

Riding the wave: public service television in the multi-platform era

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The future of public service broadcasting (PSB) has been debated over the last 25 years, generally in anticipation of its demise (Murdock, 2004: 1; Tracey, 1998), which has been variously envisaged as institutional withering driven by excessive populism or elitism, elimination in the marketplace from commercial competition, or privatization/commercialization by neoliberal governments. Yet, while public broadcasters continue to struggle for funding and audience in the fragmenting marketplace, it is clear the system has survived the market liberal reforms of the late 20th century; around the world, they continue to register considerable public support (Barnett, 2006: 59; Jacka, 2002: 7; Meijer, 2005: 28; Ward, 2004: 1; Whittle, 2004: 4) and, while digital media technologies and platforms bring new problems, they also offer new ways of delivering the public service remit: multiple channels for delivering diversity and innovation; and new personal and interactive, viewer/user relationships. However, some of the compromises being made – as funding is stretched and supplemented with new commercial services – could well prove undermining in future. As they reconfigure themselves as media content companies, public service broadcasters enter new territory with regard to their audience, their content, their relations with producers and their status in the marketplace, invoking more exacting requirements for governance and accountability, and new commercial enemies.

Beginning with an exploration of how digital reinvention is affecting traditional PSB principles, this article discusses digital and online developments at six public television broadcasters from across four English-speaking countries, to elaborate on what their new status as media content companies forecasts for PSBs. The six broadcasters reflect the breadth of possibilities encompassed by public ownership, each possessing distinctive unique

features: the BBC, the classic model of mainstream public service broadcaster, now subsidized by a highly successful, international commercial arm; Channel 4 as a publisher broadcaster funded by advertising representing the cross-subsidy model; the ABC (Australian Broadcasting Corporation) as a comprehensive and complementary non-commercial national broadcaster; the SBS (Special Broadcasting Service) as a multicultural broadcaster; American public television as the market-failure model and a system offering uniquely local and educational foci; and TVNZ (Television New Zealand) as a briefly born-again public broadcaster with a dual public-commercial remit. As a group they also illustrate the wide-ranging new initiatives emerging across the digital and online platforms of public broadcasters – cross-platform programming; user-generated content (UGC); audience participation; and the delivery of programming on an on-demand basis. Practical considerations too, of course, have influenced this selection: the choice of Anglophone institutions was partly a factor of research convenience and cost, while the television-specific focus arose from the fact that when this research began two of the selected institutions (TVNZ and Channel 4) did not deliver radio services. Channel 4 has since acquired a digital radio frequency. Hence the television emphasis should not be taken as casting radio as a subordinate medium.

Of the various digital platforms discussed here, the oldest is digital terrestrial television (DTT), requiring digitalization of the broadcast transmission system. Introduced across the developed world from the mid 1990s, DTT is generally seen as offering three main benefits: more efficient use of the electromagnetic spectrum through data compression, freeing up space for more channels; improved technical quality in picture and sound resulting from a reduced signal to noise ratio; and enabling viewer interactivity of varying levels depending on provision of a back channel at the reception end. Since 2000, the spread of broadband internet connection via various wired and wireless technologies has spawned the so-called Web 2.0 era, in which it is possible to upload and download media-rich content online. Alongside this development have come subsidiary mobile digital platforms onto which viewers, consumers and users can download and view/interact with Web 2.0 content – third-generation (3G) mobiles and personal digital assistants (PDAs).

The research on which this analysis is based draws on a series of interviews with broadcasting professionals and media commentators across the four countries, and references recent policy documents and literature from the field.

Reinterpreting PSB principles

In 1985 when Alan Peacock was chairing his historic enquiry into the financing of the BBC, the Broadcasting Research Unit (BRU) was called upon to provide evidence for the committee. Seeking to define public service broadcasting the BRU, under the chairmanship of the renowned academic Richard

Hoggart, surveyed 'broadcasters working in both the commercial and public sectors of television' and subsequently identified eight principles (Franklin, 2001: 21).¹ Since this discussion covers six broadcasters across four countries, I have adapted the eight BRU principles to accommodate the recurring elements of public broadcasting charters: universal service; independence from government and from vested interests to enable the provision of fair and impartial news and current affairs; the servicing of the interests of minorities including children, in addition to mainstream audiences; the reflection of national culture and identity; and the provision of quality programming which encompasses a preparedness to innovate and to not be driven by audience size.

