Welfare State Values and Public Service Media in the Era of Datafication

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Abstract:

Welfare states have historically been built on values of egalitarianism and universalism and through high taxation that provides free education, health care, and social security for all. Ideally, this encourages participation of all citizens and formation of inclusive public sphere In this welfare model, the public service media are also considered some of the main institutions that serve the well-being of an entire society. That is, independent, publicly funded media companies are perceived to enhance equality, citizenship, and social solidarity by providing information and programming that is driven by public rather than commercial interest. This article explores how the public service media and their values of universality, equality, diversity, and quality are affected by datafication and a platformed media environment. It argues that the embeddedness of public service media in a platformed media environment produces complex and contradictory dependencies between public service media and commercial platforms. The embeddedness has resulted in simultaneous processes of adapting to social media logics and datafication within public service media as well as in attempts to create alternative public media value-driven data practices and new public media spaces.

Keywords: welfare state, public service media, datafication, personalization, fair data

Welfare states have historically been built on values of egalitarianism and universalism and through high taxation that provides free education, health care, and social security for all, which, ideally, "encourage participation and inclusion of all citizens in the political and cultural public spheres" (Syvertsen et al. 2014, 7). Through a funding structure based on license fees or taxation, the public service media (PSM) follow the logic of the welfare state as publicly owned media with the remit to serve all citizens. However, the so-called platformization (Helmond 2015; Gillespie 2010) of the media environment, with the domination of commercial platforms such as Google, Facebook, and Instagram, has shaped media productions and media logics across the globe. The platformed media environment is now characterized by social media's logic of programmability, popularity, connectivity, and datafication (Van Dijck and Poell 2013). Van Dijck and Poell (2018, 9) describe platform anatomy as follows: a platform is fueled by data, automated and organized by algorithms and interfaces, formalized through ownership, and governed through user agreements. They distinguish between infrastructural platforms, owned and operated by the "Big Five" (or GAFAM: Google, Apple, Facebook, Amazon, Microsoft), and sectoral platforms. Infrastructural platforms are fundamental since they provide crucial infrastructural services to other platforms. Sectoral platforms provide digital services for specific sectors, such as accommodation, transportation, entertainment, or health. From the perspective of PSM, social media platforms, such as Facebook and YouTube, have been particularly important in content promotion. Video on demand (VOD) platforms, such as Netflix, Amazon Prime, and HBO, produce their own competitive digital platforms for content distribution—particularly content that has traditionally been distributed through analog television. What unites these different platforms are the data-driven systems that use data, algorithms, and recommendation systems to organize content and to develop services (Lobato

2019; Gillespie 2018). As Van Dijck and Poell argue, platforms are not value-free constructs. They carry norms and values in their architectures (2018, 3).

Several contradictions emerge from the platform ecosystem and the ways in which PSM are embedded in it. PSM companies, as institutions built with public funding and a public remit, need to be open to public scrutiny (Thomass 2016). This requires an evaluation structure and transparency, whichare considered to lead to more trust among the audience. PSM has not always been seen to live up to these standards—for example, due to paternalistic culture or bureaucracy (Ytreberg 2002). However, when audiences are offered universal access to services and understanding of the main principles and values of PSM and possibilities for participation and critique, the conditions to enhance a vibrant public sphere appear viable. Based on research into transparency in PSM in Germany, the United Kingdom, and Canada, Thomass (2016, 310) argues that "the measures for opening up broadcasting to civil society and being more transparent to the general public will have long-term favorable outcomes for the system of PSM." However, the data-driven media system of platforms leans on commercial competition and a culture of trade secrets. Commercial platforms operate on hidden mechanisms of data gathering, where user data is sold and used for the good of private companies and remains inaccessible to the public. This system is at odds with PSM's striving for transparency and universalism. In addition, PSM companies increasingly strive to develop their own platforms and lean on user data, audience metrics, segmentation, and user profiling in their content production, audience reach, and distribution. These practices raise concerns over the ways in which PSM companies are adapting to platform logics and moving away from the universality principle that has been one of its core values. All the core values of PSM— universality, equality, diversity, and quality (Hokka 2018)—are also considered to be central in supporting democracy, the welfare state, and public participation. These values are also inscribed in the concept of the media welfare state (Syvertsen et al. 2014), with its four pillars of universalism,

editorial freedom, cultural policy, and durable, consensual policy solutions. The concept of a media welfare state refers particularly to the Nordic region, and we use it in this article particularly to examine the challenges of PSM in the Finnish context.

Furthermore, scholars argue that the platformization of the media environment may fundamentally change professional practices, business models, and the ways in which media operate (van Dijck and Poell 2015; Hokka 2018, 2017; Van den Bulck and Moe 2018; Andersson Schwartz 2016). For PSM companies, the crucial question is how platform logics shape the possibilities of serving the public interest and furthering public values. As José van Dijck and Thomas Poell (2015) ask, What happens to public value outside the designated space of public broadcasting?

