoming) and there is discussion about the biases of the configuration of the Internet's technical architecture (David 2001). But research that would specify how the majority of the citizens can best use the new media to strengthen their freedoms to decide between alternative social choices and which takes account of the configuration biases of the new technologies and services is virtually non-existent. A starting point for a research agenda that would contribute to a debate about the new media that embraces citizen's rights and entitlements is outlined below.

Social science analysis of the role of the new media in fostering 'capability acquisition' should focus on the development of new media applications that could provide alternatives to the dominant 'broadcast' or 'advertising-supported' mode of digital information provision. For instance, some new media developers are providing free 'toolkits' for producing and sharing information in the public spaces of the Internet. The Internet Scout project, supported by the National Science Foundation and the Mellon Foundation in the United States, offers such a toolkit at its web site. This is designed to simplify the technical hurdles involved in creating and sharing web-based information and discussions (Scout Project 2001). The software package allows individuals or organisations with a minimum level of technical expertise and

resources to set up a web site and to manage it. This application relies on open source software and provides access to information that is available in the public domain.

A web-based intermediary that solicits contributions of information from those who are not highly skilled in the use of the Internet is id21 (2001), a development research site on the web. Information can be copied or quoted without restriction and the originating authors are acknowledged so that the viewer can discern the provenance of the information. The Hansard Society (2001) is also developing new media applications that provide resources for all citizens to interact with electronic democracy initiatives.

Initiatives that offer citizens new media tools for making contributions to public discussion or for sharing information are being developed in ways that support the acquisition of the cognitive capacities that citizens need if they are to develop new media literacies and to participate in a democratic dialogue. But most of these alternative new media configurations are inadequately funded as compared to those services that 'push' information at viewers. Most publicly sponsored and civil society organisation web sites are offering authoritative information in a 'broadcast' or 'advertising' mode. They do not foster new media applications that will encourage the capabilities acquisition that Sen has in mind.

The under-resourcing of alternative new media initiatives, such as those described in this section, can be addressed through policy intervention. However, this is unlikely to occur without a major shift in the rhetorical form of discussions about the relation between innovations in digital technologies and society. New media policy aimed at encouraging these developments will need to be presented in a rhetorical form that persuasively makes the case for a rights-based approach to policy based on the citizen's entitlement to acquire capabilities for informed social dialogue. Since much of the discussion is conducted in intergovernmental forums, there is a need not only for more systematic social science research on the social and technical relation in this area, but also for right-based arguments to filter into the rhetoric employed by participants in the influential policy institutions.

6. Conclusion

Much can be done by extending existing new media initiatives to citizens through creative organisational and investment strategies (Heeks 2001). But it is important to decompose new media configurations to ensure that investment is encouraged in alternative new media applications that do not simply favour the dominant 'broadcast' mode of new media provision. The 'digital divide' rhetoric encourages a 'blind spot' in thinking about the new media and society relations. Innis (1951: 191) argued that 'civilisation has been profoundly influenced by communication' and that 'oral discussion inherently involves personal contact and a consideration for the feelings of others'. The new media may offer the potential to foster democratic dialogue but, for the majority of citizens to participate, it will be essential for them to acquire capabilities for contributing information and for making decisions about the value and provenance of information.

Most new media configurations favour exclusive electronic spaces for commercial activity and a 'broadcast' mode of authoritative information provision in the non-commercial sphere. The social and technical character of the new media are mutually constituted and this relation will continue to be malleable. Much greater attention should be given to policy intervention that favours Internet-based tools to support the acquisition of new media literacies by the majority of citizens. This could be encouraged through a debate that embraces a rights-based approach to policy and the actions that are required to respond to citizen entitlements in a global information society. The power of the new media could then be used to reshape social bonds and to foster a greater sense of community in a way that assists people in resolving profound social problems that are facing humanity (Lévy 1997: xxi).

New media policy debates tend to be centred on legal issues, regulation, and the means to reduce the 'digital divide'. These debates encourage policy measures aimed at the supply side of the new media industry and at efforts to control the market power of the largest firms. A rights-based approach to new media policy would encourage discussion and the formation of a consensus on the new media capabilities (or literacies) that all citizens are entitled to acquire. What policy measures would foster the growth of new media configurations that are responsive to the freedoms that

people are entitled to in the Internet age? The public consensus on the answer to this question will vary from place to place. But if the bias of new media developments is responsive mainly to the needs of the minority of the population, then an alternative is necessary. Public policy encouragement of investment in information intermediaries that are developing new media applications that enable most citizens to acquire the capabilities to become critical, informed participants in democratic processes is one place to begin to develop a rights-based policy approach.

Policies for the new media are encouraging the development of new media configurations that are responsive to the needs of a minority of citizens who are able to acquire capabilities for valuing information and contributing to public debates. Some citizens are using the new media to support their choices about their lives. For instance they are using existing new media sites on the Internet to find and assess information about treatments for illness, about new skills and jobs, or about like-minded people. But, for those who are unable to use the new media in this way, much human potential is being lost. This is an infringement of human rights.

