Digital Media Culture and Public Service Media in the Platform Era

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Abstract

This chapter argues that a complete transformation to mature public service media institutions and strategies is necessary due to disruptive changes in global media structures producing a digital media culture (DMC). Broadcast enterprises are endangered by a generation rift and threatened with declining relevance and a minor role in online competition. Renewing their relevance requires abandoning the historic prioritisation of linearity and embracing interactivity in non-linear media production and operations. Building digital infrastructures for the production and distribution of linear programmes was accomplished and important, but can now be seen as an intermediary step in the continuing development of digital media culture. The future of public service media hinges on whether these organisations can be a proactive player in the digital media eco-system where the former privileges of heritage broadcasters will be dismantled or shared with other players. The author believes efforts in achieving this are uneven and, so far, too often ineffective.

Keywords: public value, media ecosystems, integrated mandate, digital disruption, digital transformation, media systems, linear and non-linear media

Introduction

This chapter provides a critique of the status and future prospects for public service media (PSM) in networked societies. In the German language, the term 'digitale Medienkultur(en)' is well-established at universities. It is useful for assessing the combination of technological, economic, political and cultural aspects. This concept accentuates technological development as a driving force in a process that is highly social. The analysis goes beyond a particular institution and its infrastructur(es), even when infrastructures are shared between actors. The closest equivalent in English is 'eco-system', a term borrowed from environmental sciences as an allegory for media as a kind of ecology of interconnected, interdependent and co-related elements. This term is problematic in important ways due to limitations in the allegory when applied to socially constructed environments. Thus, for the purposes of this chapter I will use

the term 'digital media culture' (DMC) as a useful construct for approaching analysis of 'networked societies'.

Disruption ahead

When dealing with prospects for the so-called network(ed) society, sociologists often stress the benefits of communication within and between international communities. Castells (1996) depicted the distribution of VCR technology and the spread of cable TV as signalling the end of mass audiences "in terms of simultaneity and uniformity of the message it receives" and its replacement with "segmented, differentiated audiences" (Castells 1996: 386). Castells envisioned the advancement of empowered individuals using interactive media instead of unidirectional mass media.

Eli Noam (1995) also emphasised individualisation as an effect of 'cyber-TV' featuring 'me-channels'. As media markets undergo deep structural changes, competition over frequencies, channels and content is less the focus than competing for customer attention. Noam foresaw the rapid establishment of new players in a disruptive scenario and wondered if US productions would dominate in emerging global TV markets. Barely ten years later, he answered his question: "Internet TV will be strongly American" (Noam 2004: 242). Indeed, this characterises the global online video market in which Netflix and Amazon hold strong positions and are now launching regional in-house productions.

Thus, individualisation and globalisation have certainly proven true. Noam added a third expectation of new socialising effects. He hoped the shared mass audience television experience that once created a common bond could be recreated through cyber-TV by 'telecommunities' – which was not precisely defined. Early experience in cyberspace with the Usenet made the assumption of growing peer-to-peer relationships understandable. He could not have envisioned sharing as a commodity or the peer-to-peer intermediary platforms that are dominant today. Content is still important, certainly, but the intermediary who equalises all content is arguably king.

Over a period of more than twenty years, the emergence of digital infrastructures in broadcast media has been the defining tension in discussions about the future of PSM. While digital is new, the emphasis on broadcasting is not. The focus has been on a complex set of intertwined processes for adapting production, storage and distribution with significant consequences for workflows and employment. This focus is increasingly less useful, however, because broadcasting per se has declining relevance. Unfortunately, media regulation does not keep pace with the ongoing technical and market transformation that confronts PSM with unique insecurities regarding their position in future national and global media systems. Significantly, audiences behave differently today and younger generations (below the age of 45) are increasingly moving away from linear media in all Western societies. The prevalence of smartphones as mobile media devices is even permeating use by older generations, indicating the

growing scope and depth of disruption. This is accompanied by the danger that PSM will lose popular and political support.

