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Critical Debates in Internet Studies:

Reflections on an emerging field

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Reflecting on an emerging field

Telling the story of the internet

In recent years, the story of the internet, a decentralised, global communications network mediated by the conjunction of computers and telecommunications, has been retold often enough for a consensus to have emerged. Drawing on the longer history of telecommunications, along with accounts of a century's innovations in computing, the story of the internet is generally traced to its origins in the 1960s, making 'internet studies' a very recent field. Key moments include ARPANET's first decentralised communications network in 1969, the introduction of email in 1975, followed by usenet and bulletin board services, the many interim innovations born of interactions between scientists and hackers in the 1970s, Unix users' tradition of the 'open source movement' during the 1980s, the development of hypertext language by Tim Berners-Lee in 1989, the first client browser software in 1991 leading to the World Wide Web and, bringing the internet widespread recognition beyond the technological elite, US Senator Al Gore's championing of the 'national information infrastructure' (the NII) in the early 1990s. Following this, Microsoft introduced (or privatized) the internet for the mass market with the Windows browser Microsoft Explorer in 1995, and the internet became widely used among businesses and public elites in Western societies by the mid 1990s (Castells, 2002; Slevin, 2000; Winston, 1998).

In its core infrastructure, there has been little technological change over the past decade, notwithstanding vast increases in speed, scale, content and complexity. However, socially this has been a decade of rapid and significant changes, with the internet becoming an everyday technology, diffusing through homes, schools and workplaces by the late 1990s. In 2003, 76% of Americans had used the internet, and 65% had home access (USC, 2004); the rate of internet diffusion in the USA is such that it took just seven years to reach 30% of households, a level of penetration which took 17 years for television and 38 years for the telephone (Rice, 2002). In the UK, 58% of UK adults had used the internet by February 2004, with 49% of UK households having internet access in December 2003 (ONS, 2004). The World Internet Project (2004) found that 66% in Sweden (in 2002) had used the internet, 50% in Japan (in 2002), 46% in Germany (in 2002), 24% in Taiwan (in 2000) and 18% in Hungary (in 2001). Despite the rapidity of the diffusion process, there are considerable cross-national differences (Norris, 2001) and, it seems, a levelling-off in access.

If the key 'facts' of the story are agreed, the meaning of those 'facts' is often contested. It is beyond the scope of this chapter to consider technological and infrastructural debates, but it is our purpose to consider the social, political, cultural and economic debates over the internet's shaping, significance and consequences for society. The internet today faces considerable challenges precisely because of its astonishing success. There are problems of scale and capacity, of network architecture and infrastructural robustness, of international legal and regulatory frameworks, and of public trust, security and e-crime, all these accompanying the opportunities widely associated with the internet – its potential for enhancing global communication, revitalising the democratic process, facilitating economic development and trade, reconfiguring social relations and identities, and many others. The signs are growing

that the once-anarchic, perhaps emancipatory internet is subject to increasing attempts to privatize, commercialise, control and profit from the activities of consumers online. Some of these are defended as a 'neo-liberal' freeing of the market, online as well as offline. Others are hotly contested precisely as incursions into public freedoms, privacy and rights. In seeking to understand these phenomena, we must ask, what's new about the internet, what are its characteristics, what opportunities and dangers does it afford, why is it used as it is, in whose interests, and how could things be otherwise?

Complicating attempts to understand the social shaping and consequences of the internet is the way in which it continues to change – the scope of the world wide web is expanding exponentially, newsgroups are losing popularity while blogs are on the rise, instant messaging has displaced chat rooms for many users, e-commerce was slower to take off than expected while email proved the opposite, an unexpected 'killer application' not dissimilar to the surprise success of text messaging, and various increasingly-powerful mobile devices are reaching the market. Hence research must be specific about its focus. The singularity of 'the internet' is particularly problematic, for it refers to a diverse collection of technologies, forms and services bundled together (notably, the world wide web, email, multi-player gaming, e-commerce, newsgroups, peer-to-peer file-sharing, etc.). Yet 'it' (i.e. 'the internet') is often treated, misleadingly, as unitary in academic, public and policy discourses.

What is 'internet studies'?

What are the contours of this emerging field? A parallel story to that of the rise of the internet can be told about the emergence of 'internet studies', though the struggles for control are not quite so hotly fought nor the stakes so high. Still, like the internet itself, internet studies is by no means settled as an intellectual endeavour. Its disciplinary roots are diverse, its methods barely formed and its politics much contested. Moreover, its continually-evolving object of study, being a moving target for research, sets a challenging pace to the entire project. However, the highly time-sensitive claims about technological change are linked to much longer-term and more fundamental changes in society, thereby linking 'internet studies' to 'information studies' through concepts like the information society, knowledge society, information age and network society (Castells, 2002; Dutton, 1999; Webster, 2002). This, more than the focus on technology, brings a rich vein of theoretical development and argument into the field, together with the necessity of a multidisciplinary or, perhaps better, interdisciplinary perspective.

