JRF programme paper: Globalisation

The local impact of the global internet The effect of new technology and global communication

on individuals and communities in Britain

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This paper:

- explains the implications of easier access to global communication;
- surveys the increasing use of the Internet in Britain and how this applies to local and global networks; and
- discusses how individuals and communities can build networks and the challenges this brings.

The Joseph Rowntree Foundation (JRF) commissioned this paper as part of its programme on Globalisation, which explores and promotes awareness of the impacts of globalisation on the UK and focuses particularly on communities and people in poverty

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Introduction

The rapid development and diffusion of information and communication technologies (ICTs), such as the Internet, are central aspects of globalisation. The Internet is a 'network of networks' that creates a global communication platform enabling new forms of economic ties and social networking, which in turn creates incentives for the continuing development of improved communication infrastructures. The declining cost and greater ease of electronic communication, as with travel, has created unprecedented opportunities for people to connect with others around the world, and raised a series of questions for consideration. What difference will this make for the nature and quality of communication for individuals, households, and communities across the United Kingdom?

Will globalisation, enabled by the digital revolution of the twenty-first century, undermine or enrich households and communities? Will there be unintended and negative consequences on more traditional networks of face-to-face and mass communication that are not adequately served by the emerging networks of communication? Will emerging technologies, such as social networking sites, enable new forms of interaction that reinforce and build stronger social relationships or undermine 'real' and more meaningful forms of communication?

Countervailing expectations

The revolution in ICTs, centred on the Internet and Web, has been one key aspect of contemporary concept of globalisation. This revolution has been bound up with related developments around a revival of local identities, more global economic inter-dependencies, and an increasingly problematic role of the nation state (Giddens, 2000: 24-37). Definitions of globalisation abound and have become focal points for controversy over worldwide social and economic trends, with anti-globalisation movements becoming a prominent force. Across definitions, the term refers generally to the increasingly worldwide social, cultural and economic networks enabled by global platforms for travel and communication, most recently tied to the revolution in ICTs, such as the Internet and Web.

What are the implications of for communities, such as those in the United Kingdom? The most common expectations linked to global networks of communication – often centred on community – are deterministic and dramatic (Dutton, 1999). Most generally, there are two contrasting perspectives that are most often viewed as Utopian or dystopian.

The Utopian perspective is generally optimistic about the inevitable use of new ICTs, such as the Internet, to create new, virtual, and often global communities of interest that were never before possible without global electronic communication platforms (e.g., Rheingold, 1994). From this perspective, the worldwide diffusion of communication technologies will enable individuals and communities to tap into global networks in ways that support and enrich everyday life and work.

In contrast, a dystopian perspective views new ICTs as a substitution for human interaction, by enticing people online, whether to play games or to participate in social networks and virtual communities, in ways that undermine households and local networks of communication that are fundamental to building the 'social capital' of real, geographically based communities (Putnam, 2000). The use of the Internet might therefore lead to more social isolation as users – as consumers and citizens – interact primarily with machines than with real human beings.

Another perspective is neither Utopian nor dystopian, but what could be called a 'social engineering perspective', as the design and selection of technology are viewed as means for shaping patterns of communication. A number of major theorists of communication, such as Harold Innis (1950) and Marshall McLuhan (1964), argued that the design of technologies is biased toward certain forms of social organisation. McLuhan's argued that the role of television in enabling instant global communications was more important than whatever content it conveyed.

Social engineering of community: visions and realities

A consistent effort over the history of electronic communication technologies has been focused on engineering communication patterns. Individuals representing groups, movements, or industries, can find opportunities embedded in the design of technologies that can promote their interests. For example, the advent of cable communication in the 1970s was accompanied by a number of visionaries who saw the potential for local and interactive cable systems to enhance communication within local communities, such as in Milton Keynes, one of Britain's first cabled communities (Firnberg and West, 1987). Other nations had their own 'wired cities', some of the most notable being the QUBE system in Columbus, Ohio, and the Highly Interactive Optical Visual Information System (Hi-OVIS) in Higashi Ikoma, Japan. However, most local and interactive cable initiatives failed when the proponents were unable to establish evidence of an impact on communities, or to generate large audiences, while the cost of interactive systems were double that of more conventional systems (Dutton *et al.*, 1987).

