Abstract
Cartoons have been and still are a fundamental genre in children’s television programming and are a key product for the media industry due to their easy interpretation by children and their presence in distribution channels. This paper presents an analysis of the supply of children’s and cartoons broadcast over the last decade on 25 European general-interest television channels, both public and private, of Germany, Spain, France, Italy and the United Kingdom. The research findings focus on the genre programming strategies applied in terms of channels, broadcasting time slots and types of production in a multiplatform context driven by the consumption of digital content through streaming and SVOD services. The results show the continued leadership of cartoons in an environment of scarcity of children’s supply on European generalist television channels, reaffirming itself as a morning and weekend product highly shaped by commercial logics. However, distinctive programmatic policies are prominent in the role of public broadcasters in the supply of domestic products, both due to the broadcasting quotas of local cartoons and the consistency of their strategy over the period 2010–2020.

Keywords
Children’s programming, cartoons, programming policies, television programming, public television, general-interest television, Europe.

1. Introduction

1.1. Children’s content on European general-interest channels
Children’s television programming has undergone changes since the privatization and deregulation of television in Europe. This has led to an increase in thematic channels and the launch of digital platforms that seek to attract the attention of children and young people. All have produced a disruptive effect (Matrix, 2014) and have caused major developments in the strategies followed by European general-interest television channels regarding children’s programming over the last decade.

In this context, where several authors also confirm a trend towards the disappearance of children’s and youth programmes (Paz & Vincent, 2022), it is important to note that the children’s target was essential for European DTT, with a well-ranked supply during certain periods. In 2008–2009, it became the second highest genre on DTT channels, and of great importance to public broadcasters (García–Muñoz & Larrègola, 2010), which found in it, as Moreno (2009) and Fernández–Gómez (2012) state, an ally to meet these audience demands.
and a way to diversify their means of action. The highest level of children’s thematic channels in Europe was reached in 2010, when 275 children’s channels were active, compared to the 64 found in 2000 (European Audiovisual Observatory, 2011).

The genre diversity of programmes aimed at children has been found in the policy of programmers, especially on public television, in which, as Steemers and D’Arma (2012) note, are considered its axis of action and a strategic target with particular characteristics and needs (Buckingham, 2007; Livingstone & Local, 2016).

With an uneven presence in the scheduling, cartoons, containers¹, quizzes, fictions and magazines, among others, have been part of children’s programming with divergent strategies between public and private channels, and between state and regional channels. Nevertheless, cartoons have been a key children’s genre, in both the analogue and digital eras, which “appears to lend itself better to generate narratives and images, able to intercept and capture the fantasy and the interest of young minds” (Sigismondi, 2015, p. 272).

The media industry found in cartoons a product that has a great deal of loyalty in children’s audiences, marked by technological and social transformations, and also by criticism of its content, narratives and origin. Since its beginning, cartoons have been the focus of many authors, mainly because of the transmission of social values that can lead, among others, to the perpetuation of gender roles (Aubrey & Harrisson, 2004; Leaper et al., 2002), by representing, as described by Sánchez-Labella (2011) a general stereotypical form of men and women. This includes female characters whose main interests revolve around love or affection, assigning differentiated values to the male gender, such as the search for justice or heroism, which promotes “prototypical images that would permeate children’s ideology, configuring solid, highly rooted media schemes” (Sánchez-Labella, 2011, p. 1). Furthermore, they have also been highly criticized, as stated by Del Moral and Villalustre (2008) for creating a caricature of societies disconnected from reality or for inciting violent attitudes and aggressive behaviour (García, 2000), since violence is considered, according to Kirsh (2006), an integral part of cartoon content.

However, despite all that has been noted, from the creation of Gertie the Dinosaur in 1914, to Alvin and the Chipmunk or any other successful title from the last decade, cartoons are essential to the strategy of DTT programmers and SVOD platforms, whose catalogue is mainly based on animated series aimed at children (Black, 2019).

Cartoons, as Havens (2006) notes, are the third most popular genre in reference to commendation thanks to its appearance and capacity for “universal” adoption (Lustyk, 2012) as described by Thussu (2006) and von Felitzen (2012), due to a low degree of cultural ties or with the environment and the minimum requirement for cultural interpretation due to the character and narrative stylization. Thus, it is positioned as a product that can easily be introduced into foreign markets and assimilated in the international buying-selling channels (Havens, 2007; Lustyik, 2012). However, as Havens (2006) explained, it becomes a difficult genre for local competitors, since purchase and dubbing is cheaper than production. All this underlines the dominance and huge influence in the European territory by transnational media conglomerates, mainly the United States (Bignell, 2011; Fernández-Ramírez & McGowan, 2020; Livingstone, 2012; Smith, 2004; Westcott, 2002), a market dominated by the big three (Cartoon Network, Disney and Nickelodeon) (Westcott, 2002); and Japan (Ferrera, 2020; Pellitteri, 2004, 2021; Wells, 2004). Content from this latter market was introduced to Europe between the 1980s and 1990s and quickly became popular with the public, among other reasons due to penetration policies based on very low prices (Pelliteri, 2021; Rusca, 2012) and its mukoseski nature (Napier, 2001). That is, an absence of national identity.

In addition, their influence is not only limited to the presence and broadcasting of their content and the creation of television channels, in the case of American actors, but also to

¹ Omnibus children’s programme that includes the broadcasting of cartoons, games or music shows.
2. Objectives and Method

This article analyses the programming of children’s content on the main free-to-air general-interest channels in Germany, Spain, France, Italy and the United Kingdom over the last decade. In detail, children’s programming will be considered produced for an audience of up to 12 years of age (Wilson et al., 2002). The sample consists of a total of 25 channels, 11 public and 14 commercial, and ranges from seasons 2010-2011 to 2019-2020, resulting in 32,383 hours of broadcasting. The main aim of the study is to analyse the supply and programming strategies of these channels regarding the children and cartoon programming broadcast in that period of time targeted at the different stages of childhood. These includes preschoolers or early childhood category, whose age ranges between 2 to 5 years; middle childhood, 6 to 10 years; and preteens or tweens, 10 to 12 years (Cook & Kaiser, 2003; Williams et al., 2012).

For the analysis, the following research questions are posed:

RQ1. What is the children’s content and cartoons supply on general-interest free-to-air channels supply according to their ownership, broadcast time slot and countries?

RQ2. What differences and similarities can be found in each country regarding the cartoon programming policy of the general-interest channels supply?

RQ3. What is the origin of cartoon productions in the different markets?

A content analysis of a regular week of each season, starting from 6 / 7 a.m. to 1 a.m., was conducted, divided into 6 different time slots according to the socio-demographic habits of each market. In detail, the week chosen for the analysis of the seasons between 2010-2011 and 2013-2014 corresponds to the winter programmatic season; the one between 2014-2015 and 2016-2017 corresponds to spring; and finally, the 2017-2018 and 2019-2020 are framed in autumn. Thus, it offers a more complete and realistic view of the decade’s supply, covering three seasons of the year, except summer, whose supply, coinciding with school holidays, may vary.

Table 1. The Sample description.

<table>
<thead>
<tr>
<th>Country</th>
<th>Public</th>
<th>Commercial</th>
<th>Slot</th>
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<tbody>
<tr>
<td>Germany</td>
<td>Das Erste 2DF</td>
<td>ProSieben Sat 1</td>
<td>Morning (6:00-11:00)</td>
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<td></td>
<td></td>
<td>RTL</td>
<td>Midday (11:00-14:00)</td>
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<td></td>
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<td></td>
<td>After dinner (14:00-17:00)</td>
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<td>Afternoon (17:00-19:00)</td>
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<td></td>
<td>Prime-time (19:00-21:30)</td>
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<td></td>
<td></td>
<td>Night (22:30-1:00)</td>
</tr>
<tr>
<td>Spain</td>
<td>La 1</td>
<td>Antena 3</td>
<td>Morning (7:00-13:30)</td>
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<td></td>
<td></td>
<td>Cuatro</td>
<td>Midday (13:30-15:30)</td>
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<tr>
<td></td>
<td></td>
<td>La Sexta</td>
<td>After dinner (15:30-18:00)</td>
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<td></td>
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<td>Telecinco</td>
<td>Afternoon (18:00-20:30)</td>
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<td>Prime-time (20:30-22:30)</td>
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<td></td>
<td></td>
<td></td>
<td>Night (22:30-1:00)</td>
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<tr>
<td>France</td>
<td>France 2</td>
<td>TF1</td>
<td>Morning (6:00-11:30)</td>
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<td>RTL</td>
<td>Midday (11:30-14:30)</td>
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<td>Night (22:30-1:00)</td>
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<tr>
<td>Italy</td>
<td>Rai Uno</td>
<td>Canale 5</td>
<td>Morning (6:00-12:00)</td>
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<td></td>
<td></td>
<td>Italia 1</td>
<td>Midday (12:00-15:00)</td>
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<td></td>
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<td>Rete 4</td>
<td>After dinner (15:30-18:00)</td>
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<td>Afternoon (18:00-20:30)</td>
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<td>Prime-time (20:30-22:00)</td>
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<td>Night (22:30-1:00)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>BBC One</td>
<td>Channel 4</td>
<td>Morning (6:00-11:30)</td>
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<td></td>
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<td>ITV</td>
<td>Midday (11:30-14:30)</td>
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<td>After dinner (14:00-18:30)</td>
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<td></td>
<td></td>
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<td>Night (22:30-1:00)</td>
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Source: PGC2018-094863-B-100 Project (MCIU-Feder).
The analysis uses the categories and variables of the Euromonitor Observatory (Prado et al., 2020). According to the aims proposed, the genres of children’s programmes have been studied, which includes animation costumes, cartoons\(^2\), storytelling, container, education, news, report, fiction, quiz, magazine, magic, mini-magazine, sports, show, theatre, video games and music videos. Finally, the programming has also been analysed according to the origin of production, considering three typologies: local or domestic productions, referring to those produced in the country of origin; imported, which are purchased from other countries; and co-productions, which include titles co-produced between the broadcasting country and other markets.

3. Results

3.1. Children’s supply on general-interest channels during the decade 2010-2020

Children’s content has been, quantitively, infrequently found in the main general-interest television schedules of the last decade, with rates that scarcely exceed an average of 3% of both public and commercial broadcasters’ schedules. This is mainly due to the migration of content to thematic children’s channels from commercial and public general-interest ones, beginning with the implementation of digital terrestrial television; along with children consuming products targeted at adults (BARB, 2011; Buckingham, 2015; Diгон, 2008) and a greater focus on the broadcast of family-oriented programmes (Paz & Mateos-Pérez, 2015), which are aimed at a broader age range.

This behaviour does not prevent us from verifying specific phenomenon based on the editorial preferences in each television market.

| Table 2. Supply structure by country and ownership, 2010-2020 (%) |
|-----------------|-------------|-------------|--------|---------|-------|-----------|
|                 | Children    | Information | Fiction | Info-show | Sports | Others    |
| Germany Public  | 4.1%        | 39.2%       | 29.2%   | 6.8%     | 13.4%  | 7.2%      |
| Commercial      | 0.0%        | 19.4%       | 44.6%   | 29.9%    | 1%     | 5.2%      |
| Spain Public    | 0.3%        | 58.6%       | 24.3%   | 6.3%     | 0.9%   | 9.7%      |
| Commercial      | 1.5%        | 32.6%       | 22.4%   | 27.4%    | 5.1%   | 11%       |
| France Public   | 6.3%        | 36.8%       | 17.2%   | 10.4%    | 6.3%   | 23%       |
| Commercial      | 9%          | 16.4%       | 40.8%   | 18.7%    | 1.4%   | 13.6%     |
| Italy Public    | 1.5%        | 39.4%       | 17.7%   | 21.3%    | 3.6%   | 16.5%     |
| Commercial      