The relevance of PSM, and other traditional providers of 'quality media' is at stake. Unless they can play as significant a role in online domains as they have in traditional media structures, they are likely to lose their historic importance in everyday life. They are still trusted today, but not used as much or as routinely as before. This should be of concern because the internet and its intermediary platforms offer a wide variety of topics and views but with the public service and social responsibility orientation that the traditional press and broadcasters privileged. The public sphere, which was already an ideal-type, is being segmented into opaque communication spheres without a common or shared agenda. The disruption process affects not only media but also essential structures of Western societies that include, for example, friendship, participation, sharing, transparency, and deliberation. All of this need to be re-defined under contemporary conditions of digital communication, digital economies and digital cultures. Discussion is needed about how far the disruption process in media systems has developed and how the present and future of PSM is affected – and with what implications. RIPE is about re-visionary interpretations of the public enterprise in media, and that is clearly necessary today.

By the numbers

A brief reflection on several significant numbers is helpful for understanding the critical situation of PSM. On the internet, content does not get the same share of attention as in the broadcast sphere. And that is not the only problem. One of the earliest findings from media research is that attention varies in quality and effects (see Cantrill 1947, for example). In everyday use, the reception of linear media is often characterised by low attention levels due to multitasking. The reception of non-linear content presumably features higher attention levels due to requirements for constant interactive engagement (searching, scrolling, clicking, liking, linking, etc.).

In practice, the context of media use has always mattered greatly. The relevance of information for the public was never solely determined by its 'news value', as observed early on by Walter Lippmann (1922). The communication networks of each news consumer play a significant role in determining relevance, which is often the combined result of all visited channels; moreover, personal communication tends to have the highest impact overall (Druckman & Nelson 2003; Druckman 2004; Althaus & Kim 2006). Today, social media platforms that rely on this, like Twitter, can play a decisive role in the assessment of information relevance (Gabielkov et al. 2016).

Because PSM is tightly bound to the continuing PSB focus on linear distribution of content, their relevance for opinionforming is at risk. Table 1 shows the distribution of the main news sources among generations. The results indicate that people who are age 45 and above mainly use mass media. The statistical midpoint is moving higher year by year.

Table 1.   Main source of news by age – all markets (per cent)

Age	Online incl. social media	Social media	Radio	Printed newspapers	TV
18–24	64	33	4	5	24
25–34	58	21	5	5	29
35–44	49	15	6	6	37
45–54	39	10	7	7	45
55+	28	7	7	11	51

Source: Reuters (2017: 11).

The familiar argument that these media contribute a great deal to online news reception and are still present in the minds of recipients might be true, but is little consolation. Mass media had an important role in facilitating shared community experiences. PSM is likely to lose that because the role depends on scarcity of channels. In Europe, this process is not as far along as in the USA. Audience shares for Germany's public broadcasters and the two larger commercial systems are still between 10 and 13 per cent overall for their main programmes. In the USA, the linear TV erosion is far more advanced. Despite having four times the total population, the everyday reach of leading American channels is often below the figures in Germany. A market share below 5 per cent is not unusual for US programmes, while in Germany a 15 per cent share for popular programmes is still common. Of course, the American audience is divided between a greater number of platforms and channels, but a factor of pointed importance is the growing use of non-linear TV services and video platforms.

The erosion of TV audience shares has consequences not only for the relevance of PSM, but also for the economic stability of commercial TV companies. The investment bank, JP Morgan, recently downgraded several European TV enterprises (Boerse-online, July 2017) because expected advertising turnovers are falling below general economic trend lines. This is co-related with growing TV market segmentation that is facilitated by new specialised channels that are not balancing losses for the main channels. This would suggest that the future of TV in Europe is approximate to what is now the case in the USA, and certainly merits monitoring.