Defining PSB is of course a contested field. In its first *Review of Public Service Broadcasting* in 2005, the UK communications regulator, Ofcom, found an 'overarching theme ... competition for quality', which it defined in terms of three things: 'a competitive marketplace, plurality of PSB commissioning and production, and enough flexibility in the system for provision (and providers) of PSB to change over time, as the needs and preferences of citizens change' (Ofcom, 2005). With its emphasis on market competition, this definition fits Karol Jakubowicz's view of the neoliberal position, one that is unsympathetic to the need for 'secure and dedicated financing' (2007: 41). While the BBC is widely seen as the leading model of PSB, British definitions of PSB are nevertheless at odds with those of other nations because in the UK the term is applied to all free-to-air broadcasters, signalling spectrum licensing conditions. Hence UK communications industry regulator, Ofcom, must seek common ground across commercial and public broadcasting institutions. Other national peculiarities in definitions of PSB can also be seen in distinctions made between public broadcasting and public service broadcasting. For TVNZ General Manager of Digital Services Eric Kearley, this distinction – which he acknowledges is not universal – is a key one: 'A public broadcaster generally, is a commercially funded broadcaster but with a clear remit from the government ... whereas a public service broadcaster tends to be government funded' (interview with the author, 2006). On the other hand, Jakubowicz views the reaffirmation and enhancement of 'service' as critical for PSBs' effective survival and transition to the new media age (2007: 38). Such variances in positioning derive from specific national contexts (social, political and economic) and differences in cultural traditions. In this article I have chosen to take a broad view, incorporating both public and public service broadcasters, in order to ascertain the impact of new digital services on public interest goals by investigating how well traditional principles and values fit with cross-platform and on-demand programme provision.

Universal coverage, the provision of a free service accessible to all, is generally considered the most important of the PSB principles because of the social value of mass audience reach as a shared public space for public discourse – a public sphere. In the digital era, free universal access is being challenged by the new on-demand services, since these involve additional user-pays technology

such as the internet or a mobile phone, contributing to the digital divide – the exclusion of those who cannot pay or for other reasons are not online. One response is that on-demand, cross-platform access is the *new* universality. In the social context of the digital era, when media services and the media habits of the fragmented audience are so diverse, access is no longer about scarcity, and universality needs to be addressed across the full range of media platforms in order to aggregate sufficient fragments to reach a general public. The flexible access of on-demand media offers a reinvented form of universality, one that caters for contemporary lifestyles. It can also be argued that, by distributing re-versioned content, such services extend the shelf-life and reach of publicly funded productions, building on word-of-mouth publicity, and thereby help to maximize the value of public investment. However, given the third-party costs associated with these platforms, a necessary rider for the provision of absolute universality is the continued provision of free-to-air broadcasting. Commissioner for New Media at Channel 4, Adam Gee, describes his job in commissioning cross-platform programming as: ‘TV plus something else. So usually TV plus web ... TV plus mobile, TV plus real-life [or any combination of the above]’ (interview with the author, 2006). Andrew Owen, Managing Editor, Interactive Programmes, at BBC Television, observes that Tardisodes – ‘mobisodes or short clips preceding each episode’ – made available online for *Dr Who* fans to download, were extremely popular during the television series broadcast, but became significantly less so when the on-air screening ended. Owen suggests that although a ‘trickle of interest’ in such content will persist, ‘timeliness’ and ‘relevance’ remain largely linked to broadcast television (interview with the author, 2006). As part of what is being called 360 degree commissioning, cross-platform productions thus serve PSB’s goal of universality while also alerting and directing viewers to new media platforms.

Impartial news and current affairs, frequently ranked as the second most important PSB principle, is an integral aspect of the system’s civic role associated with the public sphere, and is generally understood as requiring independence from the vested interests of commerce or government. News and current affairs that is impartial and of good ‘quality’ (well-researched political reporting) goes hand in glove with universality as part of the *raison d’être* of PSB, providing readily accessible resources for an informed and active citizenship – an acknowledgement of the singular nature of the relationship between the media and democracy. Threats to the independence of PSBs remain closely linked to funding in the digital era, with new challenges arising from the new possibilities for ‘monetizing’ on-demand content.

PSB news, one of the content forms most widely re-versioned for cross-platform delivery, offers a tempting source of ready revenue, but the distinguishing quality that makes it valuable, public trust, is particularly vulnerable in such arrangements. As the flagship of most PSBs, trusted news is particularly crucial to channel brands, thus the motivation to quarantine news integrity from

commercial influence is arguably stronger in the digital era, although TVNZ, with its dual commercial-public remit remains an interesting exception, having made radical cuts to its newsroom in 2007 while planning a specialist, digital, factual/news channel for launch in 2008 (Scoop, 2007). In the emerging field of Internet Protocol television (IPTV), where the volume of services is growing exponentially, brand identity is particularly critical for drawing an audience. Rather than being superseded by proliferating niche media, highly trusted PSB television brands built on quality news services would seem to make PSB more important than ever (Jacka, 2006: 8). This key marker of difference is evident in the BBC's channel on the social-networking website, YouTube – launched initially as a means of addressing copyright breaches. The existence of this channel in the midst of user-generated clips and mash-ups signals that recognition of the value of trusted brands and professionally produced content is not incompatible with or superseded by contemporary enthusiasm for UGC's democratizing potential.

Third, serving minority interests – a double-sided principle – reflects the system's broader civic and cultural functions, including the representation of minorities to the mainstream and the servicing of minority groups' special interests. This dual goal has always been something of a tall order in the comprehensive schedule and is another reason for claims of PSB redundancy in the 1980s. With DTT, the internet, IPTV, and on-demand content, the problems of serving the diverse interests of pluralist society on a single channel have been alleviated. Given political will, DTT facilitates the delivery of PSB content across multiple channels, thereby allowing broadcasters to tailor content to suit specific niche audience needs, while also enabling the cross-promotion of content of general public interest to all audiences. Another valuable point of intersection for diverse audiences and interest groups is the always-on interface of the portal websites of PSBs. In this way the underlying ethic of the comprehensive schedule continues to be honoured in a manner that accommodates both the complexities of cultural fragmentation and the personalized appeal of on-demand digital media.

