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Human Relations 2005; 58; 867

DOI: 10.1177/0018726705057809

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The political process of inscribing a new technology¹

André Spicer

ABSTRACT

What shapes the use of a new technology? Instead of assuming that a use is already built into a technology, I argue that technology use is shaped by political processes. A central component of this involves interested organizational actors mobilizing discourses to inscribe a function into a technology. I explore this dynamic in a case where interested groups attempt to inscribe the possible use of an Australian public broadcaster's website during a public inquiry. I identify a progressive narrowing of the possible uses of the website that occurred across four successive 'inscriptions'. This saw the website shifted from being a public resource to being a privatized outlet for advertising. The shift was not a neat process, but involved significant contestation and resistance at every step. The study shows that technical inscriptions are continually contested and resisted, inscription happens in a path-dependent fashion, and inscription is dependent on institutional platforms such as public inquiries.

KEYWORDS

discourse ■ new technology ■ organization ■ politics ■ resistance

Introduction

When the internet was introduced as a mass market technology the trumpets of liberation were sounded. Journalistic hacks and social theorists claimed that it was going to liberate everyone from the frail pensioner to the pimply teenager and allow them access to a space of unlimited connection

(e.g. Castells, 2000). Web-based technology would bring forth the blooming of a thousand flowers of human creativity. Needless to say, the reality of the online world has not lived up to such hype. Instead of being a vehicle for liberation, the internet has largely been used to achieve already existing commercial goals (Feenberg, 2002). Why is it that an apparently liberatory technology like the internet was so rapidly shaped by commercial goals? How was the internet deployed to achieve commercial goals even in a context like public service broadcasting where there are real possibilities of using the new technology for public service goals? When commercial goals have come to ascendancy, are they simply accepted by all involved?

A good place to start in answering these questions is the broad literature on technology use in organization studies. In much of the early work, technology is treated as an independent variable that determines a range of organizational aspects including workflow (Woodward, 1958), size (Hickson et al., 1969), the variability and analysability of tasks (Perrow, 1970) and degree of task independence (Thompson, 1970). For these researchers, the characteristics and uses of a technology are treated as a given which shapes all other aspects of organizational life. Some researchers turned this pattern of causation around to argue that technology use is shaped by structural and organizational demands. For instance, radical critics claimed that the structural requirements of capital accumulation have led to the ruthless application of 'de-skilling' technologies such as production lines (Braverman, 1974). The deadlock between technological or structural causation has been called into question by a range of researchers who pointed to the role of political processes in shaping technology use. This involves recognizing the process of strategic choice (Child, 1972), social and political action in strategy-making (Pettigrew, 1987), the active attempts to mobilize and manipulate actors' preferences during change processes (Dawson, 1996), and a variety of actors' attempts to steer change and development in organization (Buchanan & Badham, 1999). Recent studies of technology in organization have argued that this political process of shaping technology use involves a dialectical interplay between agency and technical structure (Barley, 1986, 1990; Orlikowski, 1992). Technology use is therefore shaped by a political process involving a variety of actors including management, investors, professionals, social movements and workers. Actors engage in this political process in order to achieve ends they find desirable such as de-skilling workers to decrease wages and increase rates of profit (Braverman, 1974), ensuring workers can be effectively disciplined (Ball & Wilson, 2000), advance advantageous new standards (Garud et al., 2002), or ensuring continued control of the work process by male-dominated unions (Cockburn, 1981).

This recent work suggests a given technology is shaped by the complex interplay between various actors pursuing varied interests. A central way that actors attempt to shape technology use is by manipulating the meaning given to that technology (Bijker et al., 1987). This is a vital lynch-pin of the political process because the 'meaning given by relevant social groups actually constitute the artefact' (Bijker, 1995: 77). This attribution of meaning to a technology involves actors mobilizing a system of sense-giving discourse.² This discourse shapes how the technology can be spoken about and understood. This process involves creating a fixed meaning and a set of uses associated with the technology. Following Joerges and Czarniawska (1998) we may call this process 'technical inscription'. Often the discourses inscribed into a technology comprise a series of technical norms that specify the standard uses of that technology and how the technology itself is to behave. Discourses inscribed into a given technology therefore shape how potential users understand a technology and its possible uses (Munir & Jones, 2004). This has been empirically demonstrated in the studies of the use of information technology in health care (Bloomfield & Best, 1992; Bloomfield & Coombs, 1992; Doolin, 2003), the introduction of the *Lotus notes* system (Hayes & Walsham, 2000), a computerized trading system on the London insurance exchange (Heracleous & Barrett, 2001), the pesticide DDT (Maguire, 2004), and photo-imaging technology (Munir, 2005; Munir & Phillips, 2005). Each of these studies demonstrates how a discourse inscribes order and relations of power into a given technology. A discourse shapes how actors may understand and use a new technology. For instance, when the discourse around DDT shifted from representing the chemical as an efficient weed-killer to a dangerous and environmentally repugnant substance, its formerly prodigious use was curtailed (Maguire, 2004).

