MEDIA@LSE

New Media and the Power of Networks

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Presented by

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My subject this evening is new media and the power of networks. It is about people and our abilities to make choices about how we, and others, want to live our lives. I believe that it is essential for policy makers, the business world and citizens to examine the way that the Internet is enhancing the power of those people who have the ability to make the best use of it. Because of the power of the new networks, it is essential to move beyond concerns about issues like media and Internet access and social exclusion. We need to link discussions about the new media and the power of networks with discussions about human rights.

I intend to argue that this is crucial because it is essential that the possibilities exist for many people to acquire certain types of abilities in the so-called Internet Age. The new media are permeating all kinds of social networks. But the widespread absence of abilities to make sense of a world of on-line spaces and off-line places, created by our global networks, means that there is a very strong case for a rights-based approach to new media policy.

This evening, I want to focus mainly on the positive, enabling power of social networks and the new media. But the events of September the 11th underline the need to say something about the disabling and destructive power of networks. The sorrow we feel for those who have lost people they love, and for the people whose poverty and hunger is now exacerbated by new fears, is being mediated by information produced by traditional media organisations and within the electronic spaces of the Internet. It is increasingly difficult to make sense of this information. This is not just because of its quantity or because of its content. It is because it is very unclear what the provenance of this information is. This is not a new problem. But it is a problem that we must take seriously if there is to be informed public debate about terrorist acts and the actions of others within the fabric of the global social environment.

Globalisation and the spread of new media like the Internet are often said to be disrupting society. Many think that the spread of networks is making it very difficult to anticipate change and, indeed, for any type of authority to govern effectively. The dilemma over how to tackle the terrorist's use of these

networks, without infringing upon established rights and freedoms, is dramatic evidence of the seriousness of this problem. Is it possible, then, to imagine how the contradictory power of the new networks can be employed in ways that are positively enabling for individuals – and for society as a whole?

I think that it is. But it is only possible to do so, and to formulate effective policy to support this, if we connect concerns about the new media and the power of networks to bigger issues of rights, entitlements and social development.

Most of our policies for the Internet Age are encouraging a situation in which only a small minority of people have, or are able to acquire, the ability to use the new media in ways that strengthen their chances of making choices about how to live their lives. For example, choices about treatments for illness, about explorations of new skills and jobs, or about their searches for like-minded people.

In the case of those who are unable to use the new media networks in this way, much human potential is being lost. This will, if it does not already, infringe on people's human rights. It follows that there are grounds for policy action to ensure that the new media do provide electronic spaces where people can acquire new abilities that can assist them in managing their daily lives.

What abilities am I talking about? I am not talking simply about acquiring skills to get on the Net. Nor am I talking about the ability to use the World Wide Web, discussion lists, or e-mail. I am also not thinking about the new e-government, e-commerce or e-everything else services that we hear so much about. The abilities I am thinking about this evening are of profound importance. These abilities, or as Professor Amartya Sen, the Nobel Prize winning economist calls them, these capabilities, are acquired cognitive capacities and the ability to discriminate between alternative choices. These capabilities are the foundations of the freedom which allows individuals' needs to be met; needs like remaining healthy and interacting with others.

If new media spaces can be developed in ways that augment people's capabilities in this sense, that Sen considers, then there is a public obligation to do this. If policy does not begin from this starting point, the likelihood is that global networks will be employed only by a minority of people to help them acquire the capabilities to discriminate between alternative choices. If the majority of people do not have the capabilities to deliberate about the things that they value, and the new media are a contributing factor to this, then something should be done.

More policies to reduce the so-called digital divide are not the answer in this case. The issue that I am talking about is not related particularly to the uneven diffusion of telephones, computers, and Internet access. Instead, it is related to the need for a radical step in new media policy. This must be to create electronic spaces using the new networks to facilitate the acquisition of capabilities, in Sen's meaning of the word, that are needed for the majority of people. I will show tonight that current trends in the development of the Internet do not favour this, at least not for the majority of people. This is because the bias of the new media favours the minority of people; those who are best positioned to live their lives in an intensely technologically mediated world.

