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TWENTIETH ANNIVERSARY COLLOQUIUM: CULTURAL AND COMMUNICATIONS STUDIES SECTION

Inside the Institutions: Culture and Communication from Digital Transformations to Automation

Julian Thomas
RMIT University

Corresponding author: Julian Thomas: julian.thomas@rmit.edu.au; 124 La Trobe St, Melbourne VIC 3000

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1. The Institutional Dimension

The creation of the Cultural and Communication Studies section of the Academy was one part of a larger disciplinary reconfiguration in the humanities of the 1980s and 1990s. This reconfiguration had tangible outcomes, including a series of major research programs, projects and publications. New channels were created between disciplines and organisations outside the universities, and research on certain topics that wouldn't otherwise have had a home was encouraged. My comments reflect on the *institutional dimensions* of culture and communication. Not the institutions of the Academy itself, the universities, or the disciplines, but the 'invisible fictions', in John Hartley's words, the environment of mainly public rules and policy or administrative organisations, which was a major object of attention and controversy in the period.[1] A longer discussion would follow some of the threads connecting today's 'historical institutionalism' in communication studies (Bannerman and Haggart[2]), institutional economics (North[3] and his successors) and regulatory theory, with the 1990s strands of Foucauldian, Weberian, and Latourian 'culture and government' research. Here I make a few comparisons between then and now.

One small 1990s institution was important for me. In 1997 I was fortunate to be employed at the newly-established ARC Key Centre for Research and Training in Cultural and Media Policy, under the direction of Tony Bennett, and then Tom O'Regan, at Griffith University. The Key Centre also had elements at Queensland University of Technology and

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the University of Queensland. It was an example of what the disciplinary reconfigurations, together with the ARC's national research agenda, had recently made possible. The CMP was my first experience of working in a multi-institutional, cross-disciplinary research centre, and it gave me the chance to learn from an extraordinary and inspiring group of screen industries and media policy researchers, intellectual property specialists, museum and library experts, scholars of Indigenous media and culture, and many others. Even more importantly, the Centre connected our work to an array of public and community organisations and institutions—right across the cultural and media sectors—all of them deeply engaged with the problems we were interested in. We worked on questions ranging from high level explorations of culture and citizenship and the public domain, to problems such as the emergence of information technology in schools, Indigenous cultural property, screen policy, or the parallel imports of books and music.

2. The Problems and Prospects of the 1990s

In hindsight, the example of that nascent organisational network offers a way through the disciplinary innovations of the 1990s, and on to the present. It was made possible by the remarkable institutional expansions and governmental refashioning of culture and communications which occurred in Australia from the 1980s onwards, alongside burgeoning currents of feminist, multicultural, and Indigenous cultural critique. We often think about disciplinary and policy realignments in Australia as reactions to trends elsewhere, but what happened here was a distinctively Australian trajectory, quite different from experiences elsewhere in the Anglo world, where the legacies of Reagan and Thatcher loomed large in cultural and media studies. Here, there was a distinctive orientation to the public sector, reflecting not only Labor's long national ascendance, but perhaps also white Australia's much older predisposition to look to government for solutions—the predisposition, as Keith Hancock famously described it, to think of government as 'a vast public utility'.[4] The universities themselves in this period had been the subjects of a landmark institutional restructuring, producing an expansion of social, human and cultural capital, encompassing of course the 'new humanities'. A few additional results of Australia's formative, cross-cutting policy imperatives of liberalisation, new international orientations, digital transformation and national cultural development can be very briefly noted:

- the development of a national cultural policy in *Creative Nation* (1994);[5]
- the passage of the Broadcasting Services Act in 1992, and what became remarkably long-lived sector-specific and economy-wide regulatory structures for linear media;[6]
- the privatisation of AUSSAT and the beginnings of competition in telecommunications in 1991, leading to the Telecommunications Act 1997;[7]
- the expansion of the museum and heritage sectors from the 1980s, including the establishment of the National Museum of Australia (enacted in 1980, announced as a major Centenary of Federation project in 1996, and opened in 2001);
- ongoing attempts to reform and modernise intellectual property on fronts ranging from digital publishing to Indigenous cultural property;
- the protracted reorganisation of broadcasting through regional aggregation of commercial services, the emergence of SBS as a second national broadcaster, and the emergent community and remote Indigenous broadcasting sectors;
- the work of the library sector and the ABC in creating organisational capacities for expanding access and content for the nascent public internet.

