

COMMISSION ON LONDON'S CREATIVE INDUSTRIES

Briefing Paper for Session 2: Creative Production Chains

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1. Introduction

This paper is intended as a short supporting document for the second session of the Mayor's Commission on the Creative Industries. The focus of the paper is the functioning of production chains within the creative industries, and how these can best be supported and facilitated through policy interventions. The intention of this briefing paper is therefore not to provide a comprehensive overview of the state of research in this area, but to briefly establish the context, outline the key issues, and provide a number of analytical frameworks that will help the Commission to derive greater benefit from the discussion in the session itself.

Session one of the Commission concentrated on how creative talent can be enabled, nurtured and commercialised. As such, the focus was very much on the early stages of what we might term the creative 'production chain'. In the second session, we want to concentrate on how creative talent, once given access, is mobilised to produce products and services that are packaged, customised and distributed to end consumers and clients.

A useful analogy might be the relationship of a plant to its ecosystem: the precise context can either nurture a delicate species; hot house an average one; or, starve, or stunt growth even in the most robust of plants. It is the same in the creative sector: clearly it helps to have quality stock, but even the best can be diminished in a hostile environment. This paper could be thought of as examining, and understanding, the crucial relationship between plant and environment, or, between a creative idea and a cultural product.

2. The Creative Industries Production System

If we take as a starting point the observation from session one that creativity is a process, and further, that it has a particularity and character to it within the creative industries, a way of understanding this better is to draw on the concept of the production system. The notion is at once simple and complex; in order to highlight the appropriate dimensions we will structure this paper around a number of 'cuts', or 'edits', which are different dimensions of this process.

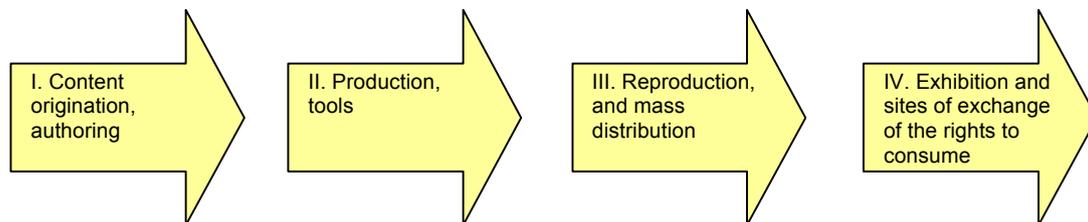
3. First cut: the creative industries production chain

The first way in which we can look at the creative industries production system is as an interlinked chain. A production chain is basically the steps or cycle that any product or service goes through to transfer it from an idea through production, distribution, and exchange, to final consumption. At each step, or link, a transformation takes place. Each link is also dependent upon, and as we will elaborate below, often interactive with, the other links in the chain. Thus, the production of goods and services always happens in a context. Simply having a great creative idea remains just an idea until it is passed through the production chain: an idea is nothing without execution, a product or service is nothing without distribution, and distribution is nothing without a site for exchange or an end customer.

So, two points can be made. First, that ideas, or creative individuals, need to be linked into production chains. Second, that production chains are vital to bring ideas to fruition, and that not all of those involved will be 'creatives' in the traditional sense.

Within the creative industries, a simple, generalised production chain of four key links can be identified, as illustrated in Figure 1 below.

Figure 1. Simple creative industries production chain



Source: Adapted from Pratt (1997)¹

Stage I refers to the various processes by which creative material and intellectual assets are originated and produced. This stage encompasses arguably the most visible activities of the sector – the creative fields of authoring (in all its forms from books to dance); design (from buildings to fashion); image-creation (from digital art, to photography and painting); music composition; and digital content origination such as multimedia titles, software packages and electronic games. It also covers activities such as the commissioning of content, the aggregation and packaging of content (e.g. by broadcasters), and the commercialisation of IPR by, for instance, record labels and book publishers.

Stage II of the production chain concerns the making of 'one offs', or prototypes, which may be reproduced later. It also relates to the production of specialist goods, materials and infrastructure used within the creative industries, such as artists' materials (paints, canvasses, brushes etc.), film cameras, or the manufacture of musical instruments.

Stage III refers to the activities associated with channelling creative products and services into end-user markets. This relates primarily to the physical processes associated with reproduction and mass distribution (e.g. printing, CD replication, shipping and wholesaling etc.), but also to newer digital and analogue forms of distribution (from broadcast to digital delivery systems). Commonly, these two modes are integrated.

Stage IV refers to the exhibition function embodied both in venue-based activities such as concert halls, theatres and cinemas, as well as the retailing of certain creative products such as books, CDs and videos. In between these lie the informal sites of consumption and display that are important in the creative production system - 'the street', or rather certain places where novel cultural consumption is visible.

