

LSE Research Online

Robin Mansell

Social informatics and the political economy of communications

Article (Accepted version) (Refereed)

Original citation:

Mansell, Robin (2005) Social informatics and the political economy of communications. *Information technology & people*, 18 (1). pp. 21-25. DOI: <u>10.1108/09593840510584603</u>

© 2005 Emerald Publishing Group

This version available at: <u>http://eprints.lse.ac.uk/3480/</u> Available in LSE Research Online: May 2008

LSE has developed LSE Research Online so that users may access research output of the School. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LSE Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain. You may freely distribute the URL (http://eprints.lse.ac.uk) of the LSE Research Online website.

This document is the author's final manuscript accepted version of the journal article, incorporating any revisions agreed during the peer review process. Some differences between this version and the published version may remain. You are advised to consult the publisher's version if you wish to cite from it.

http://eprints.lse.ac.uk

Word count 1711 (excl. references)

Social Informatics and the Political Economy of Communications By

Professor Robin Mansell Dixons Chair in New Media and the Internet London School of Economics and Political Science

23 July 2004

Submitted to Special Issue of *Information Technology and People*, Festschrift in honour of Rob Kling's legacy, forthcoming 2004.

Introduction¹

I suggested recently that researchers working in the fields of the political economy of communications and innovation studies concerned with the design and implementation of new media need to address a major lacunae in our understanding of the ongoing development of information and communication technologies (ICTs) (Mansell 2004). We urgently need to understand both theoretically and empirically the dominant guiding principles – or values and perceptions of power - that are becoming embedded in our technologically mediated interactions and what the alternatives may be. The notion of 'guiding principles' comes from research in the field of innovation and technical change developed by Christopher Freeman and his colleagues (Freeman 1992, Freeman and Louçã 2001). The notions of mediation and power come from sociological studies of the media (Silverstone 2004), institutional economics (Mansell et al. 2002), and studies in the political economy tradition (Garnham 1990, 2000). Important research questions lie at the intersection between these quite different lines of inquiry such as - how is the process of technological innovation in ICTs being structured, by whom and for whom is it being negotiated, and with what consequences?

My endeavours to answer these questions are driven by my interest in how and why people communicate within technologically mediated environments. My research career began with studies of the political economy of telecommunication networks that were being computerised at the time (Mansell 1993). I began by examining questions at the meso-institutional and macro-structural levels. My work placed questions about the dynamics of power embedded in technical systems at the centre of the analysis of the design of telecommunication systems, the structuring of markets for their production and use, and the implications of these features both for users and for those whose remit it is to establish policy. Information processing technologies were permeating the telecommunication system and by 1996 I had encountered research in the 'social informatics' tradition. I came to appreciate that my research needed to be extended into, or at least link up with, micro, within organisational studies of the technological mediation process. This led to detailed studies of the negotiation processes that shape the design and implementation of what has now been

2

designated as 'new media', including the Internet and its applications (Mansell 2002). This research has been empirically grounded, strongly interdisciplinary, and always interested in the power and social equity issues that influence people's abilities to live their lives in technologically mediated environments. This approach is the mirror image of the social informatics tradition which has emphasised the need to contextualise situated studies of ICTs in the larger social milieu.

During this continuing quest to find answers to these questions at the intersections between macro and micro studies of structures and processes of power and their social, economic and political implications, I encountered the work of Professor Rob Kling. I was delighted to spend a week with him at a Summer School in Switzerland in 2000. High in the Swiss Alps we had a marvellous opportunity to talk about what it was that connected our research interests. What piqued my interest in his account of social informatics research was his insistence on the idea that what matters in studies of information technologies is human beings. His insistence on the importance of the institutional and cultural facets of computerisation, on interdisciplinarity and on the fact that institutions matter, served as a counterpoint to my interest in understanding the institutional norms and practices that inform technological design and appropriation as well as the accommodations and resistances that people often display. Socio-technical networks, albeit for Rob Kling at a different level of analysis than that which I have undertaken, cannot be understood without studying their uniqueness. As he put it, 'IT [information technology] applications do not simply "open new possibilities" for people or organizations. Rather, they restructure information processing and social relationships" (Kling 2001: 3).