This article offers a conceptual interrogation into the ways in which the platformed, data-driven media environment affects the production culture, distribution, and circulation of PSM contents and the position of PSM companies in media markets. The article provides an overview of the main arguments of how these changes also challenge and shape public service values and the pillars of the media welfare state. It also offers a review of alternative attempts by PSM companies to respond to platform power with fair data and ethical infrastructures. Our approach is informed by previous and current research conducted on PSM in Europe. Our own research is based on ethnographic and qualitative research on the Finnish PSM company YLE during 2016 and 2018–19. This article then relies on a combinatory use of a wide range of sources of knowledge from analyses of previous research, documents, interviews, and participatory observation. This approach aims at gaining insight into the main challenges that emerge and shape the current situation of PSM (cf. Hannerz 2010).

In the first part of this article, we discuss the concept of the media welfare state and the values that

compose the core of the PSM's remit in Nordic societies. Then we move on to investigate the ways in which PSM is embedded in platform power and the ways in which this embeddedness has shaped PSM in Europe and challenged their core values. We offer particular examples from YLE. In the latter part of this article, we introduce recent "awakenings" in PSM, reflecting the ways in which PSM have responded to the current situation. Despite the initial enthusiasm for the opportunities provided by commercial platforms, PSM have come to realize the disadvantages of the current situation and strive to create different kinds of solutions to serve public values in a platformed media environment. These "awakenings" are understood as imaginative politics (Malkki 2015), which seek to create alternatives to the current situation: PSM platforms that develop fair data practices as well as collaborative alternative platforms with infrastructures that support public values. Finally, we reflect on the values that emerge in these awakenings and identify a new focus on transparency and ethical infrastructures.

Welfare State Values and PSM in the Era of Datafication

Welfare states have historically been built on values of egalitarianism and universalism. The latter is seen as the best possible policy to reach equality, so that welfare state provisions, such as free education, health care, and social security benefits, are available to all. A welfare state can be conceptualized as rooted in the idea of cooperation and reciprocity in the sense of "being with" each other (Gearey 2015, 342). Therefore, the welfare state is not perceived as a mere safety net for the poor but as an active means to influence the development of society. Overall, public services are considered to serve all citizens, whereas private services are considered only supplementary (Syvertsen et al. 2014; Esping-Andersen 1990, 27). During the twentieth century, this principle was also applied to audiovisual media in the Nordic countries.

It can be claimed that, besides social policy, Nordic countries have constituted a special model of the "media welfare state" (Syvertsen et al. 2014). This means that equality and universalism have been founding features of Nordic media policy. Syvertsen et al. (2014) distinguish four pillars of the media welfare state: First, the media welfare state is grounded in the idea of universal access to information through communication systems, such as postal services, networks, and printed and audiovisual media. Second, the pillar of editorial freedom refers to a range of measures used to safeguard editorial independence from state interference. The third pillar refers to extensive cultural policy concerning the media branch, which seeks to ensure the provision of alternative (domestic and minority) content for standardized mass culture and to diminish the influence of global market forces (Syvertsen et al. 2014, 25–28). Fourth, the media welfare state system seeks durable and consensual policy solutions.

In PSM, these aspects of the media welfare state come together. From the perspective of this article, the pillar of *universality* is particularly relevant and is connected to the PSM core value of universalism. Universality has been understood not only as equal technical access to services but also as an important part of cultural and social policy, a source of social capital (Aslama-Horowitz and Car 2015). In the theoretical literature concerning PSM, universality is defined mainly in two ways: First, it is a provision of free services accessible to everyone to reach and create a shared public space for public discourse (Debrett 2010, 186–87). Second, universality means diversity in content as public service should also give space to minorities and marginalized voices (Titley, Horsti, and Hultén 2014; Brevini 2013, 42–44; Goodman 2013, 199–200). Above all, universality refers to the "universal appeal" of the nation as an "imagined community" (Van den Bulck and Moe 2018, 877). Thus, PSM as a universal service for all citizens have been considered a key element to construct and maintain a sense of belonging in a welfare state. In this way, PSM are considered

crucial for enhancing conditions for social solidarity that require a sense of reciprocity and respect, open participation in public debates, and voices to be heard on equal terms (Nikunen 2019, 27).

As Syvertsen et al. (2014) argue, the Nordic welfare system is a combination of protective policies defending internal coherence and solidarity and relatively open economies with international exchange. As part of the media welfare state, PSM support these elements.

In the present media environment, the pillars of the media welfare state are not self-evident: digitization and globalization have brought several challenges to universality, editorial freedom, cultural policy, and sustainability of consensual policy solutions. While universality is still considered one of the key founding principles of PSM, the present media environment, based on global platforms and individualized service, has forced PSM companies to revise their interpretation of universality. In practice, several PSM companies in Europe have utilized different applications and concepts based on user data and profiling to create a present-day interpretations of the universality principle (Van den Bulck and Moe 2018; Andersson Schwartz 2016). This is also the case at YLE, where users' various needs and interests, such as levels of prior knowledge, eagerness for interactivity, or different ways to spend time on news and other services, are better served now, using digital media, than before (Hokka 2018).

