Managing Creativity in the Cultural Industries

Paul Jeffcutt, Centre for Creative Industry, QUB.
Andy C Pratt, Department of Geography, LSE.

This special issue brings together a series of contributions that are exploring a relatively new interdisciplinary space – the organisation and management of cultural industries. This opening paper provides an introduction to and a consideration of that territory; it is divided into four main sections.

We begin by outlining a conceptual position on creativity and management, and how we might define the cultural industries. Our objective here is to present creativity in a broad organizational field, much in the way that innovation has recently become discussed. Second, we examine the particularity of the cultural industries compared to other industries and how issues of management, organisation and governance are problematic, particularly given the nature of their transformation, or convergence. Third, we outline the broad intellectual space for understanding creativity in a knowledge economy, and indicate how this too presents challenges and opportunities. Finally, we review the dimensions of a significant new space for interdisciplinary research (and policy making) - the organisation and management of cultural industries. We conclude by considering emerging themes from this field and by introducing the contributions from the individual papers to this special issue.

1. Exploring creativity as a strategic business process

Creativity is currently a very popular term with both the public policy and business community. In one sense this is obvious; who would aspire to be ‘uncreative’? However, the recent obsession with the concept can be related to a particular set of government and corporate strategic responses to
competition and globalisation (Porter 1990; DTI 1999). The standard argument has two cycles. In the first, as international competitive pressures increase, there is a downward pressure on costs that can either met by labour substitution, by the substitution of labour by technology, or by cheaper labour (usually in a different region). In the second (alternative) cycle, competitiveness can be maintained through innovation in products and services. Plainly, in this cycle, innovation relies upon ‘creativity’ - as in the creation of novel products and services.

In the first cycle, one that elsewhere has been characterised as Fordist or Taylorist (see Lipietz 1992), the emphasis is upon cost alone and the organization of the labour process to achieve these ends; a common strategy is to de-skill work processes such that cheaper, untrained, labour can carry out tasks. Broadly, the policy responses, both public and corporate, have been to favour foreign direct investment (FDI); either as a means to exploit lower cost production, or as a means to attract new investment and grow regional economies. The strategic drawbacks of such a policy for a host region are two fold; either the investor is attracted elsewhere after a short period, or/and, there is little or no technology, or knowledge, transfer to the region, and limited use of local suppliers.

In the second cycle, institutions may be configured such that they prize creativity and innovation as sources of competitive advantage rather than as additional costs (as in the first cycle). More generally, the second cycle has intuitive attractiveness, as it will, logically, lead to endogenous growth. This is broadly the thrust of the argument advanced by Piore and Sable (1984) in their seminal text The Second Industrial Divide, where they argued that Fordist economies were faced with a choice, or a branching point. One possible route (that they favoured), was to adopt flexible specialisation strategies that placed emphasis upon a loose network of small producers that could mix and match skills and expertise to produce short runs of new products of high quality at short notice.
This line of argument also has been explored under the rubric of Post-Fordism (see Amin 1994; Hirst and Zeitlin 1989). Post-Fordism is suggestive of the emergence of new organisational forms with a spatial localisation: new industrial districts (Amin and Thrift 1994). Tellingly, writers in this field, especially those broadly situated within a neo-institutionalist framework, have highlighted that the spatial clustering that characterises new industrial districts might be seen as a solution to an organisational problem resulting from the fragmentation of production activities. Moreover, both post-Fordist and Flexible Specialisation theorists highlight the role that new forms of governance (corporate, state and civil society) must play. Broader theoretical accounts of this solution are currently one of the most hotly debated topics in fields such as economics, economic sociology and economic geography. We will not attempt to review the parameters of these debates here - it is sufficient to note that organisation, social context and strategy are commonly invoked in such accounts.