In this article I would like to build on these studies and ask how we can understand the political process of inscriptions around the internet site of a public service broadcaster. I argue that there are potent processes of political contestation and resistance involved in technical inscription. These political processes involve a series of vying inscriptions mobilized around a particular technology. I investigate the struggle which occurred during a public inquiry into the ABC Online, the website of the Australian Broadcasting Corporation (ABC) which is Australia's largest public broadcaster. Drawing on discourse analysis, I find that four highly charged discourses were mobilized in a sequential fashion during the inquiry. This involved shifting the broadcaster's website from being a technology used to achieve public service goals to being a revenue generator. I conclude by drawing out some of the central aspects of the inscription process. In particular, I point to the continued struggle around which discourses were fixed, the path-dependent nature of discursive fixes,

and the necessity of an institutional platform like the public inquiry for this struggle to take place.

Case and method

The inquiry into the ABC Online followed a long period when neo-liberal policy thinking dominated in Australian public institutions. Neo-liberalism led to wide-spread organizational restructuring aimed at making arms of the Australian government more commercially oriented (Pusey, 1991). At the ABC, neo-liberal restructuring resulted in a shift away from an ethos of public service broadcasting and towards a more entrepreneurial or market-focused ethos (Williams, 1996). During the 1980s, this shift involved wide-ranging changes in the structure and operations of the broadcaster intended to make it more efficient and entrepreneurial. Since about 1992 senior management sought to position the ABC in the global marketplace by attaching notions of enterprise to discourses of globalization (Spicer & Sewell, 2003). A major focus of these changes during the 1990s was the broadcaster's popular website, the ABC Online. Senior managers attempted to connect the ABC Online with the dominant discourse of globalization, thereby developing an explicitly commercial focus for the website. One result of this commercialization process was that ABC senior management entered into negotiations to establish a commercial arrangement with Australia's largest telecommunications company, Telstra. The projected result was that the website would become increasingly embedded in a network of commercial arrangements. The tension between the increasingly dominant commercial approach and the receding public service approach exploded following revelations that a proposed joint venture deal between the ABC and Telstra would involve the ABC providing content for use on Telstra's 'Bigpond' website in return for considerable monetary reward and the possibility of access to new technologies. Eventually these tensions formed the basis for a public inquiry conducted by the Australian Federal Senate.³ The discourses mobilized in the lead up to and during this inquiry will be the substantive focus of this article.

The public inquiry was a major juncture where the seething conflicts between public service discourse and entrepreneurial and globalization discourses came to a head. Most actors realized that the outcome of this conflict would influence the development of the website in years to come. This makes the public inquiry an ideal site to examine the conflicting inscriptions (Gephart, 1993; Brown, 1998, 2000, 2004; Brown & Jones, 2000; Ainsworth, 2001). In order to investigate the different discourses deployed

during the inscription of the ABC's website, I shall use the methodology of discourse analysis (Fairclough, 1995; Phillips & Hardy, 2002). I do so because discourse analysis has proved to be a particularly effective tool for charting processes of social construction involved with the inscription of technology (Bloomfield, 1995; Grint & Woolgar, 1997; Heracleous & Barrett, 2001; Munir & Phillips, 2005). The senate public inquiry is an ideal site to examine the competing discourses around the ABC Online because the major parties with different interests in ABC Online were all involved. The inquiry included ABC management and their representatives, spokespeople for two employee unions (the Media and Entertainment Arts Alliance and the Community and Public Sector Union), a spokesperson for the consumer pressure group Friends of the ABC, a media commentator, a dissenting ABC employee, and representatives of the proposed commercial partner Telstra. Therefore the inquiry provides a unique opportunity to examine the struggle between a wide range of competing discourses mobilized around the ABC Online. In order to examine the discourses mobilized during the 2000 Australian Senate inquiry into the ABC Online, I collected the major texts that were produced. These included the parliamentary debate that led to the establishment of the senate inquiry (*Hansard*, 11869–11870; 11974–11986), the transcript of the senate inquiry itself (ECITARC, 10 February 2000, 17 March 2000), and the resulting reports to the senate (ECITARC, April 2000, March 2001).

I augmented my study of the inquiry with background evidence gathered between 1992 and 2001 including media releases and speeches issued by ABC senior management and the broadcaster's annual reports. Following the procedures of discourse analysis (Phillips & Hardy, 2002), I identified the passages in the texts related to the ABC's website. These passages were then coded on the basis of emergent themes identified within the text. These emergent themes were taken to be the major discourses related to the website. I also identified who articulated these discourses. Finally, I examined the appropriate use inscribed onto the ABC's website by each discourse. This analysis identified four successive inscriptions of the ABC Online – as part of the new media environment, as a commercial technology, as part of an information corral, and finally as a vehicle for advertising. I will examine each of these subsequent inscriptions in what follows.

Inscription one: The new media environment

The ABC's website is called the 'ABC Online'. When the ABC Online emerged during 1995 it 'stress(ed) the decentralised, unfinanced, "bottom

up” nature of the inception of the site, its quality of parasitism on pre-existing ABC programs, [and] its reliance on public service ethics and its privileging of content over technology’ (Burns, 2000: 91). However, ‘this “random” part of the history was short-lived, and the ABC website soon became a field of organizational strategy’ (Burns, 2000: 92). Central to the process of becoming part of organizational strategy was the way in which the ABC Online was increasingly inscribed by the dominant language of a ‘new media environment’. This language posited that the ABC could no longer just compete in a national media market place. Instead, the broadcaster had to face a media ecology characterized by tumultuous cross-border flows of content and giant multinational media corporations. In order to survive, the ABC must abandon the ethos of public broadcasting and adopt a more commercial focus. As senior management recognized the potential of the ABC Online, they also began to see it as an emergent technology that would allow the ABC to compete in the new media environment:

There will be no long-term future for the ABC unless it adapts to the challenging environment of new media. For the ABC this includes the internet and additional TV channels available through digital technology. Now for the first time, abc.net.au has registered 7.1 million accesses in a single week and, for the fifth year in a row, has been rated as Australia’s best media Internet site. It has gone way beyond the point of being an add-on. It is the third ABC network.