The fourth principle, the reflection of national culture and identity, has been particularly important for PSBs in Australia and New Zealand where cost differences between local and imported English language programming – a factor of the larger domestic markets of the UK and the US – means a hefty proportion of TV schedules is filled by imported content. This principle encapsulates various issues – serving national unity, serving as a site of contestation amongst the different cultural groups represented within a society, promoting the nation abroad and redressing trade deficits. In the second wave of digital media, while still continuing to offer a site of contestation for the various cultural groups and values within the nation, PSBs are taking on a broader role of upholding national difference in the global marketplace. Widely interpreted as undermining the national focus of PSB in the 1980s (Born, 2004: 47), this promotional role has assumed greater cultural and economic

relevance post-2000, as PSBs compete with global media for a share of the fragmenting audience. Digital technology increases the economies of scale enjoyed by transnational media conglomerates, delivering globally transferable content and so serves as a disincentive for nationally based commercial broadcasters to support local production. Public broadcasters, however, are better positioned to invest in and promote national cultural product abroad through co-productions and co-ventures, and as a consequence often set industry benchmarks.² Certainly the role of PSBs as producers and commissioners of 'local content' appears likely to remain a critical one given the economic and trade benefits associated with a healthy audio-visual production sector in the information age. Government subsidy of the sector also brings singular political benefits, refreshing national sentiment, a national branding exercise that helps to legitimate the role of national government in the era of globalization (Bell, 1995: 197; Debrett, 2004: 9–10). The inherent tensions in reflecting national culture – the conflict between inviting national introspection and promoting the nation abroad – are also potentially diminished in the digital environment where different platforms and channels can be directed towards different needs.

The fifth principle, providing innovative 'quality' content, again reflects the system's broader civic and cultural functions. Being wide open to interpretation, 'quality' is a key challenge for public service systems in pluralist society (Born, 2004: 79; Nissen, 2007: 65–82). It is most often interpreted in terms of non-commercial production values – optimizing money on screen, optimizing research and development, and engaging in creative risk-taking – and is applied in factual and narrative programming across popular and high culture genres. That implementation of quality as diversity and innovation is enormously advantaged by the intrinsic traits of digital media – personalizable, interactive, searchable, shareable, mobile and available on-demand – is evident in the growing popularity of UGC and social networking. Channel 4 offers examples of quality as diversity in two television series that also launched cross-platform media projects (Adam Gee, interview with the author, 2006). *Lost Generation* integrates a television series – *The Somme* – with a participatory online project whereby viewers' personal contributions about relatives who fought in the First World War produce an interactive public archive, which connects public media with other public institutions such as libraries and museums. The second project was launched with *Medicine Men* – four-part television series in which 'two young British doctors immerse themselves in radically different cultures in four of the most extreme places on earth' – which gave rise to Medicine Chest, a website that aims to provide a 'repository of traditional remedies and folk wisdom in the area of health and healing', drawing on the content of the TV series, while also hosting 'conversations about these areas and draw together a range of perspectives' (Channel 4, 2008). Reflecting what Graham Murdock (2004) has termed the 'digital commons' – a metaphorical reference to the shared public

space of medieval village life that invokes the value of retaining public domain online – networking such as this fosters stronger community connections and serves civic education in ways previously unknown. One of the most groundbreaking new developments at the BBC, the Creative Archive Project is an online venture that will open up much of the BBC's past programming for non-commercial public use and re-editing as 'mash-ups', a move Murdock deems 'the most important innovation in public service provision since its original foundation', for its 'stimulus to vernacular creativity' (2004: 17). Under the Creative Archive Group's licensing options, access will be limited to UK licence fee payers, who will have the right to use, re-edit and share low-resolution content from specified programmes, on the proviso that it is for non-commercial purposes (Paul Gerhardt, interview with the author, 2006).³

Facilitating innovation, DTT channels offer PSBs a means of testing/trialling new content on a platform where ratings are less important and greater risks can be taken. Similarly, the internet also offers a site for trying out new concepts for relatively low cost. Precursors to YouTube and MySpace, Channel 4's online documentary channel, FourDocs (online documentary channel) and the BBC's Video Nation project pioneered social networking and UGC, yet demonstrate a clarity of purpose, richness of content and cohesiveness rarely found on commercial sites. Digital media technologies thus mean far more to PSBs than multiple channels and flexible delivery, they offer potential for renewed legitimacy by engaging and connecting communities in new ways.

Differences in national approach

The governments of the four countries covered in this study have taken very different approaches in their development of DTT. While the UK has been quick to exploit the benefits digital television offers PSB, elsewhere the economic and political implications have overshadowed public benefits as policy priorities.