A point that is not picked up in this literature, but one which we feel is relevant is that fact that creativity is at a premium in short product runs and rapid changing product ranges\textsuperscript{ii}. We would argue that this offers a particularly appropriate site at which a debate about the interplay of management and creativity can be developed. The question that follows on from such an observation is how to maximise creativity in any individual, organisation, or economy. In order to answer this question one has to decide where creativity is ‘located’. Obviously, individuals are a primary source of creativity, but, like innovation (with which creativity studies have many parallels), it is somewhat short-sighted, although very popular, to simply seek to increase the ‘creativity’ quotient of each individual in the hope that this will make a significant difference.

Just as with innovation, we should note that new ideas require a context in which they may be nurtured, developed and passed on, or made into something more generally useful (see Lundvall and Johnson 1992, Morgan 1995)\textsuperscript{iii}. Creativity requires a context and organisation. This is not to suggest that creativity is all context. Whilst it is clear that some contexts and
organisational settings enable creativity to flourish, the truth must lie in a complex interaction of the two - which we might better think of as a duality rather than a dualism. In other words, creativity is a process (requiring knowledge, networks and technologies) that interconnects novel ideas and contexts.

The response of the orthodox neo-classical field is to understand such activity as ‘spillovers’ or ‘externalities’ (see Krugman 1991), or in economic sociology, and economic geography as ‘embeddedness’ (Granovetter 1985) and ‘untraded dependency’ (Storper 1997). Reviewing this literature, despite its divergences, it is noteworthy that creativity, and innovation, comes to be portrayed as an ‘effect’ of the system. Thus, strategies that seek to raise the ‘creativity quotient’ in individuals or firms may be missing the point. A parallel response has been discussed in terms of industrial strategies more generally. The focus on ‘price’, which underpins the FDI model, has been termed ‘Old competition’, whilst the focus on quality, innovation (and, we would add, creativity) has been called ‘New Competition’ (see Best 1990, 2001). Strategies to support ‘new competitive economies’ focus on the adoption of new organisational paradigms that seek to capitalise on, and to develop, a new form of governance across a dispersed network of firms and other agencies (see Pratt and Totterdill 1992).

We might ask, with some justification, are not all industries creative? Thus, following from the debates about the emergent organisational forms of post-Fordism, we can discount analyses of creativity as uniquely found in a small number of expressive activities. Indeed, there are clearly some organisational fields in which creativity is configured at a premium; in others it is either discouraged, or discounted. We think that it is logically consistent to argue for a situated analysis. From a social constructivist position, the organisational form constructs ‘creativity’ in a particular setting; in this light, we argue that the cultural industries are such a particularity. Before discussing this further, it is necessary to make a few points of clarification.
We would want to challenge the assumption that if we seek the ‘magic dust of creativity’ then we need look no further than the cultural industries. We would point out that there is no magic ‘inoculation’ of innovation, to an organisation or individual, nor are cultural industries – in principle - any more or less creative than others\textsuperscript{vii}; nor, are cultural businesses, just because they produce ‘creative’ products, a potential model that may be transferred elsewhere.

In choosing to focus on the cultural industries, we are seeking to avoid the elision of creativity and organisational anarchy on the one hand, and rationality and standardisation on the other. We are also seeking to avoid the traps of the commonly repeated notion that only cultural activities are creative, or that creativity and management are oxymoronic. All of the above views stem from what we regard as a process of essentialising dualisms.

For example, the capabilities of organisations with a ‘creative output’, such as theatre companies, are often dismissed with the suggestion that they simply need good management (the assumption being that ‘artists’ cannot manage). Similarly, the equal and opposite reaction suggests that ‘conventional’ businesses need to buy-in ‘artists’ with the objective of inculcating ‘creativity’ into workers, or to learn the techniques of ‘creative businesses’. Often overlain on these dualist strategic concepts (see Jeffcutt 1996, Jeffcutt et al 2000) are stereotypes about public and private sector management practices, where the public sector is characterised as an inefficient bureaucracy and the private sector as an efficient machine. None of these dualisms are helpful, either alone or in combination. What is called for are analyses that are not rooted in atomistic assumptions about creativity - analyses that seek to understand how creativity is manifest in different ways in differing organisational contexts.

