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## **Making things: Beyond the binary of manufacturing and creativity**

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## Making things: Beyond the binary of manufacturing and creativity

### Abstract

In December 2013 US auto giant General Motors announced it would wind up production in Australia. It signalled the end of domestic production of the iconic “Australian” Holden motor car, and subjected thousands of workers and their families in Adelaide and Melbourne, where their plants and components suppliers were located, to the spectre of unemployment. Along with similar announcements from Mitsubishi, Toyota and Ford, as well as major retrenchments in the steel, clothing and textiles industries since the global financial crisis (GFC) in 2008, the announcement fuelled a growing sense of crisis about the future viability of manufacturing industries in the face of seemingly hegemonic overseas competition from cheap labour-cost countries.

The assumption in Australia – as in other advanced economies such as the United Kingdom and the United States – has been that the decline of manufacturing is inevitable, exemplified in commentaries by “experts” in metropolitan broadsheets who have depicted recent crises as part of an inevitable and permanent transition, a “historic shift in the structure of the global economy as the Industrial Revolution finally reaches the developing countries,” as Ross Gittins (2011), economics editor at the Sydney Morning Herald, put it. According to this argument, de-industrializing western countries such as Australia must now find other things to do to replace manufacturing: dig up resources to supply manufacturers in China or India; become tourist destinations; export services (“know-how”) rather than physical commodities; or focus on the so-called “knowledge” and “creative” industries, where the greatest proportion of the value of a product is said to be in its intellectual or design content, not its material fabrication.

At the very same time, proponents of the creative industries have claimed prominence in economic policy debates by presenting such sectors as design, film and advertising as alternatives or “replacements” for heavy industry and manufacturing. Much of the emphasis has been on intellectual property or immaterial design processes rather than on the physical crafting and manufacture of goods. The assumption among many creative industries proponents is that the physical manufacture of products is by and large an uncreative, repetitive task undertaken elsewhere. Accepted as “normal” is an international division of labour that posits creative genius with “creatives” in the affluent West, and deskilled factory production with “blue collar” workers elsewhere in the world, wherever labour costs can be most effectively minimized.

In this chapter we critique this state of affairs and ask, what are the deleterious effects of falsely distancing manufacturing workers and cities from the creative industries debate? We discuss a range of such effects, from setting up novelty and innovation as superior to creative repair and re-use of physical things, to divorcing design processes from physical production and haptic, bodily skills. Dematerializing conceptions of the creative industries also eschews consideration of deeper questions of the social injustices of low-waged labour, and the environmental imprint of forms of cultural production.

We thus seek to broaden the debate, in two ways: first, by questioning the ontological and political premises underpinning the false distinction between making material things and creative labour processes. We respond to recent calls for analysis to look beyond the artistic and creative subjects that have been privileged in creative economy thinking (Banks 2010; Christopherson 2008), to bring into frame the labour of those who sit apart from the “rewards of authorship” (Lovink and Ross 2007: 231). Second, we argue that a broader cultural economic frame, rather than a narrow focus on creative industries, enables a different kind of debate in which the social or moral dimensions of economic activities are foregrounded (Gibson 2012). Put differently, what things do we make, or do we need to make, given the spectre of economic and environmental crisis? Under what conditions are they made? And what role might culture and creativity play in refocusing forms of material work and production? Re-connecting

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cultural production, creativity and the way we make (and re-make) physical things is an urgent task – lest the cultural and creative industries become marginalized as mere “entertainment” or “content” amidst socio-economic and environmental volatility.

### **Keywords**

binary, creativity, beyond, manufacturing, things, making

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## **Making things: beyond the binary of manufacturing and creativity**

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### **Creative economy: wither material production?**

Where did the idea that culture and creativity were separate from material production come from? Arguably, proponents of creative industries never consciously jettisoned

material production from concepts of cultural production and creativity – but rather, material manufacture came to assume an antonymic positionality vis-à-vis creativity through a series of overlapping conflation, assumptions and in some cases, political and definitional manoeuvrings.

Our view here rests on seeing the economy not as an entity or construct separate from politics, but rather as a socio-technical system literally built through the actions, ideas, and opinions of ‘experts’ – inventors, technocrats, and especially economists, who ‘claimed only to describe this object [economics], but in fact... participated in producing it’ (Mitchell 2008, p. 1116). In this kind of analysis, ‘the economy’ is not a separate entity but a ‘project’ that particular actors with vested interests work towards. Ideas about creativity and the economy, as well as manufacturing and its character, have circulated through knowledge-policy-advocacy assemblages, the ‘project’ mutated in different regional and national jurisdictions (Kong et al. 2006) – what Brett Christophers has described as capitalism’s ‘territorial fix’. Such ideas are ‘*made to work* –given meaning and operationalized across different policy terrains and in the service of different interest groups’ (O’Connor 2004, p. 39). It is therefore critical to evaluate ‘truth claims’ about the evolving nature of the economy, a task of teasing apart multiple and often intertwining flows of knowledge and ideas that have had the cumulative effect of dematerialising cultural production.

