MedieKultur | Journal of media and communication research | ISSN 1901-9726

Article – Theme section

Assessing the distinctiveness of public service catalogues

A comparison of European content in local, regional and global video-on-demand service

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Abstract

This article investigates how public service media's (PSM) distinctiveness becomes evident in their video-on-demand (VoD) catalogues in Denmark, Sweden, Norway, Germany, and the UK, when comparing them to the relevant local, regional, and global non-PSM players in the markets. The analysis builds on the European Audiovisual Observatory's Lumiere VoD database. The European content in 65 relevant PSM and non-PSM catalogues in the five countries noted above was examined on 1 July 2024, focusing on levels of exclusivity, overlap, domestic content, transnational circulation, genre, first-run versus returning series, and theatrical releases for film. The article evidences how exclusivity of rights prevails in the VoD market and showcases the relativity and multi-dimensional nature of distinctiveness across the five markets. It advocates for a combination of traditional measures of distinctiveness (genre, country of origin) with data on exclusivity, international content circulation, reliance on returning seasons and theatrical release to make visible local specificity and risk-taking.

Keywords

Public service media, video-on-demand, VoD catalogues, distinctiveness, exclusivity, competition

Introduction

Competition in the European video-on-demand (VoD) landscape has increased with the expansion of globally operating subscription video-on-demand (SVoD) services in Europe since 2012, the growth of (new) regional players such as Viaplay, and private broadcasters' ventures into VoD. This article contributes to the understanding of European public service media's (PSM) positioning towards their competition by focusing on the content offered in their VoD catalogues. To generate a picture of their distinctiveness, we examine levels of exclusivity, overlap, and qualitative differences of European content offers in PSM VoD catalogues. We do this in five markets: the UK, Germany, Denmark, Sweden, and Norway. These countries are united in their high levels of VoD market development (Bengesser, 2024) and the relative strength of their public service media, but differ in size, organization, funding, and competitive positioning of their PSM organizations, and in regulatory circumstances concerning their VoD services and content offers.

To analyse the distinctiveness of PSM VoD catalogues' content in relation to global SVoD services and non-PSM local/regional VoD players, we address the following research questions:

1) What characterizes the content that is exclusive to PSM VoD services?
2) What do content overlaps reveal about proximities in content between different types of services within local markets?
3) Which dimensions of distinctiveness emerge as dominant for PSM catalogues within specific national contexts?

In the discussion, we reflect on how the findings contribute to a multifaceted picture of distinctiveness as a relational concept and point to concrete challenges posed to the distinctiveness and competitiveness of PSM in the different markets.

The analysis builds on a data set of European co-produced film and television seasons available in 363 catalogues in the five markets as of 1 July 2024. The data was derived from the European Audiovisual Observatory's free Lumiere VoD database that covers approximately 1,400 catalogues across 31 countries. The data was examined, cleaned, and enriched with additional attributes/metadata originating from IMDb, TMDB, Mavise, EBU, and industry literature. This process allowed us to identify and differentiate the PSM outlets, global SVoD services, and the relevant local/regional VoD services in each market. For these services, we assess levels of exclusivity and overlap with one another and characterize the exclusive European content found on the different types of VoD services. Recent research has characterized PSM's distinctiveness mainly through genre (Hendrickx et al., 2019), combined with form (Domazetovikj et al., 2024) and country of origin (Iordache et al., 2023). By leveraging data that includes catalogue information on most of the VoD players in all five markets, this article establishes patterns of content exclusivity, transnational circulation, theatrical exhibition, and reliance on returning seasons as further salient dimensions of distinctiveness. It thereby argues for a multidimensional and relative concept of distinctiveness that accounts for the different conditions within specific national media markets.

Through its analysis of VoD catalogues, the article evidences patterns in content offer and circulation that are hard to systematically trace due to lack of transparency and archiving of VoD offers (van Es, 2024). It also provides evidence on the content strategies of players with different business models that have previously been classified mostly through ownership, funding, and technological differences (Chalaby, 2023). Lastly, the article contributes to our understanding of the ways in which different national contexts affect how PSM organizations can distinguish their content offers from the competition.

Political and industrial dimensions of distinctiveness

The idea of "distinctiveness" emerged as criticism of PSM's supposed imitation of private channels in the 1990s and mainly revolved around their entertainment offer. This critique gave way to a slew of comparative programme studies contrasting shares of entertainment against supposedly more valuable programme forms/genres like culture and information (Biltereyst, 2004, pp. 344-345). Distinctiveness experienced a renaissance in the 2000s, parallel to broader concerns about PSM's online services' market impact and competition that shaped the development of the so-called "public service value tests" for PSM organizations' online activities (Donders & Moe, 2011; Moe, 2010). Although the term is neither applied consistently nor always used explicitly, the common characteristics of distinctiveness as a value in public service policy relate mainly to: 1) distinctiveness as essentially a comparative category (Goddard, 2017, p. 1091) that only comes into existence in PSM's comparison to their private competitors; 2) its use as an umbrella term for other public service values like quality or diversity; and 3) its use as a demarcation for the legitimate activities of PSM vis-à-vis the private market.

For PSM in the VoD era, "distinctiveness" is a double-edged sword. On the one hand, it enables PSM to clearly signal how their VoD offers differ in meaningful ways, particularly from the global competition, for example, through commissioning of content that reflects diverse local communities and encompasses forms other than high-end fiction (D'Arma et al., 2021, p. 690). On the other hand, the idea of distinctiveness may become a slippery slope towards a market-failure-type PSM restricting them to content not provided by private players.

In the British PSM landscape that features three commercially funded PSM outlets (ITV, Channel 4, Channel 5), explicit distinctiveness requirements are mainly applied to the publicly funded BBC. The Royal Charter stipulates that the BBC's "services should be distinctive from those provided elsewhere and should take creative risks, even if not all succeed, in order to develop fresh approaches and innovative content" (Secretary of State for Culture, Media and Sport, 2016, p. 5). In its regulatory assessment of the BBC's distinctiveness, Ofcom (2024) considers external valuations of quality, such as awards and audience perception of the BBC's content's quality and creativity. It also tracks quantitatively whether the BBC is serving a breadth of audiences, with a range of genres including "at risk" content like specialist factual material, arts, or children's programming, as well as a constant supply of new programme ideas, measured, for example, in the rate of "first-run" versus "returning originations".

Provision of domestic content endows PSM with both cultural and economic legitimacy and is frequently used as a strategic argument for the distinctiveness of PSM (D'Arma et al., 2021, p. 690), particularly in small markets like Scandinavia's (Syvertsen et al., 2014, pp. 82-84; Raats & Jensen, 2021). Regarding digital services like VoD, conditions differ. Moe (2010, pp. 216-218) highlights how Norwegian NRK, in the vein of a social-democratic tradition, obtained approval for a quite extensive digital strategy, while the liberal/conservative drive towards private media ownership in Germany was a reason for the stricter rules regarding PSM's digital expansion. Explicit mentions or requirements of distinctiveness are therefore rare within the Scandinavian context, but not unheard of. DR's 2019-2023 public service contract, for example, stipulated: "DR shall focus on content that is not offered by commercial players […] where it does not serve a clear public service purpose" (Venstre, Liberal Alliance, Det Konservative Folkeparti, Dansk Folkeparti, 2018, p. 1). The later contract, closed under a different, social-democratic-led government, no longer features this provision. In Norway, NRK's broad remit for online news has been criticized by private media companies, while research into distribution of topics finds NRK's private competitors' journalism to be more similar to each other than the coverage offered by NRK online (Sjøvaag et al., 2018).