2. Examining the Cultural Industries

The UK government has ‘branded’ the cultural industries as the ‘creative industries’. Whilst one might dispute the detail of boundaries (see Pratt 1997, 2000a; Jeffcutt 1999, 2000), the significance is that this does signal a
contemporary policy focus on a sector that is engaged in producing novel cultural products. The Department of Culture, Media and Sport (DCMS), in an attempt to create a broader alliance of interest, and to foster a wider inter-Departmental appeal, have defined the creative industries in the following terms, "those activities which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property. These have been taken to include the following key sectors: advertising, architecture, the art and antiques market, crafts, design, designer fashion, film, interactive leisure software, music, the performing arts, publishing, software and television and radio." (DCMS 1998)

In terms of conventional indicators, the volume and value of activity in the cultural industries is highly significant for western economies (EC 2001). For example, in the UK, in one of the few attempts that have been made to seriously collect systematic information on the creative sector, the cultural industries were valued at 5% of GDP (approximately 170 billion Euro turnover per annum), employ 1.3 million people and are growing at twice the rate of the rest of the economy (DCMS 2001).

This broad territory of activity is shaped by dynamics of development that are driven externally and internally. Externally, the pressures of innovation and new products, or content, are dominant. Internally, and to an extent a feeder for external pressures, are the creative and innovative challenges of convergence of content and technologies. Convergence is a crucial operational dynamic, which we argue has three main dimensions (see also Jeffcutt 2001):

Intersectoral:
The cultural industries are shaped by convergence between the media/information industries and the cultural/arts sector – this is evident at all levels of activity, from the growth of new cultural entrepreneurs to the recent merger between Time/Warner and AOL to produce one of the world's largest corporations.
Interprofessional:
The cultural industries are shaped by convergence between diverse domains (or forms) of creative endeavour (i.e. visual art, craft, print, video, music, etc) that are brought together by new opportunities for the use of digital media technologies. For example, over the past decade, the UK video game sector has developed from the cult activity of teenagers in suburban bedrooms to an international export industry equivalent in value to that of Radio and TV (DCMS 2001).

Transgovernmental:
The cultural industries as a policy field (at whatever level) brings together a complex network of stakeholders – departments of culture and departments of industry, trade, professional and educational bodies – to try to do effective ‘joined up’ governance.

The outcomes of this operational convergence are complex and challenging. The cultural industries span a diverse range of activities (i.e. arts, genres, crafts, specialisms and domains of endeavour) all of which have creativity at their core (‘where creativity is the enterprise’, Kane 1999). This produces a terrain with a very mixed economy of forms - from micro-businesses, through micro-enterprises to trans-national organisations - encompassing the range from sole artists to global media corporations. The creative process in these organisations is distinguished by a complex cycle of knowledge flows, from the generation of original ideas to their realisation (whether as products or performances). As Leadbeater and Oakley (1999) argue, the creative process is sustained by inspiration and informed by talent, vitality and commitment – this makes creative work volatile, dynamic and risk-taking, shaped by important tacit skills (or expertise) that are frequently submerged (even mystified) within domains of endeavour. Despite their contemporary influence and value, the crucial dynamics that form and transform the creative process in knowledge economies remain unruly and poorly understood.
In particular, there is a lack of strategic knowledge about the relationships and networks that enable and sustain the creative process in a knowledge economy. These relationships are enabled between the diverse contributors to the creative process (whether helping with the inspiration or the perspiration) towards the achievement of successful outcomes (whether realised in terms of performances or products). These relationships are sustained in diverse communities of activity, from project-based/hybrid/virtual organisations to cultural quarters and digital media hubs. Clearly, these diverse relationships and networks are organised, even if they may not always be managed (in conventional terms) – one of the key challenges for researchers and policy-makers is thus to better understand these crucial dynamics so that insightful and supportive action may be taken.

