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Introduction

Helen McCarthy, Paul Miller
and Paul Skidmore

DEMOS



1. Introduction

network logic

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Networks are the language of our times. Think about Al-Qaeda. The internet, eBay, Kazaa. The mobile phone, SMS. Think about iron triangles and old school ties, No Logo and DeanforAmerica. Think VISA and Amex, the teetering electricity grid, the creaking rail network. LHR to LAX. Think about six degrees of separation. Think small worlds, word of mouth.

Think about your networks. Your friends, your colleagues, your social circle. How new networks take shape through introductions at parties, over coffee breaks, via email. How your connections have helped you, supported you and hindered you.

They are all around us. We rely on them. We are threatened by them. We are part of them. Networks shape our world, but they can be confusing: no obvious leader or centre, no familiar structure and no easy diagram to describe them. Networks self-organise, morphing and changing as they react to interference or breakdown.

Networks are the language of our times, but our institutions are not programmed to understand them.

As individuals, we have taken advantage of the new connections: to earn, learn, trade and travel. But collectively we don't understand their logic. Our leaders and decision-makers have often failed to grasp their significance or develop adequate responses. We do not know how to avoid internet viruses or manage mass migration, structure

urban communities, regulate global financial markets or combat networked terror.

So now we live in a world held together by networks, but lacking the language to solve its common problems. We're left with a sense of unease – a governance gap that needs to be bridged. This book brings together some of the leading network thinkers and practitioners to help us to do just that.

A new logic

Manuel Castells, in his afterword (see chapter 17), points out that we are paying so much attention to networks now because of computerisation; it is electronic connections that have made the network such a ubiquitous and public organising principle. But as both Fritjof Capra and Karen Stephenson argue in their essays, these forms go far beyond the digital. Networks embody a set of fundamental principles for the ordering, distribution and coordination of different components, whether chemical, natural, social or digital. Network principles help to explain not just the distribution of wealth in monetary economies, but also the distribution of molecules in cellular systems. If we can recognise and detect these patterns more accurately, we could learn to use them for organisation and decision-making, to make possible new forms of coordination and collective action.

There is already a huge appetite for understanding the 'hidden connections' in the world around us, as the combined book sales of our authors would testify. But we are some way from being able to structure organisational and public power in ways that really take advantage of network potential. As Capra puts it, we need new 'design principles for our future social institutions'.

Whether it is harnessing the distributed processing power of millions of networked computers as John Taylor envisages, or using Robert Sampson's penetrating analysis of crime in the modern city to activate problem-solving neighbourhood networks, there are opportunities and challenges for governments, businesses and citizens alike. Meeting them means redefining many of the principles that currently hold our world of public institutions and assumptions

together. In the rest of this essay we examine the implications for some of these key principles:

- communication
- transparency
- knowledge
- innovation
- regulation
- accountability
- ownership
- citizenship
- power.

Communication

The networks that have changed our lives most in the last two decades have been communication networks, especially the internet and mobile technologies. The most important shift is away from broadcast (one to many) towards conversational (many to many) models of communication. The music industry is not alone in finding this new era of horizontal, peer-to-peer communication uncomfortable. No major politician, with the partial exception of Howard Dean, has yet grasped the possibilities of the internet as an organising, fundraising and communicating tool in the way that Franklin Roosevelt mastered the fireside radio chat or John F Kennedy the relaxed television address. Political communication for the internet age has yet to truly arrive.

The media itself faces significant new challenges, not least from the explosion in self-publishing that new media permit. The Monica Lewinsky scandal that engulfed the Clinton presidency was initiated by an ostensibly fly-by-night website called the Drudge Report. In the Iraq conflict the controversy over ‘embedding’ mainstream journalists in operational military units, and the accusation that this enabled the military to filter what was and was not witnessed, played out in parallel with the highly personal missives of the ‘Baghdad Blogger’. An anonymous middle-class Iraqi calling himself Salam Pax and running

a weblog called DearRaed attracted global interest for the real-time, authentic, and somehow more objective perspective he appeared to offer.