Distinctiveness, however, is not merely a policy question; it also relates to the competitive positioning within the market. In the Nordics and the big Western markets, global services like Netflix and local/regional players like Sky or Viaplay have been investing in original content, usually high-budget fiction (Domazetovikj et al., 2024; Schneeberger, 2023, pp. 30-31). This has challenged PSM's traditional role as the main and sometimes sole purveyors of high-quality national content and has increased competition for ideas, talent, and budgets. The case of the British BBC is instructive here, due to British content's exportability and value for global players that materializes in sizable investments in British content. Hendrickx and colleagues (2019, p. 289) point to the ironic situation of the BBC claiming that its high-budget dramas like *The Night Manager* were something commercial broadcasters could not do, while those types of drama are, in fact, increasingly the domain of global SVoD players. This challenges the broadcaster whose sense of public value is derived from its investment into the British creative industries (Bengesser, 2023, pp. 51-52).

The growth of new VoD players has also increased demand for licenses and changed the industrial logics governing the trade with audiovisual content. As highlighted by Eklund (2023), commissioned content plays an important role in branding services, but it is the licensed content that demonstrates how globally operating VoD services adapt to specific regions. Licenses play an important role in growing and localising catalogues quicker (Iordache et al., 2022, p. 245) and cheaper than through original commissions. SVoD services have challenged the traditional industrial logics behind content acquisition. According to Miège (1987), broadcasting is built on a flow logic, where audiences access a continuous flow of cultural products either through subscription or supported by advertising or subsidies. This contrasts with the publishing logic in the film industry, where cultural products are traditionally sold or rented on an individual basis. In the flow logic, building customer loyalty is key to success, while the publishing logic relies heavily on building catalogues where the hits can cover the losses of the misses. With SVoD, a dependency on loyalty continues the flow logic (Johnson, 2017), while the importance of catalogues (Lotz, 2017) bolsters the publishing logic. The importance of exclusivity as conduit for loyalty creates additional challenges for national broadcasters. While there has been considerable research into how the global SVoD services challenge the national broadcasters to produce content of an international standard (D'Arma et al., 2021; Sundet, 2021), less attention has been given to their impact on licensing. From the limited existing research, there is evidence that the emergence of US-based global SVoD services has reduced both the availability and value of US content for European broadcasters (Øfsti, 2023). Norwegian and Swedish PSM broadcasters NRK and SVT both initially chose not to renew their licensing deals with HBO in 2013, citing the newly established HBO Nordic as a major reason (Hagen, 2013). While both ultimately renewed their deals, US content has played a diminishing role in their offerings since (Lome, 2018; Carlsson & Facht, 2014; Facht, 2016). Concerning European content, the Audiovisual and Media Services (AVMS) Directive's 30% minimum quota for European VoD content may unintentionally have increased the competition for licensed European material. Jansson and Van Belle (2024, p. 287) report such concerns raised by Swedish distributors and public service broadcaster SVT.

Other potentially problematic dimensions for PSM broadcasters are political and industrial pushes towards limiting the availability of their commissioned VoD content. Limits to exclusive VoD windows on PSM are supposed to enable content producers to generate additional revenue. This policy is particularly prominent in the UK, where the commercialization of the BBC's content through global sales (BBC Worldwide/BBC Studios) and domestic content operations (mainly UKTV) has been justified as such since the late 1990s (Johnson, 2013). The British media regulator Ofcom requires PSM organizations to draw up terms of practice for commissions from independent producers that allow the latter to exploit secondary and tertiary windows on other broadcast/VoD services. This leaves the PSM with diminishing levels of control over where their original commissions move. In the German market, which is characterized by both strong PSM (ARD and ZDF) as well as strong private players (Pro7Sat1 and RTL), restrictions on the type of and time that content that can be kept as VoD are motivated by a different policy objective, namely fair competition. VAUNET, the lobby organization of private media in Germany, argues that extended "free" content windows on PSM may reduce their audience, and thereby advertising revenues, and make pay-per-view offers for fiction less attractive (VAUNET, 2021, pp. 10-11). Furthermore, it posits that high-value content already available on the private market should not be offered by PSM (VAUNET, 2021, p. 14). Though the very restrictive approach to content on German PSM VoD platforms has gradually been relaxed, the availability of commissioned content is still limited to one year for fiction, two years for most non-fiction, and 30 days for international content acquisitions (ARD, n.d.). These restrictions have been one motivation for German PSM to launch their own subscription services, which have been critiqued by both media politicians and the private media sector (Weis, 2023).

Methodology and challenges

Data sources and data collection

To investigate the distinctiveness of VoD catalogues of different statutes, geographical scope, and business models, we built on a data set of catalogue snapshots from the European Audiovisual Observatory's Lumiere VoD database. The database was originally launched in 2019 as a directory of European film and has since evolved to include television titles. "European" relates to content that has been (co)produced in one of the 46 Council of Europe (CoE) countries. The database is updated approximately every three months with a snapshot of the titles available at that specific moment in time. This article is based on the data of catalogue availability on 1 July 2024. By now, Lumiere VoD covers approximately 1,400 VoD catalogues available in 31 European countries. The database affords an insight into the circulation of European VoD content and facilitates the comparative assessment of catalogue composition across different providers.

It is important to stress that sports and news, both potentially distinct public service offers, are not included, nor is content from outside Europe, most importantly US material without European co-producers. Another caveat of the Lumiere VoD database is its snapshot character. Only the latest data collection is retained online. To circumvent this problem, we archived seven snapshots, starting in October 2022. We then combined the seven data sets into one unified archive containing over 7 million rows – each row representing one European work within one European catalogue. In total, the distribution of 125,000 unique European works is covered. Works are defined as either "film" or "season", and each season is treated as a separate work. During data cleaning, we corrected faulty entries and discrepancies introduced by diverse data partners contributing to the Lumiere VoD database. By combining the seven snapshots, we were able to fill in missing metadata and align entries across snapshots. Missing or incorrect years of production relating to the individual works, for example, were corrected through a merge with IMDb's freely accessible non-commercial data set (IMDb Developer, n.d.).

To further enhance the data's analytical value, we externally enriched it with data on genres, runtime and production companies taken from IMDb and TMDB. In this article, we only use the genre information from IMDb, which we were able to retrieve for 90% of titles. The availability of genre tags varies between the examined catalogues, from 96% in the Netflix catalogues to about 75% in some of the Danish and German catalogues. The genre tags were examined individually as well as consolidated into "fiction" and "non-fiction". This was done by defining titles that contained the tags "documentary", "reality", "game show", and "talk show" as non-fiction, and titles that did not include these tags as "fiction". This accounts for a wide variety of genre tags applied to fiction titles as well as the inconsistencies in how non-fiction tags such as "reality" or "documentary" are applied.

We also used the European Audiovisual Observatory's Lumiere data on admissions to European films to identify theatrically released films. Films with admissions above 500 were defined as "theatrically released", thus excluding non-theatrical films with limited screenings or festival-only releases. The Lumiere data is based on exploitation in European markets rather than country of production, and coverage reaches back to 1996. The data from specific markets varies. For the five countries in this study, the data on German and UK markets is limited prior to 2014 and 2015, respectively. For Sweden, data after 2018 is limited (Lumiere, n.d.). Films released prior to 1996 or only released in markets with limited data coverage thus risk being mislabelled as non-theatrical, despite having had a regular theatrical release.

