

Distribution Dilemmas for Public Service Media

Evidence from the BBC

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Abstract

This chapter draws on critical infrastructure studies to deliberate on the growing importance of the distribution of public service media content in the networked society and encourage citizen-user engagement in distribution. The author critiques the notion of 'networked society' and examines the emerging television environment to draw attention to transformations as well as persistent continuities. The complexity of media distribution creates dilemmas for public service media, as the BBC case study shows. If public service media is about content that is critical to the functioning of democratic societies, for enhancing social cohesion and promoting cultural diversity through investment in original content, then how that content is found and how it reaches people are crucially important questions. In short, the distribution of, and the terms of access to, public service media content has significant public interest implications which are the focus of this chapter.

Keywords: television, media platforms, critical infrastructure studies, access

Introduction

This chapter draws attention to the fundamental significance of distribution infrastructure through which content of all kinds is distributed and reaches us. An increasing number of public service media (PSM) organisations do not own or control all or key aspects of the distribution infrastructure. This renders them dependent on private commercial companies, mainly telecom giants, for the transmission, exchange, termination, the findability of and access to digital content. Traffic flows on platforms with considerable power, but these are largely unaccountable although significant to the foundations of economies, societies and politics. In the networked society, infrastructural matters have crucial importance. It is precisely this centrality that critical infrastructure studies aim to address.

For a long time, media studies have tended to focus on production, reception processes, and textual analyses of media content (Parks & Starosielski 2015). The

infrastructure that makes all of this possible has received surprisingly little attention because it has been largely seen as neutral and technical, and thus not a priority for media studies. Put differently, the emphasis has been on what is happening in front of the screen. As Star and Ruhleder (1996: 112-113) put it, the general perception is that an infrastructure “is built and maintained, and [...] then sinks into an invisible background”; it becomes visible only when it breaks.

This chapter provides a critical study of media infrastructures to 1) highlight their importance for the distribution of audiovisual traffic today and, in doing so, 2) raise awareness and encourage broader citizen-user interest and engagement in infrastructural matters regarding their development, regulation and use – what Parks and Stratolieski (2015: 6) refer to as “technological literacies” that are crucial for the content we can access, create, find, consume, and (re)use. This has a pivotal bearing on our empowerment to be informed citizens and participate in society under networked conditions. Indeed, as Sandvig (2015: 225) argues, focusing on infrastructure is “an essential task for those who hope to know and to change media and technology”. This chapter brings the distribution infrastructure of television from the background to the foreground and makes it a central focus of study of media, and PSM in particular.

Writing about the future of television in 2015, Michael Wolff concluded that “people will [continue] watching TV, even if they stop watching *the TV*” (2015: 28). Three points are worth highlighting. The first relates directly to the topic of this chapter. As a cultural form, television has so far preserved its central position in the media landscape and will continue to remain significant, enjoying high consumption rates despite the ‘digital revolution.’ Second, television is arguably being challenged as a distribution technology. A core aim of this contribution is to precisely assess the challenges to distribution for television content in the networked society context.

The third point is that in many EU countries, original television content is essentially PSM content. Recently, the EBU analysed data from 15 European countries and concluded that in 13 of them PSM was spending significantly more on original content than their commercial counterparts and, crucially, 2.6 times more worldwide than Netflix and Amazon combined (Priestley 2017). Given the legal and general understanding that PSM is about content which is critical to the healthy functioning of democratic societies (e.g. for enhancing social cohesion, for enabling civic participation, and promoting cultural diversity precisely because of investment in original content), this means how we find that content and how it reaches us are crucially important questions. My aim in this chapter is to draw attention to the interdependence between content and distribution, and to call for more research on the pressures, challenges and opportunities concerning the distribution of and access to PSM content in the networked society (see also Michalis 2014).

I examine the BBC as our case and argue that distribution dilemmas are growing in the networked society environment. The BBC was chosen for three reasons. First, because Britain is a highly developed and competitive media market with many options to distribute and access content. This allows for an interesting discussion of

relevant issues. Second, as acknowledged in other studies (e.g. Van den Bulck et al. 2018), the BBC has often taken the lead in technological innovation. It is, in that sense, a ‘Bellwether case’. The third reason has to do with my expertise and the accessibility of relevant documents and professionals for research. Document analysis relied on relevant policy and consultation documents, industry reports and media coverage. The analysis also benefited from informal discussions with relevant professionals.

