Robin Mansell and Michèle Javary

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New Media and the Forces of Capitalism

by

Professor Robin Mansell* and Dr. Michèle Javary**

*Dixons Chair in New Media, London School of Economics and Political Science
** Independent Researcher

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The New Media and the Forces of Capitalism

Introduction

If the analysis of economic power is made central to a discussion of the likely future development of the new media, that is, the technologies and services based on digital networks and platforms, the important role of financial capital in the new media markets cannot be ignored. This chapter considers the role of financial capital in forging the emerging structure of the new media markets in the United Kingdom. It highlights the need to give greater consideration to the legislative framework for regulation in order to protect certain aspects of the public interest in a high quality and relatively low cost new media infrastructure. Measures, additional to those proposed in the draft Communications Bill of May 2002 in the United Kingdom, are needed.

Those who adopt a social constructivist position with respect to the new technologies, such as MacKenzie (1996: 6) generally ask about who the new technologies are likely to be good for. As MacKenzie puts it, ‘different people may see a technology in different ways, attach different meanings to it, want different things from it, assess it differently. … Technologies … may be best because they have triumphed, rather than triumphing because they are best’. This observation is undoubtedly accurate, but this type of approach to the analysis of the implications of the new media technologies and their consequences does not enable us to consider the principal economic forces that are shaping the new media environment.

Another viewpoint has been expressed by Castells (2000: 1) who adapts Freeman’s (1982) earlier discussion of techno-economic paradigms to argue that the new media represent ‘… a cluster of inter-related technical, organizational, and managerial innovations, whose advantages are to be found in their superior productivity and efficiency in accomplishing an assigned goal …’. He goes on to suggest that ‘… they process the goals they are programmed to perform. … To assign different goals to the programme of the network …, actors will have to challenge the network from the outside … around alternative values’. The implication is that some components of the new media might be produced and consumed outside the constraint of capitalist forces of production. This controversial point is not the one that is of particular interest in
this chapter. Instead, we want to focus on the implications of Castells’ observation with respect to the ‘goals’ that the new media technologies and services are being ‘programmed to perform’.

In this chapter, we first consider the way the predominant logic of new media development is being understood by many policy makers and the particular way in which these observers regard the market as the key ‘driver’ for the development of the new media landscape. Second, by examining the roles of financial capital and governance processes in the Internet Service Provider (ISP) market in the United Kingdom, we highlight trends that appear to run counter to the conclusion that the predominant market logic is consistent with the public interest in new media services. Our analysis indicates a need for regulation of certain aspects of the new media markets that extend into the Internet realm. This view is a departure from the predominant one that advocates Internet self-regulation as the best means of protecting the public interest in the United Kingdom.

The position developed in this chapter is consistent with Trebing’s (1995, 1998) argument with respect to market developments in the United States telecommunication and ISP industries. He claims that these developments are inconsistent with an adequate standard of protection of the public interest. Similarly, Bar et al. (1999) indicate that sustained regulatory intervention is needed to encourage the evolution of an open Internet environment in the United States. Their views contrast with those of Oxman (1999) who argues that given the immaturity of the ISP market in the United States, there is no basis for regulatory intervention.

**The Logic of New Media Markets**

The predominant logic of the new media marketplace has been articulated in various international policy forums in recent years. There is a widely promoted vision of an emergent global knowledge society. As the Deputy Secretary General of the Organisation for Economic Cooperation and Development (OECD) put it during a conference in 2001, ‘the world has become a real global place; not just a global market place … The global distribution of skills and knowledge is the precondition for the distribution of wealth in the world economy’.  

1 The Secretary-General of the
OECD also observed that ‘education and e-competence are essential … governments must adopt “best practices”’. As the Chair of the Group of Eight countries’ Digital Opportunities Task Force put it, ‘the ICT revolution could be a powerful driver for empowering the world’s poor; strong partnerships and reciprocal listening are essential. … The divide is about information, knowledge and global identity …’.

This vision of a global knowledge society is accompanied by a very specific view of the economic logic of the new media marketplace. It is at the heart of the predominant thinking that informs much of the ‘knowledge society’ debate. This view is one in which the whole of society is expected to benefit when markets are fully open to the flow and circulation of capital which, in turn, is expected to stimulate investment in ever greater bandwidth and, subsequently, in new digital content.