The advent of the personal computer (PC) posed a threat to community networking, such as on cable systems, as individuals became increasingly tied to their own computers. However, from the late-1980s through the early-1990s, many promoted the PC as a tool for community with the advent of local Bulletin Board Systems (BBS), which relied on telephone dial-up modems that made local networks most economical. A BBS supported many local communities of users, such as 'Electronic Village Halls' in the city of Manchester UK (Ducatel and Halfpenny, 1993). In the USA, the Blacksburg Electronic Village, in Blacksburg, Virginia, and Santa Monica, California's Public Electronic Network (PEN), became models for many other communities (Dutton and Guthrie, 1991; Raab *et al.*, 1996: 286-89). An entire field of 'community informatics' grew around the notion that new ICTs could support local community development (Keeble and Loader, 2001).

However, at the height of enthusiasm for community informatics, the Internet raised new promises and threats. The development of the Web, and MOSAIC and Netscape browsers, that gave users an easy to use, Graphical User Interface (GUI) for searching the Web. The potential for computer-based networks to enable 'virtual communities' that were not strictly local in nature arose around the 'The Well', and popularised by Howard Rheingold (1994).

Through the 1990s, growth in Internet use drew computer users away from more local, and more limited, BBSs, such as the Manchester HOST. As a consequence, the Internet has often been viewed as antithetical to community networking – drawing Internet users into a global cyberspace.

Likewise, from the earliest days of local and interactive cable systems to the present day Internet, there has been concern over the potential for networks to support the monitoring and surveillance of users, undermining the privacy of individuals and communities. For example, a major incentive for one of the

earliest experiments with local and interactive cable, the QUBE system, was driven by an ambition to use the system for audience research (Dutton, *et al.*,1987). A key concern of communities over the use of local blogs and Websites is over the degree that a global platform will provide unwanted access to a local neighbourhood or community.

Empirical realities: the case in Britain

Contrasting viewpoints on the likely implications of global networks of communication have fostered empirical studies on the use of the Internet and related ICTs. One synthesis of over a decade of research concluded that the Internet has no consistent, systematic effect on leading to either greater isolation or connection. That said, Internet users tend to be more, not less, sociable and connected with others than are non-Internet users (Rice *et al.*, 2007). In Britain, for example, 71 per cent of households used the Internet in 2010 (Ofcom, 2010). Those who use the Internet are more social than non-users. who also tend to be older or have lower incomes (Dutton *et al.*, 2009).

An alternative to this isolation versus sociability debate is a hybrid position, called 'networked individualism', whereby computer-mediated communication systems support a mix of online and offline associations that enable individuals to reinforce their personal interests (Hampton and Wellman, 1999; Wellman, 2001). A more recent synthesis of research makes a stronger claim: that the Internet 'reinforces and regenerates geographically based community identities' (Haythornthwaite and Kendall, 2010: 1083). From this perspective, the debate has moved from whether online communication undermines more traditional forms of association to whether traditional communities could maintain their vitality without online media to support and enhance their networks. Even communities that have been dispersed, such as by disaster or migration, can be reconnected online, making the Internet a critical resource rather than a threat to place-based communities (Castro, 2010).

How are Britons using the Internet for information, communication and services in ways that could impact local and global communication networks? Answers can be found in data drawn from Ofcom (2010) and the Oxford Internet Surveys (OxIS), which are based on national multi-stage probability samples of Britain, including England, Wales and Scotland.¹

The advent of the Web and the increasing ease and power of search engines have enabled users to find, share and access information from anywhere in the world at any time, making it a truly global information system. Our research in Britain asked individuals, 14 and over, where they go first for a variety of information (Dutton *et al.*, 2009). Over a series of surveys (2003–2009), we found an increasing reliance on the Internet as their first port of call. Rather than going to or telephoning an actual place, such as a library, for example, people are increasing choosing to go to the Internet first. They go to what Manuel Castells (1996; 2001) has called a 'space of flows' versus a 'space of places'.

This greater reliance on the Internet is significant: It could open individuals to information originating from anywhere in the world, expanding the scope of information at their fingertips. It can enrich and diversify the sources of information on which people build their understanding of the world. But will the Internet and Web undermine local sources and local information?

