The new economy, or the emperor's new clothes?

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The New Economy, or the Emperor's New Clothes?

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Introduction

The idea of the new economy is at once both an attractive and problematic one. Without doubt, there have been significant events that have constituted some dramatic economic turbulence in recent years, notably in the 2000-1 period and the formation of the so-called 'dot com bubble'. This 'bubble' is not unique and has a lot in common with previous speculative investment events. It may be that the bubble, and crash afterward, has been bigger or had more widespread fallout than previous events. It is not clear whether this restructuring constitutes another round of market speculation where the mode of speculation is the novelty and not the commodity being speculated on (see Feng, Froud et al. 2001); or, a view more commonly found in the literature, a change in some fundamental values that would indicate a step change for the economy. Second, and related, evidence for the emergence of a 'new economy' is commonly indexed to particular technologies: namely, computers and the internet. We should be wary of the technological determinist overtones of much discussion here and point to the gap between what might be a twinkling in the eye of futurologists and what is actually happening. Third, hitched to debate about the 'new economy' are a host of social/economic/political rhetorics about 'new business practices', (de-) regulation (Kelly 1998), and latterly a new work-life balance (Reich 2000). Fourth, and perhaps most crucially, there is the issue of what the 'new economy' actually is: a new phase that the whole economy is in; or, a sub-sector of the old economy? Fifth, if it is the latter, how precisely is the new economy to be defined: does it include all of those activities that use computing or internet technologies, is it only those businesses that conduct all of their activities 'on-line', or is it something else altogether? Sixth, and finally, what is the causal process that is embodied in the 'new economy', and 'what changed' to differentiate it from the 'old economy'? Is it a matter of degree, or something new entirely?

This paper does not seek to answer all of these questions in detail; many are picked up in other chapters of this book. This chapter is sceptical of the notion of the New Economy altogether, however it does accept that there is

something worthy of further investigation, although my point here is that this 'something' is not described adequately as the New Economy, the causal processes implicated by most New Economy writing are not very robust, and neither are these processes universal as is commonly implied. This chapter sets as its objective to take a careful look at what is called the New Economy. The New Economy is a slippery term. I focus here on new media because at least this is can be defined and is a part of what is implied by the New Economy. By new media we mean those activities embedded in a common sector of economy activity. Although this is a new sector of the economy, one enabled by particular technologies, it cannot be reduced to these technologies, nor can its particular form and practices be explained away by macro-economic changes. At least three modalities or new media can be noted: real-time interaction, on demand services, and hybrids of on-demand and interaction, and material and immaterial goods. Whilst there is not a necessary organisational or spatial form associated with new media, some rather particular (micro-scale) forms can be observed at present: namely, the spatial clustering of some production activities and a rich socio-economic networking of producers and consumers. In opposition to much of the debate about the New Economy by its cheerleaders and fellow travellers (see below), the macro-economic sceptics (see for example Temple 2002) and the critical discourse of macro-economics (for example Williams 2001), this paper seeks to be precise about its object and re-positions analyses on the micro-scale and empirical practice rather than generalisation, and in so doing focuses on the situated nature of production and consumption.

The New Economy: evidence and concepts

I want to begin by reviewing briefly what might count as evidence of a new economy, and what its effects could be, and whether these might be considered 'more of the same', or a 'step change'. As is usual such an exercise also discloses that any evidence is only as robust as the conceptualisation of the objects that it seeks to represent.

We can begin by reviewing the initial analyses of the impact of high-technology, or computing, on the economy. The data from the US is fairly conclusive; namely that despite the huge investment in IT there is not a discernable productivity effect (Box 1). See for example (Gordon 2000; Jorgensen and Stiroh 2000; Oliner and Sichel 2000)