Rob Kling defined social informatics as "the interdisciplinary study of the design, uses and consequences of information technologies that takes into account their interaction with institutional and cultural contexts" (Kling 1999: 1). This is an essential perspective if we are to achieve a deepening of our analyses of the predominant principles or articulations of power that are shaping our interactions with networks. This definition also sensitises researchers to the fact that, as Rob Kling consistently pointed out, ICT applications often have contradictory and unanticipated consequences. These depend on the local contexts in which they are appropriated as well as on developments in distant contexts. Again, in his words, 'It is unfortunately

rare for IT designers to substantially appreciate the work and working conditions of the people who will be using the systems that they design' (Kling 2001:6).

A recent study of they way electronic commerce services are being developed by firms in Bangladesh, Kenya and South Africa shows how essential it is to acknowledge and empirically investigate the variety of ways in which the applications of the Internet are developing in different contexts. Humphrey, Mansell, Paré, and Schmitz (2003) examined the way business-to-business (B2B) electronic commerce is being developed in these countries by firms in the garments and horticulture sectors.² By the end of the 1990s, the Internet was being used to host open electronic marketplaces located at websites (Paré 2003). There were strong expectations that these websites would be attractive to firms in developing countries so that they could meet new trading partners and expand their international trade (Kaplan and Swahney 1999). Our study was undertaken between 2001 and 2003. It critically assessed prevailing expectations about B2B electronic commerce and the results departed substantially from the predominant vision of B2B electronic commerce.

Despite the availability in both the garments and horticulture sectors of electronic marketplaces providing a range of services and the fact that all the firms had access to the Internet, 77 per cent or 57 firms in the research sample had never registered with an electronic marketplace. Ten firms (14%) had registered but no sales had materialised and another seven (9%) had registered and a few sales had occurred. Smaller firms were more likely to register at these sites than larger firms but the likelihood of reporting that products had been bought or sold using the Internet was unrelated to size of the firm. There was some evidence of large buyers promoting restricted online trading as a means of facilitating the streamlining of their sourcing activities. The reality of B2B electronic commerce for the vast majority of firms in the sample involved a growing dependence on email. The more sophisticated applications of electronic commerce envisaged in some of the prevailing visions based on open Internet platforms were barely visible. There was some evidence of the growing use of supply chain management software and of the deepening of connections between firms in their supply chains through their development of closed trading platforms of various kinds. Nearly all the respondents emphasised the importance of conventional sector-based business practices.

This study demonstrated empirically that there are no simple B2B electronic commerce formulas that will launch developing country firms into new markets or help them to find new customers. The way these firms should use electronic commerce needs to be assessed from the standpoint of local users and the firms and agencies that influence their external markets. This requires us to examine the settings in which the employees of firms in developing countries are appropriating new technologies. The generic 'best practice' templates for the adoption of electronic commerce that are produced by many development agencies, ICT designers, and policy organisations, often simply assume the universal applicability of technology, taking little heed of the working conditions and work practices of the users of technology.

How people communicate in different organisational contexts is informed by the way meanings are created (in this study, contractual understandings to supply material goods) and how various processes can be made to work in both offline and online environments. The results of this study illustrate one of Rob Kling's dictums. The social context of ICT development matters – 'the matrix of social relationships ... is characterized by particular incentive systems for using, organizing, and sharing information at work' (Kling 1999: 10). The preferred communicative practices of employees in the sample firms were informed by developments both internal and external to their firms. A key set of issues was how they could best secure an understanding of their buyers' changing requirements and this required a mix of face-to-face discussions, telephone conversations, faxes, email, and limited use of the web.

There were very few signs of the emergence of the singular model of electronic commerce using open Internet-based electronic marketplace websites as a means of expanding trade prospects. The distribution of power between these firms and their buyers appeared to be governed mainly by the dynamics of the structures and hierarchies of power within the supply chains. Email communication was benefiting the firms in the sample but there were no signs that the development of B2B electronic commerce was radically altering pre-existing power relations. Electronic markets, like their offline counterparts, are influenced by technical innovations but the

processes through which those innovations become embedded in commercial activity are dependent upon the social and economic context in which markets evolve.