One could, of course, always add further functions and activities within the production chain, such as financing, preservation/archiving and the education of both producers and audiences. But, as will be explored further, due to the diversity of the sub-sectors that comprise the creative industries, there is also huge diversity in the nature of the production chains by creative form. For the present, the main point of using the production chain framework is to stress that each of the creative industries are composed of functionally interrelated activities.

The concept of the production chain thus enables researchers and policymakers to 'see' the totality of an industry, and raises the awareness that performance in one

¹ Pratt, A.C.(1997) 'The cultural industries production system: a case study of employment change in Britain, 1984-91', *Environment and Planning Vol A* 27: 1953-74

step may be positively or adversely affected by activities further up and down the chain. It should encourage us to seek to assess the health of particular chains, to explore where chains are interlocked, and thus have a strategic perspective on the whole system. Policy makers should thus be more able to identify strengths and weakness of either individual chains, or the system, and make the most efficient and effective interventions.

However, as already noted, there is considerable diversity within the creative sector: each industry, or creative form, has its particular characteristics. In the next section we point to the fact that the diversity of production chains can be characterised as tending to one of three types.

4. Cut 2: Three types of production chains

As referred to above, policy interventions targeting creative production chains need to be sensitive to the fact that these will differ dramatically across the sub-sectors. In looking at this diversity, it is possible to identify a 3-way split: between those activities that focus on bringing the audience to the content; those that focus on bringing the content to the audience; and, service based activities. This distinction should not be read as a simple tri-partite division, but rather a continuum along which activities can be placed. It is a useful distinction as it helps to open up some of the contrasting underlying economic characteristics of the sector.

The activities that are reliant on **bringing the audience to content** (live performance, gallery exhibition and festivals etc.) tend to be labour intensive, and, it is often argued, suffer from what is known as the “cost disease”². What this refers to is the fact that, as with other labour intensive activities, it is difficult to benefit from technologically driven productivity increases. For instance, it requires broadly the same number of people to stage an opera today as it did one hundred years ago. Similarly, while venues may have increased in size over time, there are still insurmountable physical limits to their capacity. Thus, as a recent CURDS report put it:

what an economist would recognise as “output” per worker (actors, directors, musicians, stagehands etc.) has remained more or less static. However, the costs of those [creative industries] workers is effectively determined by the general level of productivity in the economy (which is strongly affected, in the long run, by technological change). The result is that if workers in the performing arts are to be paid a living wage, the cost per audience member of live performance will inexorably increase, and it will increase more rapidly than general inflation. This is, of course, one of the prime arguments for public subsidy for certain art forms (for example, Opera) – they would simply not be financially viable without such subsidy³.

In reality, the picture is not so simple. The cost-disease is neither universal nor irrelevant. There are ways to escape the cost disease particularly through the application of particular technologies to increase output (e.g. the use of a synthesiser instead of a horn section in a live performance) and the transformation of a creative performance into a reproducible product (a CD, video etc.)⁴. The important point to

² First discussed by Baumol, W and Bowen, W (1966) *Performing Arts: The Economic Dilemma*, Twentieth Century Fund, NY

³ CURDS, 2002, *Culture Cluster Mapping and Analysis for the North East*.

⁴ Crucially, more than technology *per se*, the key for a creative agent is to expand their ‘envelope’ of activities in order to capture downstream IPR rewards. So, a company concentrating solely on live performance will suffer most; the potential to include licensing rights, and securing control of

note is that various creative forms have found ways of incorporating such technologies to a greater, lesser, or nil, extent than others.

The activities at the other end of the continuum, concerned with **bringing content to audience** (books, newspapers, films, TV and radio programmes, computer games and software, records/CDs) escape the cost disease as they are based upon a creative product that is inexpensive to reproduce. However, as with other informational industries, the initial costs of production tend to be very high. So, while it might have taken Sony Computer Entertainment Europe four years and budget rumoured to be around £5m to develop the first disc of the Playstation game *The Getaway*, the second copy will have cost under £2 to produce (for replication and packaging).

This very particular cost structure of high initial costs relative to the low costs of reproduction, coupled with the high degree of uncertainty and risk, has profound implications for the 'informational' creative industries. In particular, an oligopolistic industrial structure has become the norm for managing these cost pressures⁵, with a small number of global companies enjoying a pivotal position in terms of the financing and distribution of cultural products – e.g., the Hollywood Studios, the five 'major' record companies, or the ten major computer games publishers.