Box 1 here

These types of analyses shed as much light on the problem of assessing the impact of the New Economy, and they are based upon a number of assumptions that may detract from their potential use or power of explanation. A review of the underpinning assumptions of what have become orthodox analyses of the New Economy can be simply stated. The first point concerns what precisely is understood to constitute the 'New Economy'. It is quite clear that some commentators use the term to refer to the application of computers to conventional activities. From this they assume that any impact of such applications, or ‘pay off’, can be arrived at through a correlation between investment in computers and growth. Thus, the relevant data for such analyses is spending on computers and output data from firms, which are assumed to be positively correlated. Although advocates of the productivity effect have argued that since spending on IT became to accelerate in the early 1980s, it did take the best part of 20 years for the productivity effect to be realised. Thus, to these mainstream commentators the new economy can be elided with investment in technology and computers[1] (see David 1999; and Temple 2002 for overviews of the orthodox). This seems to be a remarkably blunt conception, and one that arguably does not touch upon the specific changes (notably, the internet) and the claims for 'a new business model' and 'new forms of organization' that many see as defining the new economy (see Feng, Froud et al. 2001).

On the other hand orthodox economist dissenters, or ‘visionaries’ such as Coyle and Quah's (2002), claim that some new measures and indices are required to prove the hypothesis. They include a raft of consumption measures to help to get a sense of the ways in which both production and

consumption are influencing one another. Unfortunately, their pragmatic response is to use almost every indicator of new media consumption and use. There is no hint of factors being prioritised (aside from technology) or, a causal model aside from the assertion that the 'weightless economy' will privilege on-line transactions at the expense of face-to-face ones[2]. Unfortunately, for these writers such a simple assertion can be resoundingly undermined with empirical evidence even using simple measures such as employment and location (see Pratt 2000).

What both of these analyses lack – both orthodox and dissenting – is an insight into process and the precise ways in which particular digital technologies can be harnessed to create new products and markets. Economic commentators are generally concerned to look at macro-/whole economy measures to identify an outcome and a key variable, such as technology in the hope that these will 'explain' the New Economy effect. As computers are found in all aspects of the economy this becomes an increasingly diffuse measure. Moreover, many orthodox commentators are wedded to the idea that a revolution is happening, and that a break point with the past can be identified. A common approach of economists is to seek out extant data sets that can be calibrated against their models. Unfortunately, such data is not available. If we sought out either employment or output measures we would need to rely upon standard (old) industrial taxonomies. There is no industrial classification for new media, let alone the new economy. Thus, analysts are forced back onto the use of inadequate surrogate and secondary measures. The only option would seem to be to suspend judgment on whether such a revolution has occurred until some substantive primary data collection has been carried out, and until we have a clear notion of what 'the new economy' is, and thus what effects and processes might be indicative.

Another core idea that is linked to the notion of a New Economy is that it is different from the 'old economy'. Clearly, the vagueness of these categories makes such a claim difficult to establish. Interestingly, Atkinson and Court's (1998) definition of the new economy, which Coyle and Quah use in their

study, looks remarkably like the transition between Fordism and Post-Fordism, or the transition to flexible specialisation augmented by 'high tech rankings'[3]. There is insufficient space to debate the conceptual underpinnings and weaknesses of the transitional arguments offered by the post-Fordist or Flexible Specialisation schools of thought here, but it is critical to note that they pose neither computers or 'new technology' as determining agents (and Piore and Sabel 1984 on Flexible Specialisation; see Lipietz 1992 on Post-Fordism). So, despite the apparent similarities between post-Fordism and the shift from and old to new economy, there is no substantive conceptual comparison; we are still back to the mono-causal 'factor x: technology'.

A more specific dimension of the process change implied by the new economy or hi-technology theorists is the impact of instantaneous communications (see Cairncross 1998; Coyle 1998). Once again, one is led to ask 'what is new here'? The telephone and the fax, let alone the telegram and the letter post, all gave rise to similar possibilities. The shift from fax to email, or even video conferencing, whilst different in degree is not revolutionary[4]. Moreover, as Boden and Molotch (1994) have discussed, the 'compulsion of proximity' has not disappeared, rather, it is stronger than ever. We can point also to the fact that the volume of travel, local and international has never been greater, and continues to grow. We should perhaps not dismiss this issue of the 'death of distance' out of hand, it is clear that there has been a shift towards a finer technical division of labour in the service sector, and a strategic relocation of that labour, facilitated by technology. The rise of the remote call centre is a prime case in point (see for example Graham and Marvin 2001 chapter 7).At the same time, there is a more intense interaction of non-routinised, and what the Japanese appropriately term 'high-touch', activities in core urban areas. So, we can find evidence of two types of outcomes: dispersal and agglomeration. This polarisation looks suspiciously like the organisational restructuring that which was seen in the manufacturing industries (see Dicken 2003), and it seems that at its core it too has the same dynamics.