One place to start is with the normative script of creative economy in market-based development thinking (Gibson and Kong 2005). This script has become increasingly viral in the past decade along with the popularity of ‘celebrity urbanologists’ such as Richard

Florida, Michael Porter and Charles Landry – key ‘thought leaders’ who purport to be promoting radically new visions for the economy, but who do little to budge the status quo (Davidson and Gleeson 2013). According to this normative creative economy script, contemporary capitalism is characterized by more recently dominant forms of accumulation based on the commodification of culture and the injection of aesthetic ‘content’ into all commodity production. Also influential here was Lash and Urry’s (1994, p. 123) thesis of the shift to symbolic forms of production: cultural industries, it was argued, provided the blueprint for the economy, not manufacturing – while ‘ordinary manufacturing industry is becoming more and more like the production of culture. It is not that commodity manufacture provides the template, and culture follows, but that the culture industries themselves have provided the template’.

In the normative creative economy script some places were said do better than others from this shift: those that have highly skilled, creative, innovative, adaptive workforces, sophisticated telecommunications infrastructures, interesting and diverse populations, and relatively low levels of government interference in regulating access to markets, as well as lifestyle attractions, restaurants and arts institutions to attract the new ‘creative class’. In order to compete in the new cultural economy, it is said, places should seek to implement particular policy initiatives: encourage cultural industry clusters, incubate learning and knowledge economies, maximize networks with other successful places and companies, value and reward innovation, and aggressively campaign to attract the ‘creative class’ as residents.



What is often forgotten is that this current orthodoxy of creative industries-as-economic development thinking had its genesis in a particular school of urban and regional economic geography that had rather different antecedent aspirations. American scholars such as Allen J. Scott (1988), Susan Christopherson and Michael Storper (Christopherson and Storper 1986) and in the UK, Andy Pratt (1997) were prominent early figures. The intent was not to give birth to a new 'brand' of neoliberal, proto-capitalist policy-making. Indeed, some years later, Allen Scott countered the increasing 'fad' for creative economy promotion with a frank discussion of the 'darker dimensions' of creative city strategies, while Susan Christopherson, increasingly critical of issues such as the exploitation of cultural workers, urged that we move beyond a focus on the figure of the self-expressive creative genius (see Scott 2006; Christopherson 2008).

Rather, such economic geographers had come to be interested in cultural production from a specific antecedent intellectual space: they had spent the better part of the 1980s and 1990s debating the rise of post-Fordism and so-called 'flexible accumulation' and were seeking to capture analytical insights that explained the cultural embeddedness of capitalist activities, and the simultaneous emergence of new spatial configurations in production (there was for instance a conscious disposition towards examining 'new spaces of production' in regions other than the fading rust belts, such as the 'third Italy', and southern California).

Hence for Scott (1996), the structure and dynamics of modern production systems fuelled massive agglomerations of capital and labour – effectively the basic building blocks of the large metropolises that were in turn the motors of the global economy.

The city-region became “a nexus of production relationships and associated social infrastructures” (Scott 2004, p. 486). Expanding on this thesis were empirical projects examining specific industries such as printed circuits, garments, and film animation, allowing extension into related questions of the interrelationships between regions, trade flows, competition, and globalization (Scott 1997).

Early proponents were interested in the entirety and complexity of production chains across geographic space – rather than just the design or ‘immaterial’ stages or aspects (see for example, Pratt 2008). Indeed, even the earlier, pre-‘creative class’ work of Richard Florida himself focused on innovation among automotive manufacturers (see Florida and Kenney 1991). Rather, the task was to update knowledge of the urban and regional dynamics of capitalism more generally – within an overarching paradigm that sought to disentangle the dynamics of uneven development.

