The Fifth Estate: Democratic Social Accountability through the Emerging Network of Networks[1]

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Abstract

The rise of the press, radio, television and other mass media has enabled the development of an independent institution: the 'Fourth Estate', central to pluralist democratic processes. The growing use of the Internet and related digital technologies is creating a space for networking individuals in ways that enable a new source of accountability in government, politics and other sectors. This chapter explains how this emerging 'Fifth Estate' is being established and why this could challenge the influence of other more established bases of institutional authority. It discusses approaches to the governance of this new social and political phenomenon that could nurture the Fifth Estate's potential for supporting the vitality of liberal democratic societies.

The Emergence of a New Pluralist Democratic Institution

The historical conception of feudal societies being divided into 'estates of the realm', as reflected in France, England and Scotland, can be up-dated in a way that is useful for understanding developments in contemporary network

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societies. In pre-revolutionary France and England, for example, these estates were identified as the clergy, nobility and commons.[2] In the 18th Century, as explained by Thomas Carlyle (1905: 349-50), Edmund Burke identified the press as a Fourth Estate:

> Burke said there were Three Estates in Parliament; but, in the Reporters' Gallery yonder, there sat a Fourth Estate more important far than they all. It is not a figure of speech, or witty saying; it is a literal fact - very momentous to us in these times.

Since then, radio, television and other mass media have been enfolded with the press into the important independent democratic institution of the Fourth Estate. The passing of feudal society has led many to redefine the estates, such as in the US, where these have come to be most often linked to the separation of powers in legislative, executive, and judicial branches of government. But the press remains identified as a Fourth Estate in many liberal democratic societies.

However, in the 21st Century, a new institution is emerging with some characteristics similar to the Fourth Estate, but with sufficiently distinctive and important features to warrant its recognition as a new Fifth Estate. This is being built on the growing use of the Internet and related information and communication technologies (ICTs) in ways that are enabling 'networked individuals'[3] to reconfigure access to alternative sources of information, people and other resources. Such 'networks of networks'[4] enable networked individuals to move across, undermine and go beyond the boundaries of

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existing institutions, thereby opening new ways of increasing the accountability of politicians, press, experts and other loci of power and influence. These are neither personal nor institutional networks, but networked individuals that reflect many attributes of Manuel Castells' (1996) conception of a 'network society' and which are similar to what have been called 'Internet-enabled networks' (Hamel 2007).

This chapter explores the nature and implications of the Fifth Estate, highlighting why it has the potential to be as important in the 21st Century as the Fourth Estate has been since the 18th. It begins by placing the notion of the Fifth Estate within a wider conception of the societal implications of the Internet, and then sketches more details of its characteristics and uses, based on evidence across a range of research findings. It concludes by looking at the main threats to the vitality of the new estate and the governance approaches that could help to maintain and enhance it's role.

The Internet as Distinct from the Mass Media

Some have argued that computer-based communication systems like the Internet are essentially a new medium, building on traditional media (e.g. Rogers 1986). This media-centric view has led to the Internet being seen as simply an adjunct of an evolving Fourth Estate. Many of those who acknowledge that some aspects of the Internet compose something distinctive also have a limited notion of new digital media as being essentially a

complementary form of news publishing - a blogosphere or online digital add-on to the mass media.[5]

The Politics of the Internet in Society

The Internet's broad social roles in government and politics have similarities with that of traditional media. However, it differs from traditional media, particularly in opening up other institutional arenas, from everyday life to science, to greater social accountability. This needs to be understood in the context of three common views on the political role of the Internet for society at large as irrelevant, deterministic or socially shaped:

1. *An emphasis on technical novelty.* A view of the Internet as a 'passing fad' (e.g. Wyatt et al. 2002) focused on the supposed ephemeral nature of the Internet in comparison with other institutions and previous media. For a time, this included major players in the field of information technology (e.g. Gates 1995) who were slow to recognize the increasing importance of this form of networking. With time, this passing-fad thesis has become less credible as Internet use has continued to grow and diversify around the world, but continues to arise around particular themes, such as the Internet as simply a novelty in political campaigns and elections.