In Australia, the two public broadcasters' ventures into digital television have been limited by policy and funding constraints. Despite the detailed submissions of the ABC and the SBS, the special innovative role public service media could have played in developing the digital platform was largely ignored in the high-definition versus standard digital television debate, which was primarily driven by the competing commercial interests of existing media and communications companies. The initial 1998 mandate of high-definition television (HDTV) and the subsequent simulcast compromise of 2000, along with the peculiarly narrow definition of use applied to new licensees of digital spectrum via datacaster legislation, constrained delivery of new content and slowed public take-up (Given, 2003: 139–49). The Howard coalition government's refusal to grant any additional finance for digital production prompted the ABC's 2003 cancellation of its two first digital channels, established in 2002 – FlyTV for young people aged 13–18 and Kidz for those at

primary school (Jacka, 2006: 173). Legislative changes in 2005 and 2006 led to the launch of two new digital PSB channels – ABC2, initially performing a time-shifting function, and the SBS World News Channel, a multilingual headline service. While 2008 has seen ABC2 beginning to cater to niche audiences – youth and children – the potential of public service media to drive the creative and social development of digital platforms remains curtailed by inadequate funding. During the 2007 election campaign, following recommendations from an Australian Communications Media Association (ACMA) review, the former prime minister, John Howard, promised the ABC \$82 million over four years to fund a dedicated free-to-air children's channel on the digital platform. Soon afterwards the ABC's Director of Television, Kim Dalton, announced the proposed launch of a new children's channel, ABC3, pending post-election government support, something the incoming Labor government of Kevin Rudd has since confirmed. The ABC initiated a strategic re-branding of its mainstream television service as ABC1, presumably anticipating an expanding portfolio of digital channels, and announced the launch of a 24/7 'continuous news centre' and an internet TV channel, ABC Playback, prior to any confirmation of additional government funding (Moses, 2008).

Things are very different in the UK. Following the collapse of ITV's OnDigital service in 2002, free-to-air broadcasters launched the Freeview platform that now enables both Channel 4 and the BBC to offer a portfolio of niche channels. With UK digital uptake estimated at 77.2 percent in the last quarter of 2006 (Ofcom, 2007) – this free-to-air multi-channel service has overtaken Britain's main subscription service BSkyB digital (Ofcom, 2007).⁴ For the cost of the set-top box (£30) viewers can get over 30 free-to-air digital television channels. The BBC and C4 use their new digital channels variously – time-shifting programmes that have already screened on the main channel, serving niche audiences (CBBC for school-age children and CBeebies for pre-schoolers, Film4 for film buffs), for trialling new concepts (BBC3), for delivering less populist, 'intellectually and culturally enriching' programming (BBC4), and for cross-promoting content from the mainstream channels (BBC, 2007a). Audience numbers and budgets for the new digital services are considerably smaller than those of the mainstream channels.

The special significance of the establishment of these channels is their free-to-air status. With advertising budgets moving to new media the demise of free-to-air broadcasting has been widely forecast (Given, 2003). This fear underlay the New Zealand government's about-face on digitalization, which had originally been left to the subscription sector (NZ Ministry of Culture and Heritage, 2006: 4). Realization of the national value of a cost-free universal service, which will ensure that 'publicly funded programming remains available on a free and universal basis to all New Zealanders', and a cost-benefit analysis that identified significant gain estimated at over \$230 million after analogue switch off (ASO), has prompted the government to invest in the

digitalization of the transmission system (Jameson et al., 2006: 157, 162) and to contribute funds for two new digital channels on TVNZ. As part of the digital FreeView consortium with other free-to-air broadcasters – CanWest (TV3 and TV4), Maori Television and Radio New Zealand – TVNZ now offers two new non-commercial digital channels – a family and children’s channel, and a sports, news and information channel. Launched in 2007 with government support – NZ\$79 million to be delivered over six years (TVNZ, 2006a) – a few months after the aforementioned job cuts to news and current affairs staff, TVNZ’s venture into digital services has prompted questions about the broadcaster’s ability to meet its charter goals. These two developments provide new insight into the dilemmas invoked by TVNZ’s hybrid commercial/PSB modus operandi, and also into the shifting institutional dynamics of PSBs as they strategize for multi-platform reach. Published in December 2006, ‘Inspiring on Every Screen’ details TVNZ’s five-year plan for retaining its place in the mainstream, aiming to ‘reach more New Zealanders in more ways’ and ‘to transcend television to reach our audience across the spectrum of technological advances (TVNZ, 2006b: 22, 3). In March 2009, New Zealand Prime Minister John Key announced the TVNZ charter a failure, confirming its demise (*Otago Daily Times*, 2009), returning the broadcaster to its 1999 ‘state owned’ status, although many anticipate privatization as the next part of the National Government’s agenda.