The building of inclusive local and global virtual communities is expected to be achieved by the establishment of trusted social networks. These, however, are to be underpinned by competitive markets in all aspects of information and communication service supply. In addition, as digital services spread as a primary economic activity, countries should comply with existing taxation regimes. No new taxes should be imposed on online service revenues regardless of shifts in the tax base with the growth in the importance of electronic services or in the face of social need.

The constitution of the institutional rules of the game – that is, the policies and regulations that apply globally, regionally and nationally with respect to trade, intellectual property rights, telecommunication and broadcast services, and Internet-related activities, should be accomplished according to a ‘one size fits all’ model. Market forces should be unleashed and ‘light touch’ regulation should prevail. The underlying rational for this economic logic is, as argued by an economist who advises policy makers on trade issues, that ‘…investing in innovation (in digital technologies), human resources and knowledge provides an endless mechanism for growth’. He argued during the same conference that there is no foreseeable ‘ceiling on rates of growth because of the processes of learning, competence building, and capability accumulation that are enabled by investment in new technologies’.
This is the prevailing logic of the new media paradigm. It goes hand in hand with the view that the knowledge (or information) society, resting on new media technologies, is beneficial for economic growth and well-being. It is closely linked to the argument that regulation of the new media is not a major concern given the innovative capacity and competitiveness of the new media firms.

However, some Internet industry analysts reach a different conclusion. For example, Huston observes that, in spite of the flurry of entry into and exit from an important segment of the new media marketplace, the ISP markets in the industrialised countries,

‘underneath the veneer of a highly competitive Internet service market is a somewhat different environment, in which every ISP network must interoperate with neighbouring Internet networks in order to produce a delivered service outcome of comprehensive connectivity and end-to-end services, and therefore, every ISP must not only coexist with other ISPs but also must operate in cooperation with other ISPs’ (Huston 1999: 1).

This is the co-operative ethos that is widely believed to be embedded in the Internet’s architecture and which is also believed to be associated with the socially enabling features of the new media environment (Castells 2001).

Huston goes on to argue that Internet carriage services, that is, Internet traffic distribution, has become a commodity service that provides little opportunity for product differentiation. In the traffic wholesale business, a relatively low rate of financial return is the norm. Most ISPs are seeking to participate in service retail markets where there is a potential for differentiating products and for increasing profit margins. He suggests that ‘the Internet market is not a sustainable open competitive market. Under such circumstances there is no natural market outcome other than aggregation of providers, leading to the establishment of monopoly positions in the Internet provider space’ (Huston 1999: 23). This opens the possibility that the competitive process in the ISP market may lead to variety reduction through increasing concentration in the industry. Such a reduction would be inconsistent with
the public interest in new media services as we indicate in the following sections of this chapter.

ISPs are retailing a host of information products and services under a variety of business models and they are becoming significant intermediaries between citizens or customers and information creators (Eliasson, 1999). Their potential for growth depends upon whether they can ‘lock-in’ customers in a way that establishes a foundation for their growth. As Eliasson (1999: 6) suggests, the ISPs are linking communication transport infrastructures with the ‘syndication of electronic content’. Consolidating this linkage requires new combinations of capabilities for knowledge generation in order to create new value added products and services. To achieve this linkage between the carriage of ‘bits’ and the supply of information services, new financial flows must be organised and controlled, and conditions must be put in place to secure economic returns.

The ISP market in the United Kingdom is comprised not only of many entrepreneurial ventures, but also of incumbents that emerged from the privatisation of public utilities, including the electricity and telecommunication firms as well as the broadcasting authorities. Since the mid-1990s, the incumbents have been seeking to strengthen their positions in market segments related to services for consumers and small businesses as well as those aimed at the large corporate users. By the end of the 1990s, the incumbents had acquired many of the most successful early entrants. They also had forged global partnerships and/or merged their operations with American-owned companies. In the next section we examine several aspects of the dynamics of the relatively new ISP industry.

Financial Flows and Networks of Investors

The ISP market in the United Kingdom has been characterised by the convergence of the ISPs with the telecommunication network operators. Various developments in the ISP and the telecommunication market have provided the foundation for a process of convergence in the knowledge base which supports the emerging new media industry. On the one hand, there is an ongoing process of consolidation of the economic and
corporate governance of the ISP industry. On the other, there are successive waves of intense entrepreneurial activity and new entry in the ISP market.