Nevertheless, when the more neoliberalised policy fashion for creative economy gained momentum in the late 1990s and early 2000s (see Gibson and Klocker 2005 for critique), this kind of regional economic geography model provided it an unintended scholarly knowledge base – such as it was offering an explanation for the growth dynamics underpinning previously ignored ‘cultural’ and ‘creative’ industries. Via a loose and decentralised knowledge-policy-advocacy assemblage the production of culture was shorn of much of its political economic grounding, and mutated in such a way as to weld creative industries much more firmly to a wider political agenda of looking to ‘market forces’ to ‘replace’ older industries with culture and creativity. A policy fad had been unleashed, and for some academics with track record examining creative industries, the

lure of 'crossing-over' into well-paid consultancy work based on promoting catchy neologisms was too tempting to ignore. For a prime example, see <http://creativebusiness.org>.

### **Political economy: wither manufacturing?**

Of course, such circulations and mutations of ideas about industries, material manufacture and creativity have taken place within wider political landscapes, well beyond the academy. Indeed, any history of creativity involves fraught relations between material manufacture and imagination, between creativity and production and between creation and re-creation (Pope 2005). Such tensions frequently find expression in reconfigurations of the relations between capitalists and labour. The beginnings of a division of labour between thinking and making arguably emerged with the early industrialists, who complained that the guild system (which connected the design process directly with manufacture) was counter-intuitive to innovation, with its stronghold over intellectual property bound up in the oral and haptic methods of skills transfer (Carr forthcoming). In the late 1990s and 2000s there was similarly a peculiar context in which an imagined separation of manufacture and creativity served convenient political ends. In the UK this was the rise of cultural and creative industries policy agenda, providing Blairite Labour an alternative 'Third Way' narrative, following on from Thatcher's onslaught on traditional unions. That agenda jettisoned the earlier, more democratic cultural policy elements of the former Greater London Council, and sidestepped more difficult and entrenched questions of class and inequality (O'Connor

2004; Oakley 2004). Splitting design from manufacture was also necessary to allow capitalists to seek lowest-cost labour overseas for costly elements of production or for those stages in production processes that could be most easily deskilled. The political fallout from the collapse of British manufacturing could be offset so long as a monopoly could be established over the higher-value, higher-profit parts of the value chain.

Here in Australia the relevant political landscape grew out of the experiences of recession in the early 1980s, and attempts by the then Federal Labor Government to deregulate the Australian economy. National banks, airlines, and insurance agencies were privatised; barriers to entry by foreign banks were lifted; and the national currency was floated. The Australian Labor Party (ALP) developed and implemented an international competitiveness strategy, after negotiating a delicate industrial relations accord between business and unions. It unleashed a 'program of dramatic restructuring across the nation's protected industry sectors' (O'Neill and Weller 2013, p. 74), targeting manufacturing. Meanwhile right-wing factions of the ALP aligned themselves more closely with business interests, corporate lobby groups and the finance sector, linked to the growth of banking and finance in Sydney, and a conscious attempt to shift the party's support base from the traditional unions to the business-suited end of town. As O'Neill and Weller (2013, p. 75) described, 'Sydney emerged as Australia's global entrepot and financial services centre, while many regions languished'.

Those regions that languished were especially orientated towards manufacturing and heavy industry, sectors that in turn became increasingly positioned as burdensome and inefficient. Manufacturing became a prime target for restructuring, and 'the worst

recession in Australia's post-war history' in the early 1980s 'both forced the pace of the restructure and disguised it' (Schultz 1985, p. ix). Government abandoned trade barrier support for manufacturing in textiles and clothing and in steelmaking, and the free-floating dollar (unleashed from the Bretton Woods currency pegging system in false anticipation of a permanently lower Australian dollar) put exporters at the whim of fluctuating currency speculations on the open financial markets (Webber and Weller 2001). Many thousands of factory workers lost jobs and livelihoods in hard-hit regions such as Adelaide, the western suburbs of both Melbourne and Sydney, and the smaller cities Newcastle and Wollongong (Haughton 1990). The pace and depth of restructuring amplified existing socio-economic hardships in those regions, and cast a dark cloud over the remaining parts of the manufacturing sector that those regions have arguably never since been able to evade.

Revisiting this era in light of the current debate, manufacturing didn't 'naturally' die as some kind of outcome of distant market forces, but was effectively handed a death sentence by policy moves that were masked by global recession and the synchronous deregulation and growth of the financial sector. Media and public discourses constructed manufacturing as old fashioned in comparison with rapid growth in seemingly more glamorous sectors such as banking, tourism and the cultural industries. When the much-celebrated *Creative Nation* (1994) report came out from the Keating Labor Government it was thus arguably less a ground-breaking statement of a future vision for creative industries than the congealment of a particular 'project', that had a

metanarrative to replace 'old' industries with 'new', and to mask the political fallout of deindustrialisation and trade liberalisation.