To gather more information about catalogues, we performed mostly manual data cleaning and enrichment. This concerned grouping catalogues under the same "top brand" across countries and different types of offers (e.g., grouping "Netflix DK", "Netflix GB", and "Netflix with Ads DE" to Netflix). This consolidation built on an analysis of ownership combining the European Audiovisual Observatory's Mavise database with industry sources and information on corporate websites. The Lumiere VoD database assigns business models of VoD services exclusively as either free (FoD), subscription-based (SVoD), or transactional (TVoD). This system obscures combinations of funding models within one catalogue and fails to identify PSM players. Therefore, we manually marked the VoD services owned by public service players as listed by the EBU. We excluded from our analysis services that operate as aggregators within national markets, that is, those that only retransmit other services' offers without offering exclusive content, such as Striim in Norway.

Despite data cleaning and enrichment, our study faced several limitations. Lumiere VoD only reports film titles and no seasons for eight of the German catalogues, crucially also for the second PSM, ZDF. The same issue applies to TV4 in Sweden. Furthermore, the German public service broadcaster ARD runs the VoD service "ARD Mediathek", which pools content from its nine regional broadcasters and eight niche broadcasters co-operated with other PSM broadcasters. The Lumiere VoD data, however, only covers content associated with ARD's main channel "Das Erste". This means regionally specific content which never aired on Das Erste is not part of the Lumiere VoD data set. Because of the gaps in coverage for both ARD and ZDF, we could have incorrectly concluded that the German PSM services do not connect. In fact, a 2021 strategy pushed for increased interconnection of ARD Mediathek and ZDF Mediathek, so that users could find and play content from the other services when searching or browsing suggestions at the end of a viewed item (Tagesschau, 2024). Lastly, the high number of films reported for the Viaplay catalogues leads us to assume that Lumiere VoD includes Viaplay's transactional VoD offer and not just the catalogue included in a subscription, despite the Viaplay catalogues being labelled as "SVoD" in the Lumiere VoD database. For TV2 NO, the opposite problem applies: Its catalogue, Sumo TV2 NO (renamed TV2 Play in 2021), is labelled as a TVoD by Lumiere, but is actually mainly an SVoD with some TVoD offers. In contrast to Lumiere VoD distinguishing Amazon's SVoD from its TVoD offer as two services, the Lumiere VoD data on Viaplay and TV2 NO does not allow us to distinguish the subscription from the transactional content. This has an impact particularly on calculations of exclusivity and overlaps, as TVoD content with very few exceptions is non-exclusive.

The analysis presented below focuses on the 1 July 2024 snapshot and zooms in on the relevant players within the five countries. The relevant players include all available PSM catalogues in the individual markets, the catalogues of the three dominant global SVoD players (Amazon Prime Video, Disney+, and Netflix), and a sample of regionally or locally operating VoD players without public service remits. Table 1 details the 48 services and their 65 catalogues, showing how they have been grouped into "top brands" and how they differ in statute and funding.[1] To give a sense of the Lumiere VoD database's coverage and the role of European content within the individual player's content offer, we compare the number of titles listed in Lumiere with a scrape of catalogue size, as indicated on JustWatch.com, where also non-European content is listed. This comparison should, however, only be read as an indication of data coverage and level of European content. This is because the JustWatch numbers were collected several months after the Lumiere VoD presence date because JustWatch also has considerable data gaps. These gaps become evident when the data coverage rises above 100%, because Lumiere VoD lists more titles than JustWatch.com. In the notes section in Table 1, we account for known gaps in the content as well as explanations of discrepancies.

Analytical dimensions of distinctiveness

As highlighted by Goddard (2017), measuring distinctiveness is not straightforward. The values of quality, innovation, or "freshness", subsumed under distinctiveness, defy quantification and are essentially subjective. Genre is a major variable in work on distinctiveness (e.g., Hendrickx et al., 2019) and is used in recent comparative analyses of VoD originals (Domazetovikj et al., 2024) and catalogues (Iordache et al., 2023). These studies point to the greater variety of content types (including short-form content) on the local VoD broadcasters and the large offer of children's programmes, documentary, and educa-

Table 1: List of VoD services included in the analysis.

Country	Type of service	Top brand	Catalogues included *(as labelled in Lumiere VoD database)*	Number of European seasons	Number of European films	Approximate unique titles coverage *(compared to JustWatch titles count)*
Norway	PSM-majority public funding	NRK[1]	nrk NO	1,581	1,328	163.4%
	PSM-majority commercial funding	TV2 NO[2]	Sumo TV2 NO	1,312	2,349	47.6%
	Regional SVoD	Discovery+	Discovery+ NO	601	3	24.0%
		Viaplay[2]	Viaplay NO	510	2,989	41.1%
		HBO	HBO MAX NO, HBO Max NO	245	560	43.3%
	Global SVoD	Amazon	Amazon Prime Video NO	379	1,113	40.5%
		Disney	Disney+ NO	319	241	17.1%
		Netflix	Netflix NO	1,010	2,358	45.3%
Denmark	PSM-majority public funding	DR	drdk DK	1,069	365	97.8%
	PSM-majority commercial funding	TV 2 DK	TV 2 DK	1,158	568	77.2%
	Regional SVoD	Discovery+	discoveryplus-europe DK	393	3	19.7%
		Viaplay[2]	Viaplay DK	538	3,019	41.3%
		HBO	HBO Nordic DK, HBO Max DK	245	561	45.9%
	Global SVoD	Amazon	Amazon Prime Video DK	377	1,156	40.6%
		Disney	Disney+ DK	320	237	16.3%
		Netflix	Netflix DK	1,003	2,253	44.0%

Country	Type of service	Top brand	Catalogues included *(as labelled in Lumiere VoD database)*	Number of European seasons	Number of European films	Approximate unique titles coverage *(compared to JustWatch titles count)*
Sweden	PSM-majority public funding	SVT	svtplay SE	714	734	107.0%
	Local private FVoD/SVoD	TV4[3]	tv4play SE	0	681	58.1%
	Regional SVoD	Discovery+	Discovery+ SE	542	2	25.7%
		Viaplay[2]	Viaplay SE	563	3,139	41.9%
		HBO	HBO Nordic SE, HBO Max SE	255	562	46.3%
	Global SVoD	Amazon	Amazon Prime Video SE	390	3,393	98.5%
		Disney	Disney+ SE	321	240	16.5%
		Netflix	Netflix SE	1,018	2,572	45.1%
United Kingdom	PSM majority public funding	BBC	bbc GB	1,882	323	79.9%
	PSM majority commercial funding	Channel 4	All 4 GB	1,543	67	74.4%
		Channel 5	my5 GB	604	130	73.1%
		ITV	itv GB	1,962	552	123.8%
	Commercial PSM subsidiary	UKTV[1]	uktvplay GB	750	2	73.1%
	Regional SVoD	Discovery+	Discovery+ GB, Amazon Discovery+ GB	408	2	9.6%
		Sky[4]	Sky NowTV Cinema GB, Sky Now TV GB	982	666	25.8%
	Global SVoD	Amazon	Amazon Prime Video GB, amazonprimevideowithads GB	1,139	4,469	23.4%
		Disney	Disney+ GB	346	286	17.0%
		Netflix	Netflix GB, netflixbasicwith-ads GB	1,301	2,169	31.4%