These new kinds of data-based services are ultimately a reaction to the commercialization, platformization, and datafication of the media environment. Although PSM companies still have a strong position in Nordic countries, they are also compelled to compete for users to justify their position as a tax-funded universal service (Hokka 2017). Furthermore, while the main competitors of PSM companies used to be other national private companies, now they must compete with global platforms. To be successful in the increasingly fierce competition, platforms rely on increasing

amounts of user data and increasingly detailed data analytics (Arsenault 2017). Furthermore, as users have become accustomed to services based on detailed user data and algorithms that enable, for example, personalized recommendations, PSM companies have started to consider these data-based services as an inevitable part of their operation (Van den Bulck and Moe 2018). These practices affect the value of universality, but they also shape cultural policy and the potential for sustainable policy solutions.

Next, we discuss in greater detail how embeddedness in a platformed media environment has shaped PSM in different ways on different levels. To highlight the main challenges, we explore how platformization has affected the *circulation* of content with increased PSM presence on social media platforms, the reach of audiences through *recommendation system*s and *customized content production,* and the *distribution* of content on their own platforms.

PSM in the Platform Era

As Mark Andrejevic (2013) has noted, many public sector institutions have been surprisingly willing, even eager, to hand over their position as the main organizers and providers of public knowledge to US-based for-profit platform giants, such as Google.

In the beginning, the platformed media environment particularly affected the circulation of PSM content rather than the production of the content itself. PSM companies were eager to be discoverable in the new media environment. For example, in 2010, the BBC started its own channel on YouTube, and soon other PSM companies followed with their channels (Weber 2007). By 2012, all European PSM companies were actively using social media platforms (Moe 2013). However, in the early days, during the advent of social media platforms in the 2000s, PSM companies struggled to understand their role in this environment. To serve their audiences, PSM companies took various strategic paths. Some, such as the BBC and YLE, started fighting early for their right to be on social

media platforms, to be available and visible on social media platforms, and to create their own sites and portals (Moe 2013; Donders 2019). This approach was grounded in the understanding that, in a digital environment, they could better fulfill their remit and offer equal access, universality, equality, diversity, and quality to audiences. Since the media environment was rapidly shifting, so should PSM. These actions were heavily criticized by the commercial media and were seen as an unfair advantage in markets since most PSM companies in Europe operate on public funding (Lowe and Martin 2013). This could be described as the panic stage of their online strategy (Donders 2019), characterized by unclear strategy, multiple battle plans, and a lack of consistency. This was followed by an extension stage, when PSM companies aimed to maximize their presence on social media.

Presently, YLE has several Twitter accounts, Facebook pages, and YouTube and Instagram channels, and YLE's news stories have Facebook, Twitter, and WhatsApp icons for sharing. In its operational principles, YLE justifies this by saying, "We have to be there, where people communicate," and "Through social media we reach people that we would not reach otherwise" (YLE 2019a; YLE 2017a). Thus, in the spirit of universalism, YLE considers the use of global platforms necessary to reach most people. This, however, is problematic as YLE encourages its audience to use global platforms when linking them to YLE's content. When the user shares the content on a platform, that platform gathers data about their actions for commercial purposes, yet that data is not available for PSM or the users. In this way, the actions of PSM companies directly benefit the economic purposes of global platforms. Clearly, sharing PSM content on commercial social media platforms has caused many conflicts in values. In addition, there have been disputes over copyrights and conflicts over advertising appearing as part of publicly funded content on YouTube and Facebook (Timmons 2015). Sharing PSM content on commercial platforms has led to

increasingly difficult dependencies, where commercial companies profit from publicly funded content.

Audience Experience and Content Production: Recommendation Systems

While circulation of content has relied on the operational logics and power of social media platforms, PSM companies soon engaged more deeply in the data-driven logics of platforms by creating their own *recommendation systems* based on user data, to improve their own audience reach. These recommendation systems are similar to social media platforms' algorithmically produced content, but they are also the foundation of online distributed content by VODs. Commercial audiovisual content provider Netflix is said to epitomize the shift to nonlinear television with new logics of aggregation, filtering, and recommendation systems (Lotz 2017; Lobato 2019). Ramon Lobato (2019) argues that Netflix has a pivotal role in the development and popularization of recommendations, which inevitably affect PSM as well. These recommendation systems are based on users' ratings and viewing history data but also on predictions of other users' activities and manual content coding (Lobato 2019, 40).