2. *Technologies of freedom v. control.* One claim is that the Internet tends to democratize access to information and undermine hierarchies. For example, de Sola Pool (1983) saw Internet-based networks as

inherently democratic 'technologies of freedom' through which individuals can network with people, information, services and technologies in ways that follow and reinforce their personal self-interests. In contrast, others (e.g. Schiller 1999) contend that institutions will adopt, design and use the Internet to enhance their control of existing institutional structures and organizational arrangements (e.g. in e-government initiatives that enhance existing institutional arrangements; or in the dystopian vision of a 'surveillance society' based on pervasive networks of CCTV cameras and other digital means of monitoring and controlling citizens' behaviour (e.g. Surveillance Studies Network 2006).

3. *The Internet as a 'network of networks'.* This conception moves on from the largely technologically deterministic freedom v. control debate to accept that the Internet can support and reinforce many different forms of network (Dutton 1999), each shaped by its stakeholders to reinforce or challenge the interests of individuals or organizations that form the Fifth Estate. These networks connect not only in the one-to-many pattern of the mass media, but also one-to-one, many-to-one, many-to-many, and so on.

The Fifth Estate: Interplay between Individual and Institutional Networks

Enhancing Citizens' Communicative Power

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The view outlined here of the social shaping of ICTs by developers, users and regulators highlights why technologically-deterministic thinking that extrapolates the societal implications of a technology from knowing some its key features has been a major factor contributing to the generally poor track record of many forecasts in this field (Dutton 1995; 1999). However, as explained in this chapter, the social shaping view enables the implications of technical change to be revealed by observing patterns of Internet use and impact over time. For example, networks can be designed to operate as horizontal peer-to-peer communications or for much more hierarchical and centralized structures. Their aims can be to emphasize broad social objectives or to bolster a more individualist viewpoint to which serve up entertainment for a 'daily-me' (Negroponte 1995; Sunstein 2007). Networks comprising the Fifth Estate have two key distinctive and important characteristics:

- The ability to support institutions and individuals to enhance their 'communicative power' - the use of ICTs to form networks that can then lead to real-world power-shifts, but which does not mean the Internet on its own can give new real power to its users (Garnham 1999; Dutton and Peltu 2007a). This enhancement of communicative power is achieved by affording individuals opportunities to network within and beyond various institutional arenas.

- The provision of capabilities that enable the creation of networks of individuals which have a public, social benefit (e.g. through social networking Web sites).

The self-selected, Internet-enabled individuals who have a primarily social aim in their networking activities often break from existing organizational and institutional networks, which themselves are frequently being transformed in Internet space. For example, local government officials can engage with individuals on community websites within and beyond their constituencies.

Reconfiguring Access to the Fifth Estate

The Internet and related ICTs can play a central role in 'reconfiguring access' (Dutton 2005) to people, information, services and other resources. This helps to explain how patterns of digital divides and choices can change the communicative power of individuals, groups and nations, although this understanding cannot be used to forecast the societal implications of the Internet. Instead, it indicates that outcomes are inherently unpredictable at micro and macro levels because they depend on the interaction of numerous strategic and non-strategic choices made by actors about how they seek to shape access to and from the outside world, in what I have called an 'ecology of games'[6] (Dutton 1999: 14-16). Think, for instance, of the strategies of government agencies, politicians, lobbying groups, news media, bloggers and others trying to gain access to citizens over the Internet.

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The Internet can reconfigure access in two fundamental ways. First, it can change the way we do things, such as how we get information, how we communicate with people and how we obtain services and access technologies. Secondly, and perhaps more fundamentally, its use can alter the outcomes of these activities. It changes what we know, whom we know, whom we keep in close touch and what services we obtain (e.g. through e-Government), as well as what technologies we use and what know-how we require to employ them. ICTs can also reconfigure access by: changing cost structures; eliminating or introducing gatekeepers; and expanding or contracting the geography of access (as well as overcoming geographical barriers, the Internet could also make geography more important because it could enable people to be where need to be to have face-to-face communication).