Country	Type of service	Top brand	Catalogues included *(as labelled in Lumiere VoD database)*	Number of European seasons	Number of European films	Approximate unique titles coverage *(compared to JustWatch titles count)*
Germany	PSM majority public funding	3Sat[3]	threesatde DE	0	49	23.0%
		Arte	arte DE	56	611	84.7%
		Das Erste[5]	daserste-mediathek DE	324	755	100.0%
		Kika[3]	kika DE	0	35	18.8%
		ZDF[3]	zdf DE	0	182	33.0%
	Commercial PSM subsidiary	ARDPlus[3]	amazonardplus DE, ardplus DE, appletvardplus DE	0	660	52.6%
		ZDFSelect	amazonzdfselect DE, Herzkino Amazon Channels DE	131	716	59.6%
	Local private FVoD/SVoD	Joyn (Pro-7Sat1)	Joyn Plus DE, Joyn DE	983	1,072	48.7%
		RTL	TV Now DE, amazonrtlpassion DE, amazonrtlcrime DE	1,513	251	32.5%
	Regional SVoD	Discovery+	discovery-pluseurope DE, amazondiscoveryplus DE	140	8	7.0%
		Sky	Sky GO DE, Sky Ticket DE	496	453	78.5%
	Global SVoD	Amazon	Amazon Prime Video DE, amazonprime-videowithads DE	722	2,378	42.3%
		Disney	Disney+ DE	347	272	17.0%
		Netflix	Netflix DE, netflixbasic-withads DE	1,167	2,436	34.9%

1 Discrepancy caused by much higher number of titles in Lumiere data than on Justwatch.
2 Films probably includes TVoD offer.
3 Lumiere VoD data only includes films.
4 Sky Go is excluded from the UK dataset because it aggregates content from all other broadcasters.
5 Lumiere VoD only includes the content associated with the channel Das Erste within ARD Mediathek.

tional/cultural content on PSM like the Flemish VRT. Though clearly showing differences between PSM and non-PSM players, the use of genre in measuring distinctiveness is problematic if it taps into the supposed dichotomies between "trivial" entertainment and "paternalistic" public-service genres, which Biltereyst (2004) already criticized with regards to genre-hybridity and short-sightedness concerning PSM's contribution to society.

Another dominant variable in analyses of VoD catalogues is the presence of content of different national origin to trace patterns of content circulation, for example, on Netflix (Lotz et al., 2022) or on different platforms within Flanders (Iordache et al., 2023). This measurement is useful for documenting PSM's commitment to domestic productions and regional/European content as present in most PSM remits, and it allows for comparisons of the level of catalogue localisation in other types of VoD services.

In this contribution, we draw attention to additional dimensions of distinctiveness that can be leveraged from the Lumiere VoD data as evidence of content circulation patterns. Because it covers many catalogues within national markets and across Europe, the Lumiere VoD data allows us to explore the relation of PSM catalogues to other players. First, we distinguish material exclusive to the individual service, that is, works that cannot be found in other catalogues in the same territory. Second, we analyse the overlaps of catalogues through a matrix table that relays the number of titles shared between all possible combinations of the services considered for each country. With this information on content overlaps and exclusivity, we then further explore the titles that are exclusive to the respective VoD services within the national territories and examine characteristics of content origin (first-producing country), returning versus first-run series, theatrical release, and genre.

Assessing PSM catalogues' distinctiveness

Levels of exclusivity and overlaps

Table 2 shows the levels of exclusivity of films and seasons in each catalogue. Films and seasons that are considered nationally exclusive are not in catalogues of any other "top brand" in the same country.

For most catalogues, a large proportion of content is not shared with other entrants in the same market. A large share of the non-exclusive content is theatrically released and older films. For Viaplay and TV2 NO, as discussed earlier, many of these films are likely offered on TVoD.

In general, the majority of the publicly funded PSM providers have the highest share of exclusive content, while the commercial providers have less exclusive catalogues. Still, we find that Discovery and Netflix have largely exclusive catalogues, while the BBC has less exclusive content than the UK PSM providers with majority-commercial funding. Before digging deeper into the characteristics of exclusive content, we assess content overlaps across different types of VoD services. We take this information as a proxy for how closely

Table 2: Share of catalogue by work type and level of exclusivity.

Country	Type of service	Top brand	Total works	Exclusive works *(share of all works)*	Total seasons	Exclusive seasons *(share of all seasons)*	Total films	Exclusive films *(share of all films)*
Norway	PSM-majority public funding	NRK	2,909	2,690 (92.5%)	1,581	1,448 (91.6%)	1,328	1,242 (93.5%)
	PSM-majority commercial funding	TV2 NO	3,661	960 (26.2%)	1,312	823 (62.7%)	2,349	137 (5.8%)
	Regional SVoD	Discovery+	604	591 (97.8%)	601	590 (98.2%)	3	1 (33.3%)
		Viaplay	3,499	375 (10.7%)	510	273 (53.5%)	2,989	102 (3.4%)
		HBO	805	264 (32.8%)	245	154 (62.9%)	560	110 (19.6%)
	Global SVoD	Amazon	1,492	771 (51.7%)	379	311 (82.1%)	1,113	460 (41.3%)
		Disney	560	374 (66.8%)	319	278 (87.1%)	241	96 (39.8%)
		Netflix	3,368	2,846 (84.5%)	1,010	910 (90.1%)	2,358	1,936 (82.1%)
Denmark	PSM-majority public funding	DR	1,434	1,233 (86.0%)	1,069	980 (91.7%)	365	253 (69.3%)
	PSM-majority commercial funding	TV 2 DK	1,726	805 (46.6%)	1,158	708 (61.1%)	568	97 (17.1%)
	Regional SVoD	Discovery+	396	385 (97.2%)	393	385 (98.0%)	3	0 (0.0%)
		Viaplay	3,557	375 (10.5%)	538	278 (51.7%)	3,019	97 (3.2%)
		HBO	806	271 (33.6%)	245	161 (65.7%)	561	110 (19.6%)
	Global SVoD	Amazon	1,533	781 (50.9%)	377	306 (81.2%)	1,156	475 (41.1%)
		Disney	557	375 (67.3%)	320	281 (87.8%)	237	94 (39.7%)
		Netflix	3,256	2,741 (84.2%)	1,003	905 (90.2%)	2,253	1,836 (81.5%)

Country	Type of service	Top brand	Total works	Exclusive works *(share of all works)*	Total seasons	Exclusive seasons *(share of all seasons)*	Total films	Exclusive films *(share of all films)*
Sweden	PSM-majority public funding	SVT	1,448	1,241 (85.7%)	714	643 (90.1%)	734	598 (81.5%)
Sweden	Local private FVoD/SVoD	TV4	681	114 (16.7%)	No seasons in data	No seasons in data	681	114 (16.7%)
Sweden	Regional SVoD	Discovery+	544	533 (98.0%)	542	533 (98.3%)	2	0 (0.0%)
Sweden	Regional SVoD	Viaplay	3,702	404 (10.9%)	563	309 (54.9%)	3,139	95 (3.0%)
Sweden	Regional SVoD	HBO	817	274 (33.5%)	255	170 (66.7%)	562	104 (18.5%)
Sweden	Global SVoD	Amazon	3,783	939 (24.8%)	390	325 (83.3%)	3,393	614 (18.1%)
Sweden	Global SVoD	Disney	561	376 (67.0%)	321	284 (88.5%)	240	92 (38.3%)
Sweden	Global SVoD	Netflix	3,590	3,031 (84.4%)	1,018	917 (90.1%)	2,572	2,114 (82.2%)
United Kingdom	PSM-majority public funding	BBC	2,205	1,082 (49.1%)	1,882	877 (46.6%)	323	205 (63.5%)
United Kingdom	PSM-majority commercial funding	Channel 4	1,610	1,124 (69.8%)	1,543	1,103 (71.5%)	67	21 (31.3%)
United Kingdom	PSM-majority commercial funding	Channel 5	734	492 (67.0%)	604	399 (66.1%)	130	93 (71.5%)
United Kingdom	PSM-majority commercial funding	ITV	2,514	820 (32.6%)	1,962	782 (39.9%)	552	38 (6.9%)
United Kingdom	Commercial PSM subsidiary	UKTV	752	418 (55.6%)	750	418 (55.7%)	2	0 (0.0%)
United Kingdom	Regional SVoD	Discovery+	410	311 (75.9%)	408	309 (75.7%)	2	2 (100.0%)
United Kingdom	Regional SVoD	Sky	1,648	721 (43.8%)	982	450 (45.8%)	666	271 (40.7%)
United Kingdom	Global SVoD	Amazon	5,608	845 (15.1%)	1,139	471 (41.4%)	4,469	374 (8.4%)
United Kingdom	Global SVoD	Disney	632	339 (53.6%)	346	254 (73.4%)	286	85 (29.7%)
United Kingdom	Global SVoD	Netflix	3,470	2,395 (69.0%)	1,301	849 (65.3%)	2,169	1,546 (71.3%)