The third dimension commonly spoken about with regard to the New Economy is the 'network economy' organisational form (Castells 1996). Without doubt there are changes that are occurring in business organisation as firms explore new ways to play off economies of scale and scope. We can point to accounts of flexible specialisation, which certainly pre-date the new economy, that seem to offer an account of a shift toward more fragmented, articulated and networked organisational structures. These forms themselves, as Piore and Sable (1984) observed, offer a return to a craft mode of organisation that existed before the 'blip' of mass-production. Additionally, some of the newer issues about cross-firm networking and institutions have been evident for many years, it is only since the blinkers of neo-classical economists, whose conceptual concern is with the atomistic and sovereign firm, have been lifted from our eyes that we have begun to recognise these interactions within and across firms and to give them the attention that they deserve.

Fourth, we might consider the issue of falling transport costs associated with products that are digital: the so-called 'weightless economy'. Here, once again, analysts have fallen foul of a partial vision: often extrapolating what is happening in a particular technical division of labour to a whole labour process and whole industry. First, whilst it is possible to download software anywhere there is a telephone connection or Wi-Fi base station, there are not yet (ro)'bots' that will self-write programmes for us, so, it still requires human labour to write them. This is labour intensive work; coders need managing, a place of work, and somewhere to live, etc. Analyses of the software production industry has shown it to be subject to internationalised mass production techniques (Cusumano 1991), as well as specialised craft production (Pratt 2000). In the latter case (an exceptional, but nevertheless important segment) particular concentrations of labour and unusual labour processes tend to result in localised production. Second, the notion that digital products can be distributed and consumed free is not sustained by the facts; at very least it relies upon users having hardware, skills and software to play the new product; as well as there to be an effective demand. Much of the new economy is not pure software but has a material element. Amazon, darling of

the new economy, rests upon the efficiency of its warehouses, logistics and trucks to get products to customers, much as any other business: so-called ‘bricks and clicks’ businesses (see Dodge 1999).

Box 2 here

Fifth, we can consider the argument of Reich (2000), who terms the new economy ‘the age of the great deal’. By this he means the ability of re-contract for the provision of services at minimal notice or cost. Reich points to the huge instability that this creates for employment, social reproduction and the economy. He has a point. However, the observed processes are reliant upon a pervasive and sustaining neo-liberal market ideology. Moreover, there is evidence of institutional rigidities of the providers of a services[5], and conservatism (or lack of time) on the side of the consumer. Consider the problems involved in switching a bank account or the small ‘churn’ between competing providers that is found in the utilities markets. The question remains: is this a sufficient ‘step change’, or is it an intensification of existing process?

Box 3 here

Finally, we have to consider the social aspects of the ‘new economy’; the most widely discussed dimension of which has been the so called ‘digital divide’. Once again, we can point out that the digital divide discriminates against the same kinds of people that experience social exclusion in the analogue world. The difference is that the usual techno-universalist discourse blinds us to the fundamentals that cause such division. In fact, as has been well illustrated, the digital divide is about delivering a ‘double whammy’ to deprived communities. First, people are unable to, or have little incentive to, gain access to online resources even if they are provided at no charge. This is because web resources are primarily based on consumption (if you have little or no money there is less incentive to learn how to access resources on line, many of which are linked to buying products). Second, off-line resources (such as banks, for example) are withdrawn first from deprived communities

(as this is where the least profitable clients are[6]). Added to which on-line businesses offer discounts to those on-line, and compensate by adding charges onto the off-line: effectively this benefits the rich even more. The UK Online initiative to deliver public services via the Internet has been, at least in part, an exercise on cost-saving with regard to local authority delivery of services. The logic of cost saving is undermined if one has to, say, produce a small run of leaflets (where the cost saving is in volume) to serve those not on-line. Commercial logic is to withdraw the analogue route to encourage 'migration' to digital access. Public bodies can claim free access and availability of information; in practice usage is related to access and motivation: the result is a widening digital divide (see Perrons 2002).