To explain this, I will ask and answer four questions. First, why should we be concerned about the Internet and what I am referring to as the 'power of networks'? Second, is there a case for a change in policy to ensure that people have the right to acquire certain essential capabilities for living in the Internet Age? Third, why can't we leave it to teachers to worry about this? And, fourth, are there grounds for optimism that the emphasis of policy will shift to focus on capabilities for living effective lives in the Internet Age?

First, why should we be concerned about the new media and the power of global networks like the Internet?

Professor Roger Silverstone, who directs the Media and Communications Programme here at the LSE, gives us a straightforward answer to this question. We study the media, he says, because we need to understand how they contribute to the exercise of power in society, within the established political processes and outside them.[1] Most of the attention of media and communications policy is on markets and regulation or on access to technology, or on the costs of reducing social exclusion. But much more is at stake and this is the necessity for many more people to acquire new forms of capabilities of the kind Sen is thinking of, and that Roger calls media literacies. [2]

Media literacies are crucial. They go far beyond knowing how to read and understand what we see and hear in the traditional media or by accessing the Internet. [3] New media literacy is crucial because, as Manuel Castells says in his book *The Internet Galaxy*, which was launched here at the School yesterday, the Internet is the fabric of our lives.[4] If you are persuaded by this claim, and if people living within this fabric are to have the freedom to achieve the lifestyles they want, they must be able to acquire the necessary media literacies. Without the ability to achieve these literacies, problems of alienation, poverty and ignorance, and – indeed – of terrorism, will worsen. This is because relatively few individuals will have the capabilities to improve their own lives or to express their own opinions about what they value.

Manuel Castells argues that informational strategies are now the most effective means for the exercise of power on the world stage.[5] Democratic processes, constructed around capabilities for media literacy, are essential if people are to achieve the things that they value. When electronic information is embedded in, and is mediating, so many people's lives, some form of control of networks like the Internet is, as Castells says, perhaps the most fundamental political issue.[6]

Issues around control of the media and communications networks are not new. Raymond Williams, a major British scholar in the field, and many before and since, have linked issues of control of the structure and content of older media and communication networks to questions about the organisation of society. [7] But John Thompson's work at Cambridge more recently suggests that there is still a profound neglect of how specific forms of media – including the new Internet spaces – are influencing the way that people choose to live their lives. [8] Much of today's discussion about the Internet is not about how, or even whether, the new media might augment people's capabilities to change their lives. In fact, it is often completely divorced from any consideration of the conditions of their lives, or of their freedom to create positive changes in their lives.

Thompson talks about the 'double bind of mediated dependency'. [9] By this, I think he means that, just when the process of identity formation is being enriched by the new media's rich symbolic content, we are becoming more dependent on new media networks that are beyond our control. The vast majority of people have no say over the new media networks or their contents, over how they are structured and what they cost to use, or, indeed, whether they are consistent with enabling most people to acquire capabilities for living effective lives. Thompson suggests, with others, [10] that the mediated experiences associated with the new media networks are biased in various ways, but that most importantly they tend to disempower local forms of political organisation. They make traditional forums for democratic dialogue very difficult to sustain.   He argues that a new form of 'publicness' is required.[11]

But like Jürgen Habermas's [12] earlier advocacy of the need to create spaces for public discourse, and like the pleas of those who are concerned with the potential for what is often called 'deliberative democracy', theory stops short of specifying what can be done to create new forms of 'publicness'. There is, of course, the strategy of regulation to achieve a reduction in the concentration of the media and communication industries.[13] And of course, it is necessary to examine how greater programming variety can be achieved and how the

concentration of the global media players can be reduced. But while these are issues that need to be addressed, much more attention needs to be given to other aspects of new media policy, to issues of democracy and to concerns about sustainable social development. And specifically, to how policy can foster Internet spaces where people may acquire the capabilities that they need for functioning in a highly technologically mediated world.

We need to consider questions about new media policy, democracy, social development and distributional equity together. If the new media networks do not favour environments that enable the majority of people to choose how to improve their lives, then policy is needed to support networks and applications that do favour this. Policy should ensure that the new media create the possibility for individual self-development, or to use another term, for self-actualisation. [14] It is very difficult to move this argument to the centre of the policy agenda. This is mainly because new media policy is not yet concerned at its core with people's rights and entitlements in the Internet Age.

