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The Performance of Public Television in Streaming Platforms: A Cartography of TV Brasil and TV Cultura on YouTube

A Atuação da Televisão Pública em Plataformas de *Streaming*: Uma Cartografia da TV Brasil e da TV Cultura no YouTube

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This research provides an analytical reflection on the performance of Brazilian public television broadcasters in the socio-digital media environment of a streaming platform, namely YouTube, under the principles of public broadcasting advocated by the United Nations Educational, Scientific and Cultural Organization (Bucci et al., 2012; Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, 2001). As a methodological framework, the study also adopts cartographic approach applied to communication research (Kastrup, 2007; Rosário & Coca, 2018) and the perspective of a "multiple case

study" (Yin, 1994/2015) in mapping two Brazilian public broadcasters, TV Brasil and TV Cultura, on the YouTube platform. Without disregarding the complex Brazilian political moment, which impacts the Public Broadcasting Service of the country, especially by causing the extinction of the Board of Trustees (an organ of consultative and deliberative nature) and, therefore, promote the exclusion of the participation of society in the management of the Empresa Brasil de Comunicação, the analysis highlights a specific moment of the platformisation process (Poell et al., 2019) of public television in Brazil, where it is possible to: verify adaptations and inadequacies of the studied broadcasters to the digital platform environment, note how technological changes continue to impact television as a medium and language and underline some effects of communication through platforms in society.

Keywords: public television, platformisation, YouTube, TV Brasil, TV Cultura

Esta pesquisa apresenta uma reflexão analítica sobre a atuação de emissoras públicas de televisão brasileiras no ambiente mediático sociodigital de uma plataforma de streaming, nomeadamente, o YouTube, à luz dos princípios da radiodifusão pública preconizados pela Organização das Nações Unidas para a Educação, a Ciência e a Cultura (Bucci et al., 2012; Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, 2001). Como eixo de articulação metodológica, o estudo adota também a abordagem cartográfica aplicada à pesquisa em comunicação (Kastrup, 2007: Rosário & Coca, 2018) e a perspectiva do estudo de casos múltiplos (Yin, 1994/2015) ao mapear a presença de duas emissoras públicas brasileiras, a TV Brasil e a TV Cultura, no YouTube. Sem desconsiderar o complexo momento político brasileiro, que impacta o Serviço de Radiodifusão Pública do país, especialmente por ocasionar a extinção do Conselho Curador (órgão de natureza consultiva e deliberativa) e, portanto, promover a exclusão da participação da sociedade na gestão da Empresa Brasil de Comunicação, a análise revela um momento específico do processo de plataformização (P oell et al., 2019) da televisão pública no Brasil, no qual é possível: verificar adequações e inadequações das emissoras estudadas ao ambiente da plataforma digital; registrar como as mudanças tecnológicas sequem a afetar a televisão enquanto meio e linguagem; e sublinhar alguns efeitos da comunicação via plataformas na sociedade.

 $\textbf{\it Palavras-chave:}$ televisão pública, plataformização , YouTube, TV Brasil, TV Cultura

Introductory Notes and Background

Our world is currently marked by the digitalisation of information and, more recently, by a multidimensional phenomenon related to the dynamics of convergence, connection and networking, which strains the social and economic sustainability of television considerably; this phenomenon can also be considered a "telemorphosis", that is, another phase of the continuous process of transforma-

tion of television as a communication medium: the "platformisation" (D'Andréa, 2020; Poell et al., 2019)¹.

Driven by the attempt to reach the 21st-century viewers/users that do not want to be restricted to a fixed programme schedule and prefer to interact directly with what they are watching, television broadcasters, particularly within public-service broadcasting, seek, to some extent, adapt to the "socio-digital environment" (Pinheiro, 2019) of platforms, which in this study are broadly defined "(re)programmable digital infrastructures that facilitate and shape personalised interactions among end-users and complementors, organised through the systematic collection, algorithmic processing, monetisation, and circulation of data" (Poell et al., 2019, p. 3).

Thus, considering that "socio-technical features of platforms allow and prompt both cultural producers and end-users particular types of activities, connections and knowledge" (Nieborg et al., 2019), this work, seeking to analyse the performance of public television — especially TV Brasil and TV Cultura —, in streaming platforms, resorts to the cartographic methodology to understand: how has been the performance of public television broadcasters in the context of platformisation? Which strategies or resources have been more prevalent and which have been, to some extent, rejected or little explored in the Brazilian public television broadcasters' performance in such environments? Whereas public television stations' activities must adhere to specific fundamentals — such as universality, diversity, differentiation and independence (Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, 2001) — how are these principles reflected, or not, in the presence of these broadcasters in the streaming platform where they operate?

Aware that video streaming platforms are key for television stations' sustainability in an increasingly digitalised sector, this paper seeks to demonstrate it through a cartographic investigation of the platformisation processes of two important Brazilian public broadcasters, TV Brasil, managed by Empresa Brasil de Comunicação (EBC), and TV Cultura, managed by Fundação Padre Anchieta.

Thus, the goal is to map effective strategies, emphasise best practices, and foster improvements in the quality and performance of broadcasters on the YouTube streaming platform. In this way, it may contribute to the construction of public policies aimed at promoting and expanding the public broadcasting service in Brazil within the contemporary socio-digital media landscape.

Regarding the structure of this article, the initial section comprises an introduction to the theoretical framework, highlighting the fundamental concepts of "public broadcasting" (Bucci et al., 2012; Diniz, 2013; Organización de las

¹This paper is a revised and updated version of part of the monographic work entitled: "A Atuação da Televisão Pública em Plataformas de Streaming: Uma Cartografia da TV Brasil e da TV Cultura no YouTube" (The Performance of Public Television in Streaming Platforms: A Cartography of TV Brasil and TV Cultura on YouTube; Martins, 2022), delivered at the graduation course in social communication — audiovisual, at the University of Brasilia, Brazil.

Naciones Unidas para la Educación, la Ciencia y la Cultura, 2001; Pinheiro, 2019) and "platformisation" (D'Andréa, 2020; Poell et al., 2019). The second section delves into the methodological aspects, discussing the use of a contextual "case study" approach that incorporates the technique of "direct observation" (Yin, 2015), along with the "application of cartography as a research tool in the field of Communication" (Kastrup, 2007; Rosário & Coca, 2018), and employing an "analytic-descriptive" interpretation (Trivinos, 1987) for analysis. In the third section, we analyse the platformisation of TV Brasil and TV Cultura. Finally, we present our concluding remarks, which serve as inferences to shed light on the analytical reflection undertaken throughout this study.

Theoretical Framework: Media Laws, Platformisation and Public Broadcasting

As a framework to understand the transformation dynamics that media experience during their interaction with society throughout history, particularly with the emergence of new technologies, Marshall McLuhan and Eric McLuhan introduce the tetrad of media effects in their book Laws of Media: The New Science (1988). This tetrad represents the impacts and implications of new technology on society. According to these Canadian authors, the most effective way to achieve such representation is by raising questions, such as: what will a new technology enhance? What will that particular technology make obsolete? What will it help retrieve from everything we have lost (society)? How will that particular technology reverse when pushed to its limits? We believe that streaming video platforms can also be analysed through this lens, given that their existence, made possible by new technological advances, has catalysed significant transformations in the production and consumption of audiovisual content.