The message from the critical points that I have raised above is one of profound scepticism of anything beyond an intensification of already on-going processes in this sense I concur with Williams (2001) in his diagnosis of 'business as usual'. Above and beyond this my complaint is that the object New Economy is far more variegated than many of its promoters suggest. It is not reducible to (one) technology, and it is closely bound up with the particularities of the production process (and hence, variable). Moreover, any instance of the New Economy is profoundly interwoven with an emergent mode of governance, manifest as neo-liberalism or simply an ideology of entrepreneurialism (Armstrong 2001). My argument is that the material practices of the new economy lead to the individuation of subjects, and the shifting of the responsibility, and risk, to the lowest levels of society: commonly to individuals who can least afford it. The power of this neo-liberal rhetoric is that the presumed effects of the New Economy are commonly presented as a neutral and natural characteristic of particular technologies. In this context it is not surprising that such issues of collective and individual rights and ownership have become one of the new points of contestation in the new world/economy order (see Lessig 2004).

In an attempt to bypass some of the excesses of New Economy rhetoric, and the tendencies to universalise its supposed outcomes, I now want to present an analysis of one industry: new media. Without doubt, new media would be

included in everyone's definition of the New Economy; however, I will make no claims as to the wider generalisation of new media activities.

New media: definitions

There is no space here to do more than scratch the surface of the growth and development of the new media industry (see Braczyk, Fuchs et al. 1999; Pratt 1999; Scott 2000; Perrons 2003b). The first question that we have to answer is, 'What is new media'? A refreshing riposte to new economy hyperbole is suggested by Crosbie (2002) who argues that there is much confusion between the media and the medium. Crosbie states that what most people think of as media are actually vehicles within a medium. In other words, a personal computer or the internet are not media, nor is a magazine: they are all vehicles within a particular medium. Crosbie argues that there are two communications media: mass (many to many), interpersonal (one to one). The new medium is defined as one whereby 'individualized messages can be simultaneously be delivered to an infinite number of people; and, each of the people shares reciprocal control over that content'. Moreover, this new medium is totally dependent on technology, and is not an extension of the previous two media (mass and interpersonal). It is out of this technological capability, and on the back of necessary infrastructures and training, that new forms of organization, business models, and products can be fashioned. In this sense, they are grafted onto and develop out of existing practices. For example, shopping online for a product is similar, but different, from visiting a shop. The requirement for distribution systems and stockholding do not necessarily change with these new purchasing modes. What might be different is the personalized recommendation for new purchases based on previous purchases; or, specialised offers and personalised services. The sophistication of data reconciliation between consumer past behaviour and current orders is what gives on-line shopping a real edge[7].

Box 4 here

In practical terms we can identify three modalities of new media. First, interactive screen based interfaces: these include web design, and integrated logistics and stock control that enable on-line, automated, Business-to-Business (B2B) and Business-to-Customer (B2C) interactions. Second, hybrids that link material products and virtual resources, for example computer games: whilst these have been, and will increasingly be, played on-line, their characteristic form is a free-standing 'box', or a box incorporated into a personal computer (PC). They are essentially personalised 'arcade machines'. As a business model computer games are very much like buying records, videos or CDs. Historically, the proprietary 'platform' or player has been an important element of structuring the market. Third, and finally, broadband, on demand, services: these include downloads in real time, or time-shifted, film, music and other information. The flow is predominantly one-way, from producer to consumer. For a time (in the late 1990s) it looked as if Peer-to-Peer (P2P) file-sharing might constitute a new hybrid of interactive and on-demand models; however, most have been incorporated into the third business model (but see Leyshon 2003). Thus, really, the third modality is an extension of the distributional possibilities of existing technologies; and the second is materially constrained to particular hardware. The first mode is the only true 'new media'; however, there is a strong potential for modes two and three to migrate to mode one.

Whilst there has been much academic debate about the consumption of new media, there is precious little about its production (it is almost as if researchers are taken in by the 'weightless economy' myth). I want to highlight this overlooked production side of the argument. At present, the institutional structure of the entertainment industries is not conducive to the shift to purely on-line activity, although it is technically possible. Nevertheless, all three modalities share similar (though different) characteristics of their production.