It is true that many now do recognise the importance of global networks. It is not necessary to rehearse why these networks seem to matter so much. As the American economist, Paul Romer, argues, one reason they matter is that in a knowledge economy, hardware, software, and what he calls 'wetware', or human capital, are the replacements for raw materials and certain kinds of workers.[15] He says, like many others, that new capabilities for managing electronic business networks are needed. The prospects for economic growth depend on being able to reap the benefits of organising commerce around networks.[16] But, the principal focus of discussion about the 'new', the 'knowledge' or the 'digital' economy is on growth and technology. It is not on distributional equity, human rights and social development.[17]

In discussions about the information society that do encompass issues beyond economic growth, attention is being given to the capabilities for building social or human capital. I have contributed to this area in my own work. My students and I have looked at technological capabilities for designing all kinds of networks and electronic services, from web designers to

geographical information systems. We have examined what we call institutional capabilities, such as those for making policy and for regulating in areas like intellectual property protection, electronic commerce or broadcasting.[18] Often this leads to interesting debates about Internet-related skills, but rarely does it lead to a discussion about rights and entitlements. To go into this discussion, we need a rather different starting point.

We need to join up conventional discussions about capabilities for acquiring skills for the knowledge economy with a direct consideration of the capabilities that people are entitled to acquire in a humane society. This brings me to the second question.

Is there a case for a change in new media policy to ensure that people have the right to acquire certain capabilities?

Professor Sen's work offers a very helpful way of thinking about issues of rights and entitlements. It can be applied with very practical results in the new media field. He calls for an examination of capabilities as a basic human right. In building his idea of capabilities, Sen writes about functionings. Functionings, he says, are what people may value doing or being.[19] Functionings may be very basic, like being free from hunger or illness. They can also be very complex, such as being able to participate in the life of a community or having self-respect.[20] Sen argues that capabilities are the combinations of functionings that an individual is actually able to achieve. Capabilities are the essential underpinning of the freedom to achieve whatever lifestyle people want.

Applying this approach to the new media, we need to ask what an individual's realised functionings are; that is, what is a person able to do? And what set of capabilities is available to an individual? It is necessary to evaluate and to decide upon the capabilities that any person is entitled to, and this is the issue for policy. As Sen argues, the evaluation process is a social choice exercise. It requires public discussion, and a democratic understanding and acceptance.[21]

These social choices are not about capabilities for encouraging 'social' or 'human capital' development. As Sen points out, capabilities of this kind tend to emphasise the agency of human beings in augmenting the production of goods and services. They are mainly concerned with the problem of the growth potential of the digital economy and with how people can become more productive or efficient. Sen's capabilities approach is different. It is about 'the substantive freedom – of people to lead the lives they have reason to value and to enhance the real choices they have'.[22]

His approach starts from a concern for human well being and from a view that choice and the freedom to act are essential. He explicitly rejects the neo-classical proposition that human welfare can best be served by market exchange or that such exchange produces a measure of well being. He develops a needs-based approach to individual entitlements. Professor Nicholas Garnham, of the University of Westminster, has applied this approach to issues of telecommunication access. He points out that entitlements have nothing to do with merit or absolute wealth. The metric for deciding who gets what is not money or pleasure (or utility). Instead, it is whether people are entitled to develop capabilities to achieve what they value in their lives. [23]

This idea is one which is similar to the idea of self-actualisation, the term I used earlier. Abraham Maslow developed this idea some time ago in reference to people's needs, functions and motivations.[24] Like Sen's focus on capabilities and functionings, Maslow said that people who lack food, safety, and love and esteem, will want food in the first instance more strongly than they will anything else. But when physiological needs are relatively satisfied, a new set of needs for stability, security, protection and freedom from fear, anxiety and chaos come into play. Like Sen, Maslow talked about 'being', and about the importance of the individual's capacity for growth.[25] There are problems in the emphasis on the self, rather than on the self in relation to the other, but both Maslow and Sen give central place to cognitive capabilities and to learning in their work. In fact, Maslow argued that any blocking of the use of these capabilities is a threat to the satisfaction of the basic needs of

human beings.[26] If the organisation of the Internet fabric is blocking people's capabilities for meeting their needs, then there is a fundamentally important issue here for policy.