In Germany and other European countries, the public media channels remain popular with senior generations, but the share is much smaller in the younger cohorts. In Germany, TV consumption in the 14–29 age group amounts to 93 minutes per day, while all Germans above 14 years of age watch as much as 231 minutes per day. The market share of PSM TV programmes is 45 per cent across age groups, but only 12 per cent among the 14–29 age group. Although interest in news is slightly declining overall, 75 per cent of the TV news consumption is nevertheless for PSM news programmes. But, again, among the younger groups the PSM share is much lower (see for instance Best & Engel 2016). These numbers beg two questions of pressing importance:

1. Will attitudes towards and use of TV change as today's teens and young adults grow older, and especially regarding the use of PSM channels? If not, this could seriously damage PSM's legitimacy.

2. Beyond broadcasting, will PSM be able to balance growing audience losses among the younger generations (and the less educated strata of society) with approximate gains online?

Some preliminary answers are already possible. Public broadcasters (as such) will lose the younger population if they do not position themselves as an essential part of their culture, which is interspersed by the use of personal mobile media. This lesson has been learned by some radio stations, but is largely lacking in TV programming and only evident in small part for PSM web and mobile activities beyond broadcast-related services. As long as 'online' is assessed as an additional, supplemental distribution channel for already produced linear content, it is unlikely that the online strategy of many PSM organisations will succeed. Online media success does depend not only on content, but on the contribution to continuous, complex and increasing communication on digital platforms. For several reasons (see below) many if not most PSM organisations are not yet playing an important role on those platforms.

The problem is not only caused by a broadcasting mentality, but also encouraged by asymmetrical market shares in broadcast market shares compared to online market shares. An example is useful to illustrate. The German news programme *Tagesschau* has a market broadcasting primetime share of around 35 per cent All websites comprising the ARD network to which *Tagesschau* belongs, together with the sites and apps of the second German public network ZDF, add up to a market share of 11.7 per cent of German online information offerings. Moreover, in the online environment competitors have an overwhelming position of leadership, amounting to 52.8 per cent for print publishers and a close second to PSM for commercial TV news and information websites (7.8 per cent). This disturbs accustomed proportions of intermedia and intramedia relationships. Habitual patterns and heritage trust among audiences do not migrate automatically to new media environments. PSM is challenged to prove their relevance as online and mobile media advances. They at least need to gain a degree of relevance to balance their loss in linear media environments, which is especially important in the generation rift discussed above.

Another problem arises here. For PSM, proof of relevance depends on approving their specific value for public communication. Lacking that, PSM legitimacy is probably doomed. Their legitimacy depends not only on providing quality content that others can't deliver, but on their relations with audiences. Measuring relevance must therefore grapple with a fundamental problem. Despite restrictions that inhibit PSM from fully exploiting online tracking methods to the extent typically used by commercial platforms, and for good reasons, such quantitative measures would miss the point. Tracking user interactions with interface elements (clicks, shares, likes and re-tweets) could not be fairly interpreted as indicators of the relevance of public media channels for and to the public.

The interfaces of online apps support man-machine-interactions and not cultural values, although they may reflect them. At the same time, opinions and values are temporal statements in a fluid process constituted by a complex system of media and personal communication. This being the case, other sources for establishing relevance have to be found for PSM. That will not be easy. For example, one study of news sources among young people in Germany found that although PSM news is the most trusted source, it has a small share of use (JIM 2014). The relevance of a particular political opinion or a cultural tendency in the everyday life of an individual can't be measured by a market survey or profile and tracking data analysis. There is always the likelihood that a message was shared for entertainment value rather than to support the view advocated by its author. A frequently shared (i.e. 'trending') topic doesn't necessarily have high relevance, as most journalists know. As noted earlier, the quality of attention is not equal between situations and devices. Such distinctions can't be easily captured in quantitative studies, and audience retention rates are not an adequate proxy. This is no general argument against using statistical data to generate insights regarding the use of programmes, web services, contents or apps. It is simply to observe that the evaluation of user loyalty and trust or effects that include understanding complex contexts and situations can't be based on such data.