Particular attention in the context of the Fifth Estate needs to be given to the ability of digital networks of networks to reconfigure access by giving greater or lesser control to users (citizens, viewers, readers and consumers). An appreciation of how the use and diffusion of technologies is socially shaped reveals why the development of any particular platform has not been inevitable, including those supportive of a Fifth Estate. Instead, they have developed over time through the unpredictable interaction of strategic or unintentional choices by many actors with many different competing and complementary objectives. The outcomes of decisions in this ecology have opened up opportunities for individuals to network in varied ways.

These networks can blur the boundaries of households, organizations, institutions and nations. They enable individuals, not only institutions, to create local and global networks, as illustrated by the mobilization of political and financial support around the world for causes as varied as climate change, promotion of terrorism and struggles against state control.

Related Conceptions

There are alternative but related conceptions to my formulation of the idea of the Fifth Estate. For instance, the seminal idea of the 'public sphere' articulated by Jürgen Habermas (1991) offers valuable insights, but is too closely tied to a romantic view of the past and therefore not able to capture the rise of an entirely new sphere of influence. The notion of an 'information commons' and its many variants is often used by many others to characterize aspects of the new virtual Internet space, especially open sharing of information for free or at low cost (Cahir 2003). However, although the Internet and Web may be packed with material that is free, they also contain much that is owned - trademarked, copyrighted, proprietary, licensed, etc. For example, the personal computer is a key component of the Internet's infrastructure (Zittrain 2008) and is normally owned by individuals or organizations.

My description of this new space is anchored in a social science perspective, but has been supported across other disciplines. Leading computer scientists and engineers have made similar observations, for example in the way a key

creator of the Web, Tim Berners-Lee, and his Web Science colleagues speak of the Web as an 'engineered space' that creates a distributed 'information space' (Berners-Lee et al. 2006). However, they realize this space is being engineered by an increasingly diverse set of actors, including users, and for a wide range of purposes. They also acknowledge that many of these emergent outcomes were not those originally engineered for the Web by its designers. This has led them to call for more multidisciplinary collaboration with the social sciences.

Evidence of the Fifth Estate

The following sections give a glimpse of the mounting evidence from studies around the world that are identifying patterns of use of the Internet which lend substance to the establishment of a Fifth Estate. After a discussion on background trends in everyday use of the Internet, specific institutional spheres are explored. Important sources of data used include the internationally collaborative World Internet Project (WIP)[7] covering more than twenty countries, such as the Oxford Internet Surveys (OxIS)[8] in Britain.

Everyday Use of the Internet

Digital Choices and the Diffusion of the Internet

Evidence for the basis for a Fifth Estate can be seen in changing patterns of everyday Internet use around the world, as indicated in WIP studies.

Internet use continues to grow in number, variety of applications and spread around the globe, pointing to the weakness of the proposition that the Internet is a passing fad. In the UK, for instance, the proportion of the population over 14 using the Internet rose from about one-third to 2000 to two-thirds in 2007. This is reflected worldwide to greater or lesser degrees. Countries in Scandinavia and North America have more of their population online, but many more have far less, such as across the global South.

Nevertheless, there are still important divides in Internet access within and between nations and regions, and groups within them. Generally, along the access divide, generally, the economic 'haves' get more access to the Internet than the have-nots. This underpins concerns that the Internet reinforces socio-economic inequalities in society. Despite these continuing digital divides, the Internet has achieved a critical mass that enables networked individuals to become a significant force, indicating that the existence of a Fifth Estate is not dependent on universal access.