Predictions that the Internet's capacity for improving connectivity will create profound social change are probably not incorrect. They do suffer from hyperbole. And amnesia often is the condition, for instance, when some Internet pundits forget that the off-line world of things and human beings still matters. But the facts that the Internet is spanning the world, and that it is providing an open space for learning, make it imperative that we check whether its development is threatening people's rights and entitlements to acquire the capabilities they need for living their lives.

The technical tools for communications and the media have influenced the lives of human beings for centuries. There was once a hope that yesterday's media would support measures to enable people to improve their social and economic condition. Now, the same hopes, at least in some people's minds, are being pinned on the Internet.

My contention is, though, that such hopes will not be fulfilled without a shift in the focus of policy to the question of rights and entitlements, the rights and entitlements of individuals to the opportunity to acquire capabilities for effectively using the electronic spaces created by the new media to strengthen their own freedom to decide between alternative ways of living. We do not have a basis for shaping the new media, including the Internet, that favours their use by the majority of people in ways that enable them to be effective in developing their potential within their own contexts. People must be entitled to make choices about their lives. To choose, they need to acquire a set of capabilities that are relevant to the Internet Age. Nicholas Garnham suggests that we should examine the barriers to the freedoms of people that developments in the new media are creating. This is a very helpful suggestion.

Sen argues that communication and exchange between people in the modern world requires basic education and training. He contends that changes in a globalising world create a profound need for social justice and for people to take part in decisions, if and when they choose. [27] This indicates that capabilities such as reading and writing are important, as are the capabilities for being well informed and able to participate freely in society. [28] But the difficulty is that we do not have specific details about what policy measures would encourage the broadest development of these capabilities for informed choices when the power of the new media is becoming more pervasive.

This is the issue I want to tackle now, because without specific details, it is impossible to see what this might mean for policy action. This observation becomes yet another exhortation for reasoned public dialogue and for democratic decision-making. This is the issue that my third question addresses.

Why can't we leave it to teachers to worry about these capabilities?

Moving beyond exhortations that the new media should encourage deliberative democracy means strengthening the capabilities of more people than children and teenagers to participate in the ways that they choose. It means that all of us have to reconstruct the very core of our understanding of what the Internet is and what the new media mean for all people. We cannot leave worries about these capabilities to teachers and formal education. Without guidance from social activists and interests, teachers are in no better a position than the rest of us to guide this process. Formal education is sadly too rarely organised to encourage a dialogue about entitlements and social purposes. If we are concerned about distributional equity and poverty reduction around the world, which we must be if we want to understand both the positive and the destructive power of networks, then we must see how the Internet itself – as a vast space for learning – can better contribute to the goal of improving distributional equity. At present, the Internet is contributing in some limited ways.

It is the case that a minority of people are benefiting from Internet-based discussions and information resources. But the new media policy priority must be to enable many more people to benefit in this way. This is not simply a problem of improved access or even content *per se.* Policy must demonstrate a commitment to the rights of the majority by increased public spending to ensure that the Internet does become a space of opportunity for people to acquire their own capabilities for reasoned choice. Only in this way are we likely to ensure that people's needs are met.

How is the development of the Internet biased against this? Here, some empirical evidence is helpful. Using an Internet search engine, it is possible to discover huge numbers of what are called 'information intermediaries'. These are sites on the World Wide Web.

Despite the burst of the dot.com bubble, in industry sectors from publishing to automobiles, and from insurance to banking, there are dozens of web sites. The owners of these sites claim that they support many aspects of local and global commercial transactions.

Our analysis, here at the School, with colleagues at the Institute of Development Studies at Sussex, of over 350 such information intermediary sites in the horticulture and garment sectors shows two things very clearly. The vast majority of these commercial sites are 'walled' sites; they are for members only. Also, even when they are open and take advantage of the global reach of the Internet, they are not always what they purport to be. They may claim to offer business support services like logistics, or help for producers to meet industry standards for quality or environmental protection, or even help in verifying the identities of firms. But perilously few actually do this. The notion of the 'trusted' information intermediary in the commercial world of the Net is perhaps a valid one, but only for a minority of firms that are members of closed clubs.[29] This may be appropriate for commercial activity, but it has significant implications for the bias of future Internet development and for the Internet fabric for non-commercial activity.