We asked where people would go first for information about their locality, such as about local schools, and also for the name of their local elected Member of Parliament (MP). Figures 1 and 2 show that, over time, increasing proportions of the public would go to the Internet first, even for information tied to their local community. By 2009, over 50 per cent of Internet users said they would go first to the Internet for information about local schools, compared to 28 percent who said they would make a personal visit, or 13 per cent who would use their phone. Only 7 per cent would go to a directory or book for this information (Figure 1). Change has been dramatic overtime, moving from only 28 per cent who would first go to the Internet in 2005 to almost double that figure by 2009 (Figure 1).

With respect to finding information about one's local elected official, by 2009, 56 per cent would first go to the Internet, 19 per cent would use the phone, and 14 per cent would make a personal visit to a place or person. Again, just over one out of ten Britons (11 percent) would go first to a directory or book (Figure 2). As recently as 2005, only 35 per cent would go to the Internet for the name of their local MP (rising to 45 per cent in 2007 before reaching 56 per cent in 2009).

Figure 1. First Place Britons Go For Information About Local Schools

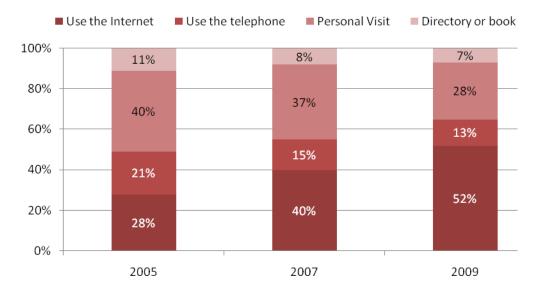
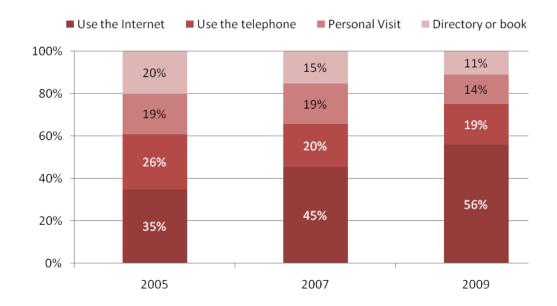


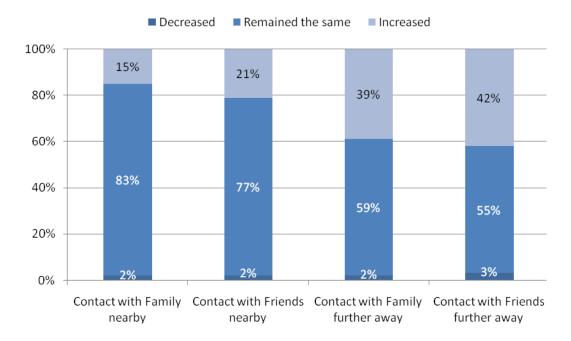
Figure 2. First Place to Go For the Name of Your Local MP



We have asked Britons whether they use the Internet to keep in touch with friends and family that live far away as well as nearby. Not surprisingly, the Internet is more significant for keeping in touch with distant friends and relatives, but, surprisingly, it is increasingly important for keeping in touch with those nearby as well (Figures 3–5).

Specifically, we asked users whether the Internet has decreased, increased or not affected their contact with family and friends that are nearby or far away. Negligible proportions of users perceive the Internet to have undermined their contact with local or distant friends and family (3 per cent or less say it has decreased their contact). If anything, the Internet is perceived to have increased their contact with family and friends both near and far (Figure 3). Larger proportions believe the net has increased their contact with family (39 per cent) and friends (42 per cent) that are far away. However, a sizeable proportion of Britons say that the Internet has also increased their contact with family (15 per cent) and friends (21 per cent) who are nearby.