Digital transformation is not easy to manage in any traditional mass media sector – print publishing, commercial broadcasting, or PSB. But there are special obstacles in achieving the transformation to PSM. These organisations are sometimes legally constrained from online development, especially in Europe where transnational and national regulations cause enforced immobility in important areas. PSM organisations generally continue to have a broadcast-based and –oriented mandate with variable additional allowances for online activities. To cope with the development of DMC, an integrated mandate and remit is necessary. Such a mandate must be technologically neutral, focused on the obligation to produce and communicate public value in any and all appropriate media formats. Legal aspects are a big problem, especially in Germany, but only one problem endangering the digital transformation to become fully PSM. Other aspects include weak organisational competences and lack of willingness in the leadership of PSM enterprises. The self-concept of these enterprises can be an obstacle to successful change, as well. For several reasons, TV production and TV audience shares are prioritised over endeavours to develop integrated communication concepts that are essential to relevance, competence and value in networked digital media environments – i.e., the digital media culture. We next scrutinise possible modes of behaviour in this light.

Media platforms

Broadcast media engaged the internet between 1995 and 2000, just before the dot-com bust. Among broadcasters, the possibilities for interactive TV were the focus of

attention, rather than the development of internet services for personal computers. The first steps into web environments differed across enterprises. Some mainly posted programme-related promotional material, some experimented with streaming small portions of broadcast content and some launched experiments with internet-specific content and communications such as live chat. Within a few years, all of these activities were directed towards the development of networked media in PSM that was conceived as a 'third pillar' alongside radio and television. It was generally understood that the internet was somehow interconnected with the broadcasting pillars, but this was mostly treated as a specific category.

After the pioneer years, there was variable degrees of support for publically financed digital services, but generally firm in EU governance. While this was important to some, such as the BBC in Britain and Yle in Finland, in many cases short-sighted leaders in broadcasting companies (public and private) had little interest in expanding online or investing significantly in these 'side' activities. The window of opportunity passed as press publishers, faced with steep decline in advertisement turnover, attacked – especially in the larger media markets of Germany and the UK. PSM was construed as illegal market distortion, which explains much about the state-aid compromise of 2005-2007 (see Donders 2009). Increasingly, the online content of public broadcasters has been restricted to programme-related services in Germany, especially, and what is offered online must be different from content offered by the press and its digital derivatives.

The struggle for PSM mainly happened within national boundaries just as these organisations underwent a broad conversion that prioritises digital networks. The idea of 'networked societies' conveys an optimistic view that emphasises presumed autonomy and sovereignty for participants. But two important aspects undercut this vision and have been largely absent in the discourse:

1. The digital economy is based on technical networks and these do not inherently create 'networked societies'. The technical network is prerequisite for marketing digital products and services, but for the most part doesn't add any special quality. For example, Amazon sold books and then allowed other sellers on the platform for a charge, thereby diversifying the range of goods. But the products were not new or unique. What is new and greatly matters is the development of data storage and analysis capacities combined with global cloud services. Today, Amazon is an enormous cloud-computing platform offering a virtual department store that also offers a streaming service with its own global production strategy.

2. Also missing was any distinction between 'frontend and backend' aspects, which denote what is visible and touchable for users and what is not. All that is not is the heart of the operation and responsible for the functioning of each platform. The backend of Amazon, Facebook and Google are gigantic data evaluation systems. Their strength lies in the capacity for big data analysis and proprietary algorithms that are applications of artificial intelligence. Amazon and Netflix

are now beginning to offer unique original content in the same genres as TV corporations and bidding up sports rights. They are focused on tying their subscribers to their platforms by offering a great variety of personalised content.

The recorded music industry offers an important example. The internet opened opportunities to share music and streaming services like Spotify solved various problems and are now accepted as vital for the music industry, which earlier focused on selling tangible products and failed to create alternative business models. New intermediary platforms now control the sector, and streaming services are beginning to produce original music. Increasingly, internet streaming services not only distribute everyone else's content, but also their own products. They also provide feedback, personalisation and communication services as masters of every internet-based technology. They observe how users behave in detail and react quickly and flexibly.