Institutional innovations such as these might all be considered instances of what John Frow and Meaghan Morris described as 'cultural solutions' to 'economic problems'.[8] Of course, they were also economic solutions to cultural problems, and perhaps just as interesting understood that way. Many such experiments occurred at that congested cultural-political intersection of economic reform and national cultural aspirations, the scene of frequent collisions — both destructive and generative, intellectual and pragmatic. It's not surprising that Australian scholarship in this period developed an original take on culture and government, or that public cultural organisations were so prominent in Tony Bennett and David Carter's 2001 collection on *Culture in Australia: Policies, Publics and Programmes.*[9]

The Key Centre arrived right at the end of that federal Labor ascendancy, creating two problems: what to do with the legacy of innovation and expansion, and how to proceed in an entirely changed national political climate. In the early 1990s, Tom O'Regan had thought that cultural policy practitioners had acquired traction in film, music and in what became known as the GLAM sector.[10] By the end of that decade, the prospects for extending that engagement beyond a few isolated zones were grim. In communications, the primary policy objective overshadowing everything else was the privatisation of Telstra, a process that coincided with the introduction of competition, producing a conflict within policy that shaped all subsequent efforts to expand and reimagine both Australia's fixed broadband infrastructure, and the new mobile networks. In relation to the internet, reactive content regulation and anti-piracy measures became the priorities. In commercial broadcasting, older problems remained unresolved. There, following legislation in 1998, considerable industry, policy and academic research was devoted to the problem of redesigning Australia's broadcasting system as a digital service, in a way that took many years to evolve beyond a digital emulation of the analogue model. A converged regulatory body, the Australian Communications and Media Authority, was created in 2005, bringing together the oversight of the telecommunications, media, radio communications and internet sectors. This was a positive and necessary step that left in place a set of inconsistent and incomplete regulatory structures and consumer protections, which remain with us today. Key areas of regulation such as ownership and control were not revised or updated—instead they were incrementally abandoned, with the results evident in the ongoing concentration of Australian media.

So while the 1980s and 90s flourishing of cultural and communication institutions played a vital role in enabling work within the new disciplinary configuration, these institutional changes also left a legacy of difficult, unresolved problems. These included the place of government in the media and communications sector, by turns recessive and defensive; the scope and capabilities of the public broadcasters and cultural institutions such as libraries and museums in the early digital era; and the content of citizenship and civic participation.

3. Twenty Years Later

The communications sector remains a crucible for new technologies, with levels of investment and a rapidity of change found in few other parts of the economy. 'Public' media and communications institutions now include large, privately operated, free to use platforms. The boundaries of the cultural and media industries are no longer readily defined, especially in relation to the technology sector. In this environment, Hancock's political economy is transformed, and therefore 'policy' also must be something different, taking more heterogeneous, and less structured forms.

Further, the dynamics at work in the media, cultural and communication industries, and the cultural politics and policy debates around them, are no longer easily recognisable as being about digital transformation in the old sense. Almost all media and communication are digital in some non-trivial way. The digital infrastructures of our cultural institutions are advanced, albeit unevenly. While in the recent past a good deal of both scholarship and public policy focussed on the digital evolution of venerable media forms, governments and researchers are now necessarily more concerned with new systems that operate across the boundaries of media forms and institutions. Some of the most challenging current transformations are about automation, returning us to the domain of culture as an 'administrative technology'. If the first wave of computation and cyber-physical automation was the result of the scarcity of resources during the second world war, the current wave has been driven by the abundance of data and the proliferation of digital communications infrastructure, created especially to meet the needs of the mobile internet.