The development of recommendation systems primarily serves the distribution of content in the digital environment, particularly on PSM companies' own platforms. Most Nordic PSM companies have different kinds of recommendation services and applications based on user profiling and/or algorithms. According to Van den Bulck and Moe (2018, 881–82), the BBC, YLE, DR, RAI, and NRK have considered personalized services highly relevant to their strategies. Particularly, the Nordic PSM have emphasized the relevance of new technologies in reaching audiences. Research by Andersson Schwarz (2016) shows how PSM companies in Sweden are developing different kinds of targeted content and personalized services but not embracing full-scale personalization (Andersson Schwarz 2016). In its strategic vision, YLE aims to invest "in personal user experience,

and different information and experience needs" and "promotes the discoverability of its content, investing in improving the personal user experience" (YLE 2017b).

In terms of content production, data-driven practices have become central in customizing, for example, news production. YLE has developed a concept bible, a guide to approaching different audiences with different storytelling methods (Hokka 2018). It was a move from broadcasting logics to adopt the logics of the digital media environment. The concept bible was created to address the challenges of reaching hard-to-get audiences—particularly young audiences—on different platforms by creating different versions of the same news item for different audience segments.

Distribution: Platforms and Apps

To be able to make use of these recommendation systems and to compete with such content providers as Netflix, PSM companies have begun to develop their own digital platforms and applications. In 2014 YLE launched Uutisvahti, a personalized news application for mobile phones where users can choose their topics of interest. This application is not based solely on algorithmic recommendation since users can choose, via index words, what topics they want to emphasize and how much. Naturally, the chosen preferences give much user data to YLE. Furthermore, YLE collects data on user activity, such as used content, duration of use, the type of device, IP address, and user's location, on all its sites and applications (YLE 2019b). Based on this data, YLE uses profiling and personalization to recommend content on several services, including its platform YLE Areena (a streaming service that 65 percent of Finns use) and the YLE News web pages. In addition, YLE is offering the possibility of using its services through personal user accounts (YLE ID) and has recently launched a campaign to expand its use from the present 1.3 million users (roughly one-fourth of the Finnish population).

YLE justifies the utilization of user data with its aspiration to provide and develop better services for users. Based on the vast popularity of YLE's digital services, it seems that users appreciate these services' functionality and content. Yet news services' use of recommendation algorithms creates the risk of filter bubbles (Parisier 2011), which contradicts the idea of PSM as a unifying force in society. Personalization enables people to filter out all the content and viewpoints they do not highly value and, therefore, follow news only related to their own interests. The increased use of algorithmic personalization within PSM is considered a form of "implicit (algorithm-determined) personalised public services," where the implicitness and automated nature of the service raise concerns (Van den Bulck and Moe 2018, 879, 890). The potential echo-chamber effect of recommendation systems has been widely debated in terms of polarization of public discourse (Campbell 2018; Baum and Groeling 2008; Parisier 2011). Various technical solutions have also been discussed to prevent audience fragmentation and polarization, such as recommendation systems that would purposefully mix content to provide a wider selection of perspectives and themes. James Bennett has discussed the possibility of a "public service algorithm" that could provide viewers with a mixture of programs to broaden their horizons rather than provide them with more of the same. Such an algorithm would mean rethinking the ways in which data are being used to personalize contents for PSM audiences (Bennett 2018). YLE is already responding to this critique by creating its own "public service algorithm" that not only recommends similar content but also seeks to diversify media use.

As discussed above, PSM companies have developed their own platforms to be able to compete in the data-driven media environment. Nordic PSM, along with the BBC, has invested in this significantly. BBC iPlayer, YLE Areena, and SVT Player are all examples of platforms that operate on the logics of online television (Lotz 2017; Johnson 2019). In terms of distribution and discoverability, PSM platforms are in direct competition with commercial platforms. Sehl, Cornia,

and Nielsen's (2018) research from Reuters Institute shows that PSM companies in the UK, France, Poland, Germany, Italy, and Finland are increasingly trying to use commercial platforms to draw particularly young and hard-to-get audiences to their own sites and platforms. In other words, they are using commercial platforms to turn traffic around and attract new audiences to their own sites.

The discoverability of PSM's own platforms is also affected by hardware streaming devices, such as television set-top boxes (Apple TV, DirectTV, PlayStation, TiVo, Xfinity TV, etc.). As argued by Hesmondhalgh and Lobato (2019), these internet-connected devices "play an increasingly important role in the distribution, selection and recommendation of content to users" (958). The visibility of service providers, such as Netflix, HBO Nordic, or the BBC, is highly relevant to their ability to reach audiences. Therefore, the discoverability of these services is the object of an increasing battle. Hesmondhalgh and Lobato (2019) show that, in the digital media environment that operates increasingly through platform power and set-top boxes (STBs), PSM's prominence is eroding. PSM services and programs may be hard to find on devices that prioritize commercial service providers, such as Netflix or HBO. In Finland, YLE Areena, the platform of YLE's streaming services, is available on Smart TV (Samsung, LG, Sony Bravia, Panasonic), Apple and Android TV, devices provided by telecommunication companies (Elisa Viihde), and game consoles (PlayStation 3 and 4). Yet these service providers often prioritize commercial content that appears more prominently on the interface than YLE content. Indeed, STBs promote and recommend particular services at the expense of others. Simultaneously, they are connected to the collection and analysis of vast amounts of viewer data. Yet very little attention is paid to the ways YLE's user data is possibly connected to other user data on these devices. As Hesmondhalgh and Lobato (2019) argue, there is hardly any discussion of the possibility of the democratic regulation of STBs and their data practices. Therefore, the growing popularity of STBs represents yet another form of platform power (Evens and Donders 2018) in the current media ecosystem. It affects the visibility