Admittedly, the BBC is unique. Despite financial, market and technological pressures, it remains a big and strong PSM provider, and its programmes sell well internationally via its commercial subsidiary, BBC Worldwide. I make no claim this case is representative of PSM everywhere. I agree with others, however, about the importance of detailed case studies to capture specifics and that is what the chapter offers (Humphreys 2012; Evens & Donders 2013; Lotz 2014). But although the second part of the chapter is country specific, the aim is to shed light on emerging and typical power relations between broadcasters and distributors, and in particular to emphasise this is not a simple linear power relationship. The first part of the chapter clarifies the main changes in the television landscape in the networked society. The broad conclusions should be relevant to other countries. The second section starts with critical analysis of the notion of a ‘networked society’. This is followed by discussion of the main changes in the media environment and the emerging television value chain, especially pointing to interdependencies and (new) power relations that have implications for PSM. I then examine the distribution strategy of the BBC to demonstrate the principles and dilemmas that shape it.

Infrastructure, platforms and networked society

We begin with three interrelated concepts that set the context for all that follows: infrastructure, platforms and networked society. In critical infrastructure studies an infrastructure is not viewed as a stand-alone, static or neutral technical system. Rather, an infrastructure is conceived as a dynamic socio-technical system (e.g. Star & Ruhleder 1996; Fuchs 2017). This is “fundamentally a relational concept” (Parks & Starosielski 2015: 9) that reflects existing knowledge, social structures and power relations, but at the same time is a critical factor shaping the production, circulation and consumption of information, knowledge and culture. Ultimately, different perspectives on infrastructure reflect competing visions of society. For Sandvig (2013), this relational understanding of infrastructure points to a variety of actors that, having diverse and often contradictory goals, are differentially positioned. The value chain approach considered in a later section sheds light on these relations and differential positions. My view is based on the perspective of critical infrastructure studies.

Sandvig (2015: 238-239) explains the transformation of the internet over the last 40 years. In his view, the transformation “from a textual system to an audiovisual one” was not a story of technological maturation but rather “the transformation was intentional”.

The aim was to “change the medium itself and optimize it for mass communication, providing a way to assemble large audiences” for profit, to increase advertising rates for video on the basis of vast amounts of user data (e.g. YouTube), and improve the possibility of introducing subscription fees (e.g. Netflix). In that light, I argue that what we are witnessing is a case of television (audiovisual content) disrupting the internet rather than the other way around.

In fact, there are more and very strong continuities than ruptures with the past. This reality is keyed to the intentional predominance of media organisations based on a commercial logic that works best if accompanied by massification. The core features of capitalism (notably capital accumulation, a generalised and expansionist proprietary market logic, and the profit motive) remain as dominant today as before the internet. We cannot therefore accurately pronounce the advent of a *new* type of society. At best, we can only speak about new qualities of capitalist society. The networked society notion interrogated in this volume is useful for the capacity to highlight important transformations that especially include the pervasiveness and spread of digital technologies, without implying that these herald a new type of society.

It is more enlightening to use notions that highlight rather than obfuscate continuities with the past, which are primarily notions that retain the noun ‘capitalism’ and apply adjectives to this that signal the significant changes brought about by information and communication technologies (ICT). What appears to many as a new type of society is, in simple terms, a ‘digital’ (Schiller 1999) or ‘platform’ (Srnicsek 2017) intensification of capitalism. These adjectives draw attention to the latest main source of capital accumulation. In this chapter, as for the book overall, the ‘networked society’ is not viewed as a technological phenomenon with its own internal logic but rather understood in a broader socio-historic context. In this chapter, particularly, that context is capitalist society. It makes more sense, in this view, to talk about a ‘networked capitalist society’. This is the broad context for thinking about the distribution of PSM content. In the next section I examine the growing complexity of the value chain for television distribution in the internet age, and explain the often contradictory interests of participants.

Transformation in the television value chain

The key transformations in the field of television concern three areas that comprise the ‘value chain’ for the broadcasting sector: content creation and aggregation of services, distribution, and consumption. We deal with each of these in turn.