In the first wave of activity in the dial up ISP market from about 1995 to 1999, there were major efforts to coordinate and control financial flows. In many cases there was evidence of the frequent presence of a common investor among those investing in the United Kingdom ISP market. For example, the American-based FMR Corporation (also known as the Fidelity Group) has significant holdings in America Online Inc. (AOL), Verio Inc. and WorldCom Inc., all of which were active in the ISP market in the United Kingdom. Verio Inc. is a large Web-hosting company and business-oriented ISP. FMR is related to two other players in the telecommunication and ISP market in the United Kingdom. One is Colt Telecom, an indirect wholly-owned subsidiary of FMR Corporation. Colt Telecom is a partner of NTL Group Ltd., alongside Energis. Another significant investor is Brooks Fiber Property, a wholly-owned subsidiary of WorldCom. More than a quarter of Verio Inc. stock is held by two of the prominent firms in the ISP market in the United Kingdom.

There are strong efforts to achieve the coordination and control of knowledge flows within these networks of organisations. This is illustrated by the shared directorships between AOL and WorldCom and between WorldCom and Verio Inc., as well as within a partnership between AOL and Verio Inc. For example, AOL’s Chairman and Chief Executive is a member of the board of WorldCom. He is also a member of the Board of Directors of the New York Stock Exchange. WorldCom’s Director is a member of the Board of Verio Inc. WorldCom gained a presence in the ISP market in the United Kingdom through a merger with UUNET in 1998. AOL’s partnership with Verio Inc. was forged in the United States and was an element in the development of AOL/CompuServe’s leadership in the United Kingdom after the company’s launch in January 1996. AOL has an exclusive agreement with Verio Inc.

The technological, financial and knowledge networks that support the growth of these ISPs in the United Kingdom are shaping this segment of the industry and enabling new forms of service differentiation through various forms of market control. The need to achieve economic power in the market requires control over components of the knowledge base for new media service supply. Building a new industry in an
uncertain technological and commercial environment requires massive investment. The process of building the ISP market is giving rise to corporate relationships that, in turn, are influencing the market’s dynamics.

The implications of the linkages between sources of finance and control over the strategic behaviour of enterprises are central themes in the literature on the determinants of corporate organization and industrial structure. In the 1980s research by Scott (1985; 1986) and Mintz and Schwartz (1985) revisited debates about the role of finance and corporate control in the economy (Berle and Means 1932). Drawing on Mintz and Schwartz’s work, Scott (1993) argues that, while decision-making may be insulated from direct intervention by shareholders, shareholder control derives from property relationships and the legal rights conferred by share ownership. Share owners have rights over the disposition of income and they have voting powers with respect to corporate affairs.

In questioning the polarized views of the liberal management and the Marxist theorists, Scott (1993: 295) argues that control should not be considered in terms of a simple relationship between ownership and managerial powers of decision-making. Instead, control should be considered in the context of the institutional constraints that are exercised by shareholders over decision-making. These constraints are embedded in any given share ownership structure. He argues that, ‘it is now the strategic actions of the financial intermediaries in Britain and in the United States which are most influential in determining the constraints under which enterprises act’. (Scott, 1993: 295). For Scott, issues of ownership and control must be considered in the light of relations of power operating through networks of inter-corporate relationships.

The ISP market in the United Kingdom displays networks of inter-corporate relations established through shareholder arrangements that bind (multinational) financial organisations and firms. Sometimes these relationships are reinforced by interlocking directorships. The significant presence of a small number of large financial institutions as shareholders is one of the phenomena at the heart of the emerging ISP networks in the United Kingdom. These institutions include The Prudential Corporation, HSBC Holdings plc, Mercury Assets Management, and Merryll Lynch and Company in the United Kingdom, and the FMR Corporation in the United States.
Some of the developments in the ISP market in the United Kingdom appear to corroborate Scott’s assessment of the significance of institutional shareholders within networks of corporations. However, another set of dynamics is at work which we consider in the next section.