This illustration shows that it is essential to understand how social values and regimes of control are embedded in ICTs and their consequences for distributional equity. In both the political economy of communications and the social informatics fields of inquiry we need comparable empirical studies of the many contexts in which ICTs are being developed and experienced. We need to ensure that these provide us with insights into articulations of power – that is, the 'guiding principles', so that we can understand issues that go to the heart of how people's lives and livelihoods are mediated by technological innovations. These involve questions about power and authority as Rob Kling rightly emphasised, in his case, mainly within the boundaries of organisations. There is latitude for social actors to make choices about the design of, and their engagement with, new technologies. We need to understand how this occurs in highly situated contexts and within the broader contours of society. My research benefits substantially from Rob Kling's contributions to social informatics and his legacy is a very substantial one for researchers in many disciplines to build upon.

References

- Kaplan, S. and Sawhney, M. (1999) 'B2B E-Commerce Hubs: Towards a Taxonomy of Business Models', Chicago, University of Chicago, <u>http://gsbwww.uchicago.edu/fac/steven.kaplan/research/taxonomy.pdf</u> accessed 24 July 04.
- Freeman, C. and Louçã, F. (2001) As Time Goes By: From the industrial revolutions to the information revolution. Oxford: Oxford University Press.
- Freeman, C. (1992) 'Technology, Progress and the Quality of Life', in C. Freeman (ed) *The Economics of Hope: Essays on Technical Change, Economic Growth and the Environment*, London: Pinter Publishers, pp. 212-30.
- Garnham, N. (1990) 'Media Theory and the Political Future of Mass Communication', in F. Inglis (ed) *Capitalism and Communication: Global Culture and the Economics of Information*', London: Sage, pp. 1-19.
- Garnham, N. (2000) Emancipation, the Media, and Modernity: Arguments about the Media and Social Theory. Oxford: Oxford University Press.
- Humphrey, J., Mansell, R., Paré, D., and Schmitz, H. (2003) 'The Reality of Ecommerce with Developing Countries', Report prepared for the UK Department for International Development's Globalisation and Poverty Programme, by London School of Economics and Institute of Development Studies, Sussex, March, available at http://www.gapresearch.org/production/Report.pdf accessed 24 July 04.
- Kling, R. (1999) 'What is Social Informatics and Why Does it Matter?', D-Lib Magazine, January, available at www.dlib.org/dlib/january99/kling/01kling.html accessed 24 July 04.
- Kling, R. (2001) 'Social Informatics' in *Encyclopedia of LIS*, Kluwer Publishing, available at <u>www.slis.indiana.edu/SI/si2001.html</u> accessed 24 July 04.
- Mansell, R. (1993) *The New Telecommunications: A Political Economy of Network Evolution.* Sage: London.
- Mansell, R. (2002) 'Conclusion: Social Relations, Mediating Power and Technologies' in R. Mansell (ed) *Inside the Communication Revolution: New Patterns of Social and Technical Interaction*, Oxford: Oxford University Press, pp. 251-270.
- Mansell, R. (2004) 'Political Economy, Power and New Media', *New Media & Society*, 6(1): 74-83.
- Mansell, R. and Steinmueller, W. E. (2000) *Mobilizing the Information Society: Strategies for Growth and Opportunity*. Oxford: Oxford University Press.
- Mansell, R., Samarajiva, R., and Mahan, A. (2002) 'About' in R. Mansell, R.
 Samarajiva, and A. Mahan (eds) *Networking Knowledge for Information* Societies: Institutions & Intervention, Delft: Delft University Press, pp. 3-13.

Silverstone, R. (forthcoming 2004) 'Mediation and Communication', in C. Calhoun, C. Rojek, and B. S. Turner (eds) *The International Handbook of Sociology*, London: Sage Publications.

Notes

The during is grateria to two anonymous referees for their comments.
 The Humphrey et al. (2003) report gives details of the research design and methodology used in the study and about the research collaborators in the three countries and of the sample of firms. The views expressed here are solely those of the present author.

¹ The author is grateful to two anonymous referees for their comments.