Nevertheless, the study of digital platforms has gained popularity across various fields of knowledge, particularly due to the significance of these socio-digital land-scapes in contemporary cultural and urban contexts. In his book *Pesquisando Plataformas Online: Conceitos e Métodos* (Researching Online Platforms: Concepts and Methods), professor and researcher Carlos D'Andréa (2020) emphasise the pressing need to invest in research perspectives that comprehend the technopolitical dimensions of digital platforms. He posits that technological artefacts and social practices co-produce each other, urging a comprehensive understanding of this relationship.

In his ground breaking work, Tarleton Gillespie (2010) presented a compelling argument regarding the strategic use of the term "platform" by services like Google and YouTube to position themselves as mere "intermediaries," promoting the perception of neutrality and facilitating an open and democratic flow of information and services. According to Carlos D'Andréa (2020), Gillespie's (2010) deconstruction of companies' discursive strategies has significantly contributed to

developing an analytical perspective that acknowledges the intricate connections among commercial interests, computational choices, and the political stances of platforms.

In line with this perspective, it is important to emphasise that in analysing platformisation within the context of non-commercial public-service broadcasters, particularly the case of TV Brasil and TV Cultura on YouTube, this study remains mindful of the platform studies viewpoint. It recognises that these platforms "are not simply intermediaries through which society becomes visible and social interactions can be studied, but rather environments that shape the emergence of a social sphere" (D'Andréa, 2020, p. 19).

D'Andréa (2020) further highlights that online platforms, in an increasingly noticeable and intense manner, render measurable and recordable the diverse social practices and computational routines occurring within their interfaces and stemming from their architectures (p. 26). It is important to note that YouTube — much like other platforms such as Netflix, Globoplay, HBO, and others — is shaped by the outcomes of its various entities, its political-economic corporate framework, and its internal technical mechanisms designed to achieve financial gains. The fundamental premise of this study, as partially mentioned before, aligns with Pinheiro's (2019) perspective, which suggests that the presence and performance of public broadcasters in socio-digital media environments have the potential to contribute to the "social legitimisation" of the public broadcasting system (encompassing both audio and audiovisual content) since platforms like YouTube have become increasingly integrated into the everyday lives of substantial segments of the Brazilian population.

Van Dijck et al. (2018) state that "a platform is fuelled by data, automated and organised through algorithms and interfaces, formalised through ownership relations driven by business models, and governed through user agreements" (p. 9). Therefore, within the realm of platform studies, two concepts hold significant importance in unveiling the interconnections that facilitate the operation of these structures and the intricate networks they form amongst one another: "platform society" and "platformisation".

We live in a "platform society", a society "in which social and economic traffic is increasingly channelled by an (overwhelmingly corporate) global online platform" (Van Dijck et al., 2018, p. 4), where people rely on apps and digital platforms to organise their daily activities, evident in numerous facets, including healthcare, education, transportation, and housing. The phenomenon of "platformisation" emerges in this context of growing interdependence among various sectors of cultural production, whose markets have undergone profound transformations due to the influence of platform logic.

That said, it is important to understand how television has responded to these market and cultural consumption changes. However, from an academic standpoint, certain authors do not recognise a clear distinction between television and video, even suggesting that services such as Netflix are authentic television

channels (Massarolo & Mesquita, 2016; Wolff, 2015/2015). Thus, digital media would have become part of the television business rather than a threat to the television industry.

Meanwhile, this does not negate the differences between traditional broadcasting services and streaming platforms, distinctions that go beyond their models of production and distribution. As distinctive characteristics of streaming services, the Agência Nacional do Cinema (Ancine, 2020) highlights that: (a) it is a service for communicating audiovisual content; (b) organised in a catalogue; (c) provided to the general public or subscribers in a non-linear manner; (d) based on the use of electronic communication networks, dedicated or not, for commercial purposes; and (e) with payment made directly by the user (through one-off purchases or subscriptions) and/or through the sale of advertising space, which entails the provider's editorial responsibility on the selection, organisation, and display of content in catalogues.

YouTube is the leading video platform worldwide, connecting users and content creators from several countries. According to the platform's official website, around 500 hours of content is uploaded on it every minute (YouTube, 2023a). People of different age groups share this international territory. However, the platform primarily attracts young adults aged 18 to 34, although an increasing presence of channels targeting children and senior citizens can be observed. According to the company, YouTube's mission is "to give everyone a voice and show them the world", and its values are based on "freedom of expression, freedom of opportunity, freedom of information, and freedom to belong" (YouTube, 2023b). These principles apparently align with democratic ideals and can be compared to public communication initiatives.

Resuming the platformisation concept, "the expanded notion of cultural production platformisation helps to understand the old models of production and cultural business adaptation processes" (Conviva, 2020, p. 22). One such example is how television practices and businesses operate from the techno-commercial interfaces of video-on-demand platforms. In recent years, there has been an urgent movement among Brazilian television broadcasters driven partly by the emergence of a new audiovisual content consumption model, demonstrated by a significant share of their audience.

The television industry, driven by the principles of granting public good (radio frequency spectrum), employs a survival strategy to maintain its relevance. With a well-established production model spanned for decades, traditional broadcasting is now adapting and integrating itself into a transformative shift towards a new environment and method of creating television content — streaming (Souza, 2020).

Television has demonstrated remarkable adaptability to emerging market trends and movements throughout its seven-decade existence in Brazil. This adaptability has contributed to the longevity and popularity of television companies, particularly evident in the case of commercial television broadcasters (Fagundes,

2020).

As streaming has become a prominent model for producing, distributing, and consuming audiovisual content, all this happening in a single environment, companies found themselves compelled to undergo a significant shift. This shift is not merely a migration but rather a reshaping of the media landscape, as it disrupts traditional features of the medium, such as live broadcasts, scheduled programming, and the temporal nature of viewer engagement (Marquioni, 2012; Oliveira, 2020). This reconfiguration profoundly alters the television experience itself.

In Brazil, the major free-to-air television broadcasters embarked on their plat-formisation process using diverse strategies. TV Globo made a significant impact in this market by introducing its video-on-demand platform, Globoplay, in 2015. TV Record provides its content through the Playplus platform, while SBT showcases its content on YouTube (Fagundes, 2020) and its recently launched platform, SBT Vídeos.

The platformisation of television is perceived as a strategy for resilience, a mechanism for sustainability, and, more importantly, as a multidimensional phenomenon (involving cultural, social, political, technological, and economic aspects). It is a dynamic process characterised by continuous changes and remains relatively understudied in Brazil in the realm of communication. Technological issues should be examined within the context of societal actions and omissions, particularly human behaviour (involving politicians, managers, and society as a whole; Pinheiro, 2019).