(Shier, 9 December 2000)

The ABC Online was held up as emblematic of the future direction of the ABC. In various places we find the ABC Online constructed as ‘a signpost to the future’ (Media Release, 9 November 1999), the ABC’s ‘first foray into this new media world’ (Media Release, 11 February 1999), and a central strategy for repositioning the ABC in ‘the vortex of the information age where there is only one certainty. Demand for more entertainment, and especially more information, will keep growing’ (Johns, 15 March 2000).

As well as allowing the ABC to survive and compete in the global media market, the ABC Online was represented as a panacea to cure a variety of ills associated with the globalized media. The ABC Online was also represented as a medium that would help avoid ‘this country being swamped with online content from the rest of the world’ by ‘extend[ing] and expand[ing] both the depth and range of its content and the number of outlets that we’ve got available for it’ (Schultz, 8 February 2000). Finally the ABC Online had the potential to be a ‘great public resource [because] . . . users can go back into the archives at will and retrieve or review past programs, content, transcripts and audio files’ (Media Release, 11 May 2001).

Although there were competing discourses like ‘localism’, ‘civic use’, and ‘Australian culture’ that inscribed the website in different ways, the new media environment discourse slowly took precedence. This discourse was solidified and materialized as senior management entered into a series of co-productions and licensing agreements whereby ABC Online content was used on other commercial websites such as Yahoo. The largest of these commercial deals was a proposed arrangement between the ABC Online and Telstra that involved the ABC selling content to Telstra as well as engaging in some co-productions and e-commerce ventures. The Managing Director, Brian Johns, represented this deal in largely commercial terms by declaring:

I think it’s interesting and much more exciting to think that if you see the Telstra arrangement as us being on the ground floor in selling content. Our content is being valued and let me tell you that our content is being valued far more under this arrangement than it is in others.

(Johns, 15 March 2000)

The proposed ABC–Telstra deal came to public attention after the proposed contract was leaked to the Australian media during February 2000. The resulting news story was a catalyst for wide-spread discontent about new media environment discourse being attached to the ABC’s website. Such discontent found its way into the Australian Federal Parliament during the sitting of the estimates committee that assigns upwards of 80 percent of the ABC’s funding. The Opposition spokesperson for communication, Steven Smith, pointed to the possible conflict between the ABC’s civic role as an independent voice and the commercial influence that a proposed deal with Telstra may introduce. This clash between the ABC’s traditional public service role and the possible influence of the commercialized new media environment was also picked up in later Senate debates. During parliamentary debate the Minister for Communications, Senator Richard Alston, pointed out that ‘we certainly take the view that the ABC from the board down are very conscious of the new opportunities and the fact that, if they do not embrace the online world, they could very easily be left behind’ (*Hansard*, 11869). The importance of the new media environment was echoed by the opposition minister Senator Mark Bishop who pointed out that ‘these new realities can be only understood through the prism of lack of ABC funding certainty . . . the only reason these new commercial realities may well threaten the independence of our national broadcaster’ (*Hansard*, 11975). Bishop represented the proposed deal as emblematic of many contradictions because it ‘raise[s] unresolved issues of advertising revenue streams, the nature of the commercial agreements and understandings by both parties to those agreements, the apparent breaches and confusion by content

purchasers, and the effectiveness of the ABC in the online environment' (*Hansard*, 11978).

This conflict between the 'new realities' of the new media environment and the independence of the ABC led to the establishment of a Senate inquiry oriented around the following issues:

- a) any existing commercial arrangements for the production, supply or distribution of Australian Broadcasting (ABC) material online, including, but not limited to, mechanisms for ensuring ABC editorial control and independence;
- b) any proposed commercial arrangements for the production, supply or distribution of ABC material online, including, but not limited to, mechanisms for ensuring ABC editorial control and independence;
- c) and any extension to legislation which could be considered to ensure that the ABC is effectively provided an independent, innovative, and comprehensive service in the online delivery environment (ECITARC, April 2000: iv).

The inquiry ran for two days (10 February 2000 and 17 March 2000). It was conducted by a Senate committee made up of representatives of the main political parties. Interested parties were asked to make written submissions. The committee requested additional verbal evidence from representatives of ABC senior management, ABC Online, Telstra, the two major staff unions (the Media Entertainment and Arts Alliance and the Community and Public Sector Union), a community pressure group (The Friends of the ABC), two producers who worked at the ABC, and an independent media commentator. The senate inquiry set up a sphere where these opposing groups could contest how the website might be used in the future.