We believe that there is value in, and much to be learned from, the cultural industries. A primary reason is that they are what we might term ‘chart businesses’ - businesses that live or die by the volume and success of their output being valued as ‘best’ in the market place for a limited period. In short, they are very good at producing products and markets for novelty. This discipline exerts peculiar pressures on business organisation. We can illustrate this by reference to the Computer Games Industry (CGI). An individual game, such as Tomb Raider, can take up to 18 months and cost in the region of £2 million to develop. However, once it is released it needs to gain publicity and sales very quickly, or drop into obscurity. Crucial is getting favourable reviews and featuring in the games chart – factors which generate sales in themselves, as well as deciding which games get distributed. Commonly, the time span in which they ‘chart’ and thus need to recoup their investment is less than 4 weeks. After this, if they are not successful, they are likely to be removed from retailers’ shelves and replaced by another product.

The studies that we have of ‘chart businesses’ in fields such as publishing, film, music and the games industry, clearly point to the fact that there is not a single ideal organisational form – rather different forms that emerge as ‘local solutions’ at different times, and for different technologies and industries. Like the rest of advanced western capitalist economies, in general terms, chart
businesses have shifted from vertically and horizontally integrated monsters to vertically disintegrated forms. Whilst part of the rise of interest in the 'creative sector' has been associated with the rapid absolute and relative growth of these industries, it has in also been stimulated by views that the cultural industries, being also at the cusp of technological innovation and digital convergence, might be pre-figurative examples of the contemporary transformation of economies in North America and Europe.

At the danger of collapsing the very differences that we want to foreground, we can note that chart businesses in the North America and Europe are characterised by a functionally bifurcated structure and size of unit. The numerically dominant firms are micro-enterprises that specialise in content origination, the financially dominant firms are a small number of transnationals who control distribution and control intellectual property rights.

Whilst considerable progress has been made in the measurement of the cultural industries, particularly in terms of employment and turnover, the topic of organisation and governance has yet to receive the attention it deserves from either academics or policy makers. However, we can begin to sketch out some of the important dimensions.

a. There is not one cultural industry, there are several. Each industry (film, television, new media, etc.) has its own ecology of labour markets and contracting networks. The cultural industries are best described as a sector, or a production system (see Pratt 1997; 2000a). Within this system are several industries. There are (organisational) connections of both a horizontal and vertical nature in the production process.

b. Many of the firms are young, many are very small: micro-business. However, participants have often been in the industry or sector for a while.

c. The industries are mostly dominated by 2 or 3 major business. Major may mean a world dominating multinational. The merger of Time-Warner and AOL has created one of the largest corporate entities in the world.
d. Most businesses are started, owned and employ ‘creatives’. Most focus on the problems of ‘here and how’, not the future. In practice, most do not have management as either a core task or a core competency.

e. Competition is fierce – de/re-regulation of broadcasters/publishers has given birth to a large number of independent operators.

f. Firm life cycles are short-term, sometimes a matter of weeks, and/or are single project based. The future is uncertain: though growth may be significant and on-going. (see Pratt (2002b); Grabher (2002))

g. Employment is commonly short term, often highly skilled, casual or short term contracting and freelancing. Serial, short-term contracts are common (see Blair 2000).

h. In a specialised and high skill industrial sector that is based around individual expertise, individuals can be ‘leached out’ of firms, or lost altogether, through employee migration and poaching. Training is seldom provided, except on a just-in-time basis.

i. The labour market pool may acquire strategic skills and knowledge due to multi-tasking and multi-experience. Over time this can be a strategic resource for a locale. However, lack of training can undermine this sustainability.

Each of these topics deserves further work in its own right and potentially presents considerable scope for debate regarding the appropriate role of management.