Therefore, we recognise that platformisation is crucial not only for commercial broadcasters but also for other components of the Brazilian broadcasting system, including state television broadcasters and, specifically, public broadcasters, which are the focus of this study (Constituição da República Federativa do Brasil de 1988, 1988).

According to a document from the United Nations Educational, Scientific and Cultural Organization (Unesco) authored by the World Radio and Television Council on public broadcasting in the digital era:

the challenge of the years to come, for public broadcasting, is to evolve and to adapt to the digital era the principles underlying its existence. Thus, the vast majority of public broadcasters already have a foothold in the world of specialty channels and Internet. What they need to do is to use these new technologies to improve and complement their public-service mission [emphasis added]. They must proceed with caution, choosing sectors that follow logically from their raison $d'\hat{e}tre$. (Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, 2001, p. 31)

As television undergoes digitalisation and progresses towards platformisation, with even greater individualisation of audiovisual consumption, largely driven

by audience control, it is crucial to acknowledge the impact of digitalisation and fragmentation on people's perception and interest in services that allow them to maintain a sense of belonging to a political community and perceive themselves as citizens (Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, 2001, p. 32).

Public television plays a distinct role within the Brazilian broadcasting system, and any potential alienation from this emerging social platform society would undermine the core principles of its public-service mission. Therefore, examining how these broadcasters have integrated into the digital landscape, particularly in streaming platforms, is essential to determine if they have fulfilled their complete function as public entities. This includes ensuring accessibility to all individuals, regardless of their methods or preferences for consuming television.

Considerations About the Method: Cartography as a Moving Map

This work employs a contextual and comprehensive approach known as "multiple cases" (Yin, 2015), focusing on the performance of public television broadcasters, namely TV Brasil and TV Cultura, within the YouTube platform. The study was based on a cartography of the channels used by the referred broadcasters on the streaming platform. Initially, from a "direct observation" (Yin, 2015) of the channels, a "sweeping gesture of the field" (Kastrup, 2007, p. 18). Subsequently, the data was catalogued and organised, enabling the mapping of these sociodigital environments (Pinheiro, 2019).

Following the completion of the mapping process, classification tools, categories, and indicators outlined in two Unesco documents focusing on the principles of public broadcasting and quality indicators were employed (Bucci et al., 2012; Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, 2001). This classification aimed to perform a descriptive and analytical analysis of the information collected. The "cartographic gestures" (Kastrup, 2007) undertaken by this study produce a "moving map", explained both by what Rosario and Coca (2018) characterise as something genuine of "cartographies in communication" and by the "evolving nature of platforms" (Nieborg et al., 2019). In essence, the findings of this study can be seen as a representation of the investigated object at the time of cartographic observation.

Understanding how public television broadcasters, especially TV Brasil and TV Cultura, operate on the YouTube platform involves encompassing a vast universe of information within the corpus observation movement, a substantial volume of content and audience engagement accumulated over the years the channels of these broadcasters have been present on the platform. Our approach in this research was to piece together fragments or parts of the reality of these channels, resembling a "mosaic" (McLuhan, 1972, as cited in Pinheiro, 2019, p. 42). By assembling and analysing these fragments, we aim to gain a comprehensive and

meaningful understanding of the processes occurring in this environment and the behaviour of the broadcasters within this particular scenario.

The YouTube platforms of TV Brasil and TV Cultura were initially examined over 15 days spanning the end of March to the first week of April 2021. For this article, we revisited the same channels for another 15 days (between the end of November and the first week of December). During this subsequent analysis, minimal changes were observed compared to the initial assessment.

Cartography and Analysis: Mapping the Performance of TV Brasil on the YouTube Platform

TV Brasil's YouTube channel was created in June 2006 and, up until the data collection conducted for this research, consistently uploaded videos daily. During the initial analysis, the TV Brasil YouTube channel had 1,310,000 subscribers, a significant number within the context of YouTube. Subsequently, in the second direct observation (conducted in 2022), the channel's subscriber count had increased to 1,980,000 subscribers. The TV Brasil YouTube channel also amassed a very expressive number of total video views. In the initial analysis, the channel had well over 300,000,000 views across its collection of 126,964 videos available on the channel. In the second direct observation (conducted in 2022), the TV Brasil YouTube channel recorded over 540,000,000 views.

In the channel description, in the "About" tab of TV Brasil's YouTube channel interface, TV Brasil identifies itself as a public television broadcaster. The channel invites viewers to watch videos of its programmes and highlights the presence of "web-exclusive content". In the same section, the channel also provides information about its presence on other digital platforms, and they are all social media platforms: Facebook, Instagram and Twitter. Additionally, users can access the TV Brasil website (https://tvbrasil.ebc.com.br/) to watch live programming through online streaming.

The YouTube channel associated with TV Brasil does not feature live programming directly from the television broadcasting instance, which would establish a connection between the two. Furthermore, it was not possible to identify any programmes exclusively produced for the platform (aside from occasional live broadcasts) contrary to what the channel claims in its description, as mentioned earlier in this text.

Determining the exact volume of television content made available on the platform over the years would be challenging without direct access to the channel's YouTube profile. However, by observing the "Videos" tab, where all the videos posted by the channel are displayed, with the most recent ones appearing at the top, we can see that videos are posted daily. However, most of these videos consist of news and reports already aired on the broadcaster's news programmes, such as Rep'orterBrasil.

When this data was collected, the last non-journalistic video the channel posted had been uploaded two months before. The discrepancy observed can be characterised as a breach of the principle of universal programming upheld by the broadcaster. Specifically, it restricts access to a particular type of content, namely, non-news programming produced by the broadcaster, thus undermining the universality of its content.

Among its featured channels, the broadcaster has three additional profiles associated with its main channel. One of them is TV Brasil Gov, which generally posts news, reports and broadcasts events related to the presidency of the Federative Republic of Brazil. This represents another dichotomy from the broadcaster's long-standing dual nature, evidenced during the Jair Bolsonaro government. The government officially merged the two broadcasters, disregarding the principle of "complementarity" outlined in Article No. 223 of the Brazilian Constitution of 1988, emphasising the need for cooperation between the public, state, and commercial systems. The two other channels belong to Agência Brasil and Rádio Nacional, also part of EBC's organisation as public communication broadcasters.

Among all EBC channels available on YouTube, TV Brasil boasts the largest subscriber count (Table 1) and content volume. This prominence within the public entity's digital realm can be attributed to the inherent appeal of television programming, compared to the content provided by the agency and Rádio Nacional on the same platform.

Number of subscribers in the YouTube channels of Empresa Brasil de Comunicação (2021/2022)

Prominent Channels	Number of subscribers (2021)	Number of subscribers (2022)
TV Brasil	1,310,000	1,980,000
TV Brasil Gov	968,000	1,430,000
Agência Brasil	6,290	10,800
Rádio Nacional	7,610	13,900

Each YouTube channel features a "Community" tab, which allows for posting images and text that are then sent to subscribers' homepages. While there is no assurance that all subscribers will receive these posts, it is an opportunity to update them about new content and encourage engagement with a programme, theme, or event. In the first moment of research (2021), the broadcaster's last post had been made two weeks before. It generated 781 likes and 16 comments, with little user traffic and frequency. This resource was little explored in the content dissemination strategies. In the second moment of research (2022), the last post of the broadcaster had been made one month earlier. It had 218 likes and only three comments. This is evidence of persistently low engagement and regularity of content posted on TV Brasil's "Community" tab on YouTube.