The growing commercialisation of the Net, with its pressure to close up the open public space of the Internet's architecture, so that it is more secure and reliable for business services, is considerable. Some argue that as the Internet develops, it will cease to be a simple 'end-to-end' network that is potentially available to all to support their activities. Quite a number of technical experts, legal people and some economists are concerned about what these changes mean for the balance of closed spaces and public open spaces; and for the legal and regulatory interventions that might be needed to preserve an open Net space. For those who are interested in the policy issues around the Internet's architecture, I highly recommend a new analysis by Professor Paul David on the prospective ending of 'end-to-end' Internet architecture' that was published in the *Oxford Review of Economic Policy* in September.[30]

But tonight, I want to focus on a parallel issue that is central to our consideration of rights and entitlements to capabilities for the majority of people in the Internet Age, in Sen's sense. The issue of capabilities requires us to examine whether Internet information intermediaries outside the commercial sphere might be expected to support the acquisition of the kinds of capabilities that Sen talks about, for the majority of citizens around the world. The statistic that 68 per cent of the Internet's content is in the English language raises an immediate and obvious barrier for many people who may wish to acquire new capabilities. [31] But, in addition to this much debated issue, there is the question of whether the development of the Internet is encouraging the kinds of web sites that will support people in acquiring the capabilities, that is, the cognitive capacities and abilities to discriminate between alternative choices. The answer is that the Internet is not developing in this way.

If we do a search of Internet information intermediary web sites that are geared to non-commercial life, we find that, from the health sector to the education sector, and on issues of environmental protection or globalisation and, indeed, anti-globalisation, there are again a huge number of web sites. But several things soon become clear. The sites that are run by established

institutions – governments, education establishments, or development organisations – generally provide people with highly structured, authoritative information, at least in terms of the creators' views. Sometimes they support interactivity. But very, very few are set up so that citizens can contribute their own information, or indeed, acquire the capabilities for deciding how that information should be valued or acted upon.

Apart from these institutional sites, there are, of course, growing numbers of personal home pages, and web sites of small and large organisations that claim to represent civil society. The LSE's recent publication of a *Global Civil Society* report [32] shows that there are some 13,000 of these kinds of organisations – counting only the international ones - scattered all over the world. Many of these have set up information intermediary web sites. Their status as trusted information intermediaries is established for their members, or for those who visit these sites, by these organisations. But they mainly offer information *to* users. Rarely do they provide the means for individuals to acquire the capabilities, for instance, of making their own information contributions. If we want the Internet to support opportunities for citizens to contribute to deliberative democratic processes, then this is the kind of development that is needed to a far greater extent than is occurring today.

Mostly what Internet-based information intermediaries do, including those in the public sector and those being developed by civil society organisations, is keep track of information that the user has viewed, or enhance information with annotations and offer various kinds of personalisation. Putting an intermediary between the originator of the information and the reader can make Internet surfing more efficient and it raises issues about privacy. And this issue is on the public policy agenda. But in most cases, these intermediaries are doing absolutely nothing to address the issues of capabilities in Sen's meaning of the term. That is, what is needed to address the issue of rights, entitlements and social development in the Internet Age.

One development that may begin to address these issues is the free availability of 'toolkits' for producing and sharing information in the public

spaces of the Internet. An Internet search shows that there are some, but not very many, examples of this type of web site development. For instance, the Internet Scout project, supported by the National Science Foundation and the Mellon Foundation in the United States, has developed a toolkit that simplifies the technical hurdles involved in creating and sharing Web-based information and discussions. This is a software package that allows an organisation with a minimum of technical expertise and resources to set up a web site. The Scout project is involved in developing a software package called Isaac which provides a means of linking disparate collections of information together so that a broad view of any given subject can be developed by an individual. These new media applications rely on open source software; they are not proprietary products.[33] They also provide access to information that is freely available in the public domain, and the use of most of the information is unrestricted.