Policies to reduce disparities in access to the new media are important. However, such policies do not address issues of citizen entitlements and rights in the global information society. The bias of new media configurations favours the minority of citizens; those who are best positioned to live their lives in an intensely technologically mediated world. A rights-based approach to new media policy has the potential to support and encourage new media developments that are consistent with aspirations to develop new forms of 'publicness' that embrace the majority of citizens.

References

- Beck, U. (1992/1986) *Risk Society: Towards a New Modernity*. London: Sage Publications.
- Bijker, W. E. and Law, J. (1994) *Shaping Technology/Building Society (Inside Technology)*, Cambridge MA: The MIT Press.
- Bijker, W. E., Hughes, T. P. and Pinch, T. F. (1989) *The Social Construction of Technological Systems*. Cambridge MA: The MIT Press.
- Castells, M. (2001) *The Internet Galaxy: Reflections on Internet, Business and Society*, Oxford: Oxford University Press.
- Centre for Civil Society and Centre for the Study of Global Governance, *Global Civil Society Yearbook 2001*, Oxford University Press, September 2001.
- Commonwealth Secretariat (2001) 'A Commonwealth Action Programme for the Digital Divide, Report of the Commonwealth Expert Group on Information Technology for the Commonwealth High Level Review Group', London, June prepared by S. K. Rao and S. Raju with the assistance of R. Mansell and N. Couldry.
- Dawson, A. C. (1999) 'The Internet: Towards a Global Political System', *Policy*, Vol. 15(1): 29-33.
- David, P. A. (2001) 'The Beginnings and Prospective Ending of "End-to-End": An Evolutionary Perspective on the Internet's Architecture', *Oxford Review of Economic Policy*, 17(2): 159-187.
- DOT Force (Digital Opportunities Task Force) (2001a) 'Global Bridges: Digital Opportunities' Draft report of the *dot force* for discussion at Cape Town meeting, 1-2 March 2001, <http://www.dotforce.org/reports/dotforce-draft-report-v1.doc>, accessed 30 March 2001.
- DOT Force (Digital Opportunities Task Force) (2001b) *Digital Opportunities for All: Meeting the Challenge*, Report of the Task Force, 21 July,

<http://www.uspolicy.be/Issues/E-commerce/dotreport.072101.htm>, accessed 23 November.

Dutton, W. H. (1999) *Society on the Line: Information Politics in the Digital Age*. Oxford: Oxford University Press, Part IV.

Garnham, N. (2000) 'Amartya Sen's 'Capabilities' Approach to the evaluation of welfare: Its application to communications', in B. Cammaerts and J C Burgelman (eds.) *Beyond Competition: Broadening the Scope of Telecommunications Policy*, Brussels: VUB University Press, pp. 25-36.

Guantlett, D. (2000) *Web.studies, Rewiring media studies for the digital age*. London: Arnold.

Giddens, A. (1999) *Runaway World: How Globalisation is Reshaping our Lives*. London: Profile.

Global Reach (2001) <http://www.glreach.com/globstats/> accessed 28 September 2001.

Habermas, J. (1992/1962) *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*, trans. By Thomas Burger with Frederick Lawrence, Cambridge: Polity Press.

Hansard Society (2001) <http://www.hansard-society.org.uk/eDemocracy.htm>, accessed 26 September 2001.

Heeks, R. (2001) 'Overestimating the Global Digital Divide', 12 February 2001, <http://www.iicd.org/news/> accessed 15 April 2001.

Held, D., McGrew, A., Goldblatt, D. and Perraton, J. (1999) *Global Transformations: Politics, Economics and Culture*. Cambridge: Polity Press.

Hutton, W. and Giddens, A. (eds) (2000) *On the Edge: Living with Global Capitalism*, London: Jonathan Cape.

ID21 (2001) <http://www.id21.org>, accessed 26 September 2001.

Innis, H. A. (1951) 'Minerva's Owl' in *The Bias of Communication*, Toronto: University of Toronto Press.