Studies such as WIP have also shown that social and economic status does not explain all patterns of adoption and use (Rice et al 2007). In addition, the making of 'digital choices' (Dutton et al. 2007) about whether or not to use the Internet also comes into play. For instance, many people choose not to use the Internet even when they have opportunities to do so. It may be generally understandable that the more senior citizens are significantly less likely to use the Internet than younger generations who have appropriate skills and greater familiarity with the technology. However, many older people in homes with

access to the technology and other support still do not find the motivation to go online. The Internet plays such a critical role in society that these disparities and lack of interest should not be seen as simply an example of consumers making different choices about products.

Trust in the Centrality of the Internet as a New 'Space of Flows'

The Internet has become central to everyday life for many people in many societies. The core of Internet uses has been communication, as shown by the continuing key role of e-mail. It also rivals the traditional media, government and business as the prime place to go not only for information and services but also conviviality and entertainment. More recently, what is known as 'Internet 2.0' has become an important tool for social networking and meeting new people, through services like Facebook, SecondLife, YouTube and MySpace.

As the use of broadband grows[9], so does the Internet as a popular venue to go to for entertainment (e.g. for downloading music or video, playing online games, viewing television and listening to the radio). Frequency of use of the Internet has also increased rapidly with a significant majority of users accessing the Internet as a routine part of their daily life.

As well as becoming a critical infrastructure of everyday life, the Internet is networking information and people in ways never before possible. For example, OxIS found that in 2007 that in the UK the Internet was the first or

second most common place users would first choose to go for information across a range of tasks, such as looking for the name of their MP, getting information about taxes or looking for information about local schools. People increasingly go to the Internet, rather than to a place or institution.

This is illustrative of what Castells (1996) calls a new 'space of flows'. Users usually do not go to a particular place on the Internet, but increasingly rely on search engines to find information to find what could be located anywhere in the world. This is significant because governments, libraries, newspapers, universities and other institutions are just beginning to realize that an increasing number of people are choosing not to come to them specifically for information and some services, but instead are going to a search engine on the Internet.

A frequent response from traditional institutions, such as the Fourth Estate, is to suggest that that they will retain their central position because of the trust they have built over the years. However, users trust what they find on the Internet about as much as, or more than, they trust broadcast news or the newspapers (Dutton and Shepherd 2006; Dutton and Helsper 2007: 28). Generally, the more experience people have with the Internet, the more they develop a 'learned level' of trust in the information they can find and the people they can meet online. They remain sceptical, with more educated individuals relatively more so, but the most distrustful are those who have never used the Internet. This suggests the Internet is an 'experience' technology (Dutton and Shepherd 2006). As experience online continues to

build, more users are likely to develop such a learned trust in the Internet. This will make the Internet as a space of flows even more the place to go for information, for making contact with other people and for finding services and entertainment.

Use of the Internet in Key Institutional Spheres

There are complementary patterns to the use of the Internet in everyday life across various other institutional arenas, such as those identified in Table 1. In all of these, existing institutional actors are trying to use the Internet and Web in various e-initiatives designed to reinforce and enhance the effectiveness of their operations and services.

<TABLE 1 ABOUT HERE - SEE FILE AT END OF TEXT>

The Internet is crucially enabling individuals in each arena to network in new ways that reconfigure and enhance their communicative power as a type of Fifth Estate. This is achieved by those involved in a sphere - such as political constituencies - going outside their respective institutional sphere to reach alternative sources of information and services over the Internet. Institutions rooted in the other estates are also being networked in new ways, such as through the opening of new online communication channels by print and broadcast media. In addition, institutional networking is supporting strategic organizational shifts in activities such as e-government, e-commerce and e-learning.

There is growing overlap and interaction between these networks, with individuals in institutions participating in networks that enable them to connect to networked individuals outside their institution. In public, private and voluntary sectors, organizations must begin to understand that people will not necessarily go, directly, to their organization for the information or services they want - even when that organization is the responsible body. They go to the Internet where they can search a network of information distributed around the world. For instance, this enables some patients visit a doctor armed with much background information gathered from the Web.