3. Interdisciplinarity and Conceptual Convergence

The dynamics of convergence in the intellectual context are similarly diverse and multi-layered, bringing together fields of knowledge with different approaches to the relationship between creativity and the economy. As has already been seen, contemporary approaches to the cultural industries value creativity in some industrial settings, but overlook it in others. In order to explore the structures that produce this valuation, we need to reflect on the web of conceptual relationships between ‘culture’ and ‘industry’ (see also Jeffcutt et al 2000). Appreciating the complexity of this relationship necessitates engaging with a longstanding intellectual heritage - as the following summary shows, the relationship between ‘culture’ and ‘industry’ has
typically been understood in terms of key separations and 4 distinctive views can be outlined:

Romantic: an opposition to cultural decline.
In the 19th century, alongside the development of a modern economy in Britain, Romantics (such as Coleridge and Arnold) envisaged a society led by an artistic elite who would be untainted by commerce. This influential movement rejected rationalism, celebrated individual inspiration and opposed what they saw as cultural decline. These understandings establish key separations between high (canonical) culture and mass (popular) culture.

Critical Theory: the industrialisation of leisure time.
Adorno and Horkheimer (Marxists who had fled from Germany to New York in the 1930’s) coined the term ‘culture industry’ in 1944. In a context of US consumerism, they argued that culture had become industrialised through a controlling process of uniformity and predictability, akin to Fordist mass-production. These understandings establish key separations between mass deception and authenticity.

Economic: culture at the leading edge of late-capitalism.
As was recognised in the preceding section, the cultural industries have become seen as a leading or privileged sector of contemporary capitalism. As we also observed - these understandings establish key separations between aesthetic goods and non-aesthetic goods.

Socio-political: culture as an instrument of community regeneration.
Over last 20 years or so (in particular), the cultural or creative sector has also become seen as an instrument of community development and thus a focus of state investment, often around agendas of social inclusion. These understandings establish key separations between socio-cultural costs and socio-cultural benefits.

It is clear that the four distinct positions discussed here each incorporate their own value systems and judgements – romantic, critical, economic, socio-
politicall, in constructing a meaning for the relationship between ‘culture’ and ‘industry’. However, they are also joined by their views that the distinctions and relationship between ‘culture’ and ‘industry’ form a relatively stable structure that is coherent and manageable (whether positively or negatively valued).

In contrast, a number of contemporary critical approaches would argue that these distinctions and relationships are blurred, unstable and unmanageable. For example:

Romantic: Over the past century, artists from Duchamp to Warhol have sought to overturn the distinction between ‘high’ and ‘popular’ culture. Subsequently, postmodernists have argued that there can no longer be any absolute criteria of judgement; all is open to critique and debate (Hutcheon 1989).

Critical Theory: Baudrillard and others have suggested that the spheres of economics and of culture can no longer be realistically separated. In this ‘hyperreal’ world there is no originary authenticity, only image and delusion - culture is simply another form of transactional activity (Lash & Urry 1994).

Economic: Recent work from anthropology (eg Fjellman 1992, Miller 2001) and consumer behaviour (eg Brown 1995, Brown & Patterson 2001) has argued that all goods are expressive and can be consumed for their aesthetic qualities, whether tractors or movies.

Socio-political: Recent work from cultural policy (eg Pick and Anderton 1999) has argued that state-led neo-patronage may be more effective at constraining rather than enabling creative space for community development.

Through these critiques we can see an emerging conceptual territory for understanding the creative process in a knowledge economy. This territory extends to a range of recent work from the arenas of organisational analysis (Bjorkegren 1996, Davis and Scase 2000), media and cultural studies (Du

4. Management, Convergence and Situated Creativity

Over the course of this paper we have argued that the cultural industries can be characterised by dynamic contact-zones that are inter-operational and inter-disciplinary – providing a territory that is hybrid, multi-layered and rapidly changing. A key challenge for researchers is to develop an appropriate conceptual and organisational framework within which to focus and situate analyses of this territory. Questions of organisation, management and governance are fundamental to understanding the cultural industries; they require the development of a strategic framework of knowledge concerning the dynamics of the creative process in knowledge economies. As we have shown, this strategic knowledge, where it exists, is currently fragmented and partial. Clearly, such knowledge is needed for assimilation, current and forward assessment, and to create and sustain a credible evidence-base for strategic action. A framework, around which to build and further develop this strategic knowledge, can be set out as follows:

Micro:

Analysis of the process and craft of creative activity in different 'industries', concentrating on what is distinctive about these activities in each domain of endeavour (i.e. situated knowledge, identity) and what could be identified as catalysts for creative invention and its successful translation into the processes that lead to innovative outputs.