of PSM and their audience reach. This, in turn, affects their legitimacy and role in society: if PSM become increasingly invisible in the platformed media environment, it is difficult to justify their public funding and position as a national public media service.

To sum up, the data-driven platformed media environment affects PSM on various levels. It affects circulation, distribution, audience relations, and content production with logics that are driven by personalization and individualized services. The universality principle, in particular, has been reinterpreted and shaped to better fit the data-driven media environment with its algorithmic recommendation systems. While these practices are legitimized as a "new universality" (Hokka 2018) that is seen to improve services on an individual level while enhancing equality and diversity, they seem to move away from universal access and a public sphere that is shared by all. Instead, the public is increasingly addressed through customization, personalization, and profiling that have bearing on the values of equality and diversity. Moreover, these practices are centered on serving individual needs rather than the public good on a more collective level and therefore seem to depart from the traditional idea of PSM and its remit (Johnson 2019). At the same time, PSM platforms struggle with discoverability: embedded in social media platforms or in hardware devices that prioritize commercial platforms on their interface, they struggle for societal prominence—and possibly legitimacy.

Perhaps one of the main contradictions lies in the different ways in which commercial platforms and PSM companies see their role in the society. PSM companies' remit is to serve the public and take editorial responsibility for their content. However, social media platforms have no such remit. Owned by technology companies, they see themselves merely as facilitators (Gillespie 2018). In a data-driven media environment, user data is the most important product of the platforms—not the content itself. Without editorial responsibility, social media platforms can be used for various ends, including dissemination of racist and hateful content or political targeting (Daniels 2018; Farkas and Neumayer 2017; Sunstein 2007). When PSM companies share their content on social media

platforms, they involuntarily support the platforms and even enhance their growth. This creates tension and contradiction in the PSM's role as responsible media serving the public interest. Therefore, even if the editorial freedom of PSM is not directly affected, the power of commercial global platforms has created serious challenges to the legitimacy and trust of legacy media. Since platforms operate on a global level, the possibility to control and negotiate on a local level becomes increasingly challenging and requires action from supranational agents, such as the European Union.[1] Syvertsen et al. (2014) point out these dilemmas for the media welfare state model: Consensus building and collaboration between public and private interests have become challenging with the dominance of global players who have no formal or regulatory relationships to Nordic governments. Moreover, with access to vast amounts of data, global platforms are in a position to increase their dominance over digital markets and development. All these aspects directly or indirectly affect the pillars of the media welfare state and force a reconsideration of the relevance and essence of the pillars.

Awakenings

While cooperation with commercial platforms at first seemed fruitful, PSM companies have realized that they have become increasingly reliant on social media platforms, partly because they did not develop their own technologies and platforms early on. In recent years, we have identified what we call *awakenings* within the PSM sector. These awakenings refer to different initiatives, approaches, and alternative imaginations (Gray, Gerlitz, and Bounegru 2018) that have emerged not only within the main PSM companies in Europe but also among small independent public media producers in the United States and other public sector institutions concerned about the platformed media environment. These awakenings refer not to fundamental changes that shape PSM organizations but to smaller cracks and ruptures in the media ecosystem. We understand them in

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[1] Philip Napoli (2019) has suggested that user data gathered from platforms should be treated as a public resource.

terms of imaginative politics (Malkki 2015) engendered by the increasingly difficult relationship between public service values, the logics of commercial platforms, and the growing concern voiced in public debates over the power and the political impact of technology companies. Problems with algorithmic biases, hate speech, and the manipulation of elections through commercial platforms have raised serious concerns about democracy and the public interest (Daniels 2018; Ben-David and Matamoros-Fernández 2016; Neumayer 2012). The awakenings are motivated and supported by the growing interest in the European Union and the United States to regulate technology giants that own the main platforms and have access to massive data.

Besides already existing regulations through the GDPR, there are continuous pressures to break down or further regulate and control the growing power of technology companies. The European Union, in particular, is strengthening the regulation of social media platforms both on commercial terms, by curbing the monopoly and unfair market advantage, and on ethical terms, by trying to decrease and filter hate speech and terrorism on social media platforms. The European Union has fined Google for biases in its search results and for promoting its own businesses and creating unfair advantages by bribing mobile phone manufacturers to preinstall Google Search on Android phones (European Commission 2018). In the United States, Facebook, in particular, has faced growing pressure to take responsibility for the ways the platform may be used for political purposes and for the dissemination of hate speech (Isaac 2019). In other words, the increased criticism of and political pressure on commercial platforms have opened up space for new awakenings within PSM.