Creation of diverse content is the archetypal function of public service broadcasters in particular. The proliferation of television channels, with the expansion of cable and satellite transmission since the 1980s and the more recent move to digital television in the 2010s, has facilitated the entry of new broadcasters and independent producers in the market. The internet is the prime example of technological convergence because it blurs the boundaries between previously separate sectors for broadcasting, publish-

ing and telecommunications; it has also enlarged the digital market and intensified and internationalised competition. Broadcasters no longer compete just with other broadcasters. They are now competing with publishers and an increasing range of non-traditional media players, many of whom are financially powerful, have a nearly global footprint and are focused on global services, and enjoy access to granular data on users upon which they base their market strategy.

YouTube launched a streaming subscription service in 2015 in selected countries (wealthy markets) and is now investing in original productions as a complement to its vast ad-supported user-generated offer. Netflix and Amazon Prime operate along the lines of traditional pay-TV, buying premium content and investing in original content that targets a global market. These powerful technological giants cultivate big media ambitions as their corresponding platforms are increasingly like television. For Plantin et al. (2016: 2-3), such platforms have become so “ubiquitous and deeply embedded that [they] could be seen as an infrastructure: robust, widely shared, widely accessible, and essential”. The authors conclude that “[d]igital technologies have made possible a ‘platformization’ of infrastructure and an ‘infrastructuralization’ of platforms”. In short, the internet has expanded the television market and television has disrupted the internet, not the other way around.

Content is typically the largest operating cost for broadcasters, with PSM generally being the main investors in original productions in Europe. With competition rising, inflationary pressure on premium content is considerable, especially following the market entry of large international players. It is becoming harder for PSM to continue investing in original and distinctive content of particular relevance to their host societies, despite the fact that this is their *raison d'être*.

Following content creation, the next step in the TV value chain is to bundle content and offer it as a service. In the past, this was offered on a typical linear television channel. Increasingly today, bundles include not only traditional broadcast content but an array of other services. Commercial players have launched triple-play offers for television, broadband internet, and fixed voice telephony in one package (and mobile in the case of quad-play offers).¹ Such large bundles aim to lock-in customers. In this scenario, PSM must rely on third parties, often direct competitors, for the distribution of their content – on parties who wish to own, or at least control, the relationship with users. Pay-TV platforms such as Sky, device manufacturers like Apple, and platform controllers like Virgin, support closed proprietary technologies and assume a gatekeeping role because they pre-approve the content, services and applications that users can access (OECD 2013). The BBC recently voiced concerns about the growing power of new market players and the potential of their platforms to become ‘super-aggregators’ bringing content and services from across sources to one place, thereby adversely affecting industry revenue and, by extension, content creation (OC&C 2017).

Distribution is next in the value chain, the link between content and audiences (Beutler 2017). In the past, most (public service) broadcasters owned and operated

the dedicated distribution network for TV, typically terrestrial and later cable and satellite. There were a few exceptions, notably in Norway and Sweden, where PSB never directly owned the transmission network. Today, two main changes in distribution are worth noting. The first is the end of dedicated broadcast networks and the growth of other distribution infrastructures. Many (public service) broadcasters no longer own a broadcast network, which are today mainly owned by telecom companies. This can be understood as part of public service broadcasters' efforts to transform themselves into public service content providers (Bennett 2008). In practice, this change requires broadcasters to negotiate access to networks capable of delivering broadcast content, often upon payment, as for example the BBC pays Sky for satellite carriage.

The second change is the expansion of broadband connections and the potential of online delivery via the public internet (called over-the-top distribution, or OTT) or via a managed TV connection (IPTV). This becomes the fourth distribution platform alongside terrestrial, cable and satellite. The internet is heralding new business models and new ways of reaching audiences that require neither a broadcast signal or channel. Multiple delivery mechanisms, or infrastructure, have facilitated audience fragmentation with adverse impact on advertising-funded media. Perhaps more importantly, in the online media environment, audiences as users are freed from linear schedules and content packages. Individuals can actively seek and also create audio-visual content, and interact with it. Audiences are no longer constrained by passivity but can, if they choose, be active.

Wireless internet connections and the popularity of portable devices, mainly smartphones and tablets, mean audiences can increasingly personalise and control viewing. Television consumption is becoming non-linear, either time-shifted through a recording device like a personal video recorder or through video on demand (VOD). Broadcasters believe they have to follow their audiences and offer their content on whatever platforms and devices audiences prefer. Public services broadcasters are often obliged to do so. These changes in distribution are fundamental, as observed by the UK Office of Communications:

[A]s the ways in which content is distributed become more complex, and the number of firms involved in the production and distribution of content grows, it may be harder for PSBs to get access to some key platforms, or for them to get access in a manner which enables them to retain some degree of prominence and editorial control. (Ofcom 2015: 17).