Introduced in 1996 with the expectation of a digital switchover (DSO) date of 2006, the uptake of digital television in the United States has been even slower than in Australia, although for different reasons, with multi-channel television services via cable and satellite a well-established reality since the 1980s. With penetration calculated at only 2.4 percent in 2004, the Federal Communications Commission (FCC) was prompted to mandate the inclusion of DV (digital video) tuners in most digital sets (Barksdale and Hundt, 2005: 27). Nevertheless American public television, which represents 348 stations, has developed ambitious plans to increase accessibility and user participation through the Digital Future Initiative (DFI). Plans involve digitizing the back catalogue of analogue content and developing a ‘sophisticated online on-demand distribution system’ – the scale of costs for which are daunting for an organization that already raises a quarter of its revenue from voluntary viewer subscriptions (Barksdale and Hundt, 2005: 25–6). A public lobby group, the Centre for Digital Democracy, questions both American public television’s ability to resource such ambitious digital plans, and the system’s commitment to localism and risk taking – decrying the use of digital channels for time-shifting at San Francisco’s KQED (CDD, 2006: 14–15). The debate indicates how contested every move is likely to be, yet it is hard to see other options for American public television. Espousing the importance of the internet in serving the traditional strengths of American public television, localism and education, Richard Winefield, then Vice-President for Interactive Educational Services at San Francisco’s KQED observed:

My prediction is that in 10 years there won't be 300 public broadcasting stations, there may be 25 or 35 that are broadcasting stations, that the stations serving small and mid sized markets are going to go away because they can't compete, as their content is much more regional. I am not in favour of that, but I am sure that will happen.... The internet is absolutely vital.... The mission is not to run a television station; the mission is to create and deliver great content to viewers wherever they are, whenever they want it. (interview with the author, 2006)

Although this may well eventuate for the viewer-subscription dependent American public television, in other countries, although the revenue model of free-to-air broadcasting is under threat – as advertisers are drawn to the interactive platforms popular with the desirable youth demographic where consumer contact is measurable – nevertheless TV viewing remains a very popular pastime (BARB, 2008; BBC, 2008b). The popularity of 'home cinema' and big plasma and LCD screens offers some support for speculation that HDTV might revive the communal viewing experience for specific genres – sports, wild life and travel – even as small screens and niche media proliferate. For the time being, new narrowcast and on-demand services are extending ways of delivering media services, contributing more media rather than displacing broadcasting, which retains special advantages as the site of first launch.

Diversity and innovation online

In the digital and online environment the public service ethos has evolved and expanded, with the 'holy trinity' of PSB goals devised by the BBC's first Director General Lord Reith – 'to inform, educate and entertain' – complemented with the addition of 'connect' (Born, 2004: 486). Digital media online potentially serves two broad purposes for PSBs: extending the scope for production through both supplementary and dedicated online content; and offering new kinds of relationships with the audience. Contributing to a 'digital commons' (Murdock, 2004) the always-on interface of PSBs' portal websites offer junctions where diverse audiences and/or user groups are exposed to a wide range of ideas, services and communities. Comprehensive public portals or junction sites such as these facilitate the servicing of specific minority audience needs while also cross-promoting general public interest content, ameliorating fragmentation, a key dilemma for the postmodern public sphere. Having interrogated the possibilities of the interactive mode as a new audience interface, Fiona Martin observes of ABC online:

In a networked interactive environment, through both selective response and discursive interaction, users can render themselves visible, and to some extent less mysterious, to the institution and to each other. ABC online provides broadcasters greater insight into the lived and imagined worlds of its listeners and viewers, and the potential to engage with them as user/citizens rather than just audiences. (2002: 48)

Anticipating marketing advantages, Paul Vincent, then Manager of SBS Online, envisaged the hybrid-funded, multicultural broadcaster moving into 'an era of broadband piloting of programmes and programme concepts', facilitating the targeting of particular audience demographics.

I think user-generated content is going to tell us a lot about what the audience is interested in, because they will create the kind of content that they are interested in.... So the talent, the direction the programme takes, is all going to be researched and developed online, which is totally the bottom-up version of audience feedback.... Once we have upgraded all our video, broadband video capability, it's only a small step then to piloting programmes in sort of closed user-groups online. Once you get to know your audience and their preferences deeply enough you can choose a focus group, a very large focus group, statistically balanced focus group, amongst your online membership and you can pilot things much more carefully than you can with the very expensive tools – that of national focus group discussions – that are around at the moment. (interview with the author, 2006)

As mentioned earlier, the BBC's long-standing media access project, *Video Nation*, offers an example of how the interactive mode now better serves diversity. Building on the ideas of the Mass Observation project of the 1930s, *Video Nation* began as a television access series in 1993 with 10,000 shorts made and 1300 screened in its first decade. As a site for public conversation where voices from society's margins can be heard, *Video Nation*, now a hybrid TV/internet project, offers on-demand access to both participants and user/viewers through the always-on availability of the internet. Complementing and extending this access, the occasional screening of participants' stories on television, in the form of short series or thematic compilations serves to keep mainstream viewers aware of these minority voices (BBC, 2007b). Also previously mentioned, *Lost Generation*, another hybrid TV/internet project initiated by Channel 4 in collaboration with the Imperial War Museum signals a different dimension to the concept of the digital commons. Inviting Britons to contribute the stories of ancestors killed in the First World War, through their letters and memorabilia, the project offers a site in which recent history can be brought to life in a personalized form. Offering guides to genealogy, tracing commonwealth ancestors and using war records, *Lost Generation* assists living relatives to fill in the missing gaps in the lives of their ancestors. The site simultaneously alerts the public at large to the role of public institutions, such as the Imperial War Museum, in documenting and archiving the nation's past. Public broadcasters' management of projects such as *Lost Generation* and *Video Nation* that involve user-generated content signals a shift from professionally produced programming to content that is primarily characterized by its interactivity and diverse authorship. Another example of online innovation serving diversity is SBS's *World Tales*, a multicultural and multi-platform project that invited young animators to adapt traditional folktales from around the world, as recounted by SBS Radio listeners. Viewable online in both English and the language of origin, the animated folktales, which

were 5–6 minutes in duration, were also used as TV interstitials (Georgie McClean, interview with the author, 2006). As professional communicators, public broadcasters can play a mediating role, something the ABC's Head of Television, Kim Dalton, sees as central to their new functions in the digital era, bringing cohesiveness to the eclectic mix of online content through the application of PSB values:

I think again ... user-generated content and the connecting potential that this media has, and the potential for the ABC to see part of what it does as actually building communities and engaging with audiences, rather than just delivering content ... and allowing audiences to engage amongst themselves, to facilitate that engagement.... At the same time you have to come back to the fundamentals that in my view underpin our editorial policies framework and the actual values of the ABC as a public broadcaster, and you have to apply those values and apply those editorial policies. (interview with the author, 2007)

Such values are also arguably evident in the huge amounts of background material PSB websites carry for television and radio programming, canvassing a wide range of social issues in a manner quite different from the distinctly promotional flavour of the websites of commercial television, where third-party tie-ins predominate. Making programme transcripts available online, for example, provides viewers with a means of verifying what was broadcast, validating public trust, while also encouraging user feedback and participation. Noting the volume and status of background content now online, David Liroff, Chief Technology Officer at WGBH Education, quotes the executive producer of the weekly public affairs documentary series, *Frontline*, who described the broadcast programme as 'the executive summary of material that the producer had assembled' for the programme (interview with the author, 2006).

Despite the perennial struggle for funding – government appropriations have regularly been well below 20 percent (PBS, 2007) – American public television is an institution with ready access to some exceptional expertise, particularly at WGBH in Boston, the system's biggest production centre, which can draw on nearby Harvard and MIT. Working in the field of educational production, Howard Cutler, Executive Producer with WGBH Interactive, regards the internet as the primary platform for educational content on the basis of the depth of interactivity compared to digital television.

It's very important for the person to be able to pause ... take a different route, come back and ... not have lost the continuity of the experience. So that first dimension was time. The next dimension ... I would call expansion and compression, in the sense that as the producer I am not having to force everything about the subject down your throat in one fell swoop, which is usually the problem with broadcast television. I have got to get everything to you, and not only that, I have to get it to you in a limited span of time.... Once I have control of time it means that then I can also give ... a surface level and a deeper level and a really, really deep level. So the next level of interactivity that's palpable is that ability to layer content from the relatively superficial to the very deep. Beyond that the other things that are really important,

I think for us, include what I would loosely call simulation, which merges over into gaming ... that allows you to master certain kinds of understandings, which are not easily communicated by story-telling. (interview with the author, 2006)

Fortuitously, a much cheaper production platform, the internet is also offering American public television new opportunities to innovate and expand in the delivery of educational content and locally centred programming, the two distinguishing strengths of America's public television system (Richard Winefield, interview with the author, 2006). However, despite cross-platform delivery, continued dependence on corporate sponsorship is likely to continue to frustrate those wanting a more provocative news and current affairs service from public television.

Media content companies

The growing take-up of broadband internet connection, the digital revolution's second wave, or Web 2.0, brings the new era of on-demand media, with television distribution via the internet (IPTV), offering 'always on' availability and global reach (Thompson, 2006: 4) along with media downloads and user generated content. Unlike the first wave – the development of digital infrastructure by telephone companies, internet service providers (ISPs), and governments – the second wave is being driven by media-rich content and user take-up. As noted earlier, the term 'on-demand' encompasses media content accessed across several platforms – TV, computer, mobile phone and PDAs – that is also 'searchable, movable and share-able' (Thompson, 2006: 5). Heralding a radically different relationship between content provider and viewer/user, on-demand media content is characterized by its facility for personalization, its mobility, and the possibilities for interactivity and UGC (Harrison and Wessels, 2005: 835–6; Looms, 2007: 99–104).

To reach the fragmenting audience, PSBs are reconfiguring themselves as media content companies to deliver 'content' as broadcasting and narrow-casting, and in various digital on-demand forms – podcasts, vodcasts, really simple syndication (RSS) feeds and mobile files. With the trend towards more outsourcing of content production, PSBs are necessarily more involved in contractual negotiations of online copyright licensing, which is professionalizing relations with producers and arguably making the reflection of national culture a more diffused, mediated and business-like enterprise. New applications have been developed to manage on-demand access to intellectual property rights online: the BBC's new online application, i-Player, gives license-fee payers seven days of access time to download or view online, with storage rights for 30 days.⁵

While the established principles of PSB remain relevant, some of the changes institutions incur in repositioning as media content companies are fundamental nonetheless. The comprehensive schedule has been a foundational tenet of

public service broadcasting, reflecting the expectations that accompany public funding and universal coverage by incorporating a broad range of programming – from serious and specific to popular culture forms. This approach also served Lord Reith's idea of moral uplift, 'serving the public by forcing it to confront the frontiers of its own taste' (Smith, 1976: 63). The comprehensive schedule offered a variety of genres and topics in prime time and, in constructing a general mass audience, served as a vehicle for the public sphere. With the spread of narrowcasting the comprehensive remit became increasingly anachronistic as the audience fragmented. Since the 1980s, in the UK and US, and the mid 1990s in Australia, increases in the numbers of commercial competitors for specialist minority audiences prompted mainstream PSB channels to pursue a populist approach – in an effort to shore up dwindling audience numbers (Biltreyst, 2004: 344; Born, 2004: 64; Murdock, 2005: 190). In the US and across Europe pay channels such as Discovery, National Geographic and Nickelodeon have drawn away some of the traditional audiences of public broadcasters – those for documentary and children's programming. Diminishing its potential to contribute public value and driving the marketization of the media, audience fragmentation has been a considerable threat to PSB (Murdock, 2005: 190).