The **service-based segments** of the creative industries (architecture, advertising and much design activity) are distinct again. For these activities, arguably the key economic pressure is that they have developed a business model akin to other so-called 'advanced producer services', such as management consultancy. In particular, the main form of revenue generation, 'money for time' (either as a day-rate or a fixed fee) – rather than exploitation of IP in the form of licenses or royalties – means that companies are under capitalised and overly vulnerable to changes in personnel. There are also limits to how much it is possible to 'sweat the (human) assets' of such service-based activities. For instance, the rule of thumb for success in these segments is generally taken to be charge out rates of 2.5 times the employment costs of staff, averaged over the full course of a business cycle. Finally, the discontinuous workflow, and the need to continually pitch for future work require a degree of self-funding, or 'cross-subsidy', of 'non-billable hours'. One response to this organisational form is the preponderance of 'project-life' companies and self-employed, freelance, contractors⁶.

Figure 2 below summarises this range of economic pressures, and charts these against both creative industry segments and the position on the continuum between audience to content versus content to audience.

[FIGURE 2 TO FOLLOW]

5. Third Cut: Mapping production webs

The simple production chain outlined above in Figure 1 places an emphasis on the functional relationships within a discrete vertical market or industry, such as

distribution and replay rights can 'cross-subsidise' live activity. This again stresses the importance of the 'production chain perspective'.

⁵ The huge costs, and risk of success/failure, mean that a small individual company cannot sustain such a cash-flow. The classic example is the large film studios that can weather a number of failures as long as it gets a few successes. However, as cost per production increase the relationship between 'hits and misses' becomes problematic even for the 'majors'. Pratt, A and Jeffcutt, P (2002, 'Managing Creativity in the cultural industries', *Creativity and Innovation Management* 11.4:225-233) term this organisational form the 'chart business'.

⁶ A classic study of new media companies that fit this model can be found in Pratt (2002) 'Firm boundaries ? The organisation of new media production in San Francisco 1996-8', (in press: copy available from author)

television. This approach is very similar to standard supply chain models used in manufacturing industries, and it is most suitable for analysing individual companies or sub-sectors. However, this crude model is not so helpful in understanding the many 'horizontal' relationships and interdependencies that exist between functions from different sub-sectors of the creative industries, and with industries and institutions outside of the creative industries.

In this case the metaphor of a web rather than a chain might be more useful. The project of gaining an overview of the whole process is more challenging than simply acknowledging inputs and outputs; here we need to literally map the linkages. Within such a map of a network there are nodes and flows. Lest we be confused with the usage of the term mapping here, let's be clear creative industry mapping documents have thus far simply measured quantities at the nodes (employment, output etc.); a far more challenging task is to explore the characteristics of the flows/relationships.

Figure 3 below illustrates an attempt to map the relationships between different elements of the production chain. The analytical effect of this mapping is to identify an interlinked cluster, or 'knowledge pool', approach towards understanding creative production chains, which stresses the interconnectedness between creative individuals and firms, related and supporting services, education and training, and the audience.