Country	Type of service	Top brand	Total works	Exclusive works (share of all works)	Total seasons	Exclusive seasons (share of all seasons)	Total films	Exclusive films (share of all films)
Germany	PSM-majority public funding	3Sat	49	16 (32.7%)	No seasons in data	No seasons in data	49	16 (32.7%)
		Arte	667	555 (83.2%)	56	38 (67.9%)	611	517 (84.6%)
		Das Erste	1,079	754 (69.9%)	324	171 (52.8%)	755	583 (77.2%)
		Kika	35	11 (31.4%)	No seasons in data	No seasons in data	35	11 (31.4%)
		ZDF	182	64 (35.2%)	No seasons in data	No seasons in data	182	64 (35.2%)
	Commercial PSM subsidiary	ARDPlus	660	112 (17.0%)	No seasons in data	No seasons in data	660	112 (17.0%)
		ZDFSelect	847	10 (1.2%)	131	0 (0.0%)	716	10 (1.4%)
	Local private FVoD/SVoD	Joyn (Pro7Sat1)	2,055	1,199 (58.3%)	983	788 (80.2%)	1,072	411 (38.3%)
		RTL	1,764	1,176 (66.7%)	1,513	1,044 (69.0%)	251	132 (52.6%)
	Regional SVoD	Discovery+	148	107 (72.3%)	140	103 (73.6%)	8	4 (50.0%)
		Sky	949	378 (39.8%)	496	254 (51.2%)	453	124 (27.4%)
	Global SVoD	Amazon	3,100	487 (15.7%)	722	261 (36.1%)	2,378	226 (9.5%)
		Disney	619	290 (46.8%)	347	220 (63.4%)	272	70 (25.7%)
		Netflix	3,603	2,712 (75.3%)	1,167	862 (73.9%)	2,436	1,850 (75.9%)

different types of services compete for content. From a user perspective, high overlaps may also create the impression that one catalogue can easily substitute for the other. The overlap calculation should not be understood as a measure of distinctiveness itself, but as an indicator of proximities and distance between the different types of players in the national markets.

Table 3: Share of European films/seasons in the catalogues that is shared by the service listed first and the two closest catalogues in the market.[2]

Country	Type of service	Top brand	Highest level of overlap	Highest overlap with	Second-highest level of overlap	Second-highest overlap with
Norway	PSM-majority public funding	NRK	4.5%	TV2 NO	2.7%	Viaplay
	PSM-majority commercial funding	TV2 NO	43.9%	Viaplay	6.7%	HBO
	Regional SVoD	Discovery+	1.0%	TV2 NO	0.3%	NRK
		HBO	38.6%	Viaplay	30.6%	TV2 NO
		Viaplay	46.0%	TV2 NO	8.9%	HBO
	Global SVoD	Amazon	14.5%	TV2 NO	14.3%	Viaplay
		Disney	21.1%	Viaplay	12.0%	TV2 NO
		Netflix	7.3%	Viaplay	7.2%	TV2 NO
Denmark	PSM-majority public funding	DR	5.5%	Viaplay	4.0%	TV 2 DK
	PSM-majority commercial funding	TV 2 DK	20.9%	Viaplay	5.9%	Netflix
	Regional SVoD	Discovery+	0.8%	TV 2 DK	0.5%	HBO
		HBO	39.1%	Viaplay	9.3%	TV 2 DK
		Viaplay	10.1%	TV 2 DK	8.9%	HBO
	Global SVoD	Amazon	15.2%	Viaplay	5.0%	Netflix
		Disney	20.8%	Viaplay	5.9%	Netflix
		Netflix	7.5%	Viaplay	3.1%	TV 2 DK
Sweden	PSM-majority public funding	SVT	4.8%	Viaplay	2.2%	Amazon
	Local private FVoD/SVoD	TV4*	46.7%	Viaplay	14.2%	Amazon
	Regional SVoD	Discovery+	0.6%	Viaplay	0.4%	HBO
		HBO	38.9%	Viaplay	28.2%	Amazon
		Viaplay	39.7%	Amazon	8.6%	HBO
	Global SVoD	Amazon	38.9%	Viaplay	6.1%	HBO
		Disney	21.0%	Viaplay	16.2%	Amazon
		Netflix	7.6%	Viaplay	5.1%	Amazon

Country	Type of service	Top brand	Highest level of overlap	Highest overlap with	Second-highest level of overlap	Second-highest overlap with
United Kingdom	PSM-majority public funding	BBC	11.8%	ITV	7.3%	Sky
	PSM-majority commercial funding	ITV	10.4%	BBC	7.0%	Netflix
		Channel 4	6.8%	Netflix	3.7%	ITV
		Channel 5	5.3%	ITV	3.4%	Amazon
	Commercial PSM subsidiary	UKTV	18.2%	BBC	12.6%	ITV
	Regional SVoD	Discovery+	1.5%	ITV	1.0%	Amazon
		Sky	9.8%	BBC	9.8%	ITV
	Global SVoD	Amazon	3.6%	Netflix	3.1%	ITV
		Disney	5.4%	Netflix	4.3%	ITV
		Netflix	5.8%	Amazon	5.1%	ITV
Germany	PSM-majority public funding	Das Erste	7.2%	ARDPlus*	3.4%	Netflix
		ZDF*	37.4%	ZDFSelect	3.8%	Kika*
		Arte	1.5%	Amazon	0.4%	Das Erste
		3Sat*	26.5%	ZDFSelect	10.2%	Das Erste
		Kika*	20.0%	ZDF*	11.4%	ARDPlus*
	Commercial PSM subsidiary	ARDPlus	11.8%	Das Erste	10.5%	Amazon
		ZDFSelect	8.0%	ZDF*	7.2%	Sky
	Local private FVoD/SVoD	RTL	6.0%	Amazon	5.2%	Netflix
		Joyn (Pro-7Sat1)	6.5%	Amazon	2.0%	Netflix
	Regional SVoD	Discovery+	10.1%	Joyn (Pro-7Sat1)	2.7%	Sky
		Sky	6.4%	ZDFSelect	3.8%	Das Erste
	Global SVoD	Amazon	4.9%	Netflix	4.3%	Joyn (Pro7Sat1)
		Disney	6.5%	Amazon	6.1%	Netflix
		Netflix	4.2%	Amazon	2.5%	RTL

*Film only.

Given the importance of exclusive titles, it is unsurprising that overlaps among the players in Table 3 are low. For publicly funded PSM services there is little overlap with globally operating SVoD services. In other words, a user of Amazon, Netflix, or Disney+ will rarely find the same works on their local publicly funded PSM. The overlap between the BBC and Netflix nonetheless illustrates how the content that ends up on both platforms could challenge perceptions of distinctiveness. Only 4% of the BBC's catalogue (85 items) can be found on Netflix in the UK. Two thirds of the British first-produced seasons that the BBC shares with Netflix are highly circulating programmes that are available in at least 10 different European countries, such as *Peaky Blinders* (available in 53 catalogues across all countries in the 1 July 2024 data set) or *Killing Eve* (available in 49 catalogues across 21 countries). These series stand exemplary for the competition around high-budget content between the BBC and global players mentioned by Hendrickx (2019, p. 289).