Once the inquiry got under way, new media environment discourse continued to play an important role. All the parties involved in the inquiry mobilized new media environment discourse very early on in their presentations. At the outset of the inquiry, Julianne Schultz, the acting head of corporate policy and communications for the ABC, framed the inquiry in terms of the rapidly changing nature of the new media environment by maintaining that 'we need to be cognisant that the media environment in which we and everyone else is operating is going to change quite fundamentally over the next decade' (ECITARC, 17 March 2000: 5). Given this evaluation of the ABC's operating environment, Schultz argued that it was imperative that the ABC establish itself within the new media environment because 'the whole online environment and broadband environment [is] one which [is] going to move very quickly' (ECITARC, 17 March 2000: 3) and the 'the ABC need[s]

to establish a presence in this new environment' (ECITARC, 17 March 2000: 3). Due to the new media environment, the ABC has 'moved towards a model where we are expecting content to be available across a number of different mediums' (ECITARC, 17 March 2000: 4). In each of these instances, senior management mobilised new media environment discourse to inscribe the ABC Online as a technology that would allow the organization to position itself in the global media market. While the new media environment was certainly the dominant discourse attached to the ABC Online, it only set the stage for even more narrow definitions of the website, and the uses it should be put to.

Inscription two: Commercialism

Once the new media environment had become a dominant inscription, a second inscription arose. This characterized the ABC Online as a commercial serfice. The first speaker to introduce this discourse was Julianne Schultz, the acting head of corporate policy and communication at the ABC. During her first presentation to the inquiry, she clearly pointed out that the new media environment was largely commercial in nature, and that the ABC must align itself with these commercial characteristics. The need to adopt a commercial approach was driven by the fear that 'in this emerging online environment, ABC content will become increasingly less visible. You will increasingly find that there are many other entry points to the online world where people go for their online shopping – whatever it may be' (ECITARC, 17 March 2000: 4). In order to develop this commercial arrangement, Schultz pointed out that it may be necessary to pursue an increasingly commercial approach which 'would involve a fundamental change in direction to move into a very commercial space where very large amounts of money are being spent at this stage for very little return but for a great speculative gain' (ECITARC, 17 March 2000: 18). The apparent dominance of commercial considerations made it necessary for the ABC Online to be positioned within this global market:

[W]e recognise that the commercial space is growing and that we want, within that commercial space, the people who only ever go into the commercial space to be able to get to ABC content efficiently. One of our assessments is that, if we can have our content present in the key gateways that many people use with a click back to the ABC site, we will maximise our audience over here in our core business.

(ECITARC, 17 March 2000: 18)

The discourse of commercialism inscribed the ABC Online as a technology that must be linked with commercial ventures to 'ensure that our content remains relevant and available' and gain some 'click backs' to the ABC site.

The Telstra representative, John Rolland, supported this commercial inscription. He pointed out that the new media environment would involve a proliferation of devices that would be controlled by large media conglomerates. By adopting a more commercial approach the ABC Online could take advantage of this, and allow the broadcaster to 'really spread ABC content across a lot more users than they see today' (ECITARC, 10 February 2000: 54). In order to develop a presence across a range of devices the ABC would need to explore commercial uses of its website, such as e-commerce. Rolland recognized this link was tenuous at present, but he argued that it would continue to strengthen in the future:

In the negotiations, both parties were looking three, four, and five years down the track and trying to figure out how an agreement today could cope with a very changed world in four or five years time. Clearly, one of the issues is: should the ABC decide to allow advertising and e-commerce revenues to be generated? . . . We have a place holder in here on how to deal with it if the ABC chooses to change their charter, but we understand we could run five years on this agreement with no advertising and e-commerce revenues.

(ECITARC, 10 February 2000: 63)

As well as ABC senior management and Telstra supporting commercial inscriptions of the ABC Online, we also find that the representative of one of the ABC staff unions, the Media Entertainment and Arts Alliance (MEAA), confirmed that 'there is an acceptance that commercial arrangements are going to be part and parcel of the online world' (ECITARC, 17 March 2000: 30). Each of these actors clearly attempted to inscribe the ABC Online as a commercial technology embedded within the 'commercial realities' of the online world. This would necessitate the ABC Online adopt a commercial approach which would involve a whole range of changes to the website including using business-like practices, engaging in alliances with businesses, and engaging in a host of commercial arrangements such as e-commerce, selling content as well as advertising.

In contrast to the positive or neutral links made between commercialism and the new media environment, the ABC producer Jonathan Millard claimed that a commercial focus is 'a disease which is very damaging in the ABC . . . It is a disease of which the Telstra and commercial online deals are

merely a symptom' (ECITARC, 17 March 2000: 39). Instead of representing commercialism as a reality that the ABC Online must engage with, Millard argued that commercialism was driven by the interests of 'management and the marketers and their empire preservation, the money making and also the preserving of output, which cutbacks had necessitated' (ECITARC, 17 March 2000: 40). Similarly, Stuart Fist (a media commentator) pointed out that various parts of the ABC had been increasingly dominated by commercial discourse (ECITARC, 17 March 2000: 56). Finally, Quentin Dempster (an ABC producer) argued that the negative results of commercial inscriptions of the ABC's technology were 'changing the nature of the material to meet the commercial business plans of our customers [Telstra]' (ECITARC, 17 March 2000: 36).