Government, business and NGOs - alongside individual users - can contribute to this distributed network of networks. But it is becoming increasingly separate and independent from any single government department, agency, NGO, business or other entity. For such reasons, all organizations need to consider how they can reconfigure services in ways that allow them to be provided more efficiently online. They should also identify what services and information they need to provide, taking account of what capabilities and resources they are best positioned to provide and what information is already being provided well by others, including over the Internet.

The following sections discuss the implications of the Fifth Estate in key arenas identified in Table 1.

Government and Democracy on the Line

Many administrations have made major strides in putting public information and services online, even though they have not generally kept up with the commercial sector (Dunleavy et al 2006). This means, for instance, that citizens and businesses can go online to complete tax returns, apply and pay for some local services or licences - and much more. Important initiatives to develop e-government services are gaining momentum (e.g. European Commission 2006; Hood and Margetts 2006).[10] The growth in this kind of Internet use is evident in the way, between 2005 and 2007, significantly more Britons - although still not a majority - started to go to the Internet for information about local or central government, to pay taxes, to learn about government policy or to contact a politician (Dutton and Helsper 2007: 73).

In political campaigns, elections and democratic engagements, many still view the Internet as largely irrelevant or marginal, while others argue that it is likely to undermine democratic institutions (e.g. Coleman and Norris 2005). Some critics view e-democracy primarily as an innovation that could erode traditional institutions of representative, deliberative democracy by offering direct 'point and click' participation in public policy-making. Others see e-democracy initiatives like gathering and delivering signatures for online e-petitions as an ineffectual, minor technical novelty. However, each era has its own version of this threat, such as the way interactive cable communication raised concerns over so-called 'push-button democracy' (Laudon 1977).

The Fifth Estate's network of networks can enable political movements to be orchestrated among opinion leaders and political activists in 'Internet time', which can be far quicker than real-world time. This provides a novel means for holding politicians and mainstream institutions accountable through the online interaction between ever-changing networks of individuals, who form and re-form continuously depending on the issue that is generating the particular network. A dramatic example is the use of texting after the 11 March 2004 Madrid train bombings to alert people to anti-government rallies, which challenged the government's claims and contributed to unseating José María Aznar's Partido Popular (PP) administration.[11] In the UK, many e-petition signatures posted to the Prime Minister opposing the expansion of road charging schemes may not have changed policy, but it forced the Government to reconsider and explain its case for moving ahead on this issue (Blair 2005).

Politicians are increasingly seeking to use the Internet and Web to engage with citizens, including finding new sources of funding[12]. Some are entering Fifth Estate spaces, for instance by creating a presence on Facebook or SecondLife. In addition, numerous individual political activists[13] are posting their own opinions in blogs, Websites or social networking sites.

The Press and Mass Media

The traditional media of the Fourth Estate has sometimes criticized the internet for eroding the quality of the public's information environment and undermining the integrative role of the media in society. One concern is that

the individuals who use the Internet to produce much online content are amateurs who are spewing misinformation or trivial non-information while marginalizing high-quality journalistic coverage (Keen 2007). Another critique is that, despite having a vast array of content at their fingertips, Internet users will choose to access only a narrow spectrum related to what most interests them, creating 'echo chambers' in which their own personal prejudices will be reinforced rather than challenged (Sunstein 2007).

However, these views ignore the degree to which all communication technologies are two-edged swords. For instance, they dismiss some of the same weaknesses of the traditional mass media, such as the focus on negative news stories. More importantly, there is also often an unjustified assumption that the Internet will substitute for, rather than complement, traditional media. Many Internet users read online newspapers or news services, although not always the same newspaper as they read offline. In these ways, the Internet can be realistically seen as a source of news that in part complements, or even helps to sustain, the Fourth Estate. At the same time, citizen journalists, bloggers, politicians, government agencies, researchers and other online sources provide a related, but independent, and often competing alternative.