As mentioned, all videos released on the channel are available on the "Videos" tab. However, over time, as the volume of content increases, it becomes im-

possible to find a specific video in this geography of the channel. Therefore, the reorganisation and specialisation of the channel's content become essential, which is allowed by playlists. They are available on the channel interface under the "Playlists" tab, can be freely created by profile administrators, and work as a list of videos that can be organised by programme, season, year, or any other category. This facilitates the search for desired content and enables viewers/users to watch videos sequentially, encouraging them to spend more time on the channel. However, this type of cataloguing requires some attention to ensure that viewers can understand how it works and navigate easily through the page.

In the case of TV Brasil, this organisation through playlists is widely used. In 2021, a total of 212 playlists were created. In 2022, this number increased to 254. It is possible to make spotlight playlists within this channel's section tab. On Canal TV Brasil, two sets of playlists are spotlighted, namely "Jornalismo" (Journalism) and "TV Animada" (Animated TV). As their names suggest, these playlists feature content related to journalism and children's programming. These options for organising the page and the videos show that certain types of content are given higher prominence than others.

There can be several reasons for that, including evident audience preferences and responses to these genres and formats. Additionally, it could be influenced by the content produced by the broadcaster, which naturally impacts the availability of certain content on the platform. Furthermore, TV Brasil may have a vested interest in promoting certain programmes or themes to encourage more views. In any of these scenarios, both the principle of universality of public broadcasting and the principle of independence are compromised. The strategies employed in content circulation, which somewhat exclude certain genres, formats, and themes, appear to serve a purpose other than the public interest. This reflection primarily stems from the many videos featuring news content, specifically covering the actions of the former Brazilian head of state, Jair Messias Bolsonaro.

Classification is another challenge that seems to permeate this type of digital platform cataloguing. Upon examining the cataloguing of playlists on TV Brasil's channel, it becomes evident that while most playlists are organised based on specific programmes, thematic playlists and others are grouped by format and genre. In some cases, older or content-rich programmes are categorised by year or season, whereas others are classified under themes such as "Documentário" (Documentary) or "Receitas" (Recipes), for instance. Some other minor errors were noticed, including playlists that are duplicated or have identical names. These situations make it challenging for viewers to easily locate and access the specific content they want.

Another noteworthy observation regarding TV Brasil's playlist system is that many older contents, particularly those included in playlists created between 2010 and 2012, are incomplete. These playlists often only feature the names of the programmes without the actual full content. These programme playlists, even though they are no longer part of the currently scheduled programming, hold significance as they form a collection that viewers can freely access. They

provide a glimpse into TV Brasil's television production history, which cannot be found elsewhere with this level of organisation. Undoubtedly, this aspect represents a significant advantage of having public television presence on a streaming platform, and it could be further leveraged by TV Brasil. Examples such as the "Musicograma" (Musicgramme) and "Revista do Cinema Brasileiro" (Brazilian Cinema Magazine) playlists demonstrate this feature's effectiveness.

To better understand the catalogue offered by TV Brasil's channel and to conduct a more analytical reflection on the performance of its playlists, the 10 most-watched playlists on the channel were selected. The purpose of this selection is to examine, using specific tools, how the content is organised on the platform, and identify any patterns, discrepancies, or gaps that may exist in TV Brasil's performance on YouTube based on the content that attracts the highest audience engagement, as outlined in Table 2.

Most watched TV Brasil playlists on YouTube (2021/2022)

Name	Format	Topic
"Repórter Brasil - 2ª Playlist"	News/reports	Current affairs
"O Teco Teco"	Educational/animation/report/interview	Curiosities/ variety shows
"Igarapé Mágico"	Children's series/animation	Amazonian folklore/childhood
"Meu AmigãoZão"	Children's series/animation	Childhood
"Sem Censura"	Interviews/reports	Current affairs
"TV Brasil Animada Completa 2 Anos"	Testimonials	Childhood/TV Brasil programming
"Carrapatos e Catapultas"	Children's series/ animation	Animal world/childhood
"Brasil em Dia"	News/ reports	Current affairs
"Um Menino Muito Maluquinho"	Fictional series/ children	Childhood
"Caminhos da reportagem"	Reports	Current affairs

In addition to examining the 10 most-watched playlists on the channel, it is also noteworthy to explore how the principles of public broadcasting — namely "independence," "universality," "plurality," and "differentiation" (Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, 2001) — are reflected in TV Brasil's performance on YouTube. Furthermore, considering

the performance issue within the context of "platformisation" is essential. The principles mentioned earlier are also addressed in another document commissioned by Unesco titled *Quality Indicators for Public Broadcasters: Contemporary Evaluation* (Indicadores de Qualidade nas Emissoras Públicas: Uma Avaliação Contemporânea; Bucci et al., 2012). The categories and indicators outlined in the mentioned documents have been compiled, adapted, and adopted as analytical tools in this research (Table 3).

Elements for analysing television broadcasters' performance in streaming platforms according to the principles of public broadcasting

Categories

Indicators

Independence

- (a) Does the broadcaster have independence in producing its programmes is the broadcaster safe from external pressures and government interference?;
- (b) Is the broadcaster free to deliberate on the content it posts on the platform or includes in its programming without being subjected to prior censorship by state agencies?;
- (c) Does the broadcaster have full autonomy to determine what it broadcasts, or does it depend on government authorisation to air specific programmes?

Universality

- (a) Is access to the broadcaster's channel on the platform and the content provided there free of charge?;
- (b) Is the content made available in a manner that facilitates the viewer/user in finding specific programmes, themes, or formats more easily?;
- (c) Are the broadcaster's different types of programmes journalistic, cultural, children's, educational, and variety presented on the platform with equal periodicity, content volume and level of importance?

Plurality

- (a) Does the available content reflect the diversity of identities ethnic, religious, popular, age, sexual orientation, and aesthetic preferences, among others present in society?;
- (b) Does the content encompass programmes specifically targeted at audiences in various geographic regions?;
- (c) Do these contents exhibit diverse formats and address a wide range of themes?

Differentiation

- (a) Are the programmes presented in an original language, or do they rely on repetitive and familiar patterns?;
- (b) Can examples be found of programmes or programme formats generated within the broadcaster and subsequently adopted by other broadcasters?;
- (c) Can this broadcaster's presence on the platform be considered a reference for similar broadcasters or competitors?

Platformisation

(a) Does the broadcaster demonstrate skilful use of the platform's resources —

content distribution and engagement with the audience?;

- (b) Does the broadcaster create original content specifically for the platform?;
- (c) Is there a well-defined procedure for how the broadcaster's content is offered on the platform on videos' thumbnails, organisational patterns (playlists, channels, seasons, themes), in the playlist descriptions?