We can therefore see that there were two conflicting inscriptions of how the ABC Online was positioned in relation to the new media environment and commercialism. On the one hand Schultz, Rolland, and to some extent the MEAA representative constructed an immutable link between the ABC Online and commercial uses. This inscribed the ABC Online as a technology that should be put to a commercial use. In contrast we find that Millard, Fist and Dempster presented a link between the website and commercialism as a strategy that would devastate the ABC Online's current public service role. This group clung to an inscription of the ABC as a public service technology.

Inscription three: Information corrals

The relatively tenuous link between the ABC Online and the commercial use that ABC senior management and Telstra representatives had managed to forge was solidified through a third inscription process. This involved inscribing the website as a small player in an internet environment increasingly dominated by large commercial sites. As the commercial inquiry proceeded, a common discourse about the changing nature of the internet arose. This represented the internet as moving from an open anarchic space populated by users who jump between a series of smaller sites towards a closed space dominated by large commercial sites that control the internet by forming 'information corrals' that users seldom leave. The term 'information corral' was rapidly picked up by different groups during the inquiry as they attempted to specify what these information corrals might be and how they would shape the possible uses of the ABC's website.

Telstra's spokesperson represented information corrals as encompassing broad parts of the internet user population. These corrals would involve 'a number of different devices, including wireless, broadband and narrowband'

and 'people want(ing) to come online and do a number of things, including communicating and seeking out information' (ECITARC, 17 March 2000: 53). They argued that only very large and well-resourced sites like Telstra's own 'Bigpond' site could support all the expensive technology necessary to construct an information corral. The implication was that if the ABC Online was to succeed in an internet environment dominated by large corporations, it must have its content incorporated into an information corral.

The information corral was also picked up and developed by the media commentator, Stuart Fist. Large sites such as Telstra's 'Bigpond' were represented as 'balkanising' the internet for private profit:

The Telstras, the AOLs and all of these big companies are trying to – what we call – balkanise the Internet. The Internet used to be an open network that was available to everyone to travel wherever they wanted to and it was completely free. Then commercialisation gradually came in and what these people are trying to do is build the little walled suburb which is their own users, and to supply as much as they possibly can to keep their users within those little walled suburbs.

(ECITARC, 17 March 2000: 52)

By inscribing these large internet sites as 'balkanisers' of the internet, Fist began pointing towards the possible negative effects of information corrals. This point was driven home with reference made to 'banners' on websites which allowed 'easy online gambling, systems of micro-payments, customized advertising and a whole host of other 'dirty tricks' that ABC journalists were yet to come to terms with' (ECITARC, 17 March 2000: 53).

Although critics such as Fist were rather wary of the informational corral, they ultimately enforced the reality of these information corrals. For instance Fist put forward a case that 'the national broadcaster should be mandated into [informational corrals]' (ECITARC, 17 March 2000: 71). Another staunch critic of information corrals, the Community and Public Sector Union also accepted the reality of information corrals:

The future is in all likelihood going to become dominated by these corrals and, for that reason, we think it is better that the ABC be located within the corral rather than outside the corral because increasingly people will find it more and more difficult to escape the dominant corral.

(ECITARC, 17 March 2000: 71)

We therefore see that even staunch critics accepted that the information corral was the reality that the ABC online must operate within.

Here we find a process whereby the ABC Online was re-inscribed as a technology that must be positioned within a large commercial information corral if it was to survive. This was supported by celebratory espousals produced by Telstra representatives as well as the more critical arguments made by one of the Unions and the media commentator, Stuart Fist. By making the begrudging agreement that the ABC Online should be part of an information corral, previously tenuous links between the ABC Online and commercial usage were reinforced.

Inscription four: Advertising

Eventually all groups involved in the inquiry accepted the inscription of the ABC Online as a commercializing entity that would eventually become part of a large-scale information corral. This opened up the possibility for a fourth inscription to appear – the ABC Online as a vehicle for advertising. While advertising was broadly evoked during the mobilization of commercial inscriptions, it was only one among a whole host of possible commercial activities that might have been considered. It was only with the introduction of this fourth inscription that advertising became the specific and favoured commercialization strategy. This was a particularly interesting inscription because the ABC's government charter specifically prohibited the organization's media outlets carrying any commercial advertising material.

The process of inscribing advertising into the ABC Online began with a member of the ABC's senior management (Schultz) differentiating the ABC Online from 'traditional radio and television where distribution mechanisms are limited and proscribed' (ECITARC, 17 March 2000: 4). This split allowed the recognition that the broadcaster should attempt to recover the 'commercial value in the ABC online content' (ECITARC, 17 March 2000: 5). One of the central strategies Schultz puts forward for capitalizing on the commercial value of the broadcasters content involved introducing advertising material onto the website.

The possibility of featuring advertising on the website was challenged by inquiry participants who questioned the wisdom of advertising appearing on the ABC Online. These critics claimed that advertising 'corrupted' individual web pages, the broader website, and the organization as a whole. The proposed ABC–Telstra deal was represented as a 'further step' in the rise of commercial influences within the ABC:

This deal [with Telstra] potentially gives Telstra more influence over the ABC than a commercial advertiser would have on a commercial

station because it allows Telstra to actually make suggestions about programs, as any co-producer can do . . . It gives them access to discussions at heart about the origin of content. It then gives them – potentially, depending on the way the guidelines are shaped – certain influences on the editorial process.