The growth of the industry has been accompanied by the development of specific sub-markets and, more critically, institutions associated with their production and distribution. In the case of computer games the memory and

data transfer limitations of the internet and home computing have meant that they remained linked to a proprietary technology, playback and distribution structure. Even with the advent of computer games on PC's (albeit modified with sound and video cards and faster processors) this production structure remains. The nature of games, the market, and the investment required to develop them has created specific conditions associated with their production. There is no space to explore this issue in any depth here, but the games industry has had a distinctive trajectory and quickly developed an institutionalised industrial structure that is very similar to the (old) music industry. Likewise, the possibilities of convergence (facilitated by media migrating from analogue to digital technologies) have meant that a substantial part of the music industry, and increasing parts of the film and factual broadcasting and newspapers are also within the ambit of new media (mode 3). Likewise, in the near future, mobile telephony will increasingly be drawn into this nexus.

My definition of new media concerns what used to be called multimedia (Pratt 2000), namely a combination of sound, text and images (moving or still), usually delivered in real time. Thus, in the early 1990s this included a range of technologies that delivered digital content (and hence, they are distinguished from tools such as programming). Such software was usually distributed on CD-ROMs, tapes and floppy disks. However, with the development of the Graphical User Interfaces and web browsers from 1992 onwards, the dominant form of distribution has been the internet. As Crosbie notes, the internet adds a new dimension of interactivity and customisation to multimedia, making it fully fledged new media. This interactivity is captured by the common terms (in the late 1990s) of B2C and B2B. Put simply, this is the development of web sites, web design, and web businesses. One of the issues I have raised with interviewees in San Francisco, New York, Berlin, Tokyo and London during field research has been how they define 'new media'. Usual responses are about 'opposition' to old media and market opportunity, drawing attention to what they felt was the uniqueness of their business. In a sense, early businesses had a distinctive cultural approach to business that stressed individualism and creativity. Most confirmed Crosbie's

point about the ‘on-line’ and interactive nature of their activities: in traditional terms this offered the possibility of reaching new markets and better integrated logistics, both tailored to a variety of customers. The key element seemed to be to use technologies and substantive content to deliver surfers to sites, and to transact business there.

One of the enduring challenges for new media businesses is the search for a business model that will allow money to be made (see Pratt 2000; Feng, Froud et al. 2001). Most firms that I spoke to did not start with a ‘product’ and a ‘market’; they saw the possibility of a niche, or a new way of attracting customers. As the interactivity occurs businesses changed their focus moving in whichever direction offered greatest potential profitability. Until such profitability can be found there is often a huge sunk investment; but, in the mid- and late-1990’s business investors and/or venture capital was not hard to find. Thus, many firms were living in a game of ‘pass the parcel’ where the music never stopped, and the money never had to be paid back. This was a problem for investors, if not for firms. The publicity that was linked to the rise of new media helped to direct a huge stream of external funds into new media businesses. Not surprisingly a market solution was found, venture capital, and later a promised public listing where shares we sold to investors to underpin long-term development. Given that few companies actually registered a profit these investments were akin to trying to fill a sieve with water[8]. Critically, early employees were held to the company with offers (or, more correctly, promises), of ‘stock options’ on vesting (when the shares were actually listed for the company at the Initial Public Offering (IPO). The geography of the new media venture capital business is important in sustaining local clusters of businesses (Pratt 2000; Pratt, Ramsden et al. 2000; Zook 2002;2004).

A striking feature of new media development is its physical location[9]. New media ‘clusters’ have not developed everywhere, or only in locations close to labour environmental preferences, as was suggested by those who predicted workers would work at home in ‘tele-cottages’ (Toffler 1980). In fact they have developed in a small number of locations across the world. The surprising point is that, according to some economists who hail the New Economy,

clusters should not have developed at all (see Quah 2000). That clusters did develop, I would argue, highlights the peculiarities of the production process of new media at this point in time as well as the continuities, rather than break, with the old economy. The key elements in the development of new media concern the unusual organisation of production and the structure of labour markets which are dominated by free-lance and serial project working. This state of affairs is referred to as 'boundaryless careers' or 'portfolio careers' within project based enterprises (Jones 1996). The emergent effects are very tight co-location based upon face-to-face interactions (Grabher 2001;2002). Firm formation is on the basis of a specific, time-limited, project for which key people are recruited. The small-scale operation and short time scale of such projects was initially – in new media at least - based upon 'flat firms' with little or no hierarchy with an expertise-based division of labour (such that there was much team work). It was only later that specific 'job descriptions' emerged, and as they did so they echoed those found within the advertising, film and television industries. Even today training is de-institutionalised with individuals responsible for their own development, in their own time (Christopherson and Van Jaarsveld 2005).