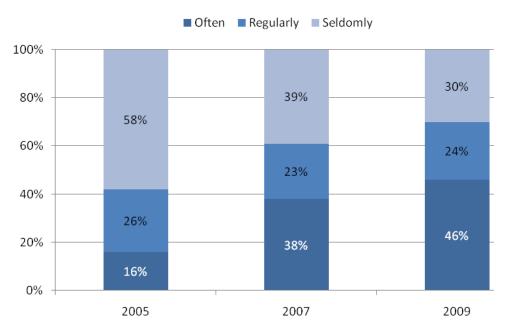
Figure 3. Has the Internet Increased or Decreased Contact?



By looking at the use of email in particular, it is possible to see similar patterns. First, Britons have increasingly used email to keep in touch with family and friends at a distance – whether in another part of the country or around the world. In 2009, 48 per cent of users said they often use the Internet for this purpose. This has increased from only 16 per cent in 2005 (Figure 4). Only 30 per cent say they do not use email for keeping in touch with family and friends faraway.

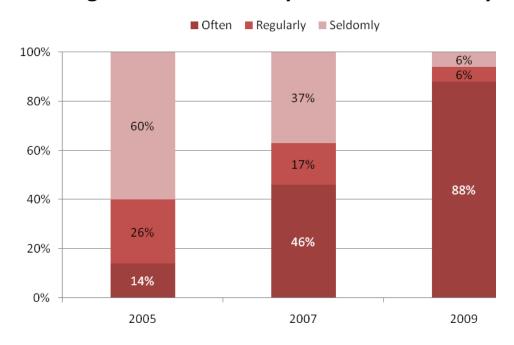
However, there is a major trend toward the use of e-mail to keep in touch with family and friends that are nearby (Figure 5). In 2009, 88 per cent said they use email in this way, compared to only 14 per cent in 2005. This is a dramatic increase over time. Only 6 per cent of users in 2009 said they do not use email to keep track of nearby family and friends.





Globally, communication networks can connect individuals with similar interests, even when they are quite unusual, such as enthusiasts for 'extreme ironing'. With the growth of social networking, the Internet is also helping friends and family to find each other and reconnect. At the local level, email and other social networks can support the coordination of local activities, such as organising a Sunday walk, or getting the word out on a team practice.

Figure 5. E-Mail Family and Friends Nearby



Local communities: the new frontier of the Internet

As this recent empirical research suggests, the Internet and related ICTs, such as a host of mobile devices, are changing the potential for connecting with local and global communities of interest. Globally, the rise of search engines and social networking sites helps to link individuals with the information they seek, and the people of relevance to them, anywhere in the world. Locally, the proportion of users in many local communities of the more developed nations, such as the United Kingdom, is high enough to make the Internet a viable medium for local communication. Diffusion does not need to be universal for a local neighbourhood or community to realise the value added by networked individuals. Location-aware technologies, such as mobile devices linked to Global Positioning Systems (GPS), have led to the creation of advertising and other information geared to the location of an individual.

In some respects, the Internet is blurring the boundaries of all traditional institutions, including the local community, since networked individuals can link to communities of interest worldwide. However, it is emerging from our findings that – despite expectations to the contrary – the locality has become a new frontier of the Internet. In line with this trend, there is increasing discussion of 'location-based services' and 'hyper-local' networks, which are designed for residents of a neighbourhood or specific locality, such as www.lovecamden.org. They list local businesses and services, and are produced most often by local residents, such as through user-generated content, ranging from news to event listings. Likewise, there are websites for expats from Britain to stay in contact with their nation or local community, such as www.expats.org.uk.

The potential for local outcomes of networked individuals

These local and global trends may seem countervailing, such as supporting local as well as global communication, but are consistent with the more general social dynamics of the Internet. Most generally, the Internet does not erase boundaries, whether geographical or institutional, but enables people to go – electronically – where they need to go for information and communication resources, while being – physically – where they value face-to-face communication.

For example, the Internet tends to erode boundaries between home and work and between public and private. Likewise, when people go to the Internet for information, they do not necessarily look locally, and often can be indifferent to the location of information or people, as they are equally accessible online. Some research supports the potential for the Internet to increase communication with those far away, as shown above by our own survey research, resulting in blurring more traditional boundaries in ways that enable transnational communities that join in two or more countries into common virtual communities, such as families that remain more closely knit despite residing across state boundaries.