The distribution of PSM content has significant public interest implications. It is not simply that the newer distribution platforms (cable, satellite, IP, mobile) have intermediaries and, unlike terrestrial broadcasting, carry the risk of rent-seeking gatekeepers, but, importantly, the new distribution platforms are typically commercial and interested in creating and exploiting artificial scarcities for financial benefit. As Martin explains, the digital ubiquity of newer technological platforms promise the potential

of expanding the reach of PSM and enabling participation on the one hand, but on the other hand, this entails greater reliance on corporate players. In short, it means “private control over public resources and communications”, deeper surveillance of citizens/users, and ultimately the further entanglement of PSM in the agendas of a few transnational technological giants and the structures of informational capitalism (Martin 2016: 7, 16).

The potential chokepoints for gatekeeping in the new TV value chain are, essentially, nodes of control that point to and indicate the market power a player has. Perhaps the most visible expression of power is in the findability of content. The critical question for PSM is how easy is it to find their content in the growing context of technological convergence, where commercial interest and algorithms essentially dictate what is findable and how easily, and where the onus is on the user to actively look for content and create her/his own schedule? This is a core question for consideration in and for a ‘network society’. The power and capacity to influence what can be found is not only about economic market power but, arguably more significantly, raises crucial questions about the practice of democracy. That is a core concern of Graham Murdock in the present volume, who calls for a public service search engine and public service algorithms.

As noted, it is increasingly unlikely that a single (public service) broadcaster will be responsible for and able to control both the content creation/ aggregation stage and the distribution elements of the television value chain in the future. It might be more accurate and analytically useful to use the notion of “value network”, as Virta and Lowe (2017) explain. This refinement of the chain concept aims precisely at analysing the broader environment in which a media company must operate in a complex assortment of relationships with other entities who might be but are not necessarily spatially proximate. How the relationships within, and ultimately beyond, the value network are managed is crucial for the network’s sustainability and efficiency.

What is relevant for our purposes is the relationship between a public service broadcaster, whose main activity is content creation and aggregation, and a distributor, whose main function is to serve as an infrastructure provider responsible for the delivery of the broadcaster’s content. Given the growing interest of distribution companies to produce their own content, the relationship can be characterised as ‘coopetitive’ (Virta & Lowe 2017: 4). Coopetition means the relationship between the broadcaster (as content creator) and the distributor (as infrastructure provider) is an interdependent one; it can be competitive where and when the infrastructure provider has moved up the value chain to offer original or bundled content of its own in direct competition with the broadcaster, but simultaneously co-operative because the broadcaster’s audio-visual content is one primary driver of infrastructure use and take-up, notably in demand for high bandwidth. We’ll come back to this later.

Our discussion in this section clarifies the context as a networked capitalist society and the main transformations in the television value chain. The next section considers continuities that remain significant in the British television environment.

Broad trends in the television market in the UK

One might get the impression that the changes discussed above have fundamentally altered all aspects of the television market. This is not so, at least in Britain – which is a major media market in Europe, and indeed worldwide. In this section I draw attention to three aspects that have largely remained the same.

First, and paradoxically, despite higher penetration of broadband, the rapid take-up of connected devices, and increased competition for audience attention, television viewing remains stubbornly healthy in Britain. Although the figures indicate continuous decline, on average people in Britain still watched 3 hours and 32 minutes per day in 2016 (Ofcom 2017). This hides significant variations among different viewer groups: Television among 16-24 year-olds has experienced the steepest decline (27 per cent) since 2010 followed by children (26 per cent). So, we don't want to minimise the decline, especially with regard to the next generation's media use patterns. But 3 hours and 32 minutes per day is not insignificant.

The three traditional digital television platforms are Freeview (terrestrial), Sky Digital (satellite) and Virgin Media (cable). These remain the primary means for accessing television content in the UK. Two of them (free-to-air Freeview and subscription-based Sky Digital) have polarised the market, with just over 40 per cent of households receiving television via DTT and 31 per cent of households via the pay satellite platform. The percentages have not increased since 2010 (Ofcom 2017: figure 2.37). This indicates that television consumption platforms and patterns are more resilient than market forecasts would lead us to believe.