So, again like the internet itself, internet studies moved beyond the specialised fields of computer science and technology studies in the mid 1990s, drawing in scholars across the academy from the arts to political science, from anthropology to photography, and perhaps receiving the most enthusiastic reception in those relatively new and interdisciplinary fields of study - information studies, media studies, science and technology studies, and cultural studies. The *Journal of Communication* featured a symposium on the internet in 1996, with editors Newhagen and Rafaeli already arguing for a complex, empirically grounded analysis of the internet. The *Journal of Computer-Mediated Communication*, begun in 1996, proved quickly successful, *Information, Communication and Society* began in 1998, *New Media and Society* in 1999, and others followed. The first international conference of the *Association of Internet Researchers* (AoIR) brought these diverse fields together face-to-face (as

well as online) in 2000, and no visitor to the library or bookshop could miss the overwhelming explosion of academic books with 'internet' (or 'digital', 'wired', 'cyber' or 'online') in their titles. Still one may wonder, does the institutionalisation of internet studies mean that a distinct discipline is being born? Or that definite progress is being made?

At the time of writing, internet studies is less institutionalised than, say, media studies or cultural studies. Nonetheless, scholars have sought to identify distinct stages in the development of academic research on the internet. Wellman (2004: 124) describes the first 'age of internet studies' as 'punditry rides rampant', an optimistic celebration of the transformative potential of the internet during the mid 1990s, peppered with dystopian prognostications from the sceptics (see also Miller and Slater, 2000; Lievrouw and Livingstone, 2002). Around the time of the dot.com bust at the turn of the twenty-first century, the second age turned to a more serious engagement with evidence, seeking to document users and uses of the internet. As Wellman and Haythornthwaite (2002: 4) put it, current research studies the internet 'as it descends from the firmament and becomes embedded in everyday life'. His hope is that the third age – the present – will make the move 'from documentation to analysis' (Wellman, 2004: 27).

In this chapter, I will consider whether progress is being made towards the theoretical explanation and critical analysis, following both the defusing of the hype and documentation of descriptions of the place of the internet in society. Certainly, any such progress, like technological developments in the underlying infrastructure, has followed a haphazard path of problems, solutions and yet more problems, rather than the well-planned roll-out of a coherent programme. Yet, even though 'there is clearly an internet research generation in the making' (Castells, 2002: x), I shall not argue for the birth of a new academic discipline but rather for a new and provisional field, inevitably since it is tied to a fast-changing technology, that – appropriately – takes its key theories and methods from long-established disciplines in the social sciences and beyond. For if the internet is changing society, it is to theories of society that we must turn for an analysis of these changes.

Disciplinary origins and orientations

Labelling a field has consequences for how it is recognised, valued and connected to neighbouring fields. 'Information and communication technology studies' (ICT) is perhaps the broadest term used to refer to the field. 'New media studies' anchors the research agenda in a long history of media and communications studies. 'Information studies' instead links it to research from library and information studies, information systems and technology studies. So, if the term 'internet' in 'internet studies' is not a simple one, the term 'studies' is no less tractable, and 'internet studies', should, if it were not too tiresome, retain scare quotes throughout this chapter. 'Internet studies', then, is a field of inquiry which, while greatly stimulated by the global diffusion of the internet, has a longer intellectual history, bringing diverse strands of research (e.g. on studies of the economics of information, on cybernetics, on the social psychology of face-to-face communication, on the sociology of mass consumption, on media studies' accounts of previously-new media like the video recorder or computer games). Consequently, internet studies draws on, if not necessarily draws together, academic disciplines spanning information systems, psychology, economics, media studies and sociology, anthropology and cultural studies, among others.

The case for asserting the existence of, and importance of, internet studies lies, however, less in the distinctiveness of its theory or methods than in the distinctiveness of its object. There have been many attempts to specify just what is interesting and significant about the internet, while seeking to avoid a definition likely to become quickly outdated. Key features of new media, typical of the internet, are outlined in Lievrouw and Livingstone (2002):

- First, new media shape and are shaped by society in a manner that is 'recombinant', meaning that 'new media systems are products of a continuous hybridization of both existing technologies and innovations in interconnected technical and institutional networks' (p.8). This contributes to the difficulty of determining what is 'new' or not new about the internet (Jankowski, et al, 1999), and undermines simple causal claims about the role of technology in social change: as Castells (2002: 1) says, while networks are not inherently new to history, 'they have taken on a new life in our time by becoming information networks, powered by the internet'.

- Second, 'the point-to-point 'network' has become accepted as the archetypal form of contemporary social and technical organization', with the term 'network' referring to 'a broad, multiplex connection in which many points or 'nodes' (persons, groups, machines, collections of information, organizations) are embedded' (p.8). This fits with a society increasingly structured according to a 'network of networks' (Castells, 2002), and challenges the dominant 'one-to-many' frame of mass communication by adding in also one-to-one and many-to-many communication into the mix.

- Third, 'ubiquity', this not simply in the sense that all members of society may use new media (for many still lack access) but in the sense that new media 'are ubiquitous because they affect everyone in the societies where they are employed… Banking systems, utilities, education, law enforcement, military defence, health care and politics … are all dependent on extensive ICT systems for record-keeping, monitoring and transmitting information – activities that affect anyone who deals with these services or activities' (p.8-9).

- Fourth, interactivity, the means by which the internet and other new media 'give users the means to generate, seek and share content selectively, and to interact with other individuals and groups, on a scale that was impractical with traditional mass media' (p.9). Even though selectivity, interaction and content creation each have a longer history through other media and, of course, face-to-face communication, it is their specific recombination on a vast scale that mediates a new and challenging set of social consequences.