Taken together, this signals a shift from portals as mere aggregators of content to platforms that provide application programming interfaces (API) and unique services for partners, clients and users. The shift began about ten years ago (Sheratt 2013). Google News provides a good example. Originally, it was seen as a replacement for singular sources, while in recent years it began to co-operate with publishers in revenue sharing. Facebook started as a platform for social networking, but is now also a system for revenue sharing. Big publishers complain about this 'digital duopoly' that controls online news traffic and access to advertising revenues (Eggerton 2017), but they are nonetheless dependent on them. This shift implies that content is no longer king, but rather the intermediary role. Platforms are not interested in the specifics of content; only in the capture of users. Lock-in is what matters most for them. Ideally for the platform operator, all popular content can be found on one site and leaving is not a desired option.

Media platforms and public service media

We now return to PSM more specifically. The shift to the platform economy affects PSM in several ways. The big intermediary platforms are global. In Germany, for example, Amazon Prime Video has become the market leader and is ahead of Netflix, leaving a mere 10 per cent share for the only remaining German streaming video supplier (Maxdome). The national PSM provider may enjoy the charm of regional content and trusted local journalism, but in all other aspects their structure and presentation seems outdated and is not very competitive. The BBC's iPlayer effectively competes in this domain, and there are other PSM firms that also do reasonably well (such as Yle's Arena service), but reliability is lacking because content vanishes from one day to another due to broadcast laws and copyright restrictions. In most cases, the legally allowed access period is very short – especially for acquired content. Many productions cannot appear online or in media libraries. Some of the content is illegally copied by

users and uploaded to YouTube, but the persistence of this content is also unreliable. In many countries, co-operation with commercial partners is not allowed for PSM anyway.

Thus, legal constraints, non-conducive organisational structures, lack of financial potential and sometimes simple unwillingness within the leadership combine to obstruct the progress of digital transformation to produce a mature realisation of PSM. In some cases, politicians are actually more far-sighted than PSM leadership and have forced the establishment of advanced digital services. That is evident in Germany, for example, with the establishment of 'Funk', a streaming platform for the younger generations. The public broadcasters requested a new TV channel instead and failed to appreciate the legal breakthrough in being allowed to produce and license internet content independently from broadcast programmes.

The only unique selling proposition (USP) for PSM programmes on the web – whether live streams or on-demand – is their presumed quality. But online competition is not about content features or even the engaged attention of users for specific content, as much-debated in the early years (see Davenport & Beck 2001). The main interest is not even controlling consumers' behaviour (contrary to Terranova 2012 and Wu 2016). The focus of competition is quite simply the presence of as many people as possible on a particular platform. For the platform operator, attention or distraction makes no real difference. But five hours spent browsing Netflix content means minus five hours using any other service, channel or medium. Platforms that work as intermediaries between content or service providers and end users are completely neutral about content and attention. Competition on the web in the age of platforms is about time spent and exploitable user data, not quality content or engaged attention.

Achieving lock-in requires platforms that are attractive, multifaceted and easy to use. The commercial aspect hinges on revenue sharing as the essential business model. This also affects PSM because platforms consume the time devoted to media use. PSM typically offers a great variety of content, but does not own or manage the platform outside broadcasting. A mixture of legal, organisational and financial constraints may even prevent taking useful steps to mature in digital media environments. The earlier example of online archives and catch-up service restrictions illustrate this. Digitising archives has been a goal in PSM for twenty years, but most work remains to be done. Too often, it actually involves discarding a considerable share of historic collections.

