Creative Destruction : Lessons for Science and Innovation Policy from the Rise of the Creative Industries – Day 1 Session 2

The parallel universes of innovation policy and creative industries policy, and the growing convergence between them, or 'so you want us to stop trying to find the cure for cancer and start funding reality TV?'

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My presentation paper *Research and Innovation Systems for Digital Content and Applications*, as you may know, if you have had a chance to look at it, is a slightly dated paper from 2003/2004 which I, along with other colleagues, co-authored with Terry Cutler. I will briefly start with that, and also reflect on two of the background papers for the symposium: the 'four models' paper, and the social networks paper. I title my paper 'the parallel universes of innovation policy and creative industries policy, and the growing convergence between them'. It has a sub-title which comes from a comment a senior bureaucrat made to me when I was seeking to lobby him about creative industries in Queensland. He said, 'so you want us to stop trying to find the cure for cancer and start funding reality TV, do you?' That I think brings out the contrast that I am trying to track here a little.

So, I'll talk about the parallel universes briefly. Some of this will be familiar to most of you, I'll talk a little about how it's changing and where I think we are at at the moment. Innovation policy and innovation systems approaches are a relatively new public policy framework, which has probably really only been in place for a couple of decades and that means that they are still in a state of real contestability. One reason why they are contestable is that they undercut the logic of what a political economist would call neo-liberal rationales for small government, for deregulation and for getting out of the way and letting markets work. Innovation policy has been made in a context in which western governments have re-introduced themselves to an active interventionary role in a number of areas where they spent a couple of decades getting out of in the 1970s and 80s, in the post stagflation era and the end of the Keynesian settlement. The innovation policy framework is a value-driven orientation to productivity rather than a cost-efficiency driver for intervention and in that sense it is in contrast to micro-economic rationales for change and reform - which were the mantra of western governments' strategy into the late 1980s and early 1990s.

It is also contestable because for Treasury officials it's regarded as industry policy ('picking winners', propping up failing manufacturing sectors, slowing tariff reform, etc) by another name and therefore highly suspect. But I think that it does represent a historic shift in the ways in which government has thought of an appropriate role for intervention. This has led to a disposition to focus on emerging industries that exhibit innovation and R&D intensity, upskilling and education of the population, and a focus on universalising the benefits of connectivity through mass ICT literacy upgrades.

The innovation policy paradigm

But the innovation policy paradigm has tended to stabilise around - and possibly congeal into - the normative frameworks found in the Oslo manuals and the Frascati protocols. In the Oslo manual, you will see what, in the literature, is usually regarded as the 'first generation' of innovation policy - that is the idea of a linear process of the development of innovation. This process begins with

basic knowledge breakthroughs courtesy of laboratory science and public funding of pure or basic research, and moves through successive stages - seeding, pre-commercial, testing, prototyping and the sequestering of IP - until new knowledge is built into commercial applications that diffuse through widespread consumer and business adoption. The prototypical industries, as we know, that have fitted these characteristics have been biotech and pharmaceuticals. The literature that is alluded to in the presentation paperwork (Lengrand et al (2002); Rothwell (1994)) talks about the evolution of the innovation paradigm. Some talk about three stages of innovation or even of five generations. Basically, though, it's a case of complicating this linear model where contemporary accounts take account of the complex iterative, non-linear nature of innovation with many feedback loops along the way, and seek to bolster the process by emphasising the importance of systems infrastructures and attributes that support innovation.

The presentation paper *Research and Innovation Systems for Digital Content and Applications* was an attempt a few years ago to apply this thinking quasi-systematically to the content industries - which it had never been applied to before either in Australia or elsewhere. It sought to identify with some degree of empirical rigor where the gaps are in the national innovation system: if one was to apply this approach to the contribution of the content industries to Australia's national innovation system, what would you have to do to make it work?

I won't go into the detail of that work now. While we can observe this migration from a simplistic "technology push" model of innovation driven by upstream R&D to the more real-world characterization of industry markets as complex systems in the innovation literature, old paradigms die hard in the real world of policy. There is a significant gap between the policy literature and the policy institutions. This is because science and research institutions change slowly. This has also been compounded by the false dichotomy between "hard" science and manufacturing policy on the one hand, and the "soft" research of the social and humanistic sciences, and the relative neglect of the services sector within industry policy, on the other. And of course the creative industries and digital content fall between this gap - on the one hand they are technology enabled; on the other hand they are seen very much as the soft end of the industry spectrum.