- Lessig, L. (2001) *The Future of Ideas: The Fate of the Commons in a Connected World*. New York: Random House.
- Lessig, L. (2000) *Code and other Laws of Cyberspace*. New York: Basic Books.
- Lévy, P. (1997) *Collective Intelligence: Mankind's Emerging World in Cyberspace*, Cambridge MA: Perseus Books.
- MacKenzie, D. (1986) *Knowing Machines: Essays on Technical Change*, Cambridge MA: The MIT Press.
- MacKenzie, D. and Wajcman, J. (1999) *The Social Shaping of Technology*, 2nd Edition, Milton Keynes: Open University Press.
- Mansell, R. (2001a) 'Digital Opportunities and the Missing Link for Developing Countries', *Oxford Review of Economic Policy*, 17(2): 282-295.
- Mansell, R. (2001b) 'Issues Paper' for the OECD Emerging Market Economy Forum on Electronic Commerce, Dubai, UAE, 16-17 January.
- Mansell, R. (2001c) 'Summary Report of the OECD Emerging Market Economy Forum on Electronic Commerce, Dubai, UAE, 16-17 January, OECD, Paris, DSTI/ICCP(2001)4, 12 February.
- Mansell, R. (ed.) (2002 in press) *Inside the Communication Revolution: New Patterns of Technical and Social Interaction*, Oxford: Oxford University Press.
- Mansell, R. and Steinmueller, W. E. (2000) *Mobilizing the Information Society: Strategies for Growth and Opportunity*, Oxford: Oxford University Press.
- Mansell, R. and Wehn, U. (eds) (1998) *Knowledge Societies: Information Technology for Sustainable Development*, published for the United Nations Commission on Science and Technology for Development by Oxford University Press.
- Maslow, A. H. (1954) *Motivation and Personality* (2nd Edition), New York: Harper & Row Publishers.
- Maslow, A. H. (1968) *Toward a Psychology of Being* (2nd Edition), New York: Van Nostrand Reinhold Co.

Nua Internet Surveys (2001) http://www.nua.ie/surveys/how_many_online/ accessed 23 November 2001.

Paré, D. J. (2001) 'Does This Site Deliver? B2B E-commerce Services for Developing Countries', prepared for a project supported by the UK Department for International Development, [Media@lse](#), London School of Economics, 28 October, mimeo.

Pratt, A. and Gill, R. (2001) 'Social Exclusion Goes Digital?', London School of Economics, draft mimeo, London.

Romer, P. (1995) 'Beyond the Knowledge Worker', *World Link*, Jan-Feb: 3.

Romer, P. (1986) 'Increasing returns and long-run growth', *Journal of Political Economy*, 94(5): 1002-37.

Schwab, K. (2001) *Wiring the Third World*, World Economic Forum, January, http://Europe.thestandard.com/article/article_print/0,1151,13797,00.html, accessed 30 March 2001.

Scout Project (2001) <http://scout.cs.wisc.edu/> accessed 26 September 2001.

Sen, A. (1999) *Development as Freedom*, Oxford: Oxford University Press.

Silverstone, R. (1999) *Why Study the Media?* London: Sage Publications.

Simon, L. D. (2000) *NetPolicy.Com: Public Agenda for a Digital World*, Washington DC, Woodrow Wilson Center Press distributed by Johns Hopkins University Press.

TeleCommons Development Group (2000) *Rural Access to Information and Communication Technologies: The Challenge for Africa*, IBRD/World Bank report prepared for the African Connection Secretariat, <http://www.telecommons.com/documents.cfm>, accessed 30 March 2001.

Thompson, J. B. (1995) *The Media and Modernity: A Social Theory of the Media*. Cambridge: Polity Press.

UNDP (1999) *UN Human Development Report 1999*, chapter 2 'New Technologies and the Global Race for Knowledge', <http://www.undp.org/hdro/Chapter2.pdf>, accessed 30 March 2001.

US Department of Commerce (1995) *Falling through the Net: A Survey of the "Have Nots" in Rural and Urban America*, Washington, DC, July at , <http://www.ntia.doc.gov/ntiahome/fallingthru.html> accessed 19 July 2001.

Wajcman, J. (2002) 'The Social World in the 21st Century: Ambivalent Legacies and Rising Challenges of Technologies', *Current Sociology*, current issue.

Williams, R. (1976) *Communications*, Third Edition, Harmondsworth: Penguin.

Notes:

- ¹ Such forums are usually open in the sense that the sponsors invite government, private sector and non-governmental organisation representatives, but the proceedings are generally conducted on the understanding that the discussion is non-attributable. The material in this section is a compilation of comments offered by such participants over the period from 1997 to 2001. Contributors to the discussions are identified only in terms of their status and type of organisation. The main source of evidence is drawn from the OECD Emerging Market Economies Forum on Electronic Commerce, held in Dubai UAE, in January 2001 (see Mansell 2001b,c for formal reports). Evidence is also drawn from discussions between experts on matters associated with the 'digital divide' in connection with the UN Commission on Science and Technology for Development in 1997 and the Commonwealth Agencies in 2001.
- ² The methodology for this analysis of web sites is documented in Paré (2001).
- ³ The writer surveyed about 300 web sites across these sectors that appeared to be hosted in the UK in early October 2001 to assess the nature of the content and the degree to which the sites provided either interactive opportunities for learning how to use the information or opportunities to those accessing the sites to learn how to use web authoring or related tools.
- ⁴ The writer surveyed on a random basis 10% of the sites listed in Centre for Civil Society and Centre for the Study of Global Governance (2001).
- ⁵ Sen's capabilities approach is similar to the concept of self-actualisation (Maslow 1954; 1968) which is concerned with people's needs, functions and motivations.