However, the hold of the two traditional pay-TV platforms (cable and satellite) is likely to increase in the medium to long term, especially following the World Radio Communication decision in 2015 to squeeze the digital terrestrial TV spectrum to the sub-700 MHz UHF band to accommodate higher demands from the mobile industry (see Harvey 2016 for analysis). A weakened DTT platform will strengthen the role of content aggregators and pay-for proprietary platforms, resulting in powerful gatekeepers. It will also put at risk the considerable investment in original content by PSM, which is sustained by the DTT platform as the main distribution platform.

Second, the continued attraction of linear TV, both live or catch-up, is equally striking. Most viewing continues to be on linear channels, with adults on average watching three hours of live television (Ofcom 2017). Consumption of online content has grown very slowly. As of 2016, it stood at 20 per cent (Ofcom 2017). In other words, non-linear consumption is growing incrementally and in complementary fashion, not substituting for linear TV, and serves to increase the popularity and reach of traditional (PSM) content.

Third, and surprising in the context of PSM's diminishing budgets and growing competition, is the continued attraction of PSM output. Although it has decreased by 4 percentage points since 2010, just over half (51 per cent) of all TV viewing is on the five PSM channels in the UK (Ofcom 2017: figure 2.1). In addition, the main

PSM channels account for 37 per cent of all programme spend. This proportion is even more significant if one considers that it is pay-TV subscriptions (46 per cent of total TV industry revenue in 2016) that drive growth in total sector revenues (Ofcom 2017).

This section assessed characteristic trends in the British television market that demonstrate important continuities: television viewing remains healthy, linear TV is still strong, and PSM output remains attractive. The next section discusses the BBC's distribution dilemmas and strategy in the networked society context.

The BBC and dilemmas in distribution: Principles, partnerships and innovation

The BBC does not own a broadcast infrastructure, and thus relies on third party network owners and operators. Until 2015 there was no framework dealing specifically with the distribution of BBC content. Evidence in itself of the rising saliency of distribution issues in the networked society context, the BBC Trust adopted a 'Framework for Distribution' in 2015.² The BBC must balance changing audience preferences with investment in a variety of distribution platforms, strive to offer quality content and services on every platform where it has a presence, and provide a universal service despite a decreasing licence fee settlement and less radio spectrum.

The 2015 Distribution Framework consolidates existing principles and requirements for distribution of BBC content, and provides clarity to the industry when engaging with the organisation (BBC Trust 2015a). It sets out six principles: 1) universal access, free at the point of use, 2) value for money, 3) openness and transparency, 4) control over content distributed through third parties, 5) services and content should be easy to find, and 6) direct relationship with audiences. These distribution principles are clearly interrelated. The remaining of the section treats these principles in two categories, examining the first four together, and then the last two.

Universality, value for money, openness and transparency, and control over third party distribution are the first category. The BBC is available on many (though not all) platforms with overlapping footprints, and delivers content in a range of formats to more than 10,000 devices. This strategy is in line with traditional PSM principles the BBC must adhere to, notably promoting universality, responding to audiences' preferences, and driving the take-up of new technologies. The downside is the underlying cost the strategy entails, especially in the context of increased competition and decreasing revenue. The operational environment is complex (Figure 1).

Attuned with PSM values, a core response of the BBC has been firm support for free-to-air platforms that enable a horizontal market in consumer equipment and mitigate against powerful gatekeepers curtailing universal access. The BBC invested in Freeview (the terrestrial free-to-air platform), Freesat (the satellite FTA platform) and YouView (the IP-enabled TV platform), along with commercial industry partners