These key features of the internet provide a common focus for researchers in internet studies. But the social and communicative shifts that they refer to rest on more fundamental shifts. This means that claims for the distinctiveness of the internet are more productively focused on the processes of information, communication and power mediated by the internet - facilitating the technologically-mediated extension of human abilities to communicate across time and space and so enabling a greatly increased degree of connectedness among social actors world-wide - than on the technology itself. Many social trends also contribute to shaping any changing conditions of communication – trends in the nature and production of economic goods

and services, in the labour market, transport systems, language, etc, these often analysed in terms of Bell's 'post-industrial society', defined as 'the emergence of a new economic order characterised by the central importance of information and theoretical knowledge, and by a shift from a goods-producing to a service society' (Golding, 2000: 169).

To get a better sense of the field as currently developing, I examine two domains in detail, below. I shall then discuss three critical debates in internet studies in order to draw out some tentative conclusions.

Case 1: From the digital divide to digital inclusion

Defining the problem

On the premise that 'exclusion from these [internet-mediated economic, social, political, cultural] networks is one of the most damaging forms of exclusion in our economy and in our culture' (Castells, 2002: 3), concerns over the gap between the digital (or internet-) haves and have-nots have stimulated much debate and research on barriers to the supposed freedoms enabled by the internet. This 'digital divide' is conceived on all levels from the global, where it is primarily an economic phenomenon that distinguishes developed from developing countries, to the national level, where factors of geography, socioeconomic status and ethnicity prove crucial, and the domestic level, where gender and generation stratify contexts of access and use.

These different levels invite very different kinds of empirical projects, from the cross-national comparison of economic flows, employment trends in the information and other sectors and emerging practices of national and international e-commerce, to detailed critiques of national information infrastructure policy and implementation, population surveys comparing internet access and use across diverse constituencies within a nation and, at the most micro-level, ethnographic studies of the meanings and practices of internet access and use in the home, school, community or workplace.

Developing the research agenda

Several phases can be distinguished in the developing research agenda. First, in the early to mid 1990s, the focus was on who has access to a computer, then to the internet, and who does not. Digital divide research followed diffusion theory (Rogers, 1995) in seeking to predict the acquisition path for the new medium from its introduction and take up by privileged, early adopters to mass ownership across society. The assumption was generally made that the internet is an unquestioned public and economic good to which all citizens have the right of access (as advocated during the 1990s by the USA's Information Infrastructure Task Force and, in Europe, by the Bangemann Report; Liff et al, 2002), a neo-liberal assumption challenged by critical scholars (Golding, 2000). Beyond charting statistics on access in relation to such stratifying factors as region, age, and socioeconomic status, this phase led to the setting of policy targets. In the UK, the Government announced a target of getting 'everyone online' by 2005. In the US and elsewhere, attention also focused on those who were 'falling through the net' (Compaine, 2001).

A growing body of research showed that the divide between digital haves and have-nots was reducing but by no means was the gap closing, this suggesting instead a

continual shifting of the goal posts and, consequently, the failure of the dichotomy itself. Indeed, increasing ICT access seemed to maintain rather than eliminate distinctions between the relatively more and less advantaged. It became widely recognised that a more complex view, going beyond a simple dichotomy of haves and have-nots, was therefore required (Selwyn, 2004). Not all agreed, however. Compaine (2001: 325) adopts a strictly diffusion approach to argue that the digital divide is rapidly closing, and that the market can be left to itself: he suggests we should 'declare the war won', for 'the overwhelming weight of the data… all point in a direction that is historically consistent and socially positive'. This, he argues, is precisely a triumph for capitalism, for it is economic pressures towards innovation and competition that systematically drive down costs and extend accessibility to maximise the market.

For most researchers, however, the second phase switched focus to examine the quality of access, 'the new technological divide' (Castells, 2002). As the platforms for internet access (computer, mobile phone, digital television, and a growing range of personal devices), quality of internet access (dial-up, broadband) and the range of locations to go online all diversified, the question increasingly became, 'access where, how and to what?' Following a business model of continual expansion, updating and specialisation, technological innovation is a moving target, requiring of the user a recurrent rather than one-off investment (Golding, 2000) in which, once again, social stratification matters. Based on her substantial cross-national review, Norris (2001) concludes that increasing internet penetration serves to exacerbate rather than reduce inequalities, precisely because the internet is unlike simple media and consumer goods in which a more-or-less stable technology diffuses from the early adopters to the mass market. For the internet, the 'chameleon-like capacity of digital technologies to morph, converge, and reappear in different guises' (Norris, 2001: 17) maximises the conditions for maintaining distinctions. Hence 'the' digital divide was reconceptualised as a continuum, with 'degrees of marginality' (Murdock, 2002: 387), and in the plural, as a number of different divides.

The stress on equality shifted to that of equity, for providing everyone with equal access is all but impossible in a fast-moving, commercial context in which access is largely privatised within homes and workplaces. On the other hand, seeking to ensure that everyone has a fair or equitable chance is more achievable. In practice, this means a policy of compensatory interventions to ensure that the disadvantaged have at least minimal provision of internet access. Indeed, this phase saw numerous community-based initiatives to provide internet access targeted towards marginalised, 'hard-to-reach communities'. Many pilot projects sprang up to bring internet access and support to deprived inner-city communities, to ethnic minorities, to the elderly or disabled, and so forth (e.g. Phipps, 2000). Frustratingly, however, the many and valiant attempts to collate and share best practice and lessons learned were undermined by the difficulties encountered. These initiatives proved highly resource intensive, uncertain as to their purpose, often underused, and difficult to sustain. Warschauer (2003) offers three telling accounts of well-meaning attempts to bring the internet to excluded communities: in each case the problems encountered, resulting in generally disappointing outcomes, amply demonstrate why 'access is not enough'. Rather, multiple factors – material, economic, social, cultural, technical – crucially mediate access and use of the internet (Murdock, et al, 1995; Livingstone, 2002).