Commercially funded PSM services overlap mostly with the publicly funded players in their market and with regional private players (Viaplay, Sky). For NRK and DR, their overlaps with TV2 NO and TV 2 DK are mainly licensed crime and drama series from the UK (e.g., *McDonalds & Dodds*) and Scandinavia (e.g., *Morden i Sandhamm*), highly circulating international children's content (e.g., *Peppa Pig*), and domestic first-produced cinema. ITV and the BBC have higher levels of overlap with one another, which may be the result of the policy to allow independent producers to commercialize secondary or tertiary windows among other players. The BBC and ITV share 261 items, mostly seasons of British comedy and crime TV productions. On the one hand, these are older productions like *The Thick of It* or *Spooks*, and on the other hand, there are recent series of mostly longer-running programmes like *Shetland* or the Scottish sitcom *Two Doors Down*. In contrast to the overlaps between the BBC and Netflix, two thirds of the British first-produced seasons that the BBC and ITV share have little to no international circulation, as they can be found in fewer than five European countries. This indicates that their appeal is mostly domestic.

Concerning the private players, Viaplay's competition for works with many different types of VoD services stands exemplary for the difficult position of regional SVoD services that are both proximate to local PSM players and US-based regional/global SVoD players. Country of origin divides what Viaplay shares with different types of players: 36% of the films that DRTV shares with Viaplay are Danish first-produced, whereas only 15% of the European films it shares with TV 2 DK are. Among the 1,434 films that Viaplay shares with TV2 NO, only 8% are Norwegian first-produced, while 315 are European-minority co-productions with US players, such as *Emma* (US/GB, 1996). This dominance of US or British co-produced film also characterizes the content Viaplay shares with HBO in Scandinavia.

In the countries where publicly funded PSM operate commercial subsidiaries, we see considerable overlaps between the parent and child companies' catalogues. The content the BBC shares with its commercial subsidiary VoD UKTV resembles and partially overlaps with that which it shares with ITV, with the addition of documentary and entertainment (e.g., *Would I Lie to You*, *Top Gear*). Only 18% of the overlapping content is earlier than 2020, indicating that the commercial subsidiary's VoD offer mostly functions as an archive for popular content. The picture is quite similar for ARDplus and ZDFselect, where the content overlaps with their parent-companies' VoD offers consist predominantly of German-produced TV movies without theatrical release (it should be noted that seasons data is missing for ZDF and ARDplus).

Measures of distinctiveness

In this section, we focus on the characteristics of titles that are exclusive to the various catalogues in their respective markets. As discussed in the methodology section, a wide range of data was examined as possible indicators of distinctiveness. Table 4 highlights the dimensions that most clearly indicate PSM distinctiveness in the exclusive works across the catalogues in five countries. The first two indicators address domestic titles. First is the number of exclusive domestic works as a share of all exclusive works; second is the number of domestic works that are not available in other markets[3] as a share of all exclusive domestic works. For genre, we examined fiction versus non-fiction as well as individual genre tags. In the third column, we highlight the presence of the "family" tag, as it most clearly indicated distinctiveness of PSM, especially when combined with production country. Table 4 shows the presence of exclusive domestic works as a share of all exclusive works with the family tag. The final two indicators reflect on levels of "first-run" productions. These are seasons that have not (yet) gone beyond their first run as well as films that have not been released theatrically.

Across the various indicators in Table 4 we find that all providers and catalogues are distinct from their competitors when the various measures are combined. Domestic content on PSM stands out in the Scandinavian markets. This is particularly true for the non-commercial PSM, NRK, DR, and SVT, while still more than half of the European content in the VoD catalogues of the two commercial PSM providers (TV 2 DK and TV2 NO) is locally produced. While we lack seasons data on the Swedish commercial VoD provider TV4, a large share of their exclusive films are Swedish, and they are a key commissioner for Swedish television (Facht, 2016). Both Discovery and Viaplay have local content in the Scandinavian markets, and the latter also has a significant share of Scandinavian productions across the three markets, while it is low or even non-existent for HBO, Disney+, Netflix, and Amazon Prime Video. The relatively high shares of local content in the Discovery catalogues should also be considered against the fact that Lumiere VoD data only lists European content, and therefore only covers a small share of these catalogues (see Table 1).

In the large markets, local content commands a much higher share of the catalogues across all services, but again, it is considerably higher among the local legacy broadcasters than for the global SVoD services.[4] In Germany, almost all the exclusive content in the catalogues of Das Erste, ZDF (film only), and the commercial subsidiary ARDPlus (film only) is German first-produced. In the UK, British content also approaches 100% in several of the PSM catalogues. Global SVoD catalogues feature lower shares of domestic content than the local services in general, but the UK is still the most common European country of origin in all UK catalogues. The lack of distinctiveness in terms of production country for UK-based VoD providers must be considered against the prevalence of UK content across the examined markets.

Table 4: Measures of distinctiveness in exclusive works (colour is relative to the share across all catalogues in the market).

Country	Type of service	Top brand	**Domestic works** *(share of all exclusive works)*	**Domestic works not available in other markets** *(share of exclusive domestic works)*	**Domestic works with family genre tag** *(share of all exclusive works with family genre tag)*	**First-run seasons** *(share of all exclusive seasons)*	**Non-theatrical films** *(share of all exclusive works)*
Norway	PSM-majority public funding	NRK	2,170 (80.7%)	2,027 (93.4%)	261 (71.1%)	618 (42.7%)	1,196 (44.5%)
	PSM-majority commercial funding	TV2 NO	500 (52.1%)	484 (96.8%)	33 (51.6%)	231 (28.1%)	92 (9.6%)
	Regional SVoD	Discovery+	258 (43.7%)	197 (76.4%)	0 (0.0%)	178 (30.2%)	1 (0.2%)
		Viaplay	45 (12.0%)	14 (31.1%)	1 (5.9%)	153 (56.0%)	47 (12.5%)
		HBO	3 (1.1%)	0 (0.0%)	0 (0.0%)	68 (44.2%)	71 (26.9%)
	Global SVoD	Amazon	10 (1.3%)	0 (0.0%)	0 (0.0%)	179 (57.6%)	380 (49.3%)
		Disney	0 (0.0%)	0 (0.0%)	0 (0.0%)	102 (36.7%)	88 (23.5%)
		Netflix	28 (1.0%)	0 (0.0%)	0 (0.0%)	436 (47.9%)	1,331 (46.8%)
		All	34.0%	90.3%	44.6%	41.0%	36.1%
Denmark	PSM-majority public funding	DR	919 (74.5%)	847 (92.2%)	77 (63.6%)	515 (52.6%)	226 (18.3%)
	PSM-majority commercial funding	TV 2 DK	454 (56.4%)	421 (92.7%)	21 (43.8%)	241 (34.0%)	71 (8.8%)
	Regional SVoD	Discovery+	104 (27.0%)	78 (75.0%)	0 (0.0%)	162 (42.1%)	0 (0.0%)
		Viaplay	51 (13.6%)	24 (47.1%)	0 (0.0%)	151 (54.3%)	46 (12.3%)
		HBO	1 (0.4%)	0 (0.0%)	0 (0.0%)	68 (42.2%)	73 (26.9%)
	Global SVoD	Amazon	12 (1.5%)	0 (0.0%)	0 (0.0%)	180 (58.8%)	395 (50.6%)
		Disney	1 (0.3%)	0 (0.0%)	0 (0.0%)	108 (38.4%)	87 (23.2%)
		Netflix	30 (1.1%)	0 (0.0%)	4 (3.7%)	435 (48.1%)	1,272 (46.4%)
		All	22.6%	87.2%	24.8%	46.5%	31.2%