Creative industries advocates and scholars with backgrounds in design, music and media studies were often complicit in this 'project', becoming creative industries 'experts' (Prince 2010). The potential economic benefits of culture and creativity to struggling deindustrialising regions were used as argument to secure research funding; professional education for creative and cultural sectors was becoming more industry-focused (Bill 2008), meanwhile supply chain managers within the private sector were actively divorcing design and thinking stages of the production process (where the true genius of creativity was said to lie) from increasingly repetitive, automated and deskilled material fabrication. Manufacturers such as Pacific Brands (whose Bonds lines of underwear and apparel had been iconic in Australia) retained design teams in Australia but shifted all production offshore, predominantly to China. So-called convergence of information, digital technologies and cultural production – all the rage in the late 1990s – rested on corporate rhetoric of the eschewing of material production in favour of the generation, trade and accumulation of intellectual property.

Since then, the normative, neoliberalised script of creative economy and development has found traction in diverse quarters of academia, in government and in policy-making – especially in cities and regions where the effects of deindustrialisation were most intensely felt. Melbourne sought to reinvent itself as an indie/cultural tourism destination of alleyway cafes and boutiques; Parramatta in western Sydney followed suit, developing a night-time economy focused on converting laneways and previously

boring office districts into creative hubs with public exhibitions and events, eat-streets and small funky bars. Adelaide hosted Charles Landry as a Thinker in Residence; and Marcus Westbury's Renew Newcastle scheme sought to revamp abandoned inner-city buildings as hubs of creativity and cultural expression in the wake of that city's own steelworks closures. Of these various creative city strategies and visions, Westbury's Renew Newcastle has probably come closest to a whole-of-production/whole-of-process approach – with many of its grassroots creative arts initiatives encompassing the crafting/making of physical things. Otherwise, across these examples, the emphasis has been largely on consumption, performance and design. Material manufacture is, by and large, nowhere to be seen.

### **Material transformations: revising manufacturing**

The irony is that in the intervening years manufacturing has itself undergone significant changes in structure and character. Notwithstanding continuing layoffs and closures, manufacturing has persisted in Australia, as in the UK and United States, though with different form and function. Some products (paint, bricks) continue to be made domestically because they are heavy and expensive or tricky to transport; others (mining equipment, air ambulances, medical devices) are made by specialist local firms because clients want customised products and on-going support and therefore seek manufacturers who respond quickly, can visit in person and who speak the same language.

Often smuggled into the debate is the presumption that manufacturing is dominated by large firms using mostly repetitive methods, low-skilled labour within Fordist assembly lines. Despite the headlines of job losses in large firms, SMEs with fewer than 50 employees make up a majority of Australian manufacturing firms (OECD 2013). Contra the assumption that manufacturing is somehow moribund, it remains the most significant investor in research and development (R & D) of any Australian industry sector, measured on a per-employee basis (Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education 2013). Those investments have increased at a rate faster than in the remainder of the Australian economy – even during the recent post-GFC period. And yet, in academic research on manufacturing as well as in creative industries, the connection between making and creativity is rarely acknowledged or explored.

Meanwhile, highly specialist niche cultural products – hand-wired guitar pedals, analogue synth circuits, indie fashion, snowboards, leather products – have become boutique, hybrid creative/manufacturing sectors linked to specialist user-groups, communities of aficionados through online retailing and bulletin board cultures, weekend festivals and markets, as well as local urban and regional cultural scenes. The purported binary between manufacturing and creative industries is constantly blurred by craft practices and the acquisition of haptic skills, as in trades, and by creativity as incrementally expressed through the manipulation of materials (Sennett 2008). Nevertheless craft-based forms of manufacturing creativity bring with them distinctive (and not unproblematic) reconfigurations of labour-capital-technology relations.



An illustrative example that has been part of our research is the surfboard industry. As a sector dominated by small independent workshops that cater to niche user groups, it typifies newer forms of manufacturing. By contrast, the ‘major’ surf labels, Billabong, Rip Curl and Quiksilver trade mostly in apparel, not in surfing hardware – and indeed consider themselves intellectual property companies trading in branding rather than physical goods (the latter they produce via subcontractors in low-cost labour countries – see Warren and Gibson 2014). Surfboards are still made by hand, by expert ‘shapers’ who plane and sand foam ‘blanks’, and ‘glassers’ who seal them against the elements. Because they are customised to local waves and body size, most Australian surfers ride boards made locally – even when cheaper imported boards are available.