In the third phase, 'digital inclusion' has become the new policy goal, linking ICT provision to wider debates over social inclusion and exclusion, and inviting research on the multiple paths to inclusion and the multiple barriers leading to exclusion (Selwyn, 2004; Liff et al, 2002). While not leaving behind the ever-growing requirements of quality access for all, this also brings to the fore questions of meaningful use, of the social contexts of use, and of people's motivation and levels of skill. Moreover, as more aspects of daily life are mediated by the internet, digital skills must be reframed also, seen no longer as the simple extension of basic skills (typing, updating software, installing filters, etc) but also more ambitiously in terms of literacy (or capacity or competencies) (Livingstone, 2002). The present research agenda, then, assumes that 'the ability to access, adapt, and create new knowledge using new information and communication technology is critical to social inclusion in today's era' (Warschauer, 2003: 9). Perhaps initiatives grounded less in technology and more in people's motivations and social contexts of daily life can be more successful. While still resource-intensive (in both online and, especially, offline resources), Warschauer offers evidence that marginalised groups more successfully gain internet-related skills and literacies when they come together for a community-based project meaningful to their circumstances - not, in other words, to learn to use a computer, but rather to use computing and other resources in order to address the neighbourhood crime problem, or construct a student newspaper, or to participate in the development of local citizens' rights, etc.

Lessons learned

The dominant metaphor in the digital divide debate is that of a race, with some getting ahead and others left behind: the necessity of running seems taken for granted, since everyone seems to be joining in, though the gains waiting at the winning post are less than clear, and nor is it established that running this race is preferable to other routes to inclusion (e.g. tackling poverty or improving education or strengthening the public sphere). Still, this metaphor is instructive in its emphasis on competition, a central feature of capitalist societies. The lesson of the second phase of the research agenda is surely that even if policies could be put in place to ensure that everyone finishes the race, still some will get on the tracks earlier, arrive at the winning post first, and so get a head start in subsequent races. Little is surprising here, for research in internet studies repeatedly shows 'the persistence of familiar patterns of social structure and experience' (Golding, 2000: 180). More pessimistically, Norris (2001: 17) concludes that 'even if the basic digital divide shrinks gradually over time, it is naïve to believe that the virtual world can overturn fundamental inequalities of social stratification that are endemic throughout postindustrial societies, any more than it is likely to overcome world poverty'.

Still, with more modest ambitions than that of countering inequality, the research community continues to devote its efforts to identifying the conditions under which access to information and communication technologies (computing, digital technologies, most often the internet) can exacerbate or alleviate pre-existing levels of inequality and exclusion. The third phase faces many research questions in pursuing the argument that 'social context, social purpose, and social organisation are critical in efforts to provide meaningful information and communication technology access' (Warschauer, 2003: 201). And this in turn can stimulate a range of policy interventions to address the barriers and enablers, now focused more on 'real' social

factors contextualising internet use than on provision of technology, in order to use ICT to broaden and deepen social inclusion (e.g. Liff et al, 2002; Phipps, 2000).

Case 2: Online participation and e-democracy

Defining the problem

Stimulated by new opportunities to communicate, connect and deliberate online, in a context in which the mass communication model, with its centralised organisation, elite gatekeepers, established relations with institutions of power no longer has a monopoly, many have sought to explore whether the internet can facilitate political participation and so revitalise the far-from-perfect democratic process. In the debate over e-democracy, the public or user is positioned not as consumer or skilled worker (as in the digital divide debate) but rather as citizen. In policy circles also, it is increasingly asserted that 'internet access has become a basic entitlement of citizenship in the digital age' (Murdock, 2002: 386; see also Gandy, 2002) and that there threatens to be what Norris (2001: 12) terms a 'democratic divide', distinguishing 'those who do and do not use the multiple political resources available on the internet for civic engagement'.

In recent decades, political scientists have been charting, with mounting concern, the steady decline in political participation by the public, across many countries, as measured by such indicators as voter turn-out, party loyalty and representation in decision-making bodies (Bennett, 1998; Coleman, 1999; Dahlgren, 2003). Since this decline has coincided with the spread of mass media into daily life, media critics have scrutinised every dimension of the media's relations with political institutions and the public sphere. While some ask whether the media are responsible for the withdrawal from civil society (Putnam, 2000), others are intrigued that the public seems to be reconstituting community online, discovering common interests with potentially-huge network of like-minded peers, developing new skills, building alternative deliberative spaces, raising the possibility of a virtual public sphere. So, by contrast with the (somewhat stereotypical) characterisation of traditional organisations in democratic societies, structured in accordance with elite hierarchy, representation and accountability, the internet is celebrated for its alternative features – the stress placed on trust, inclusiveness, transparency, action and, above all, deliberation. Can it be that, 'replacing traditional civil society is a less conformist social world … characterised by the rise of networks, issue associations, and lifestyle coalitions facilitated by the revolution in personalized, point-to-point communication' (Bennett, 1998: 745)?