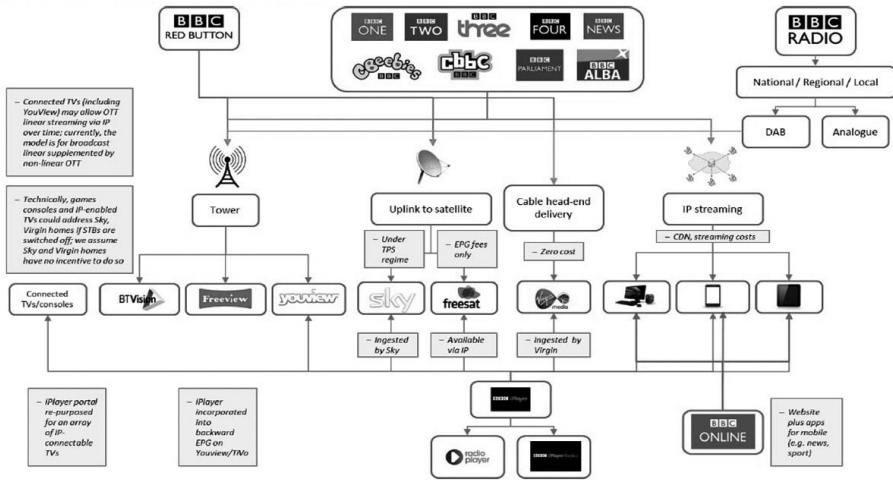


Figure 1. The BBC's distribution footprint, main platforms (2013)

Source: Mediatique (2013: 5)

that include Sky and British Telecom (BT). Such investment can be characterised as co-competitive, which the Trust endorses as a key strategic resource. This is interesting in the context of the networked society where distribution control is increasingly in the hands of commercial players. The BBC is supposed to be open to innovations from third-party platforms and device manufacturers as long as they promote the interests of audiences and are in line with the framework principles. This co-competitive response underlines the alignment of interests between the BBC, commercially-funded PSM, pay-TV platforms and other commercial players (especially broadband providers) in the face of common risks. At the same time, it “clearly illustrates the difference between commercial and public service practices” (Lotz forthcoming). Co-competition is also evident in content creation where co-productions have increased and expanded to news rather than only in drama and comedy (Oliver & Ohlbaum 2015).

The BBC has capped distribution and marketing costs at 10 per cent of licence fee income. According to Mediatique, in 2012–2013 the BBC spent 6.5 per cent on distribution (£233m). The biggest part (£203m) was spent on traditional infrastructures (radio, television and participation costs in Freeview and Freesat, and the industry stakeholder group Digital UK that operates the terrestrial transmission TV network). This is justified because the DTT and DSAT platforms deliver universality, covering 99.5 per cent of UK households (with 98.5 per cent for DTT). This will continue for the foreseeable future. The remaining £30m was spent on streaming and on-demand distribution (Mediatique 2013). Despite the lower spend, online distribution is a core element of the BBC's distribution strategy that poses dilemmas for universality, cost, and syndication.

The BBC has led innovation in UK online distribution, embracing online delivery via the open internet (OTT delivery) and devoting various applications for catch-up viewing – most notably the iPlayer that was launched in 2007 and remains the most popular on-demand and streaming service in the UK. Since 2013, the BBC has started to premier new content on the iPlayer.

Although online PSM viewing represents a small proportion of total viewing, the BBC believes younger audiences will rely increasingly on IP delivery. They do not expect IP to deliver more than 20 per cent of all video viewing by 2020, however. Ofcom has estimated that if online PSM viewing reaches 25 per cent by 2024, the costs for IP delivery could double, but the overall distribution costs could fall in nominal terms on the assumption that the ‘per stream’ cost of delivering video online will continue to decrease as volumes increase and the cost of DTT may fall (Ofcom 2015: 25). However, Ofcom also observes that if online PSM viewing were to increase significantly more by 2024, so that nearly half of viewing were to shift to online/IP platforms, then the opposite outcome is plausible and the total distribution costs could actually rise by around £100m (Ofcom 2015).

The cost for networked communications is unclear but has obvious importance for the future. This brings to mind several thoughts about the potential shift of viewing online and associated distribution costs. First, putting aside the uncertainty regarding changes in consumption patterns, the potential for significantly higher distribution costs as more viewing shifts to online/IP platforms appear to be in conflict with the government’s policy to ensure superfast broadband availability for 95 per cent of the population by 2017, which is necessary for the possibility of more video content being delivered over the internet. To this, one can add a likely decline of the DTT platform as a result of the (continued) reallocation of frequencies to mobile and broadband uses (Michalis 2016). Second, as for other PSM organisations (e.g. YLE Finland), the BBC has inaugurated an ‘internet first’ strategy and begun to premier new content online, especially programmes targeting younger people. An important related development was the March 2016 closing of BBC3 that targeted the 16-34 years old demographic as a conventional television channel. Now the service is only available as an online channel.