In the era of Web 2.0 the cost-efficient, readily updatable, searchable and interactive qualities of the internet offer new ways for PSBs to reach niche audiences in response to this threat. At the same time the unique qualities of online content are also attracting commercial players and bringing PSBs new challenges from the marketplace. The basis of that attraction is articulated in the concept of the 'long tail' that identifies a new viability for niche products that can now be cheaply displayed online and readily matched to consumers via search engines and sophisticated filters that track and aggregate consumer habits (Anderson, 2006: 108–15). But the concept also evokes enhanced value for licence fee payers according to how the BBC's Creative Archive develops, as joint project director, Paul Gerhardt, explains:

I think the way that the long tail argument has been framed is to emphasize the commercial value of products, which can be relatively old but still have a retail value many years after because of the ability of the audience to find them and to revalue them.... Exactly the same argument applies to the public value of the BBC. So to give you an example, it could be that an old costume drama by the BBC, let's say from the 1970s about Elizabeth I could have very, very little value in terms of the production, or even in terms of acting. However, it may well be that the costumes that were made for that production were some of the best expressions of costume design. So it's the ability to take that and re-evaluate that programme in terms of its costume design if nothing else, and to take from that programme two or three scenes that exemplify the high quality of production of the costume design, that's what I would call the application of the long tail for the Archive. In other words, the opportunity for a small group of people to place a high value on one particular item within that content. (interview with the author, 2006)

One telling example of how the enhanced capacity of public service media to deliver personalized educational goals more creatively is also drawing more competition for PSBs, as content companies, is the case of BBC Jam. Launched in January 2006 after a rigorous approval process by the BBC Governors, the Department for Culture Media and Sport, and the European Commission, BBC Jam was designed to assist school-age children with their homework 'to support key areas of the school curricula across the UK'. It broke new ground in servicing PSB educational goals online and had 170,000 registered users when the BBC Trust suspended it in March 2007. The Trust acted after commercial competitors complained to the European Commission that the service was not 'complementary and distinctive' as was required, and was 'damaging their business' (BBC, 2007c). An additional complexity in the suspension of BBC Jam was that half of the production budget went to independent producers (Kiss, 2007: 1). In January 2008, the Trust decided 'the public interest is best served by BBC Jam remaining suspended and formally closing when its service expires on 30 September 2008' (BBC, 2008c). One irate blogger noted:

Since the UK licence fee payer has invested this huge amount of money, whether willingly or not, in the BBC's educational output, it seems odd of the BBC Trust to refuse to let them see – and benefit from – what they've already paid for... How can there possibly be public value in suppressing excellent educational resources? It feels like burning books. (Johnson, 2008)

This episode reflects the new rules under which the BBC must compete; as competition heats up, increased outsourcing is no longer sufficient response to accusations that PSBs have an unfair advantage. The Public Value Test, which now governs new 'services' undertaken by the BBC is jointly implemented by the industry regulator Ofcom and the BBC Trust, and sets out to balance public value (as assessed by the BBC Trust) against the 'market impact' on potential commercial competitors (assessed by Ofcom) with the final result arbitrated by the Trust:

Only if the Trust is satisfied that any likely adverse impact on the market is justified by the likely public value of the change, will the proposal go forward for consultation. At the end of the consultation, the BBC Trust will then make its decision. (BBC, 2008a)

Another element in the reinvention of PSBs as media content companies is the electronic programme guide (EPG); an offshoot of digital television, EPGs now enable viewers to compile their own schedules. While self-scheduling is undoubtedly an advance for viewers as consumers it alters PSB's address to viewers as citizens – once thought integral to the public sphere function. Viewers can now readily omit news and current affairs programming, something youth are increasingly doing. Constituting a key concern for PSBs, the shift of youth audiences to new media has prompted concerted engagement with the challenge of being more attractive and relevant to youth in the quest for

audience renewal. Packaging PSB news bulletins for on-demand accessibility – as podcasts or vodcasts or as content for mobile phones – is one strategy for drawing younger viewers back to public service media (BBC, 2004: 67). Such on-demand developments – various forms of downloads of news bulletins for later listening/viewing on the run – have been criticized because they are not universal and exclude viewers who are not online. On the other hand fears of a generation growing up under-informed about news and current affairs as they consume customized online news offers a public service justification for this investment, and frames on-demand media content as the digital era's universality for PSB.