The legal situation for broadcast archives is indeed complicated. All that was produced before online distribution requires copyrights owners to agree to this form of distribution for every single piece. For content produced in the platform era, contracts with rights holders require clauses which allow (or at least don't forbid) a public offering in online repositories. When agreed, that typically entails added costs. And PSM organisations often do not own the rights for all the contemporary content they provide. For citizens who have paid fees or taxes for their services, most assume that all broadcast content will also be available online. Few understand the constraints. In Germany, PSM produces 300 new radio plays every year, but only a part is available in online libraries. Instead, co-producers sell the rights to other firms, typically

streaming partners. Interested listeners seldom have the chance to get 'free' access to radio plays unless they incidentally listen to the linear broadcast. Such works of art and elements of cultural history should be accessible without such limitations, but a total buy-out of rights would be a prerequisite.

For public broadcasters that have digitalised archives, a primary purpose is the re-use of content for new productions, which informs internal rules for the retention of archival goods and related metadata. The latter is designed for use by broadcast editors and authors, not researchers who often have difficulties finding specific content in the archives. In Germany, public broadcasters are not legally obliged to even operate archives. Their existence could be ended at any time. But these archives comprise an important audio-visual heritage. For researchers in the humanities, media studies, and political science, access to archival content is of great importance. A topic of pressing importance discussed in international committees of librarians and archivists is how archival metadata can be enhanced by collaborative tagging on open platforms (Golder & Huberman 2006). Open metadata and automatic recognition and indexing systems can make broadcast archives more visible, but for this to happen legal, political and financial deliberations are necessary. This should be done, too, in co-operation with other publically funded cultural institutions. Open archives are an essential public service in the context of the digital media culture.

Digital media culture

The digitisation of production, storage and distribution is only a first step in the digital transformation project. Although technical infrastructures and organisational configurations have changed, the transformation to mature PSM has scarcely begun. Maturity is not only about distribution channels, but includes content, presentation, tonality, external (legal) and internal rules, and most notably the *spirit* of the institution. From an audience perspective, digital developments have brought some improvements, but nothing really fundamental. Technical modernisation in screen resolution and electronic program guides have succeeded, although the latter has not replaced program information in TV magazines and newspapers. Online audio-visual archives could in theory replace personal video recording (PVR), but is contingent as discussed above.

More fundamentally, however, broadcasting companies do not yet consider themselves 'pure players' – i.e. online actors first and foremost. They see linear distribution of content as their central task. Online communication is an annex to that. This is not limited to PSM, of course. Commercial broadcasting companies are much the same. Only when this disposition is reversed, so to say, and linear distribution becomes the special case could one fairly say the digital transformation is mature. For now, however, this strategic orientation is largely missing among PSM supporters. To be fair, this is least the case at the BBC and Yle than most other PSM organisations. In those cases, a post-broadcasting era has been articulated and is being pursued to varying degrees.[1]

Analysis of failed attempts to achieve acceptance in the digital environment indicates nothing short of complete overhaul in all processes and policies can produce the desired results. The New York Times experienced two failing attempts in 2005 and 2011. In its *Innovation Report 2014* this was the starting point for NYT's third seemingly successful attempt in which every process across the whole enterprise is optimised for digital operations, rather than print. Applied to PSM, this guideline would suggest there would not be any concept in the whole institution focused on serving linear programmes primarily – if at all. Further, the actual needs of online and mobile audiences can only be learned from active communication with them.

Understanding the current state of media development with the 'convergence' notion is arguably problematic because it suggests the identity of 'old' media will (slowly) merge with elements of 'new' media after a vague but apparently longish period of co-existence. Today, it is generally considered common sense that new media won't push aside old media. But the developmental dynamics of the digital media environment applies to all media firms, and this has been broadly underrated and sometimes totally overlooked. The experience from 2000-2005 induced unjustified optimism about the active role of media users after (if there ever is an 'after') the broadcast–internet conversion (Jenkins 2006). Increasingly, it seems the active role of audiences is largely reduced to supplying profile data to feed the algorithmic analysis of digital platform intermediaries.

As observed, the experimental beginnings of online PSM are construed as the 'third pillar', but in the platform era of the digital media culture, broadcasting and online media are not in the same category. Online media constitute not merely another channel that competes with others, but has potential to consolidate all other media channels in a comprehensive system. At the very least, the process is reallocating position of mass media and redefining (downwards) their relevance. This is the process challenging PSM today.