**Entrepreneurial Dynamics - Market Expansion and Contraction**

The ISP (dial-up) market in the United Kingdom is highly dynamic with waves of new entrants and disputes between the larger as well as the larger and smaller players. Mergers, acquisitions, and bankruptcies are frequent. Despite rapid change, there is a tension between the forces of an expansionist market and the forces of contraction, control and consolidation.

In the early phase of ISP development from about 1995 to the end of 1999, the design and delivery of dial-up Internet access was closely linked to the technological and financial governance structures of the existing voice telecommunication network in terms of cost accounting and revenue sharing. The incumbent, British Telecom, dominated call origination and network control. It achieved this largely through its control of the local loop infrastructure. In this phase, the entrepreneurial firms were limited in their efforts to provide services by a call revenue sharing model enabling ‘pay-as-you-go’ ISP services. The new market entrant ISPs innovated by taking advantage of a technological opportunity. They often started up as self-financed ventures which subsequently attracted venture capital. The new entrants were swiftly acquired by the largest players. However, another round of entrepreneurial dynamics in 1998 gave rise to a new set of players providing ‘free’ Internet access to build a mass dial-up Internet market.

The lowering of barriers to entry stimulated the ISP market as service providers took advantage of the benefits of lower costs and growing revenues from call termination. The confidence and market leverage of regional, as well as other larger, licensed telecommunications operators and service providers increased as they captured a larger share of the call termination market. By 1999, British Telecom faced growing competitive pressures in the call termination market and traffic bottlenecks on its voice telephony network.
From the Spring of 1999 to the end of January 2001, competitive pressures between British Telecom and other telecommunication service providers and collaborative ventures began to drive innovation in technology and service platforms for pioneering unmetered Internet access. This triggered regulatory intervention in the wholesale call origination market where British Telecom continued its dominance. During this phase, a ‘freefone 0800’ model was used to launch unmetered Internet access. This was underpinned by an interim Flat Rate Internet Access Call Origination (FRIACO Hybrid) wholesale product offered by British Telecom and approved by the regulator, the Office of Telecommunications. British Telecom launched its own unmetered retail Internet Access product – SurfTime - in April 2000.

During this period there was a ‘frenzy’ of competition. Many of the new entrants lacked both the technological capability and the managerial competency to sustain their growth. Their primary aim was to achieve a market position that might yield high financial rewards in the stock market and/or rewards through acquisition. Most of these new ventures failed in the face of the strategies of larger incumbents. Nevertheless, the competitive pressures led to strong ISP market growth and to greater pressures on the telecommunication infrastructure.

The incumbent British Telecom at this stage sought to recover a larger share of call termination costs through its interconnection agreements with its competitors, a controversial move that had to be resolved by the Office of Telecommunications. During this period, however, these arguments over the new terms and conditions for Internet call revenue sharing between British Telecom and its competitors resulted in a slowdown in the design and roll-out of a technology platform capable of supporting the creation of unmetered Internet access products and services at the retail end of the market.

The ISPs’ failure or incapacity to estimate and control demand for their services and the variable underlying costs of their capacity requirements began to lead to growing service disruptions, failures and bankruptcy. British Telecom’s introduction of SurfTime just before the launch of the ‘FRIACO Hybrid’, gave the company an
opportunity to build market share in the unmetered segment of the retail ISP industry. By early 2000 a new phase of market contraction had begun.

From the Spring of 2000 to the Spring of 2002, British Telecom began to reassert its dominance in call origination and termination in the dial-up ISP sector by gaining regulatory support for its wholesale pricing of dial-up products. It also strongly influenced the design of its unmetered Internet access platform. During this period yet another round of entrepreneurial entry coincided with the emergence of a few hub or intermediary ISPs.

During these periods there was a constant process of strategic repositioning. This underpinned the expansion and contraction of the dial-up ISP market. This market was being shaped by the interests of ISPs, the incumbent and new entrant telecommunication infrastructure providers, and by the progressive implementation of regulatory interventions. In February 2002, British Telecom announced a major decrease in broadband wholesale prices, giving rise to a new round of market expansion for the ISPs as they raced to offer broadband services for the mass retail market. The ‘always on’ services ultimately are likely to overtake the dial-up market.

Throughout these phases of ISP market evolution, there have been continuities, discontinuities, cumulativeness and feedback processes in the market. The interaction of technological innovation, changing governance structures and regulation, financial flows and the aspirations of entrepreneurial new entrants and incumbents, are interwoven and they display signs of “cumulative causation” (Myrdal 1944). This is creating a trajectory for the transformation of the industry’s private and public governance and market structure.