Thus, the first category under which TV Brasil's top 10 playlists were observed was "independence". The comprehensive answers to some of the questions outlined in Table 3 require a thorough analysis of the broadcaster's internal processes, including programme creation, production, the definition of the programming schedule, funding, and resource distribution. Nevertheless, certain external indicators may point to issues in this regard, as evidenced by the fact mentioned above that most videos on the channel are focused on journalistic content, particularly on national politics, with a notable emphasis on excessive and biased coverage of the actions of the then President Jair Bolsonaro. It is widely recognised that providing information is an essential function of public television, but it is not the sole purpose. "Educate, inform and entertain" is pointed out by Unesco (Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, 2001, p. 10) as the "mandate" of public service broadcasters. Hence, while there might be a deliberate approach in prioritising a specific type of content that may attract a large and engaged audience, it should not lead to neglecting the other important functions of providing entertainment, education, and promoting culture.

Another external factor that significantly influences this research is the announcement made in 2021 by President Jair Bolsonaro regarding the government's plan to privatise not only TV Brasil but also EBC, which oversees other public entities such as Rádio Nacional.

This plan was not merely a campaign promise during the re-election bid of the former Brazilian President; concrete steps were taken to implement this agenda. These measures included a decree signed by President Bolsonaro, which included the company in the National Privatisation Programme and the initial analysis to privatise EBC. This situation, orchestrated by the Brazilian far-right wing, sought to undermine the significance of public communication services, portraying them as frivolous and unnecessary expenses. The EBC, and its workforce, associates and viewers, were clearly affected by this atmosphere of instability, neglect, and the looming threat of activity cessation.

Going back to the analysis categories and comparing the principles of public service broadcasting (Bucci et al., 2012; Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, 2001) with the indicators of platform logic, it becomes evident that "universality" matters: (a) If access to the broadcaster's channel on the platform (in this research, YouTube) and the content provided there are free of charge; (b) If the content made available on the platform in a manner that facilitates the viewer/user in finding specific programmes, themes,

or formats more easily; (c) If the broadcaster's different types of programmes — journalistic, cultural, children's, educational, and variety — are presented on the platform with equal periodicity, content volume and level of importance.

In the case of TV Brasil, the final indicator related to "universality" is not at an ideal level, as no equal attention is given to releasing content in terms of quantity and periodicity across different types of television programmes. Access to the platform and its contents on the channel is provided free of charge, which aligns with the objective of public service to reach all citizens. This allows people who may not have access to the broadcaster's streaming signal or prefer not to use it to consume the contents as long as they have an internet connection and access to digital devices. Furthermore, this access also extends to Brazilians living outside the national territory, allowing them to watch public television even if they cannot access it through the traditional broadcasting model in their respective countries.

Regarding "plurality", it is important to determine: (a) if the available content reflects the diversity of identities — ethnic, religious, popular, age, sexual orientation, and aesthetic preferences — present in Brazilian society; (b) if the playlists include programmes specifically targeted at audiences in various geographic regions; and (c) if these contents exhibit diverse formats and address a wide range of themes; these indicators reflect one of the most interesting aspects of public television, its diversity.

Among the 10 most viewed playlists analysed, the programme content does not have highly diverse themes. Most of these playlists consist of traditional journalistic programmes and interview shows primarily focusing on current affairs. Children's programming has a greater variety, including fictional series, educational/instructive programmes and animated series, whose formats are rarely found in commercial television programming, especially after children's advertising on Brazilian television broadcasters was banned.

This indicator presents a challenge in terms of verification within the scope of this research, as the selection of the channel's most viewed playlists provides insights into audience preferences rather than a comprehensive picture of the channel's overall programming schedule. However, it is important to note that the selection of these 10 playlists remains a valid sample, as they are part of the channel's catalogue and provide some insight into the genres and programme formats made available. The plurality also relates to the next category of analysis.

Regarding "differentiation", we seek answers to the following: (a) are the programmes presented in an original language, or do they rely on repetitive and familiar patterns?; (b) can examples be found of programmes or programme formats generated within the broadcaster and subsequently adopted by other broadcasters?; (c) can this broadcaster's presence on the platform be considered a reference for similar broadcasters or competitors?

As mentioned earlier, TV Brasil's "TV Animada" playlist, which features children's programming, stands out as an example of content targeting a signifi-

cant audience often overlooked by other broadcasters. This audience is well-represented on digital platforms, and it is not coincidental that the most popular playlists on the channel cater to this genre.

Another aspect related to "differentiation," which can also be connected to the principles of "universality" and "platformisation," is the inclusion of playlists featuring audio descriptions and/or a Brazilian sign language window in the videos. This ensures that television content is accessible to audiences with sensory diversity, particularly people with hearing impairment.

The TV Brasil channel has two playlists with this profile, "Programa Especial", a collection of videos with audio-description featuring interviews, talk shows and reports. The *Repórter Visual* playlist stands out as a news programme specifically created for audiences with auditory sensory diversity, featuring content entirely presented in Brazilian sign language. These content accessibility measures implemented by TV Brasil showcase a unique innovation in the format and language of television programmes and go beyond the conventional practices of other broadcasters.

The final analysis category introduced in this research is "platformisation," which focuses on how public television broadcasters adapt and engage with digital streaming platforms. These indicators encompass the following questions: (a) does the broadcaster demonstrate skilful use of the platform's resources for content distribution and engagement with the audience? (b) does the broadcaster create original content specifically for the platform?; (c) is there a well-defined procedure for how the broadcaster's content is offered on the platform, including videos' thumbnails and organisational patterns (playlists, channels, seasons, themes), in the playlist descriptions? The category "platformisation" in this research was specifically created to analyse how public television broadcasters adapt to and use digital streaming platforms. It does not correspond to a specific principle of public broadcasting. As a contribution in this direction, the indicators provided by Unesco (Bucci et al., 2012) were gathered, which refer to the adaptation of public broadcasters to socio-digital environments.

Based on direct observation and analysis of TV Brasil's channel on YouTube, it can be concluded that the channel uses most, if not all, of the resources provided by the platform. However, some resources, such as the "Community" tab, are used infrequently. It is worth mentioning that it has a limited number of associated channels. There is only one channel associated with television content, and it has a governmental focus.

This decision to concentrate all the channel's content in a single digital environment requires meticulous organisation and consistent content management, which is not the case. Most of the channel's playlists have not been regularly updated, including popular ones such as "O Teco Teco" and "Meu AmigãoZão," which have not received updates or monitoring for over a year.

As for the consistency in the visual identity of the channel — video thumbnails, playlist description, and video description, there is no standard procedure. Most

videos on the channel do not have edited thumbnails, resulting in the display of random frames from the video, making identification difficult. Some playlists have descriptions, and some do not. The same happens with videos, but less frequently: most videos have descriptions and links to additional information.

In playlists with no description, viewers have to watch the videos to learn their content, as no accompanying information or context is provided, not even to encourage them to continue to watch. The channel's logo and cover match the broadcaster's colours and visual identity. As in traditional broadcasting, all videos on the channel feature the broadcaster's logo in the top corner of the image.