A paradigm change is still pending inside PSM overall. The digital media culture goes beyond the more simplistic 'networked society' notion, providing more scope for assessing legacy media structures and allowing a much greater variety of participants in deciding media-society relations in the platform era. It also enforces the on-going adaptiveness of all media providers. By obliterating traditional distinctions between media, and between professionals and active users, the DMC creates new problems for evaluation and classification of services and content. Many users are adjusting their personal 'signal-to-noise-ratio' and disorientation is not an issue. On the contrary, surveys show satisfaction among users who enjoy their new sovereignty (see Shearer & Gottfried 2017). This transformation is mainly a problem for legacy media organisations, commercial and public alike.

PSM in particular is increasingly embroiled in intermedia collisions with print publishers who claim the right to compose their online services with all available digital assets – text, images, videos, etc. – and do so *exclusively*. They argue that PSM should be restricted to broadcasting, and even there to content that is subject to market failure concerns (i.e. not what is popular). In Switzerland, for example, text elements

must not exceed 1000 characters unless directly related to broadcast programmes; only 25 per cent of texts without such relations are allowed (BAKOM 2007). In Germany, newspaper publishers are campaigning against 'press resemblance', a law stipulating that the content, layout and media elements of websites and apps from PSM must not resemble those of printed newspapers.

Two interconnected paradigms hinder the transformation to mature PSM. One is the prioritisation of linear production and distribution over non-linear strategies, for several reasons. Legal requirements for commissioning, technical structures, employee qualifications, and popular use of broadcasting among older people support adhering to the broadcasting orientation. This is also predominantly supported by political forces and industrial stakeholders who fear economic disruption. And general patterns of media use indicate that the broadcast era will last for several decades still. But there is clearly a danger of sudden de-legitimacy for PSM, particularly in Germany which is a major European media market. Political and public support is eroding there, and there is no mandate for transforming the media system as a whole. In October 2017, a representative of the leading political party, CDU, proposed curtailing the mandate for ARD to restrict services to regional broadcasting content and to discontinue the news programme *Tagesschau*, ARD's journalistic flagship. At this writing, it remains to be seen what the outcome will be.

The second problematic paradigm is the distribution-orientation characteristic of mass media. This orientation addresses the public in a certain way. Mass media enterprises are self-conceived as originators, curators and classifiers of messages (or 'content'), not as participants in a continuous conversation. DMC is a global network and deeply recursive. The self-exclusion from networked communications could be tantamount to extinction for broadcasters. Visible efforts to encourage participation have generally been feeble, late and prone to failure. Concepts like 'trimedial planning and production' of content seem inadequate to cope with today's rapid development of internet-based media. A thorough reorientation and new prioritisation of online media will necessarily require painful decisions regarding linear content, institutional identity, and employees as well as managers. It is understandable but unwise for broadcasters to avoid disruption as long as possible. Unwise because that is a high-risk strategy amounting, in the DMC context, to no strategy at all.

Under present conditions, considerable problems therefore arise not only in the legal and institutional fields for PSM but also with respect to their modes of contact, address and reception given the engrained reliance on broadcast programmes and channels. How will the relation between linear and non-linear services evolve? In the long-term, linear programmes will likely be a special case of discrete digital media services for live shows and sporting events that are inherently linear and time-bound for interest value. The reception of video on demand services like Netflix is already peaking for TV primetime and can be read as a practical criticism of traditional broadcasting. Streaming creates new usage forms like binge viewing of series seasons. Storytelling is already affected by these changing habits (Rezende & Gomide 2017).

The heritage paradigm of TV primetime audience flow and loyalty to a certain channel is decomposing. For TV documentaries and educational programmes, it never existed. Although the linear perspective will remain prevalent for older audiences for some time still, it is reasonable to plan for what happens later in the DMC environment that is rapidly emerging and increasingly comprehensive. The unchanged 220-240 minutes of daily linear TV viewing by older audiences is already irrelevant for younger users. Their orientation is not linked to channel logos but to content brands.