Another illustration of an Internet-based intermediary that solicits contributions of information from many people and makes these available so that they can be copied or quoted without restriction is ID21,[34] a joint initiative of several organisations including the Department for International Development and the Institute of Development Studies at Sussex. Originating authors and institutions are acknowledged so that the viewer can discern where the information has come from; its provenance. Yet another example, close to the School, is the London-based Hansard Society's efforts to pioneer new ways of involving people of all ages and backgrounds in electronic democracy initiatives using the Internet.[35]

I could provide more examples of initiatives like these that offer people the tools to make contributions to public discussion on the Internet and to share information. These are the types of sites that are necessary if the majority of people are to have the chance to acquire capabilities that are needed to support new forms of democratic process. Most of these initiatives, however, are inadequately funded as compared to sites that offer information to viewers. They are always struggling to maintain their work on software or on managing their information sites. Yet, these are the types of sites that make

the largest contribution to developing people's capabilities to meet their needs and to participate in an informed dialogue about social choices.

Most publicly sponsored sites, and most sites of civil society organisations, are designed mainly to be authoritative information providers in a familiar 'broadcast' or 'advertising' mode. They are not spaces where the majority of people might acquire the new capabilities that Sen talks about for living in the Internet Age.

A Master's thesis completed this summer by one of our Media and Communications students at the LSE confirms this. He compared the publicly supported web sites for e-government services that are being developed here in the United Kingdom, in Canada, and in Australia. He found that they are all using an inflexible model that maximises the provision of authoritative information to people. They hardly begin to provide the tools to enable citizens to acquire the capabilities to make choices about social alternatives, or to contribute to public deliberation, apart, that is, from short-lived, and moderated, discussions on specific issues.[36]

The under-resourcing of efforts to develop the capabilities needed for information sharing of the kind I am concerned about must stop. Putting effort into this area ought to be the priority. It is one of the few ways, in the world of the new media, that we have of moving towards creating better conditions for learning about the world around us and for enabling people to participate in choices about that world. Policy steps in this direction would represent a needs-based approach to new media and Internet policy - a policy that would be a response to a respect for people's entitlements and human rights.

My last question is this.

Are there any grounds for optimism about a radical change in new media and Internet policy?

A pessimist might note that the relationship between technical change and society is a central theme in nearly all social science inquiry. Lewis Mumford, for instance, wrote in the 1930s that 'technics and civilisation as a whole are the result of human choices and aptitudes and strivings, deliberate as well as unconscious'.[37] A needs-based approach was called for, but nobody listened very carefully. The transparency of the processes of making social choices in the Internet Age is even more difficult to maintain in a world fragmented by complex global and local networks of social actors. A minority view of the proper role of our technological networks in society is taking precedence.

This area of policy is a difficult 'blind spot' in our thinking about the new media and the role of the Internet. It is not novel to argue that the media and communications have profound implications for society. The Canadian economic historian, Harold Innis, whose ideas were popularised by Marshall McLuhan, said that 'civilisation has been profoundly influenced by communication'. He was concerned about the implications of the media for the character and the distribution of knowledge.[38] Long before the Internet, he said that 'oral discussion inherently involves personal contact and a consideration for the feelings of others'.[39] The Internet has the potential to offer a space for new dialogue and to forge some new kinds of personal contacts. But it certainly cannot be used for this constructively if people do not have the capabilities for contributing, for making up their minds about the provenance of information, or about the trust they want to place in the medium's content.

So far, despite the 304 million people who were on-line in June 2000 and the more than one billion (one thousand million) unique pages of Internet content,[40] we do not seem to be investing enough in Internet developments

that will promote the acquisition of the capabilities needed by the majority of people in our societies.

There is a bias in new media development in favour of closed network spaces and in favour of 'broadcast' or 'advertising' modes of authoritative information provision. This discourages other Internet developments like the ones I have mentioned that would help citizens to acquire new capabilities.

I am optimistic, nevertheless, that a radical change in new media policy might occur. The networked world is malleable. It continues to encourage exchanges of new ideas about what it can be useful for among many people, though still a minority. More effort could be given to developing policies which will encourage the acquisition and use of Internet tools of the kinds I have mentioned and this, in turn, would help to build up the capabilities of the majority of people. If this happens, there is a chance that the new media could play a very important role by enabling more people to acquire the new capabilities that Sen and Garnham say are essential. As Pierre Lévy, a French commentator on the Internet Age, puts it, the power of networks could then help profoundly reshape social bonds in the direction of a greater sense of community and help us to resolve the problems currently facing humanity.[41]

But to achieve this, some existing public support for Internet development needs to be diverted into establishing a foundation for essential, and currently very scarce, types of web sites. These are the ones that support the acquisition of capabilities for being well informed and able to participate freely in society – that is, they support the acquisition of new media literacies, to use Roger Silverstone's term, not for the minority, but for all.