In the studies that I have carried out employees were recruited from diverse communities: coding; artistic and business; with project management and a 'directorial' role deemed to be a key skill. In the earlier years when the labour market was buoyant, employees were either freelancers or self-employed, and as such firms had to 'add value' for employees if they were to attract and retain staff. As employees were usually on temporary contracts, they were always looking for the next job, thus networking was vital to find out who was hiring next. As analysts of the film and television labour markets have argued workers in this sphere use jobs as steps in their career development (Blair 2001; Blair, Grey et al. 2001). Such a strategy requires high quality, fresh gossip and information exchange. Thus, physical co-presence is required. Accordingly, new media companies were not only found clustered in particular cities, but actually within a small number of specific streets and buildings.

Moreover, project-based firms also require to be 'in the loop' in order to pick up their next contract. In my interviews I gathered significant examples of firms acting like individuals, moving from one contract to another in a 'learning curve'. Sometimes this learning involved the firms 'migrating' between different technologies and markets, commonly from web design to business consultancy. Being 'in the loop' for such companies meant just the same intense information exchange as that of individuals and hence they tended to locate themselves in a community setting (with other companies, clients and lenders), as well as with employees (past, present and future). Often, employees were an embodied form of information exchange. Within the workplace, large open plan offices/lofts were commonly preferred so that work process could be fluid. That is, they could be re-organised at short notice. Office communication was often on the basis of a 'shout' for assistance from colleagues: this necessitates working in the same room. In the short term, the social nature of business led to instances of 'borrowed' and 'shared' equipment and personnel (often from the company 'down the hall'). Again, issues of physical proximity were salient (Wittel 2001; Pratt 2002).

Finally, we can note that the 'bulimic' nature of work (see Pratt 2000) leads to 'crunch periods' (often requiring 24/7 shifts) that have severe impacts on home-work relations or social reproduction (Perrons 2003a; Jarvis and Pratt 2005). We found few examples of the idealised 'live-work' settings of new media companies in lofts where they also lived (aside from those set up by housing providers, to make a killing in the property market). As Florida (2002) has noted, many creative and high technology workers like to live in culturally rich and diverse areas. Taken together this has created inflationary pressure on locales where new forms of cultural production take place, and in many cases it has created severe housing market stress for both new media workers (and for company principals) who have been priced out of 'gentrifying' neighbourhoods.

It might be argued that both boundaryless careers and project-based firms are evidence of a youthful industry and immature firms: to this extent they are found in all micro enterprises. However, if we look to the film, television and

advertising industries we can see that such a temporal maturity narrative will not hold. First, 'deregulation' (or rather new regulatory structures) has been the driver of such organisational fragmentation (Christopherson 2002). Second, it may be that instead of 'growing out of it', that is small firms getting bigger and more 'normal', that an unusual organisational structure is maintained for particular reasons (associated with intense competition and innovation). Clearly, more detailed qualitative research is required to establish this point.

Revolution, business as usual or, something else?

The big question remains: is there anything unique or revolutionary about new media that might at least count as evidence for the claims about a 'New Economy'? The first point has to be a definitional one. Most definitions of the new economy are so wide and all encompassing that even if there *were* anything going on it is likely that it would be swamped by the 'noise' of contradictory activity. Second, using self-fulfilling definitions of the New Economy such as those of the US Department of Commerce does not promote critical scholarship. Third, better definitions, more macro scale analyses, and secondary analyses would not help us to analyse this area of the economy as the basic data available, namely the industrial classification codes used to classify it, are many years out of date and simply do not measure he object of interest: new economy or new media: it is 'below the radar'. Thus, we have to begin from the bottom up, with detailed analyses of what is going on in emergent economic sectors. This has been my objective here to avoid idealisation and generalisation and to peel off an area of economic activity and examine it in detail.