Country	Type of service	Top brand	Domestic works *(share of all exclusive works)*	Domestic works not available in other markets *(share of exclusive domestic works)*	Domestic works with family genre tag *(share of all exclusive works with family genre tag)*	First-run seasons *(share of all exclusive seasons)*	Non-theatrical films *(share of all exclusive works)*
Sweden	PSM-majority public funding	SVT	901 (72.6%)	849 (94.2%)	72 (66.7%)	349 (54.3%)	556 (44.8%)
	Local private FVoD/ SVoD	TV4	102 (89.5%)	15 (14.7%)	1 (16.7%)	No seasons in data	109 (95.6%)
	Regional SVoD	Discovery+	258 (48.4%)	156 (60.5%)	0 (0.0%)	165 (31.0%)	0 (0.0%)
		Viaplay	89 (22.0%)	11 (12.4%)	2 (6.5%)	166 (53.7%)	46 (11.4%)
		HBO	3 (1.1%)	0 (0.0%)	0 (0.0%)	69 (40.6%)	73 (26.6%)
	Global SVoD	Amazon	25 (2.7%)	0 (0.0%)	1 (1.9%)	186 (57.2%)	499 (53.1%)
		Disney	0 (0.0%)	0 (0.0%)	0 (0.0%)	108 (38.0%)	86 (22.9%)
		Netflix	49 (1.6%)	0 (0.0%)	1 (0.9%)	440 (48.0%)	1,459 (48.1%)
		All	20.6%	72.2%	20.8%	46.6%	40.9%
United Kingdom	PSM-majority public funding	BBC	1,025 (94.7%)	854 (83.3%)	189 (99.0%)	251 (28.6%)	178 (16.5%)
	PSM-majority commercial funding	Channel 4	995 (88.5%)	836 (84.0%)	3 (100.0%)	388 (35.2%)	20 (1.8%)
		Channel 5	482 (98.0%)	398 (82.6%)	15 (100.0%)	136 (34.1%)	92 (18.7%)
		ITV	780 (95.1%)	618 (79.2%)	80 (95.2%)	158 (20.2%)	31 (3.8%)
	Commercial PSM subsidiary	UKTV	415 (99.3%)	362 (87.2%)	0 (0.0%)	105 (25.1%)	0 (0.0%)
	Regional SVoD	Discovery+	245 (78.8%)	129 (52.7%)	0 (0.0%)	108 (35.0%)	2 (0.6%)
		Sky	585 (81.1%)	435 (74.4%)	21 (91.3%)	163 (36.2%)	244 (33.8%)
	Global SVoD	Amazon	430 (50.9%)	269 (62.6%)	20 (54.1%)	245 (52.0%)	293 (34.7%)
		Disney	130 (38.3%)	5 (3.8%)	5 (12.8%)	115 (45.3%)	79 (23.3%)
		Netflix	454 (19.0%)	45 (9.9%)	8 (6.4%)	423 (49.8%)	915 (38.2%)
		All	64.8%	71.3%	66.0%	35.4%	21.7%

Country	Type of service	Top brand	**Domestic works** *(share of all exclusive works)*	**Domestic works not available in other markets** *(share of exclusive domestic works)*	**Domestic works with family genre tag** *(share of all exclusive works with family genre tag)*	**First-run seasons** *(share of all exclusive seasons)*	**Non-theatrical films** *(share of all exclusive works)*
Germany	PSM-majority public funding	3Sat	8 (50.0%)	8 (100.0%)	0 (0.0%)	No seasons in data	11 (68.8%)
		Arte	157 (28.3%)	1 (0.6%)	0 (0.0%)	17 (44.7%)	461 (83.1%)
		Das Erste	710 (94.2%)	687 (96.8%)	43 (95.6%)	56 (32.7%)	575 (76.3%)
		Kika	6 (54.5%)	6 (100.0%)	2 (50.0%)	No seasons in data	6 (54.5%)
		ZDF	60 (93.8%)	52 (86.7%)	1 (50.0%)	No seasons in data	60 (93.8%)
	Commercial PSM subsidiary	ARDPlus	106 (94.6%)	74 (69.8%)	27 (100.0%)	No seasons in data	107 (95.5%)
		ZDFSelect	8 (80.0%)	7 (87.5%)	1 (100.0%)	0 (0.0%)	9 (90.0%)
	Local private FVoD/SVoD	Joyn (Pro-7Sat1)	1,027 (85.7%)	974 (94.8%)	24 (70.6%)	247 (31.3%)	394 (32.9%)
		RTL	855 (72.7%)	812 (95.0%)	34 (55.7%)	389 (37.3%)	120 (10.2%)
	Regional SVoD	Discovery+	36 (33.6%)	33 (91.7%)	0 (0.0%)	15 (14.6%)	4 (3.7%)
		Sky	75 (19.8%)	55 (73.3%)	2 (22.2%)	106 (41.7%)	105 (27.8%)
	Global SVoD	Amazon	94 (19.3%)	49 (52.1%)	2 (7.1%)	136 (52.1%)	170 (34.9%)
		Disney	16 (5.5%)	8 (50.0%)	2 (7.4%)	98 (44.5%)	61 (21.0%)
		Netflix	143 (5.3%)	12 (8.4%)	1 (0.8%)	426 (49.4%)	1,132 (41.7%)
		All	41.9%	84.2%	38.9%	39.8%	40.8%

The share of first-run seasons provides a distinction between the commercial and non-commercial PSM in Denmark and Norway, where DR and NRK have higher shares than their respective commercial PSM counterparts. Swedish SVT also has a high share of first-run seasons. In both Germany and the UK, however, the share of first-run seasons is lower across all PSM than the global SVoD services. Except for Arte, there is little difference between the various PSM providers and the local and regional commercial providers. When considering non-theatrical films as another form of "first-run" television content that does not (always) rely on past success and recognizability, the German PSM providers and their subsidiaries do stand out in the German market (see Das Erste), while non-theatrical films are less prevalent among British PSM than on the global players' exclusive European offer.

Across all countries and types of VoD services, commercial services lean more towards fiction. The Norwegian and Danish commercial PSM have less non-fiction content than their publicly funded counterparts, and in the UK, the commercial PSM with more niche remits, Channel 4 and Channel 5, lean towards non-fiction. Looking deeper into the types of non-fiction content, the non-commercial broadcasters in Norway and Denmark also lean more towards documentaries than reality and fiction compared with their commercial PSM counterparts. Reality television does, however, have a place in the catalogues for all PSM organizations outside of Germany, where this is mainly found in the catalogues of the commercial VoD providers. The exception is Discovery, which leans heavily towards non-fiction in general and reality in particular.

The share of content with the "family" tag is generally low, but it is highest among the non-commercial PSM and the Global SVoD services. When country of origin is considered, further distinctions become evident. In the UK, the BBC stands out with a higher number of domestic family works than all other providers. The other PSM providers, as well as Sky, also provide domestic family content, but at a much lower volume. The global SVoD providers also have family content, but it is mainly non-domestic. In Germany, global and regional SVoD providers have negligible shares of domestic family content, while there is little distinction between the local commercial SVoD and PSM providers. In the Scandinavian markets, there is almost no domestic family content outside of PSM, and the non-commercial PSM broadcasters provide the majority.