Some might want to argue that policy intervention along the lines I am advocating is inconsistent with a libertarian view of the Internet. It would mean directing the Internet's development at a time when this should be left to the Internet's designers, so as to encourage experimentation and innovation. But a rights-based approach to future Internet developments will not spring from present trends in its development. Diverting a portion of the spending

that now goes on promoting access to the Internet, on underwriting the costs of regulating the media conglomerates, on technical fixes to protect digital information, is not likely to bring these activities to a halt, nor should it. It is not my view that these should stop, although intellectual property rights in digital information poses a special set of issues which cannot be dealt with here.

It also might be argued that a rights-based policy to encourage Internet developments that will enable more people to acquire the capabilities for discriminating between alternative choices could have unintended consequences. It might, for example, heighten the risk that new forms of deliberative processes, with greater and potentially global participation, become unstable, relative to the problems of governing that already exist today.

But policy intervention to mobilise people and funds along the lines that I am suggesting is essential. Inaction will increase the likelihood that the new media and the power of networks simply compound the complexities of governing and of solving problems created by distributional inequities in many spheres of life. It will mean that the potential of the new media technologies is not used to address fundamental social problems of marginalisation and poverty.

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What are the messages that follow from a capability approach to the role of the new media in society?

First, the new media policy debates are centred largely on legal issues and regulation. This addresses only a tiny part of the larger issue of the role of the new media in society. These debates ask who should intervene and how, largely on the supply side of the information and communication industries. Policy must also examine what capabilities all people are entitled to acquire.

As Sen might say, what are the freedoms that people are entitled to in the Internet age?

Second, in the formal education arena, information society discussions focus on lifelong learning, skill acquisition, IT-enabled education and distance learning, but most of the initiatives aim to make people more productive at work and many offer only authoritative information to people. These discussions and initiatives are not fundamentally needs-based. They are often driven by what technology can do, not by what the majority of people might want to do with it. An alternative approach is essential. One such alternative is public investment in information intermediaries that develop and make available the toolkits and other resources that would enable citizens themselves to acquire capabilities to become critical, informed participants in democratic processes.

Third, there is a need for an evaluation of the capabilities that people are entitled to in the Internet Age. We will not get very far if we limit our thinking to conventional capabilities, that is, skills associated with human capital development, mainly for the workplace. We also will not get very far if we wait for the commercial sector to encourage the development of the kinds of tools and Internet spaces that we need for the majority of citizens. It falls to the public sector and to civil society organisations to create these spaces. And even if the development of these web sites does attract greater and sustained financial support, there will still be a need for decisions about what specific sets of capabilities are required. This evaluation is essential, not so much to reduce social exclusion or digital divides. It is essential to acknowledge the entitlements of citizens to be informed participants in society. It is essential to support people's entitlements to create a society in the manner that they choose.

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In a short epilogue, Professor Mansell[42] acknowledged Professor Nicholas Garnham's earlier work on capabilities, the Dixons Group plc and its Chairman, Sir Stanley Kalms for its support of the Dixons Chair in New Media and the Internet at the LSE, and the contribution to her work of many former and current colleagues, especially those at the Science and Technology Policy Research Unit (SPRU) at Sussex University and in Media@lse at the LSE.

Dixons Group plc

Notes

1 Roger Silverstone, *Why Study the Media?* Sage, London 1999.

2 Roger Silverstone, ibid.

3 Roger Silverstone, ibid.

4 Manuel Castells, *The Internet Galaxy: Reflections on Internet, Business and Society,* Oxford University Press, 2001.

5 Manuel Castells, Ibid.

6 Manuel Castells, Ibid.

7 Raymond Williams, 'Communications as cultural science', *Journal of Communication*, 23 Summer, 1974.

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