One characteristic of new media is that it is part of a wider production process, one that is constantly being re-articulated as new products, markets and means of distribution are envisaged. In part this is due to re- and dis-intermediation that is a significant potential of the medium (in another context see French and Leyshon 2004). We have to look at the whole production network/chain to see what is behind the screen. We need to see the

connections between infrastructure (wired and roads) and products, to see the hybrid nature of these systems, and the complex and emerging division of labour. It is in these novel formations that work practices emerge. In some cases, such as those that I have explored, the organisation of production is tightly constrained to place and people. In each of the modalities of new media relationships to customers or with other producers varies. As most of the businesses have a 'chart mentality' (that is they are driven by 'hits') they are extremely sensitive to market fluctuation change and potential change. In order to address this challenge they commonly seek to create a feedback loop with clients and customers that will hopefully calibrate precisely *the qualities* of what is produced (not simply *quantities* as in the old economy), at particular times, and in specific places. The general 'buzz' or more specifically the local gossip may provide access to 'the next big thing' for those attuned to understand it, and thus cultural producers more generally, and new media producers in particular, cannot afford to drift outside of this charmed circle.

Even if it is a passing phase, or an immature phase, the recent form of new media businesses is worth looking at (particularly as there are some striking parallels with other 'cultural industries'; a sector of the economy that is growing rapidly in the developed world). The project-based firm, and a fluid labour market, as well as the lack of capacity to 'learn systemically', creates an unstable and perhaps unsustainable structure; learning is individualised (at a firm and worker level): in the end the potential to add value is both carried in the 'gossip' and embodied in the people active in new media and associated industries in these districts (Pratt 2002). This is a situated and embodied interaction: it is the practice of 'embedding' for this industry. Consequentially, property price rises, takeovers, firm migrations etc., all pose threats for such regions. Moreover, there are maturity issues. A workforce mainly comprised of '20-somethings' cannot forego security indefinitely. As age catches up the need to either pay a mortgage or form a family (or both), constrains the room to manoeuvre for many. Due to the freelance nature of work there is little visibility of the 'lay-offs' common in the manufacturing industries. People are simply not re-hired. There are also a number of labour market effects. Gill (2002), for example, notes how the de-institutionalisation of media labour

markets has specific gender, age and race implications. These effects are mainly about discrimination as a result of recruitment through informal friendship based networks. This makes it particularly hard for 'outsiders' to break in and reinforces privilege.

Related and overlain on all of this is the way that the new media story meshes so successfully with the shift to neo-liberal governance in US and UK society: a shift to individual responsibility, and a minimal role for the state and other social actors. The initial promotion of the new economy seemed to emerge from the pages of Wired and (US) government advisors; it was a story about technological utopianism and libertarianism. As Armstrong (2001) notes, the unexamined myths or idealisations of entrepreneurship need to be checked against empirical practices; this is what I have sought to achieve in this paper.

So, it is not a revolution, however, whilst it may be business as usual as far as the macro economy goes, there are some unusual day-to-day practices going on that make new media (at least) different to our expectations. There are some interesting things that are going on for specific reasons; they are worthy of attention and note. They may, or may not, not be subject to generalisation, but they do deserve further investigation. If nothing else they need attention as the 'prophets' of the business world seem to be selectively plundering the sector for examples upon which to base a new social and political philosophy. For all its hard technology and cyberspace, new media is a very 'touchy–feely' business.

Guide to further reading

Many of the key references are clearly signposted in the chapter. The aim of this paper has been to take readers away from secondary data and idealisations of work practice and toward an appreciation of the material practices that constitute it. A very comprehensive analysis of the development of New Media in New York can be found in Mike Indergaard's (2004) Silicon Alley. An ethnographic study of Silicon Valley provided by English-Lueck (2002), is indicative of where I think future work could be directed. Finally, a novel by Ellen Ullman (1997) really captures the issues and dilemmas of work in new media. Her book, Close to the machine: technophilia and its discontents, documents life as a software coder in San Francisco's 'multimedia gulch' in the mid-1990s.