Following Habermas (1969/89), Bentivegna (2002) argues that the internet is 'democratic' in the sense that, while each of its features are not intrinsically new, in combination, the internet introduces a qualitative shift in the potential for democratic communication. The features she identifies are: interactivity, enabling citizens to be senders as well as receivers of messages; co-presence of vertical and horizontal communication, facilitating not only communication between elites and citizens but also communication among citizens; disintermediation, by which the power of traditional gatekeepers is undermined in favour of more direct communication among interested parties; communication costs, greatly reducing the entry barriers to participation for small groups, social movements and individuals; the speed of communication, transforming the potential for information dissemination, flexible

organisation and mobilisation across considerable geographic range; and the absence of boundaries, permitting the relatively free circulation of information, opinion, and proposals among all interested parties. Here, then, is a rich agenda for empirical research on public participation.

Developing the research agenda

As in the digital divide debate, the early hyperbolic claims for the transformative potential of the internet to right the ills of democracy were quickly superceded. Research shifted to examining rather more modest claims for internet-mediated communication as complementing – rather than replacing - existing channels for political deliberation and action. In so doing, research draw on a long-standing theoretical debate over whether deliberative and participatory models of democracy – seemingly more fitted to the internet – offer an improvement over the well-established but apparently-ailing representative model of democracy. So, while some research does explore how traditional political elites use the internet to promote their political goals more effectively (Graber, et al, 2004), most has pursued the possibilities for online deliberation and active participation by the public in the political process.

Worldwide there has been an explosion in projects and initiatives – on global, national and, most often, local levels – to exploit the potential of the internet to draw citizens into civic participation and so enhance democratic participation (Tsagarousianou, et al, 1998), although most projects occur in the 'wired' West, since in non-democratic regimes such as China, Cuba, Singapore, etc, governments seek to restrict or censor any form of online political deliberation (Graber et al, 2004). One success was UK Citizens Online Democracy in 1997, which conducted the first online scrutiny of proposed government legislation (the Freedom of Information White Paper); one third of the many who participated were individual citizens, deliberating with each other and with the government minister responsible (Coleman, 1999; Tumber, 2001). Another was the Move On campaign to persuade Congress to drop impeachment proceedings against Bill Clinton in 1999, mobilising half a million online messages sent by citizens to Congress (Graber et al, 2004).

At the level of local communities, Rakow's (1999) account of a 'televillage' in North Dakota, USA provides valuable lessons for the democratising potential of the internet in community decision-making, though her story ends depressingly when, in a secret business deal, the local (commercial) paper takes over the (public) city website. In the Blacksburg Electronic Village (Kavanaugh and Patterson, 2002), things went awry for a different reason, for although in this community the internet was used effectively to mediate local, social capital-building activities, those involved were precisely those in the community who were already actively involved, already high in civic engagement and social status, the internet merely providing a new conduit for their established interests and activities. In that case, Jankowski (2002) observes that the wired community had been constructed top-down by local elites, positioning ordinary residents as consumers rather than citizens from the start. Even when online community is organised in a more inclusive, democratic fashion as a virtual public sphere, it seems that familiar social patterns are reasserted online. For example, in the Digital City Amsterdam, 'now one of the largest online communities in the world' (Slevin, 2000: 68), citizens transferred offline norms online in order to govern this space (limiting space for each 'resident', banning pornography, vandalism,

harassment, etc), rather than developing new and original forms of social organisation.

So, perhaps we should ask not whether the internet can reinvigorate participation among the many but whether it provides an effective tool for those few already committed to participation? Here empirical support is easier to find, both in relation to established political elites and for alternative social movements. Examples of online participation within new social movements include the Zapatistas in Mexico, who used the internet imaginatively and effectively to organise, disseminate, and stimulate grass roots activism for a previously-marginalised cause, and the international protest in Seattle in 1999 over the globalisation policies of the World Trade Organisation (Kahn and Kellner, 2004). In relation to new social movements more than traditional politics, local or national, there is more evidence also of the social shaping of the internet, for the internet is far from an inert medium during this social and political experimentation. Rather, in response to new forms of networked politics (Graber et al, 2004), the internet continues to develop and change: 'new web forms of design, such as web logs and wikis, have evolved the internet's hypertextual architecture, even as such online phenomena as hacker culture, terrorism, and internet militancy have emerged from the technical-fringe to become a central feature of everyday life on the world wide web' (Kahn and Kellner, 2004: 88), resulting in the 'permanent campaign' (for example, against Nike's exploitative labour practices, or against Microsoft's anticompetitive business strategies) characteristic of late modernity (Graber et al, 2004).

Lessons learned

Neither the data nor theory are so contested in this domain as much as the conclusions to be drawn from them. The pessimists concede that much political activity – publicity, mobilising, informing, lobbying, consulting, advocacy - is now conducted online, but consider that there is little evidence that political activity is thereby increased or improved as a consequence, that 'politics as usual will probably prevail' (Graber et al, 2004: 97). Moreover, if judged according to Habermasian ideals of the public sphere (1969/89), they argue that 'the virtual political sphere clearly fails the test' (Murdock, 2002: 389), being insufficiently inclusive, interactive or consequential. At the worst, 'individualisation, unequal access, and disenfranchisement may be the outcome of net politics' (Golding, 2000: 176).