The creative industries side of the parallel universe

We now look at the other part of the parallel universe - on the creative industries side. I ask you to keep in mind Jason and my background paper on the 'four models' of the creative industries, and think about the first two models. This is a paper that talks about four potential models of the relation of creative industries to the rest of the economy. The first model poses a *negative* relationship - where transfers occur from the rest of the economy into culture in order to address non-market and market failure aspects of support for the traditional arts. The second is what we call the *competitive* model, where the established media (broadcasting, music industries, print and so on) have essentially a neutral relationship, they behave like other industries and their unusual characteristics such as power law and information failure characteristics are addressable under competitive conditions. Keep in mind those two models when I talk about the 'parallel universe' of the creative industries.

There are three points I want to make about them. These points all relate to why there is this parallel universe, in other words there has really been no connection between the creative industries and innovation thinking for most of the history of both of these discourses. The first point is *category confusion*. There is a significant ongoing issue of what do we mean when we talk about the creative industries. Are we talking about the copyright industries, the content industries, the cultural industries, digital content or are we talking about arts or entertainment or something in addition? This category confusion means that it is extremely difficult to gather accurate, authoritative and timely data about sectors and that it is subject to unfocused analysis and

intervention. Various attempts have been made to systematise this and I will allude to one of them later with some of the work we have done.

Second, *theoretical contestability*. In the cultural sphere, we have been our own worst enemy in many ways. There is a remarkable degree of critique in the academic field but also amongst policy and industry about this notion of creative industries and some of you will be aware of some of the literature in this field. Let me remark very briefly on one such critique which I regard as being emblematic of many. This is the work of Nicholas Garnham, whose an article in the *International Journal of Cultural Policy* a few years ago focuses on the core intellectual lineage of the information society and its fatal links with creative industries.

Creative industries ideas are a kind of Trojan Horse, secreting the intellectual heritage of the information society and its technocratic baggage into the realm of cultural practice, suborning the latter's proper claims on the public purse and self-understanding, and aligning it with inappropriate bedfellows such as business services, telecommunications and calls for increases in generic business creativity. Garnham rests his case on the normative imperative to return to the 'cultural industries' policy focus on distribution (critique of multimedia conglomeration) and consumption (smoothing of the popular market for culture for access and equity) of which he was a main proponent in the 1980s. He names as his bete noir Schumpeterian approaches to entrepreneurialism, the technological sublime as epitomised in Ithiel de Sola Pool's work, and of course the 'pervasive 'neo-liberalism' ungirding the claims for the Information Society. I am not going to go into what we might say in response to that, it is important to simply register that there is a strong sense of incompatibility held by academic theorists, as well as industry and policy people in the cultural field, that this Trojan horse threatens the status quo.

The third one is *policy marginalisation*. Let me quickly quote a couple of concrete examples of this. The Australian Income Assessment Act Section 73B 2C(f) sets out what can qualify as allowable research and development for tax concession purposes - people from Britain will be familiar with a similar regime there. To qualify for the concession, R&D must be 'systematic, investigative and experimental'. The activity must involve 'an appreciable element of novelty', a 'high level of technical risk', and 'be carried on for the purpose of acquiring new knowledge (whether or not that knowledge will have a specific practical application) or creating new or improved materials, products, devices, processes or services'.

The entire field of the humanities, arts and social sciences are excluded from this domain exclusively on the basis that they do not generate knowledge of this type or undergo processes of knowledge production of this type and so what is currently a $460 million exercise in this country of providing tax breaks to industry for qualifying research and development doesn't apply in the creative industries. This goes back, of course, to the normative framework of the Oslo manual and what is accepted as R&D.

We could go through a number of points about the creative industries and why both in their own self understanding and in terms of policy marginalisation they have never positioned themselves as being a field that requires or describes itself as having a value chain that has R&D in it. The main point I want to make about that is that the large industries that make up the high profile aspects of the creative industries are the large multinational commercial firms – who simply have no interest in qualifying for such a concession. They don't need it, by and large, and they don't see themselves as actually undergoing that kind of process in order to generate the products and services that they do. My assertion would be that they indeed have absolutely demonstrable R&D processes but they have never had to frame them for the purposes of government surveillance, and so the whole area of innovation and R&D policy simply has passed the creative industries by.