The ISP market reflects the transition from the ‘old telecommunication’ to the ‘new telecommunication’ institutions and regulatory practices. During most of the period considered here, the incumbent British Telecom has been a reluctant follower of developments in the ISP market. It has influenced the pace of change as well as the strategic options available to new entrants in the wholesale and retail segments of the market. In some respects these developments are reminiscent of earlier incumbent
telecommunication operator strategies to maintain market control in the face of new entry (Mansell 1993).

Financial risk has been distributed towards the new entrants who, in many cases, lack the financial, technological and organisational (networking) capabilities of the incumbent. Nevertheless, the pioneering efforts of entrepreneurial companies have been the catalysts for learning and experimenting with novel formulae to combine, produce, and manage Internet access products and services. Both competitive and collaborative forces are altering the market and institutional governance structures that enable the delivery of new Internet products and services.

In the most recent phase of development – the push towards broadband using asynchronous digital subscriber lines - the Office of Telecommunication’s regulatory interventions may not have been sufficient to halt another round of ISP market contraction. British Telecom’s is restructuring and strategically repositioning in the broadband market. This suggests that even if the phases of contraction and expansion of the ISP market prove to experience Schumpeterian (1942) cycles, there is a need for regulation to ensure that a high quality of service to end users is maintained, even in the face of oligopolistic market competition.

The New Media Paradigm under Capitalism

In the ISP market in the United Kingdom the expectation is for an increasingly rapid turnover time of capital and a rapid growth in profits. Speculation on the growth potential of the ISP market is dependent on the exploitation of new media technologies. There is a transition from the older to the newer technologies which requires both sustained large scale capital investment and substantial learning time, especially in the case of the Internet. High bandwidth infrastructures are expected to create the conditions for the delivery of a large throughput of new media services. However, the capital invested in the infrastructure has an engineering life-cycle spanning several decades. This is creating intense pressure for the realisation of short term expectations for a return on capital for smaller and larger service providers.
In the ISP market, the risk for investors is substantial. As a result, there is tension between the financial expectations of investors and the constraints of the new media system. This tension is being eased through strategies that promote a rapid scaling up of the use of available infrastructure capacity – the rush to broadband (Mansell and Nikolychuk 2002). In the ISP market, the main strategy is to exploit scale economies in infrastructure provision through consolidation between ISPs and facility providers. Service providers are also seeking to achieve economies of time through the intensive marketing of higher value added services.

The ISP strategies for achieving rapid returns on the financial backers’ investments differ somewhat from those that characterised the separate telecommunication carriage and content industries. It is not surprising that the major firms in the ISP market are devising strategies aimed at achieving quasi-monopolistic positions in differentiated segments of the market. However, the implication of convergence is that they must also redefine the scope of the ISP market in a bid to increase their capacity to integrate and systematise learning to support new media market growth. If they succeed, this will continue to create conditions for optimising their use of network capacity and securing a return on capital at a pace that could meet the expectations of the financial institutions.

On the one hand, the nascent characteristics of this market and the appearance of multiple new entrants suggest that diversity is the trend for the future. On the other, the role of financial capital in this market suggests that the dynamics of the ISP market are inconsistent with the public interest in a new media marketplace which takes account of the interests of citizens, consumers and small firms. The evidence for this is that the ISP market does not appear to be delivering a very high quality of service for many individuals and smaller firm users. For instance, the rate of dial-up failure is high, and companies are offering technical support to their customers at premium telephone tariffs ranging from fifty pence to £ 1.00 per minute. The broadband Internet access market is growing rapidly, but it is unclear how this will impact on the quality of service available to Internet users.

Stock market investors began to curtail the ISP boom as the speculative future failed to materialise in line with early expectations. In order to sustain a high level of
capitalisation, the major suppliers in the ISP market need to learn how to transform prophesy into reality. As they do so, the risk to the public interest in diverse content and new services is likely to grow.