For instance, Salam Pax[14], the 'Baghdad Blogger', helped to change the media agenda on the war in Iraq by using his enhanced communicative power to present to a worldwide audience a local Iraqi perspective that could not find a strong voice in the mainstream Fourth Estate, which later gave him a

platform. In contrast, the press ignored a long, complex blog on the counter-insurgency in Iraq that lent support to keeping Coalition Forces in Iraq for a time, although this view became increasingly visible through a grassroots movement using e-mail and other blogs.[15]

Work and the Boundaries of the Firm

The Fifth Estate has a crucial transformative potential in the workplace and the business firm and other organizations. Internet-enabled networks allow networked individuals to address a variety of problems through collaborative network organizations (CNOs), also know as distributed problem-solving networks (Dutton 2008). Successful examples of CNOs include Wikipedia, which has become widely used and trusted despite the controversy over the merits of its creation through open inputs from Internet users (Giles 2005), and open source software produced by creative arrangements of distributed expertise (Weber 2004). Internet users not only read Wikipedia or use open source software, but are exercising their Fifth Estate communicative power to help to co-produce these and a host of other products, services and information.[16]

Most firms do not choose to use these networks because they may blur the boundaries and operations of the firm. Instead, individuals are choosing to join CNOs to enhance their own productivity, performance or esteem. Organizations are trying to understand how such innovations can be exploited

for the benefit of the enterprise as a whole, and not simply the individual user (e.g. Hamel 2007).

Education and Research

E-learning networks can move beyond the boundaries of the classroom and university. However, many follow and reinforce existing institutional structures (e.g. with the teacher as the primary gatekeeper in a multimedia classroom or virtual learning environment). At the same time, students are linking with one another and worldwide through the email lists, social networking sites, etc. in ways that enable them to challenge their teachers by bringing in other authorities and views. When done in real time, this can be a positive force or a disruption in the classroom, depending on how well preparations have been made to harness these learning networks.

Likewise, universities are building campus grids, digital library collections and institutional repositories to maintain and enhance the productivity and competitiveness of the institution. At the same time, researchers are collaborating more than ever before through Internet-enabled networking[17], often across institutional and national boundaries (e.g. Wuchy et al. 2007). They are generally: more likely to go to an Internet search engine before they go to their library; as likely to use their personal computer to support network-enabled collaboration as meet their colleagues in the next office; and post work on their Web sites and blogs rather than in institutional repositories. Indeed, freely available social networking sites offer tools for collaboration that

could be as, or more, useful to researchers than systems for collaboration in which Universities and governments have invested much money.

Academics are engaged in their own emerging Fifth Estate, for instance by online mobilization around local issues (e.g. university governance) as well as more international topics (e.g. copyright and open science). Checks and balances on more established academic institutional structures are being broadened on the Internet, for instance with a growing sense of accountability to the often anonymous blogosphere of fellow academics.

Conclusions: Sustaining Democratic Vitality through the Fifth Estate

A New Space of Flows: Implications for Governance and Democracy

The conceptualization of the Fifth Estate in this chapter builds on Castells' (1996) depiction of the Internet as a 'space of flows', in contrast to a space of places. When you 'go to' the Internet, you enter this new space that connects with people and places. This is significantly different from a physical place, although they complement each other in shaping the quality of our information environment.

This space of flows enables a multitude of actors to reconfigure access to information, people, services and technologies. This can reinforce existing institutions, such as when the government posts information and documents online. They can also enable individuals to be at the centre of their own

personal networks (e.g. students at the centre of their own learning network in including friends, school or university resources and the treasury of Web knowledge). Individuals can also network in ways that constitute the Fifth Estate as an independent source of social accountability across multiple arenas.

The evidence highlighted in this paper - the tip of a larger and growing research base - indicates that the Fifth Estate is a robust concept which can flourish despite a digital divide in access, and with only a minority of users actively producing material for the Internet, as opposed to simply using it. It allows networked individuals to employ the Internet to increase the accountability of the other Estates, for instance by challenging government policies and Fourth Estate sources. And the Fifth Estate can be deployed as an alternative source of authority to professional expertise by offering alternative sources of information, analysis and opinion to citizens, patients, students, etc.