Cartography and Analysis: Mapping the Performance of TV Cultura on the YouTube Platform

Upon examining the TV Cultura channel on the YouTube platform, it is possible to observe that similar mechanisms are employed, albeit with a different approach. The TV Cultura channel was also created in 2006, in March. During the initial phase of this mapping in 2021, the TV Cultura channel garnered a substantial audience, with 1,550,000 registered viewers. The channel's content received over 400,000,000 views, and over 19,000 videos were uploaded. Furthermore, the channel exhibited a consistent pattern of daily video uploads. In the second direct observation, 2022, the subscriber count increased to 2,100,000, and the total number of videos uploaded surpassed 30,000. The content received almost 582,000,000 views, and the channel maintained its consistent practice of daily video uploads.

The TV Cultura channel on YouTube presents itself as the official channel and emphasises its digital conceptualisation. It provides a description showcasing an overview of some of the programmes available on the channel. This description highlights which programmes are original content created specifically for the platform and which are part of TV Cultura's regular programming schedule. However, this description was and remains outdated since some programmes are available but no longer being produced. The public nature of the broadcaster was not explicitly stated in its profile.

The channel's "About" tab, featuring its description, provides hyperlinks to other digital platforms on which the broadcaster operates: Facebook, Instagram and Twitter. Users can access the broadcaster's website (https://cultura.uol.com.br/) to watch live programming through online streaming. Live broadcast, as a resource available on YouTube, is only used by the channel in specific cases, such as the transmission of an event, the premiere of a programme, in the main channel, and, as we will see, the topography (organisation in space) of the TV Cultura channel is unique. The channels associated with it may make greater or lesser use of this feature.

Upon analysing the "Videos" tab, there is a remarkable diversity of formats and themes in the types of programmes whose videos are uploaded. While there is a significant volume of journalistic content, which is expected considering its daily production, no apparent discrepancy indicates a particular type of programme being prioritised over others.

During the observed periods, one of the consistently uploaded programmes on the channel was O Povo Fala (People Talk), which features an innovative format inspired by the popular "fala povo" segment often used in radio shows. This programme consists of short videos featuring testimonials from passers-by on Avenida Paulista, sharing their personal stories and impressions of the city of São Paulo. Short programmes like O Povo Fala are common on the channel.

The associated channels of TV Cultura's main channel exhibit a greater complexity in the topography of this system. In total, 23 channels bear the names of the main programmes from TV Cultura's programming schedule. This means that the contents were segmented, and the traffic of viewers/users interested in the specific programmes of TV Cultura was also hyper-specialised. Hence, these contents were managed independently in separate profiles with particular identities.

As a result, some channels have as many, and in some cases more, subscribers and views on their videos as the broadcaster's official channel (Table 4). These include the channels of the programme *Roda Viva*, with 1,320,000 subscribers in 2021 and 1,610,000 subscribers in 2022, and *Quintal da Cultura*, with 1,630,000 subscribers in 2021 and 1,780,000 subscribers in 2022. This type of programming segmentation within the platformisation process is a common organisational strategy employed not only by TV Cultura but also by commercial Brazilian television channels such as SBT and Band, which operate on YouTube.

TV Cultura channels on YouTube

Prominent Channels of TV Cultura	Number of subscribers (2021)	Number of subscribers (2022)
Café Filosófico CPFL	647,000	819,000
Roda Viva	1,320,000	1,610,000
Cocoricó	436,000	535,000
Quintal da Cultura	1,630,000	1,780,000
Jornalismo TV Cultura	606,000	1,070,000
Programa Ensaio	90,400	111,000
Manos e Minas	202,000	213,000
Sr. Brazil	272,000	372,000
Cultura Livre	161,000	184,000
Viola, Minha Viola	336,000	453,000
Programa Prelúdio	14,000	15,900
Repórter Eco	55,500	82,600
Provoca	339,000	457,000
Castelo Rá-Tim-Bum	297,000	296,000

Esporte TV Cultura (Revista do Esporte)	23,300	31,400
Matéria de Capa	139,000	173,000
Ordem do Dia	6,470	6,490
Persona	35,700	49,100
Metrópolis	67,600	87,100
TV Cultura Papo de mãe	118,000	159,000
Terradois	10,800	13,500
Vamos Pedalar	5,100	5,400
Clássicos	10,900	14,300

The "Community" tab appears to have been deactivated by the channel in 2021. The most recent post on the channel's wall was made one year prior to this research (May 25, 2020), receiving minimal engagement with 188 likes and eight comments. However, not many previous attempts at posts suggested that the strategy was likely abandoned before its effectiveness could be evaluated. In 2022, we observed the activation of the "Community" tab, although the engagement in the recent posts remained relatively low (98 likes and two comments). However, there was a more consistent update of content.

It reinforces that the "Community" tab is a mechanism for promoting the channel's content and fostering audience engagement. Therefore, this study argues that overlooking the opportunities for interaction offered by the "Community" tab is not beneficial for the channel. While metrics such as likes, views, and comments on videos are typically seen as the primary indicators of engagement, the activation of the "Community" tab goes beyond these surface-level metrics. It serves as a space for fostering relationships among the channel's viewers, making the term "Community" particularly relevant in the long run. It provides an opportunity for building connections and establishing meaningful interactions among the audience.

The playlists on the TV Cultura channel, amounting to 69 in total, are categorised by programmes. Programmes with extensive content are further organised by year or season. Additionally, thematic playlists and curated collections of the broadcaster's historical programmes are available on the channel. However, many of these lists do not include a description, or when there is one, it may not accurately reflect the content of the videos or provide clear guidance. As a result, it becomes challenging for the audience to identify, access, and search for specific content within these playlists.

In streaming environments, these processes need to be fluid and dynamic, with the least risk of encountering mishaps, so the audience can have autonomy and control over their viewing. Therefore, like the programming schedule plays a crucial role in the broadcasting experience, the organisation of the content catalogue is one of the most vital aspects of video-on-demand platforms. It has been demonstrated that how content is presented and appropriately signalled on the platform is as important as the type of content itself. This ensures that it can be easily located by the audience who is interested in it. Thus, it is then up to the broadcaster to mediate this process.

To better understand how the public broadcaster TV Cultura operates on the YouTube platform, the 10 most watched playlists (see Table 5) of the channel were analysed, focusing on the following categories: "independence", "universality", "plurality", "differentiation" and "platformisation"². These categories were submitted to the same indicators in the form of questions as the playlists of the TV Brasil channel.

Most watched TV Cultura playlists on YouTube

Name "Talentos"	Format Reality show/ contest/musical	Topic Musical theatre and contest
"Os Campeões de Audiência"	Documentary/interviews	TV programmes and TV celebrities
"Urbanite"	Educational	Challenges of urban life
"Retratos da Fé"	Documentary series	Religion and faith
"Cultura, O Musical"	Reality show/ contest/musical	Musical theatre and contest
"Giro com William Corrêa 1º Temporada"	Interviews	Brazilian celebrities
"Campos em Ação"	Film screening	University cinema
"Bem Brasil - Fundo de Quintal"	Broadcast of concert/ musical performance	Music
"Cultura nas Maldivas"	Travel programme	Travel and Culture
"AgroCultura"	Series of reports/interviews	Farming and life in the countryside

The category of "independence" as a principle of public service broadcasting, observed through TV Cultura's performance on YouTube, shows no evidence

 $^{^2\}mathrm{Regarding}$ the five dimensions of the platform proposed by Van Dijck (2013), this work does not circumscribe them as direct analysis categories in the cases of TV Brasil and TV Cultura since they refer to issues such as regulation, business model, investment and information architecture. These dimensions may be further explored in future research that specifically aims to understand the structural aspects of the platform rather than focusing solely on its content.

of restrictions on specific programmes, subjects, or direct affiliation with any political party in the space occupied by the broadcaster on the platform.

The channel demonstrates a certain degree of autonomy, and although the positioning of TV Cultura as a public entity is subtle, it is still evident. When viewing the channel's videos, a text window states that TV Cultura is a station operated by Fundação Padre Anchieta and that the São Paulo state government fully or partially funds the content. That does not imply that there is no influence or interaction between the funding source and the broadcaster but rather that such influence was not observed in the analysis of the channel.

Based on the principle of "universality," the analysis of the selected playlists demonstrates a general equilibrium in the linked programmes, encompassing various formats, genres, themes, target age groups, and regularity of posts on the platform. Access to the platform and all the contents available on the channel are free of charge. The organisation of the channel is facilitated both by the specific channels for programmes with more content and by cataloguing them in a few playlists.

The biggest challenge lies in effectively managing and generating viewer traffic and engagement across all these channels. However, segmenting and hyperspecialising the content through efficient management, organisation, and regular updates greatly facilitates the integration of the television broadcaster into the digital platform's reality.

In the category of "plurality," a wide range of programme genres can be observed on the TV Cultura channel, including interview programmes, reality shows, documentary series, travel programmes, musical performances, and various other formats. Some content aimed at an audience of specific geography was also identified, such as local sports championships, like Parazão 2021, a sports championship of the state of Pará in Northern Brazil.

These programmes cater to specific audience niches that may not interest commercial broadcasters. However, they contribute to ensuring that public TV programming communicates with and appeals to a wide range of viewers while also serving as a platform for transforming television language and promoting regionalisation, thus making it more democratic and inclusive.

Programmes with unique themes in Brazilian television productions, such as $Retratos\ da\ F\'e$ (Portraits of Faith), a documentary series exploring religion and faith in Brazilian society from various perspectives, and $Campos\ em\ Aç\~ao$ (Fields in Action), a programme dedicated to promoting and raising awareness of university film productions, were also part of the TV Cultura channel's content. Both programmes tackle socially and culturally significant topics and have garnered a positive audience response on the platform.

However, certain shortcomings are observed in the case of TV Cultura, such as the absence of content catering to multisensory accessibility and an excessive focus on Paulista-themed content. It would not be an issue if more programmes targeted

other regions of the country, for TV Cultura is primarily a local broadcaster.

Indeed, TV Cultura has consistently excelled in children's programming, with notable shows like *Castelo Rá-Tim-Bum* and *Cocoricó*, this success has translated into its performance on digital platforms as well. As a result, the dedicated children's channel of the broadcaster, Quintal da Cultura, has garnered more subscribers and has produced more original content specifically for the YouTube platform compared to its main channel.

Several programmes featured on TV Cultura's channel showcase original formats that have inspired other broadcasters or have no equivalent counterparts. Examples include *Talentos* a reality show highlighting musical theatre talents in Brazil, and *Giro com William Corrêa*, a programme where Brazilian celebrities are interviewed while driving around the city.

Hence, the dimension of "differentiation," which focuses on authenticity in the performance of the public TV broadcaster, appears to be considered not only in the choice of programmes and content included in the broadcaster's platform catalogue but also in their creation and production process. Therefore, the relationship between the various stages of television production is evident, whether in the traditional broadcasting or the streaming model, as this principle of ensuring quality and distinctiveness should be upheld prior to the content's dissemination.

Finally, concerning the "platformisation", when analysing TV Cultura's performance on YouTube, there appears to be an imbalance in the use of the platform's available resources. While TV Cultura demonstrates a clear strategy in organising its content through channels and playlists to streamline viewer traffic and avoid content accumulation, there is still room for improvement in content management, particularly concerning playlists. Many playlists lack descriptions, and some only provide the names of the programmes without additional details or significant excerpts of the content.

The production of original content, while previously more active with programmes like *Cultura nas Maldivas*, has recently become limited, with most submissions following a live or vlog format that has become repetitive due to its widespread use, particularly during the COVID-19 pandemic.

Furthermore, there is a lack of consistency in how the content of TV Cultura is presented on the platform, as there is no standardised procedure. Some videos lack thumbnails, and playlists' titles and content descriptions follow irregular formatting patterns. The channel's visual identity aligns with the broadcaster's specifications, featuring the same logo and colours. This consistency helps foster a sense of connection and affiliation between the broadcaster and the channel on the platform.

Based on the results of these analyses of TV Cultura and TV Brasil, and drawing from the tetrad of media effects proposed in *Laws of Media: The New Science* by Marshall and Erin McLuhan (1988), we reflect — below in our conclusions —

on the changes prompted by the advent of streaming platform technology. This technology enables the existence and interaction of video-on-demand services with society, impacting television as a medium and language.

Conclusions

Before reflecting on the effects of digital streaming platforms, it is important to acknowledge two fundamental premises that underpin McLuhan's (1964/2000) epistemology of electronic media: firstly, the notion that "we become what we behold," and secondly, the understanding that "we shape our tools and then our tools shape us". Based on these premises, McLuhan examined two major technological revolutions that drive aesthetic, cultural, and social transformations: the invention of the press in the 15th century and the new applications of electricity: the telegraph, telephone, television, radio, and the computer (Del Bianco, 2005). Our current reflection focuses on the unfoldings of this last technological revolution driven by the intercession of television and the digital world (computers).

These premises suggest that technology constructs an environment within which humans navigate, and this concept holds particular relevance in the context of digital platforms. The concept of environment is translated into the atmosphere, that is, into something invisible and intangible, but which, nevertheless, influences human activity to contribute to shaping lifestyles, production and consumption.

This environment represents a secondary nature that not only influences individuals but also shapes their patterns and perceptions of the world as they interact with the medium and its messages. Through this relationship, media have evolved into "extensions of man" as if they were extensions of the body, capable of stimulating the senses and conditioning changes in our behaviour as individuals and society (McLuhan, as cited in Del Bianco, 2005, p. 154).

Therefore, streaming platforms like YouTube engage individuals within a nervous system of content circulation and production, offering real-time interaction possibilities or even when it creates a sense of complicity and intimacy through the affective communication of vloggers. The effects of the platform, in contrast to traditional television and radio, are not solely determined by its programming.

"The effect of the medium is made strong and intense just because it is given another medium as 'content'" (McLuhan, 1964/2000, p. 33). This concept emphasises that the key to understanding the social effects of platforms lies in their inherent characteristics, structure, and functioning, which ultimately shape the content they host. The significance lies not in the specific content offered by streaming platforms but in their existence and transformative impact on society (Del Bianco, 2005, p. 155).

Thus, through McLuhan and McLuhan's (1988) questions to assess the impacts of a new technology on society, Table 6 was constructed as an endeavour to

depict the transformations instigated by the platforms.

Tetrad of media effects applied to the video streaming platform

	Questions based on proposals by McLuhan and McLuhan (1988)	Transformations instigated by the plataforms
Enhances	What does the streaming platform enhance?	The viewer/user's control over the choice of television content and the moment of spectatorship.
Makes obsolete	What does the streaming platform make obsolete?	Viewing that is restricted to the predetermined schedule of the broadcast. Physical video rental stores and video piracy.
Retrieves	What does the streaming platform help retrieve from everything we have lost (media's social effect)?	Retrieval of television formats, old productions, and productions made unsustainable by tradicional television. Interactivity and direct communication between the audience and the content creator.
Reverses	How does the streaming platform reverse when pushed to its limits?	Content hyper-segmentation, audience hyper-specialisation, social dispersion, and the phenomenon of binge-watching or "marathon watching" (the practice of consuming content from a single audiovisual product, series, or franchise for extended periods, uninterrupted, spanning hours or even days).

To a significant degree, we can say that the streaming video platform stood out from traditional television (broadcasting) by improving a condition already facilitated by home videocassette players and, later, DVD players. In these situations, the viewer has control over the choice of what to watch, when and how to do it. All these processes are made easier in the platform universe through faster devices, dynamic interfaces, significantly expanded catalogues, original content offerings, and the relational and interactive possibilities inherent to the digital medium.

The constraint of viewing being limited to the regular programming schedule in the broadcasting reality is also disrupted by the advent of streaming platforms. Physical video rental stores have become obsolete, except in areas without internet access or where the availability of online streaming services is unreliable. The illicit piracy industry also diminishes in influence due to rising concerns over security issues involving users' personal information, account passwords, and subscriptions required to access streaming platforms.

The streaming production mode allows the retrieval of television formats, such as sitcoms and documentary series, which had lost prominence in traditional television network programming. As there is a constant need to expand the content catalogue and meet the growing demand, it has become common to include older productions contributing to preserving significant television productions by creating spaces for cultural memory.

Productions deemed financially unsustainable for traditional television, often due to budgetary constraints or declining audience numbers, now have their production and distribution rights acquired by streaming platforms, expanding the possibilities within the television and audiovisual market. In addition to promoting interactivity through the relational nature of digital platforms, these platforms establish a direct communication channel between the audience and the content creator.

Ultimately, the platforms reverse in the hyper-segmentation of content, standardising productions through established formulas. As a result, it becomes challenging to pursue experimental languages and innovative formats in productions. The hyper-specialisation of the audience limits the viewer's freedom because once the platform's algorithm defines their profile, it becomes increasingly challenging to be exposed to or receive content recommendations that deviate from their previous consumption patterns.

Social dispersion can also be a reversed effect on some streaming platforms, such as Netflix, where content is typically released in its entirety. This strategy facilitates what is commonly known as binge-watching, which refers to the practice of consecutively watching all episodes of a series or movies from a franchise, often referred to as a "marathon" viewing session. Engaging in this habit may lead to distractions from daily tasks, as viewers may find themselves watching content during school or work hours. Furthermore, it can potentially give rise to obsessive and pathological behaviours, including addiction³.

McLuhan (1964/2000) postulated that each new medium initially operates as a hybrid medium, incorporating and referencing the preceding media. Applying this perspective, it becomes plausible to understand the impact of video-on-demand platforms on the medium that preceded it, namely television. Applying this perspective, it becomes plausible to understand the impact of video-on-demand platforms on the medium that preceded it, namely television. The term "hybridisation" was coined in the 1960s to describe the transformative effects prompted by the widespread adoption of television, as it assimilated elements from radio, theatre, and cinema. Many years later, this concept remains current and offers a particularly valuable opportunity to examine the elements and structural properties of the ongoing process (Del Bianco, 2005), such as the platformisation of television.

³A news article highlights the detrimental effects of binge-watching on the audiovisual industry, particularly television productions, and its negative impact on viewers' mental health (Coelho, 2016).

McLuhan (1964/2000, p. 75) further argues that hybridisation releases great energy by fission or fusion (the old medium and the new medium separate after collision — the media converge to form a new medium). This critical moment of truth and revelation gives birth to the emergence of a new form.

The moment different media meet represents a moment of freedom and liberation from the monotony and numbness they impose on our senses. At this stage, it is challenging to predict with certainty the future of television as a medium following its hybridisation with streaming platforms. One can only assume that the television language and certainly part of what characterises this medium will persist, regardless of the outcome of this convergence.

Through this concept, it is possible to understand how the ongoing mutations caused by platformisation are driving a realignment within the communication system, not only within the television sector. This phenomenon paves the way for the convergence of processes and practices, which can also be observed in other domains, such as radio broadcasting (Pinheiro, 2019). Within the context of evolving communication ecologies, where forms of media rely on each other for subsistence, the foundations of the convergence process between new and old media are being established in the contemporary era (Del Bianco, 2005). Likewise, the avenues for the continuity of the television language are being paved, enabling its resilience and survival across changing eras as it migrates through different media, devices, and social landscapes.

As television, as a medium and language, rapidly progresses towards complete digitisation, the ability of television broadcasters to adapt effectively to these processes can determine their survival or potential decline. For the broadcasters studied in this paper and potentially other public broadcasters, platformisation presents an opportunity to update the modes of production and communication with their audience, that is, citizens. Furthermore, platforms provide public television networks with new avenues for sustainability and increased social legitimacy. Public broadcasters can enhance their presence and relevance by actively engaging with the socio-digital environments that have become integral to contemporary life.

Moreover, by leveraging digital platforms, television broadcasters can access new audiences, particularly younger demographics. This allows them to reinforce their historical significance, particularly in the case of TV Brasil and TV Cultura, which have played crucial roles in Brazil's media history and must continue to be relevant. Additionally, embracing digital platforms can create more favourable conditions for fulfilling the mission, mandate, and principles of public service broadcasting (Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, 2001).

Finally, this study emphasises the importance of further exploring the platformisation of television broadcasters, particularly public service broadcasters, from various perspectives. It suggests that cartography can serve as a valuable tool for this purpose. Undoubtedly, studying online platforms poses a significant challenge in accessing information directly related to their operations, including their affordances and data-driven processes. Conducting quantitative research using such data can yield fascinating insights and results. Indeed, it is crucial to consider and further research the editorial tension and production biases arising from the logic of algorithms and datification, which are inherent aspects of online platforms.

Moreover, the global expansion of media platformisation impacts not just public television broadcasters but also state-owned and commercial media. It is crucial to highlight the public nature of all these media segments, thereby creating numerous opportunities to narrow down the focus of study for future research.

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