(ECITARC, 17 March 2000: 73)

A representative of the consumer pressure group, Friends of the ABC (FABC), ventured a parallel inscription of advertising as something which ‘distort[s] what we see by interrupting the flow and it damages our enjoyment or appreciation of content’ (ECITARC, 17 March 2000: 59). The FABC representative also raised the ‘question of power – the power of the advertising – and this whole question of self-censorship’ (ECITARC, 17 March 2000: 59). The ultimate result was a shift to a commercial ethos and a situation where ‘the emphasis slowly begins to change and they start to move away from your traditional public service broadcasting, like educational programs and children’s programs, and get more and more into the populist sort of thing’ (ECITARC, 17 March 2000: 63). Ultimately, these critics attempted to throw into question the necessity of advertising in a commercial information corral. They did this by constructing advertising as a ‘corrupting influence’ that may lead to the abandonment of traditional public sector tasks.

While there seemed to be two quite clear lines of inscription of the ABC Online in relation to advertising, what was more opaque was exactly what counted as advertising on the ABC’s website. One of the major points of contention during the inquiry was whether the on-selling of the ABC’s content to other internet sites like Telstra or Yahoo (which ended up appearing alongside advertising on these commercial sites) was or was not advertising.

The process of fixing upon a common definition of what exactly constituted advertising can be seen in a dialogue between Harry Bardwell (the head of multimedia services at the ABC) and the Chair of the public inquiry:

Mr Bardwell: . . . Somebody entering Yahoo and looking for Australian news would see a listings page at the front of the Yahoo site where ABC is notified. There is probably an advertisement at the top of that page. That is within the guidelines.

Chair: Where is the advertisement, Mr Bardwell?

Mr Bardwell: Look at the top of the screen underneath Yahoo. Is it an ad, or isn’t it an ad? I cannot tell.

Chair: It says, 'Click to go to 5,000 jobs.'

Mr Bardwell: Sometimes they have ads there. If they cannot sell the space, they have not got ads. That space could have an ad in it or it may not have an ad in it, but that is the ad space on that page.

(ECITARC, 17 March 2000: 8)

By speaking of these arrangements as a 'licensing arrangement', Bardwell distanced the ABC from advertising. So even though there was advertising present alongside ABC material ('click to go to 5,000 jobs'), this advertising was placed on the site of Yahoo, not the ABC.

The ambiguity around what exactly constituted an advertisement can also be seen during an exchange between Telstra's representative during the inquiry and the Chair of the inquiry. When asked by the Chair what exactly constituted an advertisement, Mr Rolland (the Telstra representative) replied:

That is a good question. It is covered within the existing terms sheet, and we expect it to be absolutely defined within the contract. It is acknowledged that we cannot show advertising on the same page that there are full ABC stories.

(ECITARC, 17 March 2000: 60)

The Chair then asked what exactly constituted a story, to which Rolland replied:

We work that out based on the guidelines that the ABC have. We are yet to see those guidelines in full. That is part of the operationalisation procedures work group that we set up, as well as it being expressed within the contract. We have a philosophical understanding and commitment not to run advertising on the same page as ABC content. As I understand it – and I will ask the ABC to correct me if I am wrong – there is a provision for one-line news headlines within the front page where there may be other advertising but certainly not full stories or any other full streams that come through. But I stand to be corrected.

(ECITARC, 17 March 2000: 60)

What emerged from this exchange was a relative certain and stable inscription that advertisement should not be placed directly alongside a full-length ABC story (by appealing to a 'philosophical understanding' and 'guidelines'). However there was a wide zone of ambiguity left in various content configurations.

Jonathan Millard, the ABC staff representative, unpicked the apparent separation that Rolland suggested between a full-length ABC story and a news item. Using a computer connected to the internet, Millard showed that there was in fact a direct pairing of advertising and ABC content:

We have now moved to Equity Café as the guest of and travel via the ABC. Here you can see we have advertising for a commercial organisation called Equity Café. We will go to 'business news', because a lot of people want to get their business news. If you go there once, you will know that this is good business news, it is the ABC's. You can see clicking over the top the names of financial companies. You can see 'BT'; the other day it was Westpac. So you have one or two different, clicking ads.

(ECITARC, 17 March 2000: 43)

Millard picked up on Equity Café's use of the ABC's material to demonstrate how advertising on the internet alongside ABC material was in fact similar to advertising on television and radio. The connection between internet advertising and television advertising surfaced again in Millard's argument that 'to work through the news [on the Equity Café site], you have to go back to that site and cop⁴ another ad. Each item, you have to cop another ad. It is a bit like Channel Nine putting an ad between each news item' (ECITARC, 17 March 2000: 44). Schultz then attempted to sideline this potential breach of guidelines as an accidental product of how individual internet users configure their browsing software:

Equity Café did not change anything, nor did the ABC. Equity Café set up their system to work as suggested by Mr Millard – that is, a window appears within the full screen – but whether a news story opens in a small window or a full window depends on the sort of browser software and the set up of the individual computer.

(ECITARC, 17 March 2000: 82)

We therefore find an appeal to pragmatic reasons for the possible intrusion of advertising.