Meso:

Comparative analysis, across domains, of what enables and supports innovation processes in their (unruly) interface with creative invention;
concentrating on these dynamics in relation to key intermediary factors for creative enterprises, such as organisation, networking, expertise and media, that impact across the territory.

Macro:
Comparative analysis within and across cities, regions and nations of the relationship between creative enterprises and socio-economic development in knowledge-based societies; concentrating on the role of key environmental enablers/inhibitors such as intellectual property rights, cultural diversity, skillsets and access, entrepreneurship capabilities, ICT capabilities, governance, institutional partnerships, labour markets, development policy and funding etc.

Meta:
Analysis of the longer-term impact of changes in aesthetics, lifestyle, commodification and spatiality on the development of an evolving network society (ie local, regional, national and transnational).

Earlier, we noted that research activity across this framework is both disbursed and in the early stages of development; it is significant to note the following main trends. To date, there has been much greater emphasis on macro (eg Landry 2000) and meta (eg Castells 2000) analysis, with a relative neglect of micro and meso analysis. Significantly, there has been little joining up of analysis across levels to produce a more integrated framework of strategic knowledge. However, debates emerging in the field of the ‘new regionalism’ are suggestive of a conceptual framework within which to consider this problem (see Soja, 2001; Storper 1997; Scott 1998; Amin and Cohendet 2000).

In this paper, we have argued that issues of management, organisation and governance are fundamental for the strategic framework of knowledge outlined above. We have argued that strategic knowledge in the cultural industries must be situated in the analysis of particular organisational fields;
not simply imported from other sectors or industries. A significant theme that has emerged from the small body of research in this area points to the importance of emerging organisational space, interfaces and intermediaries (see Jeffcutt 2001, Pratt 2002c). Over the course of this paper, we have recognised that cultural industries occupy an unruly organisational space between the domains of culture and industry, that they articulate the contested interfaces between the practices of management and creativity, and that they mobilise these complex operational interrelationships through intermediaries. Each paper of the special issue contributes to this key theme of work in a distinctive way.

Hitters and Richards are concerned with management strategies in cultural clusters. They examine two multi-stakeholder clusters in the Netherlands, considering how the organisation and governance of each enables the sustainable development of an innovative milieu. By way of contrast, the nature of interorganisational relationships and their impact on business strategy is the concern of Gander and Reiple. They concentrate on complex strategic interrelationships between ‘the majors’ and ‘the independents’, arguing that these different interorganisational forms are complementary but hostile, whilst their exchanges are functional to the development of the industry.

Picking up on the theme of creativity per se, Banks et al are primarily concerned with the new media industry; specifically how creativity is defined, located, valued and managed in a rapidly developing area that manifests significant differences between firms. Prichard’s paper offers a critical reading of individual creativity as being functional to business performance; using the ‘hero manager’ as an exemplar, he focuses on the debilitating effects of normative and performative behaviour in workplaces. A contrasting analysis of the multi-agent and dialogic nature of the creative process is presented by Kavanagh et al. They employ a novel interactive method of knowledge building about the domain and process of creativity, likening it to ‘origami’ - an emergent practice of folding and enfolding.
We can map these papers on to the strategic framework that we have outlined above: specifically, by focusing on macro (Gander and Reiple), meso (Hitters and Richards, Banks et al) and micro (Prichard, Kavanagh et al) dimensions of organisational knowledge, whilst they all make contributions to meso concerns. All of the papers highlight the fact that interfaces and intermediaries are axiomatic in the organisation and management of creative space in the music industry (Gander and Reiple), new media (Banks et al) and ‘creative clusters’ more generally (Hitters and Richards). Furthermore, they demonstrate the fact that interfaces and intermediaries are also crucial to the organisation and management of creative practice, whether in work settings where creative space is sought to be circumscribed (Prichard), or in settings where creative space is sought to be opened up (Kavanagh et al).