Boxes

Box 1: The theory of the new economy

'The argument was that factors peculiar to technology, particularly the plummeting cost of information processing power, helped to make organizations vastly more efficient. To put it another way, technologically increased productivity and global competition had held down inflation, which means that growth could be higher without the need to choke off inflationary pressures with higher interest rates. Advocates of the notion of a new economy cited supporting factors uniquely combined in the US economy, particularly minimal government, high levels of competition, encouragement of entrepreneurship, and access to venture capital. What gave the theory bite, was the vision that the widespread diffusion of new technology had permanently changed the way economies worked for the better.' Source: Coyle and Quah (2002 page 4)

Box 2: A weightless economy?

Even Wired magazine, mouthpiece of the digital revolution – where I serve as one of the editors – does not approach the idea of an intangible company. Wired is located smack in the middle of an old-fashioned downtown city [South of the Market, San Francisco], and in one year turns 8 million pounds (or 48 railway trucks) of dried tree pulp, and 330,000 pounds of bright coloured ink into hard copies of the magazine. A lot of atoms are involved. [not to mention distribution of the magazine]. (Kelly 1998 page 4)

Box 3: The age of the Terrific Deal

‘The world is in the midst of another great opening: the Age of the Terrific Deal. It started in America several decades ago and has been gathering momentum ever since. It’s about to accelerate very sharply. It’s based on technology and imagination. Combine the internet, wireless satellites, fiber optics, great leaps in computing power (through circuits no wider than a few atoms), a quantum expansion of broadband connection (transmitting more and faster digital data into homes and offices through networks of fibre-optic cables and constellations of satellites), a map of the human genome and tools to select and combine genes and molecules – and you’ve got a giant, real-time, global bazaar of almost infinite choice and possibility.

Finding and switching to something better is easier today than at any other time in the history of humanity, and in a few years, will be easier still. We’re on the way to getting exactly what we want instantly, from anywhere, at the best value for money.’
(Reich 2000 page 15)

Box 4: Defining a new medium

[Those] who truly understand this New Medium and its possibilities to simultaneously deliver an infinite number of individualized messages while providing equal control over that content refer to the New Medium as the *'many-to-many'* medium — to distinguish it from the 'one-to-one' (Interpersonal) or 'one-to-many' (Mass) media.

Mistakes, misnomers, and misperceptions of the New Medium are easy to make because the vehicles of this New Medium are only starting to appear, as are the true capabilities of this New Medium…Just consider the converged technologies that make this New Medium possible…

Imagine that when a person visits a newspaper Web site, he sees not just the bulletins and major stories that he wouldn't have known to request information about but sees the rest of that edition customized to his own unique needs and interests. Rather than every reader seeing the same edition, each reader sees an edition that has simultaneously been individualized to his interest and generalized to his needs…

[T]hese New Medium forms of content inherently are forms of mass customization, something impossible with either the Interpersonal Medium or the Mass Medium. The existence of this New Medium will catalyze, economize, and popularize entirely new vehicles for production and distribution, just as the invention of the medium of air did for transportation. And it will create entirely new concepts in and forms of content.

Source: Crosbie, V (2002 no page numbers) (gender as in original)

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[1] In a somewhat teleological statement given the dominant hypothesis of technology led-growth the US Department of Commerce (2002) defines the New Economy as 'an economy in which IT and related investments drive higher rates of productivity growth'. Furthermore, such a definition elides technology with IT and the rest of the economy.
[2] The weightless economy is based upon two principles (enabled by the internet): cost-free reproduction of goods, and zero distribution costs (see Quah 1999).
[3] That is they explicitly privilege the impact of one technology over another.
[4] The reader can ask themselves the question: 'what can be communicated by email but not fax?'
[5] Institutional contrasts also account for the different form and impact of new media in Europe compared to the US (Watson 2001).
[6] Of course loans to the poor are generally very profitable for lenders as such high rates of interest are charged in exchange for high risk (Leyshon, Burton et al. 2004). However, in aggregate terms banks achieve greater income and profits dealing with the rich.
[7] A good example is the store affinity card. The on-line example is the 'recommendation' offered on a purchase on Amazon.
[8] The popular terminology of the time was the 'burn rate' of companies (how long it took them to exhaust all of the investment capital).
[9] This is something shared in similar but diverse ways with film and television production, computer games and advertising.