Ultimately there were a number of conflicting inscriptions of what constituted advertising on the ABC Online. As we can see, each of these inscriptions led to quite different ways of examining how advertising might be used alongside content generated by the ABC. This meant that while the former three inscriptions of the new media environment, commercialism, and information corral were progressively stabilised as the inquiry proceeded, the

final inscription of the ABC Online as a vehicle for advertising remained contested and unstable.

These successive stages of technical inscription were reflected in the interim and final reports produced by the inquiry and tabled in the Australian Senate in April 2000 and March 2001 respectively. As well as providing a summary and analysis of the major issues that arose during the inquiry, these reports presented the recommendations made by the Australian Democrats and the Australian Labor Party. The Democrats recommended limiting the sale of content to Telstra. They also recommended removing all reference to advertising, unspecified future joint ventures, cross-promotional ventures, Telstra's Easymail, and future collaboration around data-casting. Finally they recommended a forum be created where staff could express concerns about the ABC as well as further guarantees of privacy in contractual negotiations. The Labour Party recommended that prohibitions on advertising on radio and television be extended to all delivery platforms and that the functions of digital broadcasting and new media be written into the ABC's constitution. While there was some variation in the recommendations made by both parties, there was clearly a concern that ABC Online content remained advertising free. This reflects the fact that the advertising inscription did not achieve the same kind of broad consensus as did the previous three inscriptions.

Discussion

The empirical analysis shows that we cannot draw a line (no matter how porous) between the use of a technology like the ABC's website and the political processes of negotiation and contestation which went on around it. Rather these processes of negotiation and conflict were actually processes that shaped the possible uses of the ABC Online. Each inscription of the website during the inquiry literally made it into a quite different technology that would serve quite different purposes. Inscriptions of the website as part of the new media environment made it into a tool for positioning the ABC as a whole in the global marketplace. As this broad inscription was (begrudgingly) accepted by most of the participants in the inquiry, the ABC Online came to be seen as a website that should be able to compete within an international media market. The next inscription saw the ABC Online defined as a largely commercial enterprise instead of a public service. While there were some uncertainties around the commercial nature of ABC Online, these were stabilized as the inquiry moved on to the issue of information corrals. This figure was adopted and promoted by the senior management and the representatives of Telstra. After some questioning, it was reluctantly accepted by

a group of critics. The final inscription of the ABC Online was as a vehicle for advertising. In this case, we saw just how ambiguous the uses of a technology can be. While participants in the inquiry vigorously advanced a commercial inscription of the ABC Online, others struggled to break the link between the ABC Online and advertising. While inscriptions associated with the new media environment, commercialism and information corrals were begrudgingly accepted, there remained a degree of contestation and uncertainty around the inscriptions of the ABC as a site for advertising.

This political process of inscribing a technology like the ABC Online did not seem to involve a technical standard being accepted and passed over in silence as Joerges and Czarniawska (1998) suggest. Rather, there was a cacophony of voices which openly contested and questioned and re-inscribed how the ABC Online could be used. While there were a number of points in time when inscription processes moved in a relatively similar direction, there were other points when there was a struggle between profoundly different inscriptions of the technology. This suggests that it was a rather fragile political achievement when one inscription of the ABC Online had been accepted and passed over in silence. This fragility reminds us that a dominant technological inscription is not unquestioningly accepted by all actors (Joerges & Czarniawska, 1998). Nor is a dominant inscription simply the victory of one discourse over another (Munir & Phillips, 2005). Rather, a technical inscription seems to be a fragile and momentary 'truce' between a number of contending actors. This suggests that any given technical inscription is at least potentially open for contestation. This means alternative and resistant discourses can and do appear in ongoing attempts to shape a technology. Consequently, an accepted technology is not a stable entity with a fixed meaning and set of standardized uses. Instead, it is an object that is always potentially contested.

A second theoretical observation that arises from the present study is that technological inscription proceeds in a path-dependent fashion. During the public inquiry we saw a progressive narrowing of inscriptions of the ABC Online. It began with the ABC Online being inscribed as a core strategy for positioning the ABC in the new media environment, then the website was inscribed as a commercial operation, then it was inscribed as part of an 'information corral' and finally some groups attempted to inscribe it as a vehicle for advertising. For each successive inscription to appear, other prior inscriptions had to be in place, and ideally agreed upon and fixed. For instance, before the ABC Online could be plausibly inscribed as a site for advertising, proponents found it was useful if there was broad agreement around the fact that the ABC was inscribed as part of a commercial information corral. If this begrudging agreement was absent, attempts to inscribe

the ABC Online as a space for advertising would have been either rendered impossible or impractical. Advertising would have been seen as an issue that was completely off the agenda. Because a commercial inscription was present, it became possible for ABC senior management and Telstra representatives to make a convincing case for the presence of advertising on the ABC Online. The importance of prior inscriptions suggests that the process of technical inscription may proceed in a path-dependent fashion.⁵ That is, prior discourses shape the kinds of discourse that are able to appear. This may suggest that as well as there being technical (David, 1985; Arthur, 1989) and institutional (Garud & Rappa, 1994) lock-in during the development and shaping of a technology, there may also be a process of discursive lock-in. This may occur as past discursive inscriptions that were accepted and simply 'went without saying' condition further technical inscription. The kinds of technical inscriptions that could appear around a technology are therefore heavily dependent on which discourses appeared earlier.