Among organisations for whom the careful manipulation and transmission of images and messages is a fine art, there is much to be unlearned. Critically, they will have to look for ways to insert themselves effectively into ongoing conversations, which they can shape and influence but probably not control. Understanding the way that messages are communicated and spread horizontally across networks is becoming more and more highly prized in this regard, as the immense popularity of Malcolm Gladwell's *The Tipping Point* demonstrates. In their essays, Ann Lieberman, Diane Wood and David Hargreaves explore the possibilities of lateral networking and collaboration between teachers to spread good practice rapidly across school systems. It will be interesting to watch the way that individuals and organisations who are seen to act 'gatekeepers' or 'hubs' in influencing people's behaviour are identified and enrolled by governments keen to influence the actions of citizens or the performance of public services, by campaigners wanting to rally people to a cause, or by companies hoping to sell them a product. Shoshana Zuboff and James Maxmin forecast a bright future for those firms trusted by consumers to act as brokers, stitching together personalised combinations of goods and services from a diverse network of providers.¹

Transparency

In a hyperconnected society, secrets get everywhere. Transparency has gone from being something that institutions permit to something that they find it hard to resist. A misplaced click of a mouse, a careless conversation, and secrets are transmitted round the world in a matter of seconds and reported globally within hours. Wave after wave of scandals, from Iran-Contra to BSE to Enron, have illustrated the problems that a lack of transparency can create. Each has prompted policy-makers to extend powers of scrutiny so that such obliquity will not be repeated.

The dynamic of information in a network is one of openness. As Stewart Brand puts it: 'Information wants to be free.' It would be hard to overestimate the challenge that this poses. Access to information is an important source of power for professionals and organisations of every stripe, and many institutional cultures have been built on secrecy and insularity. The recent Hutton Inquiry process was remarkable less for its final outcome than for what it revealed about the machinations of Whitehall.

With the right kinds of transparency, it could be possible to rebuild public trust in institutions that have taken a battering over recent decades, but also to improve organisational performance itself. Take government policy-making, for example. The image of policy as a rigid, linear production line from 'conception' to 'winning support' to 'implementation' could evolve into something much more interactive and adaptable. Policy could be developed through genuine dialogue, tried out in small-scale ways and adapted in light of the results. Implementation on a larger scale would not follow until evidence about what worked had been clearly marshalled. Citizens would be less the passive arbiters of government performance and more the active co-creators of new policy. Such an approach would have to be accompanied by a different set of expectations, however, among both public and media. All institutions make mistakes, and good decisions depend on the capacity to consider a wide range of options. Without the scope to do so without scandal or sensation, secrecy will remain a default position among governments.

Knowledge

Brand also argued that information equally wanted to be expensive, because at the right time and in the right place it was so immeasurably valuable. This tension, and its specific application in debates ranging from intellectual property and scientific publishing to research and development and human capital banking, will manifest itself more and more frequently in the future.

The 'open source' movement has shown that it is possible, given the increased capacity for coordination that new communication

networks permit, to create popular, robust and user-focused goods and services by tapping into the collaborative instincts of humans as social animals, not merely our competitive instincts as rational economic calculators. An approach that originated in software programming through things like the Linux computer operating system has now been successfully applied in the pharmaceutical industry and other knowledge-intensive sectors. Former BBC Director-General Greg Dyke announced plans to make the entire BBC archive available free online, opening up the possibility of an open source approach to broadcast content. The Creative Commons movement has sought to anchor these developments in an evolving statement of shared values and legal principles.