Threats to the Fifth Estate

The Fifth Estate faces a number of threats, related to each of the other estates. Its Internet-enabled networks therefore need to be identified and better understood if they are to be protected and fostered as a means for realizing the growing potential of the Internet.

The Internet's role in networking individuals is a double-edged sword. The Internet opens gates to allow in those aspects of the outside world of benefit to the user. This also brings in those causing harm by intent or accident. Just as environmental or positive political movements can exploit the Internet, extremist groups can establish a strong Internet presence as a resource for recruiting, funding and magnifying their image. The Fifth Estate could undermine valuable institutions, or become a conservative force by establishing ever more checks and balances. Although such dangers are offset by a similarly long list of advantages, the thrust of the critique remains - that the Internet can empower both the malicious and the well intentioned.

This double-edged nature of the Internet is the source of some of the main threats to the Fifth Estate from the established estates (and the lay public, which Burke might have called the Mob). The modern equivalent of the First Estate clergy could be seen as the public intellectuals and critics who undermine the value of the Internet by depicting it as a space over-occupied by an ill-informed, ill-disciplined 'cult of the amateur' (e.g. Keen 2007). The power base of 21st Century 'nobility' is reflected in economic elites, for example global corporations competing to dominate and commercialize Internet spaces, such as the 'Edisons of the digital age' (Carr 2008) who seek to create vertically integrated 'clouds' of 'giant information utilities' equivalent to the power utilities of an earlier era.

Government - the Third Estate – is increasingly aware of the potential power of the Fifth Estate to challenge its authority. In some countries, the response

has been to develop various techniques of filtering, regulation and other controls to constrain and block Internet access (Zittrain and Palfry 2007; Deibert et al 2008).[18] As discussed above, the Fourth Estate overlaps with the Fifth in some complementary ways. But traditional media are also competing with, co-opting and imitating the Internet's space of flows. Finally, the 'mob' of citizens, audiences and consumers, but also spammers, virus writers and hackers, whose communicative power is enhanced by entering the new space of flows. Table 2 summarizes these threats.

<TABLE 2 ABOUT HERE (see separate file)>

Governance of the Fifth Estate Space

The risks and hazards intrinsic to an open technology like the Internet has led increasingly for calls from citizens, governments, business and industry and others to introduce online gatekeepers and other controls to govern what was originally conceived by the Internet's designers as an open, end-to-end network allowing a free flow of content (Dutton and Peltu 2007b). Questions about the governance of the Fifth Estate are likely to become more prominent as people realize that the Internet is a social phenomenon with broad and substantial societal implications. Appropriate forms of governance of Fifth Estate social and political processes - not just technical Internet and infrastructure aspects - will be required to ensure public debate and accountability are supported by finding a balanced governance approach. This should minimize the risks without damaging the openness of the Internet

that supports the users ability to generate innovative applications and content (Zittrain 2008).

Fifth Estate governance includes topics that have become well understood in other Estates, such as freedom of expression, protection of minorities and media ownership and concentration. A right to anonymity is a key issue, since governments and other estates could threaten networked individuals they could identify, but many, such as some service providers, are asking for authentication of the identity of users for safety and security purposes.

The vitality of Internet-enabled Fifth Estate networks rests less on new policy initiatives since its emergence, than on preventing excessive regulation or inappropriate regulation of the Internet. An intriguing avenue to explore could be to hold Internet users more accountable through the development of innovative approaches to encourage more Fifth Estate self-regulation, such as by what has been called the 'peer production of Internet governance' (Johnson et al. 2004). These are typified by self-governing processes developed for successful novel online applications, such as Wikipedia and the eBay online auction service, where users participate in establishing and monitoring governance rules. These could stimulate ideas for approaches to governance of the space of flows in ways that protect and enhance its vitality to ensure that - using Burke's observation on the Fourth Estate - the Fifth Estate continues to be not 'wishful thinking, but a literal fact'.