The optimists, however, argue that it is too early to judge, but that the embryonic signs provide grounds for hope (Dahlgren, 2003; Hampton and Wellman, 2002; Papacharissi, 2004), for 'politics in cyberspace is attempting to redefine itself in the light of the profound changes affecting the social system in the past decades by exploiting the internet's intrinsic potential' (Bentivegna, 2002: 51). Norris (2001) too concludes on a note of cautious optimism, not because a ringing endorsement of e-democracy is possible, but of the encouraging if tentative evidence that the internet permits a more open space for debate among a wider diversity of political actors, amplifying small voices that might otherwise not be heard, facilitating rapid, flexible responses to events, ready sharing of information both locally and globally, and some critical challenges to the establishment.

As evident from the digital divide debate, e-democracy initiatives require considerable efforts (energy, time, technology, funding) to start up and maintain, both

offline as well as online. They also require commitment from political elites if they are not to become 'merely' a discussion among citizens; it is particularly difficulty to link the outcome of deliberation (on or offline) to political action or community consequences (Hampton and Wellman, 2002). Problematically too, though familiar from research on knowledge gaps (Bonfadelli, 2002), it seems easier to attract the already-interested or politically active than it is to draw in new initiates to democratic deliberation: consequently, initiatives directed at the marginalised risk instead further advantaging the privileged. And most worryingly, it is not yet clear how robust such initiatives are against the potential to undermine, disrupt or transforming democratic spaces into authoritarian, reactionary or extreme spaces.

How ambitious should research be in seeking to change politics? Is Coleman (1999: 69) right that 'the emergence of the internet presents… the possibility of a qualitative shift in the practice of political communication, as significant for the pre-millennial 1990s as TV was for the 1960s.. [with] hitherto unprecedented possibilities for citizens' deliberation and public input to decision-making processes' (Coleman, 1999: 69). If so, this opens up an agenda examining the communicative conditions under which open deliberation can be effective online, the creativity of (h)activist strategists versus the dominance of the elite publicity machine, the commitment of political elites to participatory ideals (rather than merely to more publicity), the continued emergence of innovative online forums and tactics, the willingness of the public to trust and to commit (on and offline), and so forth. This agenda can keep internet studies busy for years to come. Yet even after this, we may still also find ourselves worrying, with McChesney (1996: 108), that 'the issue here is not whether a citizen-based, nonprofit sector of cyberspace can survive in the emerging regime… rather, the key issue is whether the nonprofit, non-commercial sector of cyberspace will be able to transform our societies radically for the better'.

Varieties of critique in internet studies

In this chapter I have pointed to some key debates and developments in the new field of internet studies, including debates over the focus of the field itself. I have also examined two cases within the field, that of the digital divide, now digital inclusion, and that of online participation or e-democracy. As these demonstrate, developments in internet studies depend on a rigorously critical reception by the academy, contesting claims, introducing alternative evidence and pointing to biases or oversimplifications. In this last section, I explore more carefully the nature of these critical debates, arguing that 'critique' within the academy means at least three distinct ways of approaching theory and evidence within (and beyond) internet studies. These are, first, 'analytic critique' – a cautious and sceptical analysis that stays within the terms of the argument to interrogate claims being made for internet-related societal changes; second, 'explanatory critique' – the contrasting of competing arguments or explanations for observed changes, which in internet studies is typically cast in terms of technological versus social determinisms; and third, 'ideological critique' – in which the underlying interests at stake in driving these changes are identified from conflicting critical/Marxist and neo-liberal world views. Let us examine these varieties of critique in turn.

What's new?

Internet studies have been stimulated by the dramatic sense that the internet could change everything, so the world will never be the same again; this idea has brought attention, resources and talent to the research agenda. At the same time, the academy has devoted considerable energy to critiquing these claims for change; as Golding (2000: 166) sceptically observes, 'we are, it seems, always on the cusp of a new sociality'. Indeed, the research literature is full of sensible warnings against getting caught up in hyperbole, swayed by moral panics or rushing down blind alleys endemic to popular and policy discussion. These discussions typically assert a powerful narrative of progress or decline, with the internet cast as angel or villain in the moves towards global understanding, loss of tradition, rise in surveillance, loss of privacy, new forms of creativity, or new levels of risk.

As the cases of the digital divide and e-democracy both show, the internet has not (yet) made a dramatic difference to either inequality or participation in society, though more modest changes are evident as we learn not only more about the internet but more about how the internet is, and can be, embedded in everyday circumstances. When Jankowski et al (1999: 6) asked 'what's new about new media?' in *New Media and Society*, it was to prioritise these provisional, contingent claims that they invited 'work which seeks to analyse 'newness' through comparison between the old and the new, in their social and cultural contexts'. Five years on, asking 'what's changed about new media', Lievrouw (2004) argues that the field has become characterised less by uncertainty and more by the banality of its topic as new media become part of the mainstream of everyday life.

This banality has its upsides – for example, it provokes us to become more theoretical, now that much of the basic descriptive work has been done, and its downsides – as some of the more radical possibilities become obscured by emerging norms surrounding the technology. We must continue to be sceptical of claims for change, weighing evidence, clarifying concepts, acknowledging the limits of research. For example, in arguing for continuities rather than a radical break with the past, Webster (2002: 22) rejects the term 'information society' (though not the importance of information) because, he argues, the case has not been established that 'quantitative increases in information lead to qualitative social changes' – after all, the case for the qualitative changes so often claimed is a difficult one to make. In relation to e-democracy, we have seen how difficult it is to determine whether the evidence points to social transformation or merely to a modest increase in levels of participation. Assuming there is more evidence for the latter, we have also seen how difficult it is to determine whether the lack of dramatic change is best explained by a lack of public interest in participation or by the relative lack of importance of the internet as an enabler of participation. Or is the problem more prosaically a methodological one, that the right questions have not yet been asked, or the best measures used, or sufficient resources put into the initiatives being evaluated?