If technical inscription occurs in a path-dependent fashion, there are a number of important implications for the politics of inscribing technologies. The path-dependent nature of technical inscription reminds us that although a technical inscription may be an uneasy truce that is always potentially open to re-inscription, any re-inscription efforts can only draw upon a very limited range of options. Because they are path-dependent, the options that are available to groups who want to contest currently dominant inscriptions are conditioned by past inscriptions. This means previous inscriptions become locked in, and are treated as conditions for action, not the object that may be contested. The result is that resistant groups can be, and often are, led to accept technical inscriptions they had fought bitterly to overturn. Moreover, any political action taken around new issues merely serves to further lock in an inscription that they had previously contested. Resistant groups are therefore in the paradoxical position of being able to potentially contest lock-in around a technology but also being instrumental in further locking-in inscriptions they had rallied against.

In the case of ABC Online there was an extensive dispute around the uses the technology could be put to. The fact that there was even the possibility of publicly discussing the uses of the ABC Online may be because the ABC is a public organization with at least a nominal commitment to public accountability. Moreover the process of inscription examined in this paper occurred during a public inquiry. As previous studies have demonstrated, public inquiries are typically important sites for collective and conflicting sense-making and mobilization of discourses (Brown, 2000, 2004; Ainsworth, 2001). This leads us to suspect that the very fact various discourses could emerge was dependent on the institutional platform

provided by the public inquiry. Perhaps it was only because an appropriate institutional platform was in place that various conflicting discourses could appear.

The importance of an institutional platform for discourse can be found in classical concept of discourse. For many classical philosophers, discourse was at its most basic a process of reasoned interchange. However, this reasonable conversation could not take place anywhere. It required the institutional platform provided by 'The Public'. It was only when the speaker inhabited the institutional platform of the public sphere that they could engage in discourse. Hannah Arendt (1958), for instance, points out that the ancient Greek public square or 'agora' was where political contestation, or discourse, could take place. Indeed the very *raison d'être* of public space was as a place where people could meet and engage in discourse. The public sphere has taken on different forms such as the Greek agora, the Roman forum, and the coffee house in Europe. In modern societies we find that newspapers, television and perhaps websites begin to constitute the public sphere. For Habermas (1991), these spaces lay down the very foundation that allows discourse about a contentious issue of the day to appear. Therefore, in order to understand where discourse about a contentious issue like the commercialization of the ABC Online can emerge, we need to account for the role institutional platforms play in allowing contestation. Indeed, the public sphere has served as an important platform for inscription and re-inscription of technologies. Some examples include the debate around genetically modified crops, inquiries during the 1960s into DDT (Maguire, 2004) and large-scale technical failures (Brown, 2004). This suggests that the process of technical contestation relies upon the institutional platform provided by the public sphere, and the public inquiry in particular. In situations where these institutional platforms do not exist, it may become extremely difficult to question, let alone contest, dominant patterns of technical inscription.

Conclusion

Writing about the largely commercial uses the internet has been put to in higher education, Andrew Feenberg argued that 'one can also envisage a very different outcome modelled not on the factory but on another modern institution, the city' (2002: 114.) What Feenberg is pointing to here is that a technology like the internet does not have any obvious or natural use. Instead, technologies are profoundly shaped by the political, economic, and social context in which it is mobilized. Throughout this article we have seen that

the ABC Online was so thoroughly imbued with different inscriptions that it makes no sense to see technology use being determined by the nature of technology itself. As various actors deployed discourses around the website during the public inquiry, the ABC Online was made and remade into very different technologies. Moreover, different interest groups articulated divergent inscriptions of the ABC Online. As each group attempted to advance its own inscription, quite different uses of the website came to the fore. This drove a continued narrowing of the possible uses of the ABC Online. The technology moved from being positioned in the new media environment to being a commercial entity that existed within an information corral, to being an outlet for advertising. Ultimately, what we can see is that the increasing dominance of commercial goals in the use of an internet technology like the ABC Online involved path and platform dependent processes of political inscription.

Notes

- 1 This article was originally presented at the 3rd Critical Management Studies Conference in Lancaster, UK during July 2003.
- 2 Discourse may be defined as a system of texts mobilized by actors to construct social reality thereby engendering relations of power (Fairclough, 1995). Discourse analysis in the study of organization has been used to investigate 'the significance of discourse in constructing, situating, facilitating and communicating the diverse cultural, institutional, political and socio-economic parameters of 'organizational being' (Grant et al., 1998: 12). This approach has been extensively used to investigate a range of processes in organizations including the social construction of subjectivity (e.g. Jacques, 1996), interactions (e.g. Ruud, 2000), managerial technologies (e.g. Rees, 2001), inter-organizational relations (e.g. Hardy & Phillips, 1999), institutional fields (e.g. Selsky et al., 2003), and the environment (e.g. Welcomer et al., 2000). Central to each of these studies is the political mobilization of discourses by interested groups to construct subject or objects of concern in a way that advances their political interests.
- 3 At the federal or national level Australia has a bicameral parliamentary system. The Senate is the upper house which examines, approves and amends bills put before it by the lower house.
- 4 'Cop' is an Australian idiom that the Maquire Concise Dictionary defined as 'to be allotted, to receive'. When used it usually has negative connotations.
- 5 For accounts of path-dependency in relationship to studies of institutional change see the work of North (1990), Pierson (2000) and Mahoney (2000).

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