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Table 1. A Categorization of Networked Institutions and Individuals

Arena	Networked Individuals of the Fifth Estate	Networked Institutions of the Other Estates
Governance and Democracy	Web-based political movements (e.g. Moveon.org).	e-government, e-democracy
Press and Media	Bloggers, online news aggregators, Wikipedia contributors	Online journalism, radio and TV
Business and commerce	Peer-to-peer file sharing (e.g. music downloads), collaborative network organizations	Online business-to-business, business-to-consumer (e.g. e-shopping, e-banking)
Work and the organization	Self-selected work collaborations, open source software creation and distribution, wikis for co-creation	Flatter networked structures, networking to create flexible work location and times
Education	Informal learning via the Internet, checking facts and information, teacher assessment	Virtual universities, multimedia classrooms, online courses
Research	Collaboration across disciplinary, institutional and national boundaries	Institutional IT services, online grant and proposal submissions

Table 2. Threats to the Fifth Estate from Established Institutions

Traditional Estate	Modern Parallel	Type of threat
1st: Clergy	Public intellectual	Internet seen as a space for amateurs unable to challenge the knowledge and analytical rigour of experts.
2nd: Nobility	Economic elites	Centralization of information utilities and commercialization of Fifth Estate spaces.
3rd: Commons	Government	Filtering, regulation and other controls to constrain and block Internet access.
4th: Press	Mass media	Co-opting, imitating and competing with the Fifth Estate space of flows.
Mob	Citizens, audiences, consumers, but also spammers, hackers	Malicious and accidental uses of the Internet undermine trust and confidence

Endnotes

[1] This chapter builds on the author's Inaugural Professorial Lecture, Examination Schools, University of Oxford, 15 October 2007. See Dutton (2007).

[2] Fitzsimmons (2003) provides an account of the estates of pre-revolutionary France.

[3] The notion of networked individuals corresponds to the term 'networked individualism' used by Barry Wellman (2001) to break old dichotomies between the individual and place-based communities.

[4] Craven and Wellman (1973) coined the concept of a 'network of networks' in the early years of the Internet, when it was founded as the US Department of Defense's ARPANET.

[5] For example, a blogger calls his blog The Fifth Estate. See: http://at5thestate.blogspot.com/

[6] The term 'game' is not used here in a strict game-theoretic sense, but more generally to indicate an arena of competition and cooperation structured by a set of rules and assumptions about how to act to achieve a set of objectives.

[7] See: http://www.worldinternetproject.net

[8] See http://www.oii.ox.ac.uk/research/ and Dutton and Helsper (2007), from which UK statistics in this paper have been taken.

[9] Broadband access had become the norm for Internet access in many countries; e.g. by 2007, 85 percent of Internet households in the UK accessed the Internet through broadband connections, which is over half of all households (Dutton and Helsper 2007: p.10).

[10] See also the Breaking the Barriers to eGovernment project led by the Oxford Internet Institute (http://www.egovbarriers.org).

[11] See: http://info.interactivist.net/article.pl?sid=04/09/02/1821228&mode=nested&tid=12

[12] In the Democratic primaries for the US presidential election in 2008, for instance, Barack Obama raised more money, more quickly than anyone had done before - mainly by Internet-enabled networking among a large number of supporters, each contributing relatively small amounts. According to Green (2008): 'To understand how Obama's war chest has grown so rapidly, it helps to think of his website as an extension of the social-network boom'.

[13] For example, the Drudge Report (http://www.drudgereport.com) and Guido Fawkes (http://www.order-order.com).

[14] See: http://dear_raed.blogspot.com/

[15] See 'The Anatomy of a Tribal Revolt' at: http://smallwarsjournal.com/blog/

[16] For example, the system called Sermo enables licensed physicians in the USA to ask questions of one another, post replies, and answer and create surveys (http://www.sermo.com) and a Swarm of Angels is an internal open content film production collaboration (http://aswarmofangels.com).

[17] The Access Grid is one major initiative (http://www.accessgrid.org).

[18] See the OpenNet Initiative (http://opennet.net), which identifies and documents Internet filtering and surveillance.