In a near future, broadcasting will only be distinctive in formats as discussed. Already today, successful multimedia productions demonstrate how important benefits can be derived only by harnessing all available sources and materials. An essential observation is that the reception of video content is currently the strongest trend online, and particularly for smartphone use and among younger generations. The most important feature of smartphones is not mobility but the fact that they are *personal*. The three most common places where smartphones are used are the places most common for people to be: at home, at work and in shops (Google 2016). They are increasingly used in parallel with laptops and television. YouTube viewing spikes during primetime and happens on smart TVs and smartphones, whereas computer-based viewing peaks around lunchtime. The average YouTube viewing session on smartphones is now more than 40 minutes, and 42 per cent of YouTube users watch videos on smartphones *only*. Adolescents may spend a lot of time in rooms where a TV is switched on, but viewing on smartphones is apparently more relevant. This option is most consistent with their preferences and facilitates communication with friends about video and web content.

Today's buzz about 'cross-mediality' and 'trimediality' is mainly focused on the 'third pillar' and fails to capture the need for media with a public value mandate to be active on mobile media services. That requires financial and organisational efforts that are constrained by the traditional broadcasting orientation of PSM (see Virta & Lowe 2016). TV and radio departments may be willing to share content with their online counterparts, but not their budgets. For instance, an initiative proposed by a highly-ranked TV editor for a German broadcaster to spend only 1 per cent of all editorial TV budgets for YouTube reformatting and user communication failed because colleagues *and* the company's leadership resisted.

For its part, the so-called third pillar of online media often have no legal mandate to produce independent content, while the two primary pillars in broadcasting are not inclined to support production of adequate, much less impressive, online content by adapting programme strategies and financial schemas. This dilemma is unlikely to be solved within the confines of the self-conception of PSM as 'broadcasting plus'.

Many PSM organisations are not making any conspicuous efforts to test the boundaries of their legal mandates or organise political support for the transformation to become fully integrated digital media operators. Most dissipate their energy in fighting rear guard battles against commercial media efforts to delegitimise their mandates. The generation rift and an alleged abundance of public value content from

commercial sources online provides a familiar rationale for reducing or eliminating public funding for media. The adverse impact has been rising in recent years.

Cross-media or trimedia productions try to reflect requirements and expectations of contemporary DMC development, but lack a fully fleshed out strategic concept for editorial work and resource utilisation. Without such a frame, attempts generate only a semblance of accomplishment and avoid any fundamental shift. 'Three pillar' thinking doesn't do this, but instead maintains linear media in their traditional priority position, leads to underfinancing of the online 'pillar', and neglects the difficult transition from annunciation (broadcast transmission) to dialogue (social media communication) as the basis for all production.

The future of PSM is at stake. The next ten to fifteen years will decide if broadcast-centred organisations can adapt to the dynamic DMC environment and retain influence in the global platform era. The full digital transformation of PSB to really become PSM must include a thorough revaluation of traditional broadcast mentality, beginning as soon as possible. I believe their active contribution is crucial to the general progress of the digital media culture, but requires a necessary transformation. They can only be successful if allowed to restructure themselves, and if they develop the expertise to accomplish this. Most importantly, it depends on the willingness to do this.

The German media structure, which is the biggest public service media system, is endangered by potential collapse due to a lack of enough innovation. This is not totally their fault because legal obstacles and the regulatory situation is a serious complicating factor. Moreover, responsibility is distributed across 16 regional states and the discursive climate is increasingly aggressive against PSM. That needs to change because without a strategy to accomplish an integrated mandate and integrated digital media organisation, PSM will crumble in the context of a thorough and increasingly global digital media culture.

Note

1. See the 2016 Special Issue of the *International Communication Gazette,* edited by Marko Ala-Fossi on Broadcasting in the Post-Broadcasting Era.

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