In craft-based forms of manufacturing such as surfboard-making, creativity is expressed by producers through a combination of manual skills with tools, technical knowledge and aesthetic design flair. Meanwhile embeddedness in local and online social and cultural scenes is critical, in ways reminiscent of an earlier era of thinking about music as cultural industry (see Brown, O’Connor and Cohen 2000). Such craft-based manufacturing forms involve diverse and diverging network topologies (Thomas et al 2013), and industrial landscapes, from reinvigorated guild traditions and reconfigured relationships with downstream suppliers (who often have divergent philosophies from crafters – see Jakobs 2013), to more precarious employment conditions and a culture of individualism as opposed to collective bargaining (Warren 2014). The point is not to promote niche manufacturing of cultural/creative products as a superior alternative to Fordist manufacturing, but rather to suggest that manufacturing has itself changed and

fused with cultural industries logics in diverse ways that require further academic attention.

### **Manipulating materials: rethinking 'redundant' skills**

Finally, what kinds of problems emerge when the manual skills of manufacturing workers are assumed to be 'redundant' in the creative age? Here we are especially mindful of the broader ecological crisis and that carbon-sensitive futures will rely heavily on the creativity and abilities of those who can make things and re-purpose materials with minimal energy and resource requirements. Material commodity production is at the forefront of a necessary move away from high volume, low quality production, towards a productive capacity built on creativity, longevity and stewardship (Lane and Watson 2012). Shifting the creative economy agenda to a dialogue of production ought to be a key part of this. And that shift inevitably involves questions of manual skill with materials.

The knowledge and skills of maligned production workers enables them to delve deeper into the assemblage of things - to look beyond the 'thing-power' encountered by Jane Bennett (2010) in her pursuit of 'Vibrant Matter' – to the very materials that compose objects, and to exercise creativity in manipulating them. The hand-drill for example is a consumer object, a 'thing', yet under repair it becomes a collection of diverse elements: copper wire, metal brushes, nickel cadmium, magnetic force, momentum, heat, friction. The tradesperson with the skill to both use and repair the hand-drill is engaging with the

agency of the thing in undertaking work tasks, but also engages with the agency of the matter within, uniquely understanding the (to paraphrase Bennett) clustering, affiliation, proximity and co-ordination required of each constituent element, to the agency of the thing. This has important implications for repair (and the reduction in resource consumption), but also in putting materials to new uses if, for example, the drill can't be repaired.

Part of the debate therefore needs to be not just what manual skills might support new manufacturing or creative niches, but what capacities are there among seemingly 'redundant' workers to make and re-make objects in various city spaces, including at home, through the manipulation of physical materials (Carr and Gibson 2015). Rather than the normative characterisation of industrial cities and workers relentlessly engaged in the production of 'stuff', placing grave strains on our commons, the manual workers, tradespeople and technicians that make up the bulk of the manufacturing workforce possess haptic skills and ingenuity, and are deeply embedded in local manufacturing cultures that respect materials and their reuse.

## **Conclusions**

In the minds of many policy-makers as well as creative industry academics, manufacturing remains antonymic with creativity. In tying the creative industries to the production of intellectual property, founding definitions in the UK and Australia drove a division between creativity and the process of physical production at the outset. And yet

arguably at no time in recent memory has the task of making things creatively (for instance, through innovation for low-carbon goods) been more important. We need smarter material goods that use fewer finite resources, last longer, that take advantage of and fairly reward already-present human skills and resources, and that capitalize on existing regional specializations (Bryson, Taylor and Cooper 2008). The picture of manufacturing therefore needs to be made more complex in public policy debate, and its sectoral diversity, and existing and potential connections to innovation and creativity as well as the carbon reduction agenda duly acknowledged.

At the same time, just as cultural studies scholars have been making arguments for the moral economy of media and cultural industries to be brought back into the creative economy agenda (Hesmondhalgh 2013; Banks, this volume), so too ought we think about forms of material manufacture both in terms of their creative input and their broader role creating a better kind of society and economy. Against a backdrop that casts industrial city workers as 'lacking' capacities to cope with deindustrialising futures, creativity in manufacturing regions and workers draws on and builds people's qualities and skills (embodied experimentation, adaptability, innovation, resourcefulness). These are qualities and skills that enable work, social networks, and meaning to come into existence in everyday life in the industrial city. Our point is therefore no so much to push manufacturing as a creative sector – to simply 'throw' manufacturing into the already bulging 'bucket' of what might constitute creative industries – than to find through examples of the material making of things qualities and skills in people that

ought to be better conceptualized within discussions about the future of seemingly 'imperilled' cities and regions.

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