This has certain consequences particularly because this sector is predominantly composed of SMEs not of large firms. The great preponderance of firms are SMEs who indeed are those who should be able to access such support as export development assistance, R&D concessions and the panoply of industry schemes which our study *Research and Innovation Systems for Digital Content and Applications* demonstrated has almost completely passed them by.

How is this changing?

So how is this changing? *On the innovation side*, policy is catching up with the academic literature and there is a much greater emphasis on services innovation. The size of the services sector is beginning to attract attention, the assumptions of services as parasitic on more established primary and secondary industries has broken down, and there is a greater sense of the porosity between the manufacturing and services industries. The attention to services is complicating the linear model because services don't obey this model. There is more attention on public sector innovation because services are very much what the public sector provides, more routinely and normatively than the private sector.

This has propelled a fundamental shift in the rationale for public policy in this field. 'System failure', rather than market failure, is the basis on which governments can with some confidence proceed to develop policies and invest in innovation on a sound rationale. 'System failure not market failure' is a recognition that many generative aspects of the innovation process lie outside the market economy, not only in terms of breakthrough science but also public and household sector innovation, and unplanned innovation at the final consumption end. It also implies a central role for government not only in providing key elements in the NIS (agencies, departments, schooling systems, etc), but also in identifying that the linkages between elements which make the system work are robust and optimal. Where links are missing, suboptimal, or not even thought of, government has a role in identifying such systems failure and bringing to bear resources to address the problem.

And so public sector innovation branches out of the narrow commercialisation paradigm that attended the linear model – the first generation model – and is driving more and more towards a wider agenda, particularly for our purposes with the question of user-generated innovation, of consumer-led change and innovation and that is being picked up in business more and more. Richard Lyons of Goldman Sachs says in rich countries about four-fifths of economic activity now involves services, but profit margins are eroding. He argues that 'commoditisation often occurs even faster in services than in physical products, because innovations are easier to copy, patents can provide less protection, up-front costs are lower and product cycles are shorter'. The question of user-generated innovation, user-generated content is as much on the lips of business as it is on the lips of the academic vanguard. And indeed science is becoming increasingly aware of the open innovation paradigm that Cheeseborough and Von Hippel and others have talked about for some time.

On the creative industries side, how are things changing? Again, I invoke the third and fourth models in the 'Four models' paper: the third model focuses on the idea of the high growth rate of the creative industries, in some cases twice as high as the economy as a whole. This is suggesting that we have a sector that is dynamic, that has a positive relationship rather than a negative or neutral relationship to the rest of the economy, that it's driving growth in some respects and the four models paper suggests some ways in which we can point to that. One in particular is the shift from thinking of the creative industries as a sector, as a set of outputs in industry terms to a set of inputs into the rest of the economy. Increasing work is being done on this and we've contributed to it with work on creative workforce covering Australia, the UK and New Zealand. We've talked about the extent to which creative employment in the rest of the economy is greater than employment within the creative industries, so creatives are found more outside the creative industries than inside them.

The implications of this for knowledge transfer and for the so-called creative economy is beginning to be put together. So, model three tells us something about the beginnings of an innovation approach to the creative industries, and a further example is report from NESTA in the UK, *Creating Innovation: Do the Creative Industries support innovation in the wider economy?* – an input:output analysis that seeks to answer that question in the affirmative.

Model four, as you might expect, is the most speculative of the four models and it is saying that instead of thinking of creative industries as the sector, or thinking of it as the driver of GDP growth in standard macroeconomic terms, think of it more as a co-ordinating mechanism or - in John Hartley's terms - an enabling social technology for distributed innovation. If you begin to think of it in those terms we're obviously into more speculative grounds but into grounds that then connect up with the notion of 'social network markets' which is the topic of the other background paper relevant to this presentation.

Where are we now?

I think these parallel universes are coming together, if you look at some of the examples of recent innovation policy formulation and creative industries formulation. There are two interesting examples that can be pointed to from the UK in early 2008: 22 February saw the launch of *Creative Britain* and on 18 March the launch of the innovation white paper - *Innovation Nation*. These two together form a very interesting combination of contemporary approaches to creative industries and innovation and I think that in those we see the consolidation of a *rapprochment*. Policy is catching up with theory which is itself catching up with the theme of this workshop: 'creative destruction' of old forms of thinking of value creation and new ways in which the market and the non-market sectors are being thought through and the kinds of affordances that digital literacy and the internet is providing for that.