Increasingly, academics are expected to predict, and so intervene in, events which shape the future, despite their considerable and warranted wariness about engaging in futurology (Silverstone, 1997). Widely varying assessments of the pace and urgency of social and technological change frame debates about the internet. Indeed, there are genuine difficulties in measuring social change. The social consequences of print, for example, became evident only after the centuries of change, beginning with the

invention of the printing press in the fifteenth century, playing a key role in the Protestant Reformation in Europe through the sixteenth and seventeenth centuries, and then with the achievement of mass literacy (via mass education) in the eighteenth and nineteenth centuries (Luke, 1989). The 'internet revolution', if such it is, is supposedly occurring on a scale of decades, years or even months, hyped by technologists, business and, it must be said, by governments. The difficulty for research lies in balancing attention to standards and precautions required for intellectual and empirical rigour with the demand of producing timely findings and recommendations to contribute to public and policy agendas.

Accounting for change

The claim that every aspect of society – from work to family life, from politics to entertainment, from religion to sexuality – is affected by innovations in information and communication technologies all too easily lends itself to the kind of technological determinism that social science now widely critiques. As Raymond Williams noted, 'in *technological determinism*, research and development have been assumed as self-generating. The new technologies are invented as it were in an independent sphere, and then create new societies or new human conditions' (1974: 13). Rather than casting technological innovation as the cause and society as the effect, social science instead seeks to understand how 'the technological, instead of being a sphere separate from social life, is part of what makes society possible – in other words, it is constitutive of society' (MacKenzie and Wajcman, 1999: 23). The internet, far from being 'a single medium which sprung fully formed into our lives less than a decade ago' (Lievrouw and Livingstone, 2002), is like other innovations in undergoing a lengthy and highly social process of research, development and design, hand in hand with the co-construction of a 'market' and its 'needs' (Mansell and Silverstone, 1996; Winston, 1998).

To counter the claims of technological impact or determination, Woolgar (2002: 14-19) proposes five 'rules' for understanding developments within what he calls, with a deliberate question mark, the 'virtual society?'. These are, first, the importance of contextualisation, namely that 'the uptake and use of the new technologies depend crucially on local social context'; second, the assumption of inequality, that 'the fears and risks associated with new technologies are unevenly socially distributed'; third, the consistent empirical evidence against displacement of the real, that 'virtual technologies supplement rather than substitute for real activities'; fourth, the counter-intuitive observation, 'the more virtual the more real', based on findings that the growth of online activities/spaces has in unexpected ways intensified, remediated or stimulated innovation also in offline activities and spaces; and fifth, contra claims about the death of distance, since efforts to transcend the local and promote the global turn out to depend on specific local practices and identities, 'the more global the more local'.

These rules are clearly consonant with our two case studies and they offer a useful heuristic for anticipating the social processes which shape and contextualise the development and diffusion of new media. But they make little or no reference to the specifics of the technology itself and so risk replacing technological determinism with an equally simple sociological determinism. Though advocates of both these positions can be found in the literature, others are seeking a more subtle 'soft determinism', for 'everything that is important is what happens in the mediations, which dissolves these

dualisms' (Miller et al, 2004: 79). One approach is to treat technologies as texts, as designed and interpreted within particular social contexts that facilitate certain social options and close off others.

As Agre (2004: 27) puts it, 'every system affords a certain range of interpretations, and that range is determined by the discourses that have been inscribed into it'. For example, Lessig (1999) argues that cyberspace is regulated at the level of the internet codes: these inscribe cultural norms, encode institutional imperatives, configure possible uses, prioritise certain activities and interests over others and establish the line between what is public and what is private online, in subtle but crucial ways. Internet users, like mass audiences, are faced not with the onslaught of televisual impacts but with the challenge of interpreting the text flexibly and meaningfully, guided and also constrained by textual and contextual factors (Livingstone, 2004). Note the verbs used here, for they mark discursively the shift in the argument – from strong determinism's language of impact, effect, and transformation, positioning the technology as outside society and impacting upon it, to soft determinism's language of reconfiguring, establishing, affording, positioning the technology as precisely part of society and, by encoding its meanings and practices, in turn contributing to it. The question of whether the internet is to be judged 'democratic' as a medium, for example, will be answered differently depending whether one means that it is inherently democratic, or democratic to the extent that we have made it so.

Eschewing simple determinisms then, internet studies should now critically develop both the soft-determinist claim that 'core economic, social, political, and cultural activities throughout the planet are being structured by and around the Internet' (Castells, 2002: 3), and the social shaping claim that 'people, institutions, companies, and society at large, transform technology, any technology, by appropriating it, by modifying it, by experimenting with it' (Castells, 2002: 4). Neither can be studied satisfactorily in isolation from the other. Some would then take a further step towards social critique which 'situates technology within the underlying unequal power relationships that exist in society' (Warschauer, 2003: 209). This raises questions not only about the explanations in contention within internet studies but also about their politics and values.

Change for the better?