The risk associated with the new media or networking paradigm is that it may be very unstable. It may exacerbate various kinds of insecurities and it may lead to inclusion in the ‘knowledge society’ on very unequal terms, as well as to outright exclusion (Mansell and Steinmueller 2000). The response from adherents to the vision of the positive features of the new media paradigm described above is to point to the diversity and declining costs of new media services. Most people in the United Kingdom can now be connected to new media networks and services either in their own private spaces or at publicly accessible sites. Adherents to this view suggest that, in the United Kingdom, the development of the new media under the forces of capitalism is unfolding in a way that is consistent with inclusive social goals and continuing economic growth. The changes in the legislative environment for regulation in the United Kingdom reflect this view.

In the light of technological convergence, the issues of whether and in what form regulation should be applied to the rapidly changing new media markets are more complicated than they were in the monopoly era of telecommunication and free-to-air broadcasting. They are also infinitely more complicated than the regulation required to encourage a competitive market for the supply of voice telephony services. The Communications Bill of 2002 (Department of Trade and Industry (DTI) and Department of Culture, Communication, Media and Sport (DCCMS) 2002) in the United Kingdom is intended to promote a strategic view across the whole of the communication sector. It is a response to the explosion in the volume of data communication and to the convergence of services using digital technologies.

The Government of the United Kingdom is emphasising the need for a coherent, integrated, and balanced approach that minimises regulatory burdens. The new integrated regulatory agency is expected to ‘secure public policy objectives with regard to the protection of consumers and citizens, but with the minimum of regulation that is necessary to achieve the required result’ (DTI/DCCMS 2002: 27), that is, it should take a ‘light touch’ approach. The legislation is expressly drafted to
ensure that the new Office of Communication (OFCOM) will not regulate the content on the Internet, but it is silent with respect to other aspects of the presently unregulated ISP industry.

In its decision not to regulate the Internet, the Government is defining regulated services as those being ‘available for reception by members of the general public’ (DTI/DCCMS 2002: 48), thus excluding video-on-demand, but acknowledging that the Secretary of State could amend the definition to take account of matters such as the expectations of the public about content, child protection issues, and technological change. The new regulatory institution is expected to address issues of media literacy, but to do so by developing a better understanding of the different types of media services, both licensable and non-licensable and, in particular, the Internet. No mention is made of the changing networks of financial control in the new media industry represented by the ISPs nor of the public interest considerations that these developments may give rise to. With respect to the broadcasting industry, it is asserted that ‘in the future new technologies may increase choice and competition in communications markets to the point where there is no longer any need for ownership rules to guarantee plurality of media voices’ (DTI/DCCMS 2002: 56). And further, that ‘any consequent consolidation in the TV industry will benefit consumers and companies alike’ (DTI/DCCMS 2002: 58). Yet, the ISPs are offering platforms for the delivery of the broadcasting industry’s content and the present phase of consolidation is tending to suppress diversity and high quality services.

The development of the ISP market in the United Kingdom provokes questions about the need for new forms of regulation to ensure that the forces of capital in the market for Internet access and related services produce outcomes that are more in line with public interest considerations such as the availability of diverse, low cost, good quality services. Is there a case for regulatory intervention to protect the public interest in the deployment of services that use the Internet as a platform?

Adopting Corsi’s viewpoint, we should not regard firms as ‘… powerless economic agents adjusting passively to parametrically given techniques, prices and quantities but [rather] as agents actively seeking the reorganization of production and market activities in the context of rival’s possible reactions’ (Corsi, 1991: 124). If we
understand the current competitive process in the new media markets in this way, there are many reasons for concern about the motives and practices of the firms that are operating in these marketplaces.

One reason is suggested by the dynamics of the ISP industry and the implications of the interplay between technological change and the control and coordination of the knowledge base and capital flows within the industry. Arguably, the processes of “creative destruction” (Schumpeter 1942) associated with technological change in this industry are leading, not to the erosion of market power, but, instead, to its reconstitution. Insofar as this is so, it is inconsistent with the public interest in an open network ‘commons’.

Clark (1939; 1961) argued that a good system of public control must be democratic, powerful, and adaptable. Based on these criteria, he sought to introduce incentives into the process of public control or regulation to divert management away from subverting regulation and towards the goal of improving efficiency. The ISPs seem mainly concerned with maximising shareholder value, a concern which appears to overshadow a concern with ‘efficiency’ in the sense that might be expected in an intensely competitive marketplace. This observation seems particularly apt in the light of the largely favourable reception of the new communications legislation by both the regulated and unregulated components of the new media industry.