We now routinely rely on computers not only to make things, or to emulate older media forms, but to process large volumes of data, learn what that data represent, make predictions, apply rules, choose actions and determine outcomes for human subjects. A recommender system, for example, is an automated decision-making system now widely deployed in the media industries, presenting options for viewers and audiences based in part on their own viewing histories and those of others. When streaming services substitute for broadcast systems, viewers may well be 'freed from the schedule' of linear broadcasting, but the freedom available to them is now defined by these highly sophisticated and specialised machines.

Understanding media and communications *automation* in this sense does not mean that the issues of the 1990s have disappeared: I think the reverse is true. There are two main implications for our field. First, automation and the emergence of the communications ecologies in which it occurs have stimulated a new set of historical questions, and a new wave of scholarship concerned with them. Tom O'Regan, Vibodh Parthasarathi, and Adrian Athique now speak of the 'deep history' of platforms. There are many examples of areas where further investigation of this highly generative idea is likely to be fruitful. The following examples reflect some of my own recent areas of interest:

- Streaming media services, including unlicensed services such as Netflix, have advanced automation much further than linear media, and are reorganising global audiences and television markets.[11] But the *detachment of television* from linear, simultaneous experience is not new. The first programmable television receivers appeared in the 1960s, predating digital TVs by decades; their consequences, and those of analogue VCRs and the other 'new television technologies' of the 1970s (games, teletext), in facilitating critical shifts in industry power, are becoming clearer. In this context, an institutional lens draws attention to the dynamics of formalisation as a source of innovation and industry change.[12]
- Current policy arguments over automated, 'programmatic' advertising, such as those arising in the ACCC's platforms inquiry, rest on a new case being made for *national intervention* in a global industry to protect local news media companies. They return us to older arguments over the deregulation of TVCs and national cultural value in the 1980s and 1990s (well documented at the time by Stuart Cunningham in *Framing Culture*).[13]
- The automated systems of the present make issues of *digital inequality* more pressing. Affordable online access is a serious problem in Australia, and in our region, with

adverse consequences for older citizens, low-income families, and many of those younger citizens who rely substantially on mobile devices.[14] The National Broadband Network, Labor's last ambitious national communications project, is almost complete, but the problem is not going away. During an earlier wave of policy debates around information poverty and the digital divide, in the 1980s and 1990s, cultural institutions played a critical role. The State Library of Victoria created VicNet, one of Australia's first internet service providers together with skills and content creation programs, in 1996; in the same year, the Commonwealth funded an 'Accessing Australia' program aimed at enabling all public libraries to provide free public internet access. The problem of affordability remains; the difference now is that the cost of exclusion from the digital economy greatly exceeds that incurred in the 1990s.

- *Cultural datasets*—highly prized, large collections of both public and private provenance—have played an important role in enabling the new wave of automation. A decade ago, Google researchers used YouTube's vast user-generated audiovisual repository to develop the first machine learning capabilities able to recognise images.[15] There are other, related, path dependencies: for example, the same company's library book scanning project provided the expertise and a home for the creation of Streetview, a key component in the mapping information used for the mobile internet.[16]

The second main implication is that in our research and public debate, we should consider again what we want our cultural and communications institutions to do. Humanities scholars often speak about the need to 'humanise' automated systems. We should not overlook the capacity of the new wave of automation to take over institutional decision-making functions, and the potential costs involved. In the media, examples include the replacement of professional editorial work by machines; programmatic advertising, which bypasses the traditional functions of agencies and media-buyers, is another prominent, current case. Blockchain technologies, and the further development of machine learning, may take these substitutions and augmentations much further, with great potential benefits and unknown risks. We do not yet know what the effects of these changes will be; they are likely to begin to have an impact in critical parts of the cultural infrastructure, such as intellectual property rights agencies, funding bodies, social media entertainment and the philanthropic sector. We don't know where they will end. Learning from the 1990s, we can expect that some new work on the futures of our cultural institutions is likely to be needed soon.

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