In such ways, individuals can keep ties with their local community as well as their home community simultaneously – they are not in conflict (Silverstone, 2001). ICTs can reshape an individual's one's 'psychological neighbourhood' of who is perceived to be near and far (Keller, 1977). For example, will immigrants to Britain use the Internet to maintain their links to their place of origin, as illustrated by the growth of what has been called 'Diaspora-Homeland Web Sites', or to bring global experiences to bear on local decisions and activities – globalising the local. For instance, a number of villages in Mexico have Web sites designed and maintained by young professionals that have left their hometown, but wish to maintain contacts with family and friends.² In such ways, global networking can support the local, and there are other ways in which networked individuals can enrich local communities, as outlined in the following sections.

Communication: establishing new and more diverse friendships

In addition to maintaining and enhancing existing social networks, the Internet can also introduce new friends, from loosely defined 'friends' as a category of affiliations on social networking sites, to once in a lifetime partners, through online dating and matching services. In such ways, either by accident, such as discovering someone online, to finding someone purposively, such as through a dating service, the Internet is likely to diversify social networks, such as by introducing people who might not otherwise meet through traditional practices (Dutton, Helsper, Whitty, *et al.*, 2009). In 2009, 38 per cent of Internet users said they had met someone online that they did not know before. This represented an increase from 2005, when only 20 per cent said they had done so (Dutton, Helsper and Gerber, 2009: 41).

Complementary news and information services

Likewise, the Internet is also being used in ways that diversify other sources of information, such as where people get news. In 2009, 57 per cent of Britons read news online (Dutton *et al.*, 2009). However, this is usually in addition to reading the newspaper offline. In other words, most Britons supplement the news through online news services. About 35 per cent of Britons only read a traditional newspaper, while 61 per cent read the news on and offline.

This pattern of online news access is likely to enable readers to find new information sources that both deepen and broaden their access to global developments, offering them more choice in stories and news coverage from a wider range of sources. Social networking sites add an additional dimension to this phenomenon. Increasingly, individuals are being directed to news stories through social networking sites, as friends and colleagues suggest stories of possible interest. In such ways, emerging patterns of distributed families and friends referencing news of relevance, and discussing the stories and issues online, can enable a more global discourse about the news (Gillespie, 2006).

The ways in which the Internet complements other news sources challenges claims that ICTs narrow the uptake of information by putting individuals in virtual 'echo chambers' (Sunstein, 2009). The echo chamber thesis ignores the tendency for individuals to selectively attend to communication of all types, not simply the Internet. Moreover, bloggers are likely to address and link to contradictory arguments, enabling access to more diverse opinion (Hargittai *et al.*, 2008). Also, the Internet is empowering citizen journalists who are not caught up in an often limited news agenda of mainstream journalists, best illustrated by the phenomenon of 'pack journalism' that leads reporters to agree with their colleagues on the story to report (Crouse, 1973).

The changing media mix: greater diversity or developing gaps?

The diffusion of the Internet and related ICTs has been associated with significant changes in the broader media landscape. In some respects, there has been a growing array of new global media outlets, such as via satellite, or cable services, or broadband Internet services. Households in Britain can watch a growing range of global offerings, such as through Al Jazeera, SKY, STAR, CNN, and Fox.

At the same time, some media offerings are diminishing, such as local and regional news in Britain, which is facing increasing financial pressure in part through a shift of advertising to the Internet. One case study of the City of Baltimore, Maryland, located 53 different news outlets that regularly produce some local content.³ In Britain, however, local television services have been reduced, as in the case of Manchester-TV, or stopped, as was the case for the Oxford Channel Six TV. The Internet, and related digital media, can help compensate for the loss of local TV. However, it likely to be more vibrant in

more middle income and urban areas, and have less coverage in poor and rural areas.

Informal education and learning

In education, students go beyond their university for sources (Dutton and Eynon, 2009). In developed nations, for example, students can go to the Internet informally or to help with their formal studies, providing them with resources that are as powerful as the libraries of an earlier era. Only language and access to the Internet prevent an increasingly global resource for education and learning.