The awakenings emerging from this discontent and critique include both the heightened awareness of public media values and new, practical initiatives for a more ethical public sphere. They range from small, imaginative politics among independent public media actors to initiatives led by more established PSM organizations, such as the BBC. The heightened awareness is apparent in the ways

PSM organizations express their role through annual statements. Research by Karen Donders (2019) has identified new awareness of the value of public service within PSM, mostly expressed on the executive level and in policy statements, visions, and plans. In other words, after the initial stage of fighting for their right to disseminate their content on commercial platforms, PSM now have more advanced online strategies with an awareness of problematic trade-offs with technology giants. PSM have found new legitimacy for their role and the value of their own platforms in the current media environment. However, as Donders (2019) points out, there are often contradictory strategies within one PSM: the grassroots level of news production may be distributing content on social media platforms and implementing algorithms and data-driven personalization, whereas on the policy level, more critical views may be expressed toward commercial platforms and their logics and power.

While most of the European PSM companies have resigned themselves to the dual strategy of sharing content on commercial platforms while developing their own platforms, some PSM have fallen into an open dispute over the reliance on commercial platforms. In 2019 the BBC withdrew its podcasts from Google apps with the incentive to build more content on its own platform. The withdrawal demonstrates the discontent over ways in which third parties (Apple, Google, Spotify) control access to BBC products. This was expressed by the BBC as a need to "safeguard British radio" (Purnell 2019) and offer trusted alternatives to global platforms such as the BBC Sounds app.

These battles are defined not only by the sense of losing business and media space to commercial media but also by the tendency to safeguard public service values. In many cases, these actions seem belated and desperate, since alternative public platforms do not really exist or have not been developed at the same pace as their commercial equivalents.[2]

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[2] PSM still hold an important position in the European media scape, whereas the situation of public service media in the United States is much more vulnerable (Pickard 2019).

PSM-Owned Platforms with Fair Data Practices

As discussed above, many national PSM companies have created their own platforms to distribute content in the digital media environment. In terms of following the public values of universality, equality, and diversity, these platforms should be available for everyone and should produce content that enhances cultural diversity and domestic production and that otherwise may not be produced. Since platforms operate on user data, PSM companies have come to realize that their data practices have to be in line with public values. A study by Hilde Van den Bulck and Hallvard Moe (2018) shows that PSM companies are not simply embracing new data practices but are expressing concern over the ethical aspects of datafication. VRT policymakers in Belgium, for example, voiced concern about how to treat user data properly and protect privacy. If PSM companies fail, it could damage their "trust-based relationship" (Van den Bulck and Moe 2018, 888). This has meant a focus on ethical and fair data practices. The BBC designates its data and privacy practices in three areas—transparency, choice, and trust—emphasizing the public service values of serving audiences with transparent practices, offering tools for customers to manage their own data, and safeguarding the security of data.

At YLE, the concern about a datafied, platformed media environment is tackled by developing fair data practices and initiating deeper conversations with other PSM companies or actors with similar aims. YLE data practices follow the general guidelines of ethical data practices by safeguarding privacy and users' own access to data as well as by providing transparency in these practices.[3] As discussed above, YLE gathers data through YLE ID, which is described on its website as a "domestic and safe" registration system. YLE assures its audience that it safeguards user privacy and that user data is not handed over to third parties. In addition, users are able to check and

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[3] See https://yle.fi/aihe/yle-tunnus/yle-tunnus-kayttajien-tietosuoja.

download their own data, and they have the right to be forgotten.[4] In addition, YLE is investing in raising awareness of the data-driven media environment with projects that enhance data literacy. One of these projects is the fair data project that started in 2018 as part of cooperative research on datafication.[5] This project includes data workshops with different user groups as well as educational and news stories about experiences with data, processes of data tracking, and trolling.[6] The challenges of a datafied media environment were also discussed in a cultural event organized by YLE in October 2019 at LIFT Helsinki. The event brought together various public service initiatives that seek to create a more ethical and public value-driven media ecosystem and introduced Public Media Stack, PublicSpaces, and Public Service Internet initiatives. We can see these initiatives as attempts to raise awareness and seek ethical solutions for PSM in the current situation and also beyond the national scene.

However, being embedded in an environment controlled by commercial platforms, fair data practices can be challenging. As noted earlier, in the everyday life of newsrooms, the take on data appears to be more practical and follows industry trends that both embrace and resist social media logics and datafication. This seems to characterize PSM companies across Europe. Van Dijck and Poell (2015) argue that the logic of social media, which pushes the principles of connectivity and datafication onto all sectors of public life and sociality, has made it "virtually impossible to keep social media's intrinsic commercial forces at bay" (Van Dijck and Poell 2015, 151). However, this is also an infrastructural question: virtually all platforms outside the "Big Five" are dependent on their infrastructural services in one way or the other (Van Dijck and Poell 2018, 15). Through infrastructures, they are inevitably mixed with a data-driven ecosystem. Concerning PSM's remit and trust, it is extremely problematic if their user data is tracked and sold to third parties.