These developments and trends don’t add up. Given that online PSM content consumption is not very strong yet (even among younger audiences), why is it wise for PSM to transfer some content exclusively online where the costs of distribution are higher? Judging from the available data, online distribution for the iPlayer only delivered 2.3 per cent of total BBC viewing in 2012 (linear and non-linear; 600m hours) at a cost of just under 12 per cent of the total for all distribution. In sharp contrast, conventional distribution of PSB content delivered 98 per cent of the audience at 87 per cent of the cost. Put differently, for each percentage point of viewing share, the iPlayer (non-linear distribution) is six times more expensive than linear distribution (based on data from Mediatique 2013). One can easily conclude, as Mediatique did, that, from the vantage point of costs linear distribution provides much better ‘value for money’ for the BBC. Broader policies and trends (especially the push for faster

rollout of superfast broadband and the diminishing role of DTT) appear to be pushing PSM towards the costlier online/IP delivery method. If half of PSM viewing is to take place on online/IP platforms by 2024, then the associated distribution costs can be expected to rise dramatically. Given diminishing PSM budgets, that scenario will put at grave risk the public policy objectives associated with PSM in the UK.

Turning now to syndication, as for other PSM organisations the BBC is subject to ‘must offer’ obligations. Among the factors the BBC must take into account in deciding whether to make content available on a platform are editorial control, brand protection, no incremental cost to users, parental controls, and non-adjacency to adult material or advertising. For instance, the BBC agreed to put the iPlayer on the Sky On Demand platform only after securing editorial controls and access to user data. In contrast, the BBC refused to make BBC content available on the Sky mobile and tablet applications due to lack of editorial control, prominence and other mandated requirements (Mediatique 2013).

A final point relates to the limits of competition. It is interesting to note that PSM led the UK market in launching catch-up players and popularising on-demand consumption. These are well established and have continually developed their functionalities. The dilemma is whether this fragmentation, which makes sense for branding and control, is justified in the context of a networked society where audiences value convenience and the ability to find as much content as possible in a single place? Or, given the increasing threat of having commercial super-aggregators shaping audience preferences through non-transparent algorithms, whether co-operation among PSM organisations in the area of catch-up services and online distribution makes more sense? Indeed, the idea for an Open BBC where the corporation becomes a platform, an aggregator, a curator, and a gateway to the world for British creativity, open to partnership with, for instance, the country’s leading cultural institutions, provides a case in point (BBC 2015b). This dilemma leads nicely to a discussion of the last two BBC distribution principles.

Prominence, findability and relations with audiences

Content availability (universality) does not equal findability. How audiences discover content becomes increasingly important in the networked society where access is available via numerous devices and platforms. As Jackson reminds us, “if the contents and services provided by PSM can’t be found then they aren’t services and there is no public” (2016: 198). Indeed, distribution guidelines emphasise the continuing importance of prominence for BBC content so that audiences can easily and quickly find it. At the moment, Ofcom’s ‘Electronic Programme Guide’ code applies to linear channels and requires prominence for PSM there, but has no equivalent requirement of prominence for on-demand content. Responding to the consultation on the BBC’s distribution framework, commercial market players maintained there was no need

to extend this regulatory requirement to the online environment because commercial sense provided strong enough incentives to address that. They argued that since BBC content is popular and audiences wish to consume it, online firms have every interest to make it prominent on their services and platforms so that audiences can easily discover it (BBC Trust 2015b).

As noted earlier, however, the new technological giants in ‘new media’ have big media ambitions and are disproportionately powerful in financial terms. In the future, one could expect them to be in a position to pay for the prominence of their own applications and services in the online environment at the expense of competing PSM applications and services if negotiations and decision-making is left entirely to the market. It seems, therefore, that regulatory intervention aiming at promoting the prominence of British and PSM content is warranted to reduce the risk that commercial players will become the gatekeepers to such content.

The final dilemma that PSM faces concerns their relationship with audiences and the issue of personalisation, which is a central characteristic of the networked society. The paradox here is that the increasing complexity of the distribution environment makes this very challenging for PSM. The challenge hinges on the balance between personalisation and universality (see Van den Bulck & Moe 2017). The BBC expressed an interest in personalisation as early as 2004 (Ferne 2004). The 2015 Framework for Distribution perceives personalisation as complementary to universality and stresses “[t]he need for the BBC to have reasonable access to accurate and timely audience and user data available” (BBC Trust 2015b: 19). Access to user-data is expected to become critical as audience expectations for personalised services grow and the online giants have access to vast amounts of data they use to leverage commercial advantage.