However, it is not simply efficiency considerations that must be of concern to policymakers when they consider whether certain components of the new media industry, that is, some Internet-based firms, could require government regulatory oversight. The continuing waves of expansion and consolidation of the ISP market have implications for the diversity and costs of the content of the new media. This raises many social and cultural issues that have been addressed within the framework of conventional regulation of the older broadcast media. They are no less relevant to the new media.

Conclusion
Developments in the ISP market in the United Kingdom suggest a trend towards an oligopolistic industrial structure, together with a continuous process of expansion and contraction. The present dynamics of “cumulative causation” are inconsistent with the idea of a network ‘commons’ that is responsive to a wide range of social values. The trend appears to favour the consolidation of the ISP market in the hands of financial investors whose primary interest is in the rapid turnover time of capital rather than in the long-term development of diverse and low costs services targeted at citizens, consumers and smaller firms. They favour an effort among the large suppliers to consolidate the knowledge base (competencies and capabilities) to succeed in the new markets. They also are giving rise to barriers to entry for small suppliers that confront constraints on their capacity to expand and to offer financially viable services. Alongside these developments, Internet platforms are being designed and deployed using architectures and pricing regimes that do not always favour the incumbents in the market. When new entry opportunities do emerge, there are strong indications that entrepreneurial activity drives the expansion of the market – for a period of time at least.

The overall trajectory of movement towards an oligopolistic market structure, however, is creating pressures for reduced service variety. This is an outcome that runs counter to the view that the new media and the Internet’s open architecture are optimised to encourage diversity in the supply of content and information services. The investigation of economic power in the ISP market is crucial in order to expose the interdependencies of technological change, innovation and the role of finance. The trend in ISP market development is consistent with the interests of large corporations and the expectations of investors for strong revenue growth and rapid capitalisation. It is also consistent with the Schumpeterian “creative gales of destruction” that so often accompany innovations in technology, business organisation, and governance. As the new media paradigm takes hold, the outcomes of these developments for citizens, consumers, and smaller firms must be considered as matters for policy and for regulatory intervention, even within the framework of new ‘flexible’ legislative and regulatory initiatives in the United Kingdom.

The combined forces of the financial flows and networks of the large players with interests in the ISP market and the speculative behaviour of the small entrepreneurs
are giving rise to a process of “cumulative causation” and to feedback loops that tend to reinforce the positions of the dominant and traditional telecommunication infrastructure provider, British Telecom. At the same time, they are giving rise to reductions in the quality of service available to some end users of ISP services.

Garnham (1990) argues in support of a political economy of communication that is concerned with how power is structured and differentiated. He favours an examination of the processes involved in the development of the media and communication industries in the context of the specific and changing dynamics of capitalism. In this chapter, we have addressed one small aspect of the way in which the system of social relations, governance processes, and market power in the present historical period is being reproduced through the predominant vision for global knowledge society.

The study of the new media under the forces of capitalism must focus on the continuing ‘industrialisation of culture’ (Garnham 1986: 31), that is, on the way symbolic forms are produced and circulated as commodities. New combinations of technological, financial and knowledge networks are enabling the lock-in of customers and citizens to an increasingly oligopolistic industry. The vision of a global knowledge society that has captured the imagination of policy makers and many others is predicated upon intense competition in the industry that provides access to the Internet and that is increasingly involved in the provision of the content of the Internet. The evidence, at least in the United Kingdom, shows that this vision is only partially accurate. There is intense competition but it is complemented by strong cooperation and by the consolidation of market power in the ISP industry. There is a case for national governments to create legislative frameworks that will enable intervention in an attempt to ensure that the new media market evolves in a way that is more consistent with the public interest.
References


http://www.communicationsbill.gov.uk/policy_narrative/550800.html accessed 29 November 2002 (see also Communications Bill,


**Notes**

1 This articulation of the vision was presented at the OECD Emerging Market Economy Forum on Electronic Commerce, Dubai, UAE, 16-17 January 2001 where Mansell served as rapporteur.

2 An extended version of this discussion appears in Javary and Mansell (2002).

3 This section is based on research conducted by Javary under a grant from the Economic and Social Research Council Award No. R000223599 in the United Kingdom, Javary (2002).