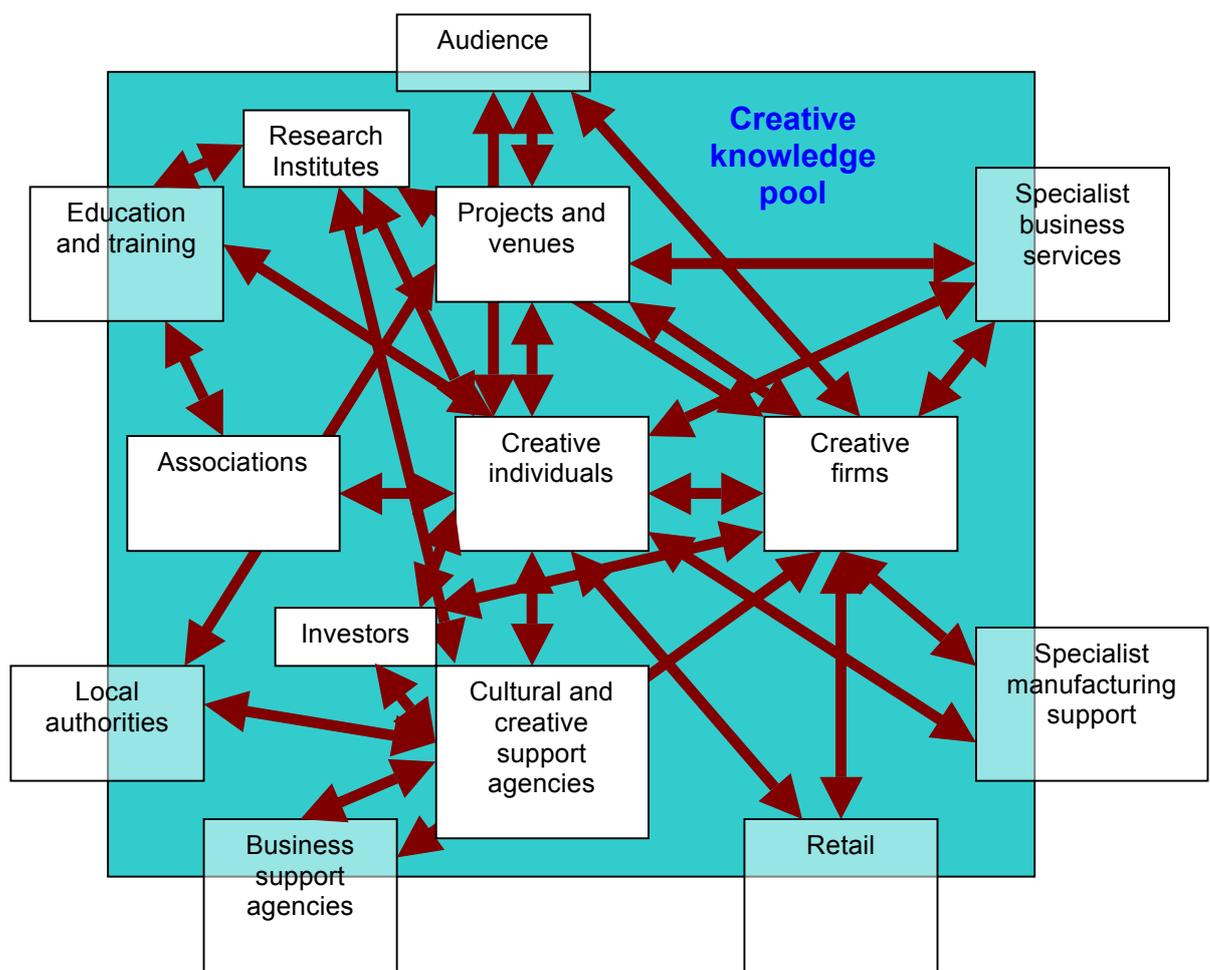


Figure 3. A cluster-based model of relationships

Source: CURDS, *ibid*

What this diagram does not do is to actually measure the strength, direction and quality of interactions. Quite simply, some linkages are more important than others⁷. This would involve a very intensive information gathering exercise. However, very broadly we could see two types of linkage traded, and un-traded. Traded linkages are identified as the links with key buyers and sellers of inputs, part-finished and completed product/labour; however as important, but more intangible are the un-traded linkages of informal exchange of skills and knowledge, materials and labour.

Finally, we have to see that the production web is rooted in particular places. First, we can note that crudely London has, in comparison to the regions, a greater preponderance of 'content origination' than production and reproduction. Clearly some parts of the production chain are of higher added value than others. Policy makers need to be aware of this. Thus, crude measures of employment in the creative sector are less helpful than more detailed breakdowns by production chain function⁸.

Moreover, there needs to be an awareness of the global nature of production chains. London may be the hub of the UK creative industries added value; but this is not necessarily the case for the world. Plotting these sorts of relationships will point up particular strengths and weaknesses. Whilst we may want to actually measure flows of value between places and parts of the production web it may be more useful at the local level to explore the importance of location in the facilitation of linkages. Research leads one to expect that the proximity of film and television production in Soho is not chance, or related to low rentals. Firms choose to be there, at very high cost, in order to benefit from rapid exchange of precisely the right goods and ideas; and, they pay a lot to be 'in the loop' of informal knowledge exchange that is fuelled by multiple interactions⁹.

Given the Commission's focus on regional economic and social development for London, understanding the geographical dimensions of London's creative production chains will be vital to the development of effective strategy and interventions.

Ideally, then, both the production chain and the cluster map outlined above need to be reworked to overlay their functional analyses with a geography of production. If applied to all of the creative industries sub-sectors in London, the frameworks would then begin to reveal which activities take place within London, and which take place elsewhere.

However, at present, we know too little in detail about either the spatial dimensions of the constituent production systems of the capital's creative industries or the particularity of the flow or content – except that they change rapidly. For instance, London's largest post-production company (The Mill) recently took a strategic decision to pull out of work for international motion pictures and focus on domestic advertising. It is unclear how the loss of this major link into the US film complex will have for the ecosystem that is London's cluster of TV, film and digital media industries.