To assess to which degree the domestic content in the catalogues is aimed at domestic audiences, we also calculated the share of content that is domestically produced and only available in the first-producing country. In this framing, the PSM catalogues become strikingly distinctive from all the others, as at least half – in some cases significantly more – of the domestic works are only available in their home market. Some of these titles are entertainment formats' localized versions. Formats are common in the commercial VoD catalogues (e.g., *Ex on the Beach* at Discovery DK), but they are also found in the non-commercial PSM offers. One example is the longest running show in the NRK catalogue, *Mesternes mester* (*Champion of champions*), a show based on a Belgian format. TV 2 DK has several old seasons of the Danish version of *Who Wants to be a Millionaire*. Among the titles not available outside of the home market, we also find morning shows such as ITV's *Good Morning Britain*, cooking shows like DR's *Spise med Price*, and old episodes of long-running soap operas like SVT's *Rederiet*. Among the first-run seasons and non-theatrical films, we find titles referring to local history such as Das Erste's *Willy – Verrat Am Kanzler*, or about specific issues such as the BBC's *Black Nurses: The Women Who Saved the NHS*. Looking at the titles in the Channel 4 catalogue that are only available in UK and Ireland shows a similar pattern, with titles such as *Britain's Scenic Railways* and several seasons of the format *Location, Location, Location*. This glimpse into the actual works exclusive to specific services highlights how very different content forms and themes can be behind the individual indicators we chose to highlight in our large-scale analysis.

Discussion: A relative and multi-dimensional concept of distinctiveness

Our analysis highlights the continued dominance of exclusive content for VoD services of all types, particularly for televisual content. Therefore, market forces push VoD services apart from one another. This force is particularly strong for publicly funded PSM and the global SVoD providers, which have both high levels of exclusive content and hardly any overlap between them. The larger overlaps in theatrical films indicate the continued prevalence of the publishing model in film distribution. From a competitive perspective, larger overlaps point towards a struggle for the commercial local/regional players to position themselves clearly within the national markets, because both the locally/regionally specific content like domestic family films and the material with global appeal such as US-first-produced films are important for them.

Distinctiveness of PSM emerges on several levels and, depending on the individual national contexts, different levels of distinctiveness become crucial. The offer of domestic content is the most evident first characteristic of PSM content in all markets. While it distinguishes PSM from the global SVoD providers with their more international content profile, it distinguishes PSM from local/regional non-PSM players only in the small Scandinavian markets. The prevalence of riskier types of content emerges as a second dimension of distinctiveness when comparing majority non-commercial PSM with local and regional commercial players. It is particularly pronounced for first-run seasons at DR compared with TV 2 DK, and at NRK compared with TV2 NO, even though neither of them are explicitly required to take this risk. In contrast, the BBC relies more heavily on returning series than most of its competitors, despite Ofcom assessing PSM distinctiveness based on levels of first-run originations. It is important to note, however, that most global SVoD services also have high levels of first-run European seasons and non-theatrical films. This could also indicate risk-taking, but not necessarily within the specific national markets, since they have low levels of domestic content.

Genre, of course, also distinguishes PSM content profiles, but the reliance on fiction over non-fiction across *all* commercial services, or the high levels of documentaries on Discovery or family content on Disney+, showcase how genre alone does not generate a clear picture. The combination of genre with additional factors like country of origin or level of transnational circulation brings out the differences more clearly and helps to avoid the short-sighted equation of certain genres with public service.

While country of origin and genre have featured in previous assessments of catalogues and their content profiles, our analysis of content exclusivity and circulation levels exhibits another dimension of local specificity. Among all the publicly funded PSM, we found high levels of content that is only available in their catalogues, and not available internationally. For national PSM, this exclusivity designates content that most likely is of little appeal elsewhere. These titles become highly specific in their focus on local celebrities and stories. This distinctiveness factor is particularly important to the BBC because of the value British content has on the global market. In fact, 83.3% of the exclusive domestic titles in the BBC's catalogue are unavailable outside of the UK, while on average, 71.3% of British titles across the studied UK services have not travelled. Despite its remit to commercialize BBC content abroad, its domestic service therefore remains highly local.

Policies aimed at protecting commercial interests and the local creative industries may create issues for the perception of distinctiveness of publicly funded PSMs, when their originally commissioned content appears in commercial services, or they commercialise their content on their own subsidiary platforms. We have shown that the commercial subsidiaries of British and German PSM mostly function as archives of older programmes with local appeal, and that only small amounts of original PSM content is shared by PSM and global players. In the British case, larger content overlaps between the BBC and ITV suggest that independent producers indeed have a chance at placing their content with another major domestic service. The German TV movies dominating their commercial subsidiary services, however, are mostly "native" to PSM, which suggests that there is little commercial potential for them outside the PSM sphere.

This discussion evidences the necessity of a relative and multi-dimensional approach to distinctiveness as a value for PSM and as a category for assessing PSM content offers. Country of origin, genre, reliance on returning content or theatrical film, and levels of local specificity versus capabilities to circulate all distinguish PSM content, but they do so to different degrees regarding the type of (competing) VoD service under discussion and the individual national media system. A multi-dimensional approach to PSM distinctiveness is therefore necessary to avoid a regression of distinctiveness to "public service genres". A relative approach to academic or regulatory assessments, distinctiveness is imperative to avoid a "one-size-fits-all" definition of distinctiveness that does not account for the specificities of different national markets and competitive constellations.

Conclusion

Looking at distinctiveness through the five national cases discussed underlines the necessity of a relative and multi-dimensional approach to distinctiveness not only concerning the services PSM might be compared to, but also regarding different national contexts. In smaller countries, the political distinctiveness discourse is less pronounced than in larger countries. While more concrete policy requirements for distinctiveness are lacking in Scandinavia, the publicly funded PSM players still show distinctiveness of content on many levels. In the large markets, domestic content is not enough to distinguish PSM players, and distinctiveness is a more pronounced policy issue. Factors like the value of the content on the international market and risk-taking versus reliance on returning series or theatrical films play a bigger role for distinguishing content there.

The empirical findings presented show that there is merit in large-scale comparative catalogue research, despite the many shortcomings of the currently available data. Further research should expand this work to include dimensions not considered here, such as the age of works, running times, and further explorations of countries of origin and transnational content flows. This should ideally also include material not currently covered by the Lumiere VoD database such as sports, news, and non-European content, which will be of particular importance for better understanding the content profiles of the non-PSM players.

Moreover, catalogue research does not reveal anything about prominence and discoverability of the content we have characterized as distinctive for PSM catalogues. Interface analyses would thus be necessary to nuance the picture. Importantly, these large-scale approaches to the question of distinctiveness do not reveal anything about differences in types and qualities of representation in the actual content.

Notes

1 Although their SVoD services do not formally have PSM remits, we have included Danish TV 2 and Norwegian TV2 as commercially funded PSM, because their broadcast "parent" channels, which supply a large portion of their content, operate under PSM remits. Note that the two are not affiliated, despite the similar names.

2 The percentages relate to the entirety of European titles of the first-named catalogue; for example, 6% of DR's catalogue can be found on Viaplay DK, while 10% of Viaplay DK's content can be found on TV 2 DK.

3 As there is a strong overlap between the entirety of some UK and Irish catalogues, as well as some German, Austrian, and Swiss catalogues, presence in the catalogues of the same "top brand" in these countries has been disregarded when determining availability in other markets.

4 3Sat and Arte are transnational PSM. For the German/Austrian/Swiss 3Sat, the number only covers a small sample of films, and about half of the French/German Arte's catalogue consists of French titles.

Acknowledgements

This research has been funded by Aarhus University's Independent Research Fund (AUFF) in the project "EUVoD" (2021-24).

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