Collaborative support and problem-solving

There are also a growing number of examples of the Internet enabling individuals to network across ethnic, regional and religious divides, such as when organised by their work. One example is that of London taxi drivers, the Knowledge Boys and Girls, who share information online about routes and destinations (Ross, 2007). Likewise, migrant domestic workers who live in London, but who came from many nations, span institutional boundaries to meet as a group (Anderson, 2001), but they are also supported by various Web-based services, such as Kalayaan, a website supporting their welfare.

One of the most promising developments is the rise of new forms of collaboration, such as captured by discussion of the wisdom of crowds and the potential for crowdsourcing. Community groups, local businesses, but also civil society and governments, can use the potential for tapping distributed intelligence from around the world to address local problems.

At one extreme, there have been a number of local disasters that have been addressed in part through marshalling global distributed intelligence and cooperation. A global community of individuals and non-governmental organisations formed through a variety of Internet and Web-based tools were pulled together by Crisis Camp to address the devastation of the 2010 earthquake that struck Haiti. IT professionals, and activists, used tools, such as social networking software, to help find missing people, map the disaster area, and identify needs. Crisis Camp also helped to bring people to the aid of work focused on the Deepwater Horizon Oil spill in the Gulf of Mexico.

These examples provide a sense of what is possible for more routine local and neighbourhood problems and issues. Localities can draw from local, regional, and even global networks of individuals to tap distributed expertise and support. As people go the Internet, versus a place, for information, localities often tap global intelligence, such as when looking for health and medical information, or finding information about efficient energy use.

Local political and social movements

The ability of individuals to go beyond geographical and institutional boundaries enables new patterns of social and political movements. Networks

enable local groups to have greater weight by linking to other local groups, for instance, to buy particular products or boycott others, such as in response to global movements for fair trade. Local governments are developing urban regeneration projects based on Internet-based initiatives, such as the location of an online training agency in the city of Leicester. Also, global networks have enabled movements to organize localised protests, such as in orchestrating demonstrations in London around the G20 summit of 2009. Another opportunity arises from the value of networked individuals providing a new source of accountability in liberal democratic societies. I've called this potential the rise of a Fifth Estate, which is as important as the rise of the Fourth Estate of an earlier era of mass media (Dutton, 2009).

The strategic use of the Internet by networked individuals

Whether these potentials are realised depends on myriad factors shaping the choices of individuals and institutions in using the Internet. The Internet enables individuals to network with information and people with similar interests or expertise anywhere in the world. This creates the potential for Internet use to undermine the local community, but in fact users are increasingly choosing to use the Internet to link with information and people both locally and globally to support local communities.

Challenges to the networked individual

These promising patterns of developing local and global networks face major threats, such as from rising concerns over digital rights, including: a plateau of diffusion, that might retain and deepen divides; privacy and freedom of expression; and the behaviour of malicious users. These and other concerns are driving regulatory shifts that could undermine the vitality of the Internet.

Network divides

Another concern is over the ways in which the opportunities and risks of globalisation are inequitably distributed. Digital divides – referring to the inequalities in access to the Internet – remain significant and seem to have reached a plateau in many nations. Across the UK, 71 per cent of households had access to the Internet, one percent more than in 2007, and leaving over one-quarter of the population offline. Within Britain, England had the highest level of access (73 per cent), followed by Northern Ireland (70 per cent), Wales (64 per cent), and Scotland, with 61 per cent of households (Ofcom, 2010: 93). These differences in access are explained by the socio-economic circumstances of households, but also by the attitudes of individuals, as many choose not to use the Internet (Dutton *et al.*, 2009; Ofcom, 2010).

Compounding the impact of digital divides is the tendency for those excluded from access on the basis of socio-economic constraints, to be likely to live in neighbourhoods that do not foster neighbourhood ties. Thus, as found in the Netville study, those 'without the technology, and those in neighbourhoods without an existing propensity towards local tie formation, are structurally disadvantaged twice over' (Hampton, 2007: 740). That said, neighbourhoods with even a small proportion of Internet users can gain some advantage in cases where users can perform a role as gatekeepers, opinion leaders, or span the boundaries for the neighbourhood, while also providing the potential for proxy use of the Internet.