Conclusion

Anticipating the impact of the 'truly fragmented, self pleasing audience' Kim Dalton describes contemporary developments as the 'tipping point' for network television, seeing it as an opportunity for Australia's ABC to both ride and drive changes in how people watch TV programmes. Asserting the continuing importance of the ABC to the national conversation, Dalton describes its role in the digital era as a 'place where people can meet, visually and virtually, to discuss, debate and make sense of their world in a trusted safe environment' (2007: 2–3). Noting tension between freedom and safety for civic engagement online, SBS Manager of Policy and Research Georgie McClean, questions how PSB moderation should be defined:

Online obviously offers entirely new opportunities for engagement ... for people to contribute to ... debates around major issues of public concern.... It's something that I think is going to be a challenge for public broadcasters, just to find a way of doing that ... without it just being sort of lost in the commercial world.... There is a space for us to actually maintain a different ... calibre and quality of service online without it just being a free for all ... [but] what sort of levels of monitoring and filtering do we have to have ... in order to maintain our key editorial standards that differentiate us from any chat forum online? (interview with the author, 2006)

The era of globally available, on-demand media content represents a considerable challenge for national media – both commercial and public service – particularly for policies intended to protect national culture, although public service media generally enjoys some advantages in this regard, being publicly funded. Although they continue to attract very high levels of public trust around the world and as public media content companies serve a vital new social role as developers of cohesive portals to reliable information online, PSBs are facing opposition from a new field of competitors – multimedia producers and software developers – and new pressures for more rigorous systems of performance measurement and accountability. Tomas Coppens and Frieda Saeys (2006) note the trend towards public service contracts in

Europe, where various efforts have been made to pin down what quality stands for and to measure broadcasters' performances with a view to making funding contingent on delivery of goals. In Australia, at the ABC the battle over accountability recently focused on 'balance' with a new position, Director of Editorial Policies, created in December 2006, while the BBC's 2006 charter, as already noted, has brought the introduction of a Public Value Test against which market impact must be measured. Ultimately, whether such new measures prove advantageous or corrosive will depend on political and public will to protect and maintain these fields of national culture and communication as public domain.

As trusted media brands renowned for their independence, public service broadcasters acquire a particular premium in the online environment where unaccredited and unreliable information abounds. While the old PSB principles may be shifting, they continue to validate public service institutions as the best positioned to deliver independent news and current affairs content, to contribute cultural and programming diversity, and to service national conversations about identity. Public service broadcasters' reinvention as multi-platform media content companies marks more than just the delivery of re-versioned content across more platforms. Identifying key markers of difference, Ferrell Lowe and Bardoel note of European PSBs: 'The decisive issues have always been primarily *social*' (2007: 10). In the digital era, however, technology and economics necessarily play a larger role. The nature of on-demand content – personalizable, shareable and interactive – inviting new kinds of relationships with viewers, brings a raft of new complexities: UGC and the shared authorship of online fora; it also means less producing and more commissioning, which brings new constraints in the licensing of intellectual property online and additionally opens up the possibility and the need for new revenue streams, with potentially damaging consequences. Whether or not developments such as the ABC's recently announced portfolio of online channels, which includes plans to sell ABC content (ABC, 2008b), will erode the national broadcaster's independence of voice will depend on future government funding. In May 2009, the ABC received an additional \$167 million in the Federal Budget, with set amounts allocated to a children's channel, increased Australian drama production and regional 'broadband hubs', which are intended to foster the 'creation of rich broadband content in regional and rural Australia (ABC, 2009b).

The ABC strategy is intended to serve both its status as a mainstream media player and the government's plans for high-speed broadband roll out (Moses, 2008) by helping to drive user take-up. It is indicative of the gamble PSBs are taking around the world in riding the wave of on-demand media; increasing their financial burden despite existing funding constraints, foreshadowing hybrid funding possibilities and thereby risking non-commercial distinctiveness, to initiate innovations.

Notes

1. The BRU principles of 1985 were: (i) geographic universality; (ii) catering to all tastes and interests; (iii) catering for minorities; (iv) concern for national identity and community; (v) detachment from vested interests and government; (vi) direct funding of one broadcasting system by the body of users (that is, via a licence fee system); (vii) competition in relationship to good programming rather than in increasing audience numbers; (viii) guidelines which liberate programme makers rather than restrict them (Harrison, 2000: 66).

2. Georgina Born argues that the BBC's commitment to quality children's programming with higher than average budgets on its digital channels led to Nickelodeon 'increasing its commitment to British production and the budgets of those productions' (2004: 487).

3. In late 2008 the project was under BBC Archive management and awaiting the decision of the BBC Trust via the Public Value Test process.

4. UK digital uptake is also the world's highest and is expected to climb to 95 per cent by 2010 (BBC News, 2006).

5. Similarly, a commercial joint venture by BBC worldwide, ITV and Channel 4, titled Project Kangaroo – a site for viewing television content online – was planned for launch in 2009, subject to BBC Trust approval. However, the project was stopped in February 2009 by the Competition Commission, which considered it a 'threat to competition' advising that the three should be 'competitors not allies' (BBC, 2009). In early 2008, Australia's ABC launched iView, 'a free internet broadcasting service', offering five channels of streamed on demand television content for viewing on a computer along with an online shop (ABC, 2009a).

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