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[4] According to YLE, this means that users can delete their IDs. After that, the individual user cannot be connected with any information that was provided with the ID.
[5] The fair data project is a collaboration of YLE and our research project BIBU, conducted at the Tampere University; see https://research.uta.fi/comet/reiludata/.
[6] See https://yle.fi/aihe/artikkeli/2019/08/22/emilia-laurila-25-halusi-selvittaa-mita-tietoja-hanesta-on-keratty-paljastui.

One step further from fair data practices is the idea of the Public Service Internet initiative, which aims at creating more substantial change in the online environment. The initiative was launched by the BBC's development and research team. Its mission is to explore "how the BBC could help create an internet that more easily supports the online ambitions of public service organisations of all types, around the world." The statement on the BBC's website captures the idea of the need to imagine alternatives (Gray 2016): the initiative is exploring ways the internet could be reimagined—"or even re-invented"—to better serve the public interest and benefit the whole society. Public Service Internet focuses on four themes: public-controlled data, easy access for everyone, a healthy digital public sphere, and public service networking. For this project, the BBC is collaborating with Mozilla Foundation, Doteveryone, and the Open Data Institute.

Independent Digital Infrastructures for Public Values

While national PSM companies have created their own platforms and strive to develop ethical data practices within these platforms, new public media initiatives are also being developed outside the big national PSMs. These initiatives are often collaborative by nature and are often led by current or former PSM employees. They strive to create open, ethical infrastructures for all PSM. Several initiatives are in process; we will discuss two of them that have also collaborated with the YLE and the BBC, Public Media Stack and PublicSpaces.

Matt Locke, the founder of Public Media Stack, proposes that "there is a perfect storm right now" enabling the creation of new strategies "to coordinate . . . into something that could grow into a sustainable ecosystem that could survive in parallel to the FAANG monopolies for the next twenty years."[7] The Public Media Stack summit was organized in May 2019 to gather dozens of public

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[7] Matt Locke, "The Public Media Stack," January 8, 2019, Storythings, https://www.storythings.com/blog/2019/1/8/the-public-media-stack.

media representatives in New York to explore the possibilities for larger collaboration in terms of public media. Particularly, they met to think about building ethical technologies that can be shared as a sustainable media ecosystem. As expressed by Matt Locke, this initiative grew out of frustration with the fact the PSM did not invest in developing their own technologies and platforms twenty years ago. The main idea of Public Media Stack is to bring together existing knowledge on open and ethical infrastructures used by public media actors. Locke argues that, for some time now, disparate public media companies have contemplated sharing and combining their publishing infrastructure. Public Media Stack is inspired by the observation made by Jesse Knight from Vice: "Starting in 2014, several media companies began to take their own publishing systems and repurpose them as platforms that could be used by other publishers. Vox Media's Chorus, *The Washington Post*'s Arc, New York Media's Clay, and Hearst's MediaOS are four such platforms that are now available for licensing." This idea is taken further with the aim of building an ecosystem that furthers public values and can be shared collaboratively. In this context, commercial data-gathering practices are considered almost harmful for smaller media companies that operate closely with their audience and emphasize transparent and ethical data practices. Public Media Stack is not necessarily designed for the use of the national PSM companies, who already have their own platforms, but more as a resource and guidance for smaller public service companies or individuals who are planning to start some kind of public media project.

In similar ways, the Dutch PublicSpaces initiative relies on collaboration between different public institutions. PublicSpaces aims to build collaboration between PSM (BNNVARA, VPRO, EO), museums, film institutions and festivals, public libraries, and networks of media literacy and innovation. PublicSpaces' manifesto declares: "Many essential applications on the internet, while being indispensable tools in our lives as economic and social citizens, have turned into vehicles for political control and economic profit. In these essential applications, citizens are no longer subjects,

but objects. We share a common view that an alternative is necessary and are reimagining the internet as a public space."[8] PublicSpaces is committed to data practices that are open, transparent, accountable, sovereign, and user centered. The overall aim of PublicSpaces is to create a Public Badge, a technological code and tooling of a website and software that adhere to the values of its manifesto. Like Public Media Stack, PublicSpaces is building a network of European partner organizations. Currently, the BBC-led development of the Public Service Internet initiative is also collaborating with PublicSpaces.