Yet despite its attractions the open source model has certain features that may reduce its applicability to wider social and economic endeavours. Most obviously, it depends on restricting participation to those with high levels of technical knowledge, and through a combination of peer review and central coordination it has a relatively clear mechanism for validating this knowledge. Where these conditions do not apply, then it will be crucial that we develop much more sophisticated systems of human capital banking for certifying what people know, and allowing us to find out which people know what. This is not just a challenge for governments, since the task of certifying knowledge must be distributed across the domains in which that knowledge is acquired and deployed. Instead, as Riel Miller has argued, it should be seen as a long-term collective project analogous in difficulty and importance to the development of a reliable financial capital banking system.²

Innovation

As a growing body of research makes clear, innovation is not a lonely process undertaken by 'Fred's in sheds'. It is itself a network endeavour.³ Good ideas are dependent on an environment that is supportive of collaboration. Partly this is about getting the right mix of people, skills and experience. American professor Richard Florida

has argued that diversity and difference are often crucial attractors of creative people to high-performing cities.⁴

But these networks of innovation must also be managed and shaped to achieve longer-term public benefits. A key feature seems to be a hybrid, tight-loose approach: a tight, potentially even prescriptive approach to developing the simple rules or common standards to which all parties will work combined with a much looser approach to specifying the particular applications that will then emerge as a result. This reflects the fundamental point that networks provide a 'platform' for coordinating highly diverse activities, many of which are not predicted in advance. WiFi, SMS, even the internet itself all evolved quite differently from how they had been conceived.

Regulation

Successful innovation also depends on effective regulation. Given the benefits to citizens and consumers in terms of the goods and services that networks provide, and the potential incentives for actors to exploit their position within the network to behave in ways that reduce these benefits, special attention must be paid to the peculiar regulatory challenges that networks create. In particular, it is often necessary to separate the regulation of the 'platform' that networks provide from the actual services which are delivered via that platform. The difficulties of finding an organisational model for promoting the maintenance and improvement of the post-privatisation rail network is one recent example of this. Creating a competitive market in broadband internet access given the dominance of an incumbent market player is another.⁵

Looking to the future, similar problems are looming in relation to the provision of digital television services,⁶ and even the hitherto very lightly regulated internet itself. The recent stock market flotation of the web's most popular search engine Google, and the possibility that it could be acquired by a company with a vested interest in influencing its search results, was a timely reminder that in certain respects searchability of networks through transparent and reliable search engines is a public good that cannot be left simply to the market. How

we approach such regulatory conundrums remains unclear, but it seems unlikely that the models we have relied on up to now will be up to the job. The role of regulatory agencies may need to shift from that of enforcement to brokerage, identifying the organisations and strategies that could be enrolled in tackling a given problem.⁷

Accountability

In an interconnected world simple chains of cause and effect are difficult to establish. Most organisations are nodes in a whole series of complex networks, some of which they may not even realise they belong to. The impact of those networks and the outcomes they produce is rarely the result of any one organisation but rather the interactions between them. At the same time, membership of such networks does not diminish the need to give account for one's actions; on the contrary, it amplifies it. A typical FTSE 100 today is now required to give account to: shareholders, and particularly the large institutional investors whose judgements are so crucial in influencing perception of company performance and management competence; the media, through which its reputation and trustworthiness will often be mediated; an array of regulatory agencies, perhaps sector-specific, others concerned with generic issues like employment practices or health and safety; supranational bodies, including the European Union; and its wider stakeholders, including customers, suppliers, employees, NGOs and politicians.

Yet despite this complex picture, we still treat accountability as a linear process – one party being held to account by another. This is expressed in the way that the Public Accounts Committee of the House of Commons works, for example, and in the way that the scrutiny functions of regulatory agencies continue to be understood. In the future, our conception of accountability seems likely to evolve away from simple lines of answerability towards something more complex and messy, with lines of accountability that are:

- multiple, so that any one actor was accountable to a number of other actors in a number of different ways

- overlapping, so that at different times in different circumstances one source of accountability might take priority, but at no point could there be no accountability at all
- based on deliberative as well as procedural processes – generating opportunities for genuine discussion and learning, rather than fostering defensive mindsets or going through the motions.