⁷ Importance is not simply captured by regularity of contact, or size of the trade. Think of the contacts in your address book; in some circumstances it is the weak contact that has the crucial information to solve the problem. Access to this contact is 'mission critical'.

⁸ See SEEDA report., Scottish Enterprise

⁹ See an example of the new media sector: Pratt (2002) 'Hot jobs in cool places: The material cultures of new media product spaces; the case of the South of the Market, San Francisco', *Information, Communication and Society* 5.1:27-50

6. Fourth cut: the Directors cut.

As we have noted above, once the spatial distribution of London's creative industries production chains becomes clearer, it follows that it is necessary to examine the dynamics that have generated each particular territorial arrangement of production. This is key to the ability of policy to safeguard and further exploit London's specialisms in the future.

Understanding the geographical, social, economic and political configuration of the production system entails an analysis of the organisation of production chains, with particular reference to how this meets the need for constant innovation within products and services.

Bringing all of the above together we can begin to characterise the creative production system as a particular type of innovation process. Analyses of the innovation process have stressed the importance of not simply the linear progression from idea to market, but the creative and learning possibilities afforded by feedback (both horizontal and vertical). Feedback may be the conversation had in commissioning a piece, in a chat at a launch party, or in the purchase or hiring of labour or materials. Thus, the co-presence of crucial parts of a production web, or the system, may be vital to success.

Experimental and innovative producers need a range of goods, equipment and expert labour and knowledge at hand. Although they might not use it regularly, they value the possibility that they may use it one day. The whole essence of experimentation is that it is unpredictable. If creative businesses have access to such a wide range of products and services they can be both more efficient, produce higher quality goods, and in a timely fashion. Thus policies to analyse, sustain, and spot weaknesses in a healthy and diverse ecosystem could underpin individual success. Easier said than done; as we have shown above this is a fearsomely complex issue.

However, once again it helps to simplify matters so that we can focus on the central issues. In practice it's more than about simple presence or absence of the resources in an creative ecosystem; it is as much about how they are made available and under what terms, and where they are located, physically and structurally, in linkages, networks and institutions.

We can characterise the mobilisation of linkages in and between organisational forms on a simple continuum from individualistic market co-ordination, to collective bureaucratic. In the creative sector we can point to a clear illustration: the pre-1984, BBC as historically a bureaucratic form that internalised linkages (of the whole production chain). Within such a system resources can be set off for innovation, planning, research and development, as well as training. Such organisations are generally good at strategic development, but they tend to be weaker on innovation and cost-sensitivity. Channel 4 is an example of an organisation closer to the market co-ordination end of the continuum; it contracts out many activities and simply acts as publisher. It can mix and match suppliers (programme makers) and target niches. At the extreme end is the independent production company that is simply focused on the one programme; there is commonly less time, expertise and willingness to look at the bigger picture.

Clearly both extremes have their strengths and weaknesses; moreover, they cannot be detached from context. For example the revolution that created the independent production company, and Channel 4 and the new BBC was in major part regulatory change (ditto the post-WW2 break up of the Hollywood system, the Paramount decision). This regulatory change whilst driven by macro-economic desires was also linked to questions about changing market demand and new technologies. The point

here is to stress that there are no ideal, or, fixed forms: they are all temporary fixes. However, analytically, being aware of what they are a fix to, helps us to consider the local strengths and weakness of production systems.

Thus, based upon the sort of knowledge based outlined above we may be able to construct 'surgical strikes' at key elements of a production system. This is likely to be more efficient and effective than, for example, crude 'market steering' represented by subsidy; or, blanket infrastructure or training policies.

For example, we might consider how strategic market knowledge is being gathered and used in the sector, if it could be improved. In a micro-enterprise environment some collective provision of future, or non-local, market trends could provide huge strategic advantage¹⁰; its lack could be a strategic weakness. The same argument may be rehearsed for skills and training, management expertise, capital goods purchasing decision, business services, etc.

In order for intervention to help facilitate the development of strategic knowledge, it has to establish agencies that are capable of this – 'intelligent agencies' that have credibility with the sub-sector because they offer something that's genuinely missing and needed.

Each sub-sector will have different key knowledge requirements, necessitating the need for specialist agencies. Generic solutions don't work as each sub-sector has to be at the cutting edge requiring particular solutions to particular barriers/challenges and these change rapidly.

7. Key Questions for the Commission

[To Follow]

¹⁰ The best examples of this are the way that fabrics and colours for the fashion industry are known in advance to a select number of major stakeholders; or, the how access to sophisticated first weekend preview analysis of films is used in the US to re-edit and achieve maximum market impact on general release. Accessing such strategic information for a regional 'club' (on a subsidised subscription basis) could provide considerable market leverage.