Many introductions to internet (or new media or ICT) studies describe a polarisation between optimists and pessimists, as illustrated by our two case studies. Since this optimistic/pessimistic framing is not typical of the social sciences, we might ask why? Often, the optimist/pessimist discourse is introduced for rhetorical purposes, in order to disavow both positions (set up as 'straw men') and so legitimate a more cautious and grounded perspective in their place. More significantly, the pivotal role of social change in framing technology-society relations is responsible, rendering the field heavily future-oriented and policy-directed, despite social scientists' preference for analysing the past and present. With this future-orientation comes a focus, implicitly or explicitly, on values, even on political ideologies. However, when the optimist/pessimist positions are more seriously debated one of several underlying oppositions appears to be at stake.

One opposition is that between administrative and critical schools of communication research, defined by Lazarsfeld (1941) in the early days of mass communication

research. He sought to distinguish research that takes its agenda from, and produces recommendations useful, for public policy from that which maintains a critical distance from established institutions. We can gloss this by contrasting those who consider it the responsibility of research actively to shape social and technological change with those who consider it their role to produce independent knowledge that critiques the strategic activities of the establishment (Levy and Gurevitch, 1994). In internet studies, it seems as if the optimists work within the normative social framework in order to contribute towards 'making things better' while the pessimists stand outside in order to remind them when the public interest is not after all being served.

A second debate discernable within the optimism/pessimism polarity is that between the political economy versus cultural studies schools of communication research (Ferguson and Golding, 1997; Mosco, 1996). The political economists tend towards pessimism for similar reasons to the critical communication scholars, for macro-level analyses of the exploitation of the public interest to further the interests of the elite, characteristic of capitalism, unsurprisingly generate a pessimistic critique. Unlike critical communications scholars, however, who maintain their independence, the political economists also argue for policy interventions that might alleviate inequalities, improve participation, reduce invasions of privacy, increase public accountability of governance structures, and so forth. For example, McChesney (1996: 100) argues not only that 'capitalism encourages a culture that places a premium on commercial values and downplays communitarian ideals' but he also argues for structural media reform, for increasing regulation in the public interest and to limit the anti-democratic consequences of the major media conglomerates (see also McChesney, 2000; Mansell, 2004).

On the other hand, the optimism evident within cultural studies is unlike that of administrative scholars. Instead, it seeks to identify forms of evasion or resistance among the public, whether ordinary people, particular subcultures or new social movements, so that some subversion of or alternatives to the dominant order is achieved (see Curran et al, 1996; Seiter, 1999). Here the work on cultural analysis of mass media audiences is extended to new media so as to reveal the ways in which, through the interstices and indeterminacies of (mediated) social structures, people in their daily lives manage to evade, resist or reconstruct normative meanings or practice (Livingstone, 2004).

A third debate also motivates the rehearsal of the optimist/pessimist rhetoric, this being between modernist versus postmodernist views. Where late modern accounts stress the continuities from life offline to life online identity (e.g. Livingstone, 2002; Miller and Slater, 2000; Webster, 2000), postmodern accounts radically rethink the key terms to open up new and exciting possibilities. For example, Poster (2001: 175) explores the role of the internet within a postmodern democracy 'that opens new positions of speech, empowering previously excluded groups and enabling new aspects of social life to become part of the political process'. The radical nature of this claim becomes clear not just from his argument that 'the age of the public sphere as face-to-face talk is clearly over' (p.181) but more importantly from his suggestion that 'the public sphere as a homogeneous space of embodied subjects in symmetrical relations, pursuing consensus through the critique of arguments and the presentation of validity claims' (181-2) is also over. In electronically mediated discourse, operating within what Poster terms 'the mode of information' (or 'virtualisation'), we

find instead 'new forms of decentralized dialogue', 'new combinations of human-machine assemblages, new individual and collective "voices"' (p.182). Others are developing postmodern arguments in other domains. Kress (2003) asks how the visual, hypertextual, always-open representational forms of the world wide web permit new ways of thinking and understanding, by contrast with the linear, hierarchical, closed formats and thinking of the modernist era of print. Kellner (2002) extends this argument to suggest that, if forms of representation are radically changing, so then are the possibilities for literacy and hence for education, enabling more democratic and creative styles of learning.

There is little resolution to be had here. Those seeking to counter the postmodern position (Golding, 2000; Webster, 2002; Wellman and Haythornthwaite, 2002) do not convince those excited by the potential of the internet to prompt radically challenging ways of thinking. In empirical terms, our two case studies suggest that researchers have been more successful in tracking the (re-)emergence of familiar cultural norms, social conventions and everyday anxieties than they have in documenting radical or alternative forms of consumption, communication and community-building, except perhaps among a highly motivated and generally elite minority of internet enthusiasts (e.g. Snyder, 1998; Turkle, 1995). But other cases may have led to different, less conservative conclusions. After all, research on the internet is still in its early stages, the internet itself only having been widely available for ten years, and even then only in wealthy parts of the world.

Internet studies have moved on from the early days of speculative hyperbole towards a solid grounding in empirical research, even if this remains tentative in its preliminary conclusions. They have also moved on from the assumption of a separate domain, 'cyberspace', clearly distinct from the 'real world'. Thirdly, they have moved away from simple assertions of technological determinism in favour of either social determinism or 'soft' technological determinism'. The research agenda continues to be contested by scholars taking more optimistic or more pessimistic approaches, working within more market liberal or more critical frameworks, from a late modern or postmodern stance. And the research agenda continues to expand as ever more aspects of everyday life, once (and still) the subject of other social sciences (from anthropology to criminology, from economics to psychology), 'go online' and so also fall under the (one hopes capacious) umbrella of 'internet studies'.

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