These hybrid and emergent organisational spaces, made up of dynamic interfaces between multiple stakeholders with many layers of knowledge, are both characteristic of, and endemic in, the cultural industries. As we have argued, these distinctive organisational spaces represent both challenge and opportunity for a developing interdisciplinary field, and over the course of this paper we have explored key issues that are shaping the development of this territory. Significant amongst these issues has been the role of intermediaries - individuals, formations and institutions that not only seek to make connections at interfaces (whether between persons, parties or knowledges), but which also seek to transform the space in which they are operating. In other words, these intermediaries have the potential to form learning or intelligent agencies, able to address future challenges of organisation, management and governance in the cultural industries.
Notes:

i Throughout the paper we use the term ‘cultural industries’, for consistency we have chosen to use this instead of ‘creative industries’ (the term most commonly used in policy debates) – our rationale for doing so is discussed in section two of the paper.

ii The permanence, or otherwise, of a product is, of course, not intrinsic; rather it is evidence of an organisational field that has been created such that this value (permanent or transitory) is amplified. For example, there is no reason why pop music should be ‘ephemeral’ however the chart system by which singles or albums are promoted stresses this dimension. It can be argued that more and more products are being constructed as ‘ephemeral’ as they then generate repeat or multiple purchase. In this way it could be argued that the whole economy might be characterised as one that is shifting to a pattern common in the cultural industries (see Lash and Urry, 1994, for a more general version of this argument).

iii Studies of innovation began by focusing on the production of ‘big ideas’, then progressed to exploring the chain of events that took ideas to markets; more recent work has offered a critique of such linear models of innovation and favoured recursive, iterative and heuristic networks (see Pratt 1998).

iv In neo-classical economics knowledge and technology, and presumably creativity, are deemed to be externalities: some general benefit that is equally available. Generally more socialised, and anti-atomistic, accounts favour an internalisation of these elements and a recognition of their potential to be structured by organisational forms, and thus to be unevenly available.

v Definitionally, the location of creativity is problematic. Does theatre administration count? If not, the case is for creative occupations (rather than industries). This means that it is possible to define people as creative when not in a creative business, and not creative when in one. Such debates, though practical, do highlight the conceptual weakness of terms such as creativity when used in this manner.

vi The classics of labour process debates may be cited here (see Braverman 1974, Willis 1986).

vii One of the debates about the measurement of the cultural industries in terms of employment is whether to measure only ‘creative’ occupations, or, all occupations in a ‘cultural business’. There is a clear case for appreciating the interdependency of ‘creative’ and ‘non-creative’ occupations. A point we make elsewhere is that the ‘creatives’ would not be creative without the social and material infrastructure to mobilise their creations (see Pratt 1997).

viii The key targets here are the DTI and its policies on Competition and the Knowledge Economy, and the DFEE (see Our Creative Futures).

ix This notion of economic transformation is a false one. The break up of the film industry in 1940s Hollywood, and the fragmentation of TV production in 1980s London was figured by regulatory changes, not simple market optimisation (see Christorperson 2002; Pratten and Deakin 2000; Deakin and Pratten 2000).

x Such predictions are prone to universalise business organisational forms. As Hamilton and Biggart (1998) have noted, there is more than one form of economic organisation under capitalism, the Asian version contrasts strongly with the US version. For example, we can note that micro- and small enterprises are quite uncommon in the Japanese cultural industries (see Pratt 2002a).

xi Reference may be made here to Artificial Intelligence, where interactive programmes are created that can learn and thus create a form of agency for themselves.