The opportunities that the Internet opens up should not only be accessible to people with the resources and skills and openness to exploit the technology. Individuals with lower incomes and less schooling are still less likely to have access to the Internet, as are older individuals, retired or of retirement age. Access does not translate directly into empowerment, but without access the potential of the Internet cannot be realised. Moreover, it is not only individuals or households that can be left out of the communications revolution – so can neighbourhoods and communities without a critical mass of Internet users, as well as less innovative civil society organisations that are unable or unwilling to introduce new approaches to organizing their work.

Digital rights: freedom of expression and privacy

As the Internet has become a more significant infrastructure, it has begun to face increasing efforts to control content (such as through Internet content filtering) and the growing risks tied to the loss of privacy and the growth of

surveillance. For example, with the growth of user-generated content, there is growing concern over the production and distribution of personal data.

Neighbourhood control over communication

A related constraint on the use of the Internet to support local neighbourhoods and communities is a wish to control information. Creating community can often entail delicate issues over who knows what about whom, and what events are open and which are closed to those outside the neighbourhood. My own work with local communities has raised this issue on many occasions, yet it is often based on a fear of what might be done versus actual problems. Fears can be addressed by sensitive moderation of neighbourhood blogs and websites, and showing concerned individuals what information is actually made available.

Malicious users and uses

The value of the Internet in empowering 'networked individuals' is a doublededged sword in that it provides a resource to those who might undermine the values and interests of communities, businesses, and nations. Increasing concerns have been raised over the inappropriate or unlawful use of the Internet to:

- copy or share copyrighted materials;
- circumvent efforts to protect children from violent programmes or other inappropriate material;
- distribute illegal images or materials, such as those tied to child pornography;
- radicalise vulnerable individuals and groups, or orchestrate terrorist activities:
- defame or libel individuals;
- financially defraud users:
- or distribute spam or harmful viruses that infect computers; and more.

Governing and regulating a double-edged sword

Efforts have been made to reduce divides, such as through the UK appointing a 'Digital Champion', to protect privacy and protect personal data, and to introduce national and global initiatives around Internet governance and regulation, which include efforts to promote self-regulation and the propagation of norms that would govern the behaviour of individual users. The limitations of self-regulation have led to increasing calls for more global governance and national regulation of the Internet, such as in the creation of the Internet Governance Forum, and national legislation, such as the Digital Economy Bill in Britain, which addressed such issues as illegal file-sharing.

Conclusion

The Internet is one aspect of a wider set of globalisation processes, opening up new opportunities for people to connect with others around the world. The local community is being increasingly supported by this network of networks, due in part to the global resources it places at the fingertips of 'networked individuals'. Many individuals and households in the UK and other nations (Smith 2010) are using ICTs to connect with information and people in other parts of the world, or to cement their local ties, learn, and solve problems. The Internet is not causing people to be more or less social, but individuals often use the Internet to reinforce and extend their networks and to tap globally distributed intelligence to address individual and local problems. This is leading the Internet to become a key support for local communities, rather than simply a tool for globalisation that undermines community.

At the same time, the value of these networks means that those unable or unwilling to use new ICTs could be closed off from the benefits they might enjoy. This creates major incentives for renewed efforts to diminish the digital divide in nations, such as Britain, where over a quarter of its households are not online. Technical advances, such as more location-aware and mobile services, could further the significance of local information. However, this does not mean that the value of networks is inevitable or being fully realized, given the difficulties of engineering community. In fact, it may well be at risk given moves toward greater regulation of the Internet.

Further research on the societal implications of the Internet is therefore critical. Qualitative and community-based studies can complement the present research. Yet research on individuals is also needed to track whether network divides will be diminished and whether individuals will choose to reinforce local communities or focus on more global communities of interest? Will Internet governance and regulation buttress or undermine the flexibility of networked individuals, and thereby the dynamic, bottom-up creativity of Britain's network of networks?

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¹ Descriptions of the sample designs for each survey are available online at: http://www.oii.ox.ac.uk/microsites/oxis/methodology.cfm

² A study of these sites by Luis A. Castro (2010) has called them 'Diaspora-Homeland Web Sites'. The developers use these sites to 'maintain and strengthen ties to their places of origin' (González et al 2009: 42).

³ Pew Project on Excellence in Journalism: http://www.journalism.org/print/18897

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