If access to PSM is via third party providers (e.g. portals and OTT providers), those providers will enjoy the direct relationship with users and viewers rather than the content maker, with direct access to the resulting data. The recent ‘BBC+, The BBC, just for you’ application, launched in July 2016, aims precisely at offering a personalised service by providing users a single place where they can access all BBC content based on their consumption of BBC services (Hudson 2016). Since May 2017, the BBC has been prompting iPlayer users to create an account to get a “more personal and relevant” BBC experience through, for instance, programme recommendations, alerts, and allowing them to pick up a programme where they left off on another device (Scott 2017).

Conclusion

Building on critical infrastructure studies, this chapter brought the distribution infrastructure of television from the background to the foreground to make it central in the study of media, and PSM in particular. The social, civic, cultural and democratic role of PSM does not diminish in the networked society context, but actually strengthens.

However, the networked society and its accompanying complexity of media distribution present challenges for PSM that we have addressed as dilemmas for the fulfilment of the public service mission.

In critiquing the notion of a networked society, the chapter argues this does not herald the advent of a new type of society but, at best, new qualities of the capitalist society. Equally, when examining the core transformations in the television value chain, the persistence of continuities is strong in Britain. Still, it is clearly the case that in the networked society responsibility for the transmission, exchange and termination of digital content traffic increasingly lies with private commercial players who support technological solutions, markets and business models that favour commercial priorities and who, in many cases, are big platform owners that are powerful but largely unaccountable. This points to the supreme importance of infrastructure in economic, political, social, cultural and informational life. The potential for taking (strong) gate-keeping positions is real and presents risks for PSM, and for the fundamental values the enterprise supports: inclusiveness, freedom of speech and democracy.

The chapter sheds light on how PSM engages with these developments and rethinks the distribution of their content through examining the BBC. Their response has been three-pronged: developing a distribution framework, innovating, and establishing partnerships with other market players, including commercial firms. These responses present dilemmas, as explained, since the BBC has to carefully balance them against PSM principles. I have argued that regulatory intervention may be warranted either on straightforward competition grounds (e.g. abuse of market power and access to bottlenecks) or, as in the case of findability, because market solutions are likely to work at the expense of PSM and their associated public interest objectives.

All of this matters to the framework and realities of a network society because the distribution of PSM content has significant public interest implications. PSM is about content that is considered vital for the healthy functioning of democratic societies, enhancing social cohesion and promoting cultural diversity. How we find that content to achieve those purposes, and how it reaches us, are important issues. The ultimate aim of this chapter is to encourage broader citizen-user engagement with media infrastructural matters at local, national and international levels through, for instance, participation in policy debates, processes and campaigns, involvement in related civic society organizations, and support for non-profit public and community alternatives. The infrastructure of communications is neither neutral nor merely technical, but actually fundamental for the cultural and informational content that we access, create and consume. It matters to our potential for empowerment, active citizenship and, in short, for defining the society we live in. What is at stake is not simply about market power and fair competition, but crucially about voice, speech and democracy. The future of any networked society rests on our collective engagement with these issues.

Notes

1. The selling of (fixed) voice calls in today's advanced telecommunications markets may seem odd at first sight. Similar to other countries, in Britain voice calls are in decline. In particular, fixed-originated calls have experienced a large decline as they continue to be substituted by mobile-originated calls, internet-based voice and messaging services. Two paradoxes are worth noting. First, according to the latest available data, although fixed-originated voice call volumes were down by 11.9 per cent in 2016, in contrast with a 5.7 per cent increase in mobile-originated call volume, there has hardly been any change in the number of fixed lines that remain at around 33.5m. This is due to an increase in the number of households and, importantly, because in most cases landlines are required to access broadband services. Second, despite falling call volumes, the average revenue per fixed line increased due to continued increases in line rental prices and bundled calls. In other words, it is typically the case that fixed voice calls are sold as part of a bundle (Ofcom 2017).
2. Following the adoption of a new charter in April 2017, the BBC Trust was replaced by a unitary board. I refer here to the BBC Trust because it was responsible for the distribution strategy examined in this chapter. The 'Framework for Distribution' remains in place.

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