These alternative initiatives clearly share similar aims and goals. They are interested in developing digital technologies that are fitted to public values. These values are captured in transparent data practices that offer control over data to the citizens rather than to media companies. In each of these initiatives, technological and ethical layers come together in their understanding of public media as a digital, public platform. Rather than new large-scale initiatives, these appear to be small and gradually growing grassroots initiatives based on collaboration and networking, operating mainly in the Northern European context. Their individual relevance may remain modest in the context of the global media ecosystem; however, their emergence to address the problems of datafication speaks of the need to imagine alternatives within the PSM sector. It is noteworthy that all these initiatives emphasize ethical data practices. In other words, open and public data management is central to these initiatives, reflecting the ways in which data and its management have become fundamental elements in the current media environment.

While we can see that traditional public service values, such as universalism, are reshaped and challenged by the new media environment, we can also identify newly emergent initiatives and values. These are connected to the idea of ethical public infrastructures and fair data practices. The

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[8] "Public Spaces Manifesto," June 28, 2018 (updated September 2019), https://publicspaces.net/manifesto/.

data-driven platformed media environment has forced PSM companies to address user privacy to ensure trust as they embark on data practices. To distinguish themselves from commercial technology companies that use mostly hidden data practices, PSM companies, as publicly funded media, need to maintain transparency in their operations. In other words, transparency and ethical data practices have become central elements that safeguard public media values. Transparency of digital infrastructures appears critical for creating trust and providing space for participation and interaction where the public can understand and have access to the ways in which their data is being managed. Therefore, the value of transparency can be seen to reinforce the first pillar of the media welfare state. Universalism, to be fulfilled in its new form, needs public infrastructures that are based on transparent and ethical data practices that can protect privacy and enhance an inclusive and open public sphere.

Conclusions

This article set out to explore the implications of datafication for PSM in the context of the welfare state. While datafied practices have affected many areas of welfare states, from social policy and housing to taxation and health care (Redden 2018; Eubanks 2018), these practices have also shaped media industries in complex and contradictory ways. PSM may not be considered the most vital welfare state institution; however, particularly in the Nordic countries, PSM organizations have been considered central to formation of citizenship and equal participation in the public sphere—the grounds for democracy. Therefore, the ways datafied practices shape PSM have consequences for the organization of the public sphere—from the ways citizens find information about current affairs and political processes to the ways they trust public institutions and gain a sense of social solidarity by being in this together (Nikunen 2019).

The article showed how PSM companies are increasingly embedded in the platformed media environment. This produces complex dependencies that are manifested in the ways PSM companies

promote content through commercial platforms, adapt to data practices, or become invisible on hardware interfaces. Data practices have various implications for PSM. With user data and algorithms, news content is personalized and distributed through recommendation systems to different audiences. This is justified as a new universality among PSM companies; however, it may also erode universal access and the idea of a shared public sphere by categorizing and profiling audiences into groups and bubbles. This may also further inequalities among citizens. Furthermore, embeddedness in a platformed media environment renders PSM invisible in the interfaces and platforms dominated by commercial actors. Regarding the welfare state, these developments lead to problems where the public sphere is shaped and controlled by commercial interests, where corporate surveillance exists, and where citizens are increasingly profiled and categorized. These developments affect the very conditions that social solidarity stems from: open participation in public debates on equal, inclusive terms and a sense of agency in the public sphere (Nikunen 2019).

However, we also identified new kinds of awakenings within public media companies. These awakenings include a heightened awareness of the public service values within PSM, emphasis on their own platforms with fair data practices, and new initiatives to create fair and ethical media. The initiatives introduced in this article can be understood as small acts of imaginative politics (Malkki 2015 to rethink the media ecosystem and to regain power for public media. Their values and principles of open and fair data, accountability, and transparency are clearly addressing the need arising from the complex embedded structure of the current media ecosystem and answering many of the questions for PSM raised in this article on datafication. Many of the initiatives are collaborative at heart and operate through networks and practices of sharing. While we consider them small-scale initiatives, they are noteworthy in their ability to think differently about the values embedded in the technologies and architectures that surround us.

The awakenings discussed in this article exemplify the urge to hold onto public service values in the midst of a platformed media environment and attempts to reinvent public interest in a data-driven media system. In other words, they point out the important continuities in the changing media landscape (Freedman 2018). However, they also pinpoint certain shifts in public service values and a new emphasis on the role of infrastructures in serving those values in the digital context. In other words, to be able to serve public values, PSM need to hold onto transparency of their operations and ethics in data practices. In the context of a data-driven media system, the traditional public service values of universalism, equality, diversity, and quality seem to be complemented with values of transparency and privacy. While Syvertsen et al. (2014) argue that the pillars of the media welfare state remain important in guiding media policy in the digital age, there seems to be a need to strengthen the pillars to respond to the demands of the digital, platformed media environment. It appears that the pillars of the media welfare state need to be fortified with an emphasis on transparent, ethical data practices that can guard privacy and trust as well as ensure infrastructure that treats citizens fairly without making a profit off their personal data. This focus would capture the relevance of technologies and infrastructures that enhance the agency of the members of the society. For the future of the welfare state, such public spaces of agency and fairness are fundamentally important.

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