Ownership

The blurring of responsibility and the growth of organisational interdependence also force us to rethink our binary assumptions about public versus private ownership. New ways of organising and providing public goods and services have emerged, which downgrade the role of the state from that of provider to that of regulator or coordinator, and seek to draw other actors into complex webs of provision cutting across traditional institutional boundaries. This process has been theorised in the rise of ‘the governance paradigm’ across the social sciences. The common theme is an interest in patterns of governing that do not rest on the traditional authority of the state to coerce and command, and which involve institutions drawn from within but also beyond government.⁸

Citizenship

Network citizens understand their connections to the wider world, as well as to those in their neighbourhood. They are capable of participating in networked forms of social action, as Howard Rheingold elaborates, but they are also able to respect the informal norms of collaboration in everyday life that enhance quality of life in the terms set out by Robert Sampson. Many of our public goods rely on the network effects of individuals being prepared to act as ‘co-producers’ of the service they receive from the state. Networked citizens will participate in the creation of new decision-making capabilities as well as understanding their informal power and responsibilities.

Power

The changing nature of power in a network society may be the hardest nettle to grasp. As Manuel Castells explains in his afterword, power is as crucial as ever in structuring the contours of the network society. But power no longer resides in individual institutions (even states) but in what he calls the ‘switchers’ through which networks regulate terms of entry and privilege or exclude particular interests or positions. These structural conditions help to explain the persistence of particular kinds of systematic disadvantage even where the wider environment appears to be in flux. Mark Buchanan’s cogent analysis of the network causes of income inequality illuminates this point.

It is interesting that governments have been markedly more willing to accept the logic of network power in some policy areas than in others. Faced with the current outcry over the ‘outsourcing’ of service employment to call centres in India and elsewhere, for example, a coherent policy response has yet to emerge. British politicians have simply reiterated the neoliberal consensus that in a global networked economy, national policy and employment priorities are inevitably subservient to investment flows that they have little or no capacity to control.⁹ By contrast, on the equally thorny question of how to deal with substantially higher levels of migration from developing countries, European governments have desperately sought to shore up creaking asylum and immigration systems in order to convince hostile electorates that control is still feasible.

In the face of interdependence, neither defeatism nor control freakery is acceptable as a strategy for governance. Public intervention to pool risk, counteract economic insecurity and counteract social dislocation is becoming more, not less, necessary. The question is what kinds of public intervention are going to be both legitimate and effective. The answer, as far as we can see, is to develop institutions able to channel this interdependence in positive ways rather than be swamped by it, and which work with the grain of our desire for self-determination rather than suppress it.

In other words, if we can only connect the pursuit of freedom to systems of organisation that will not be undone by its exercise, a

networked world can become a more sustainable and a more enriching place. Making it so requires us to change not just our tools of intervention, but also our ways of seeing the world. Fortunately, the connections we have forged make it possible to pursue this task together.

Notes

- 1 S Zuboff and J Maxmin, *The Support Economy: why corporations are failing individuals and the next stage of capitalism* (London: Allen Lane, 2003).
- 2 R Miller, 'Towards the learning society?' In T Bentley and J Wilsdon (eds) *The Adaptive State: strategies for personalising the public realm* (London: Demos, 2003).
- 3 I Tuomi, *Networks of Innovation: change and meaning in the age of the internet* (Oxford: Oxford University Press, 2002).
- 4 R Florida, *The Rise of the Creative Class: and how it's transforming work, leisure, community and everyday life* (New York: Perseus, 2002).
- 5 See J Wilsdon and D Stedman Jones, *The Politics of Bandwidth* (London: Demos, 2002).
- 6 B Cox, *Free for All? Public service television in the digital age* (London: Demos, 2004).
- 7 J Black, 'Enrolling actors in regulatory systems; examples from UK financial services regulation', *Public Law*, Spring 2003.
- 8 G Stoker, 'Governance as theory: five propositions', *International Social Science Journal*, no 155, March 1998.
- 9 As Tony Blair put it in December 2003: 'I feel desperately sorry for anyone whose job is at risk as a result of this change, but that is the way the world is today...' 'Blair warns jobs exodus part of new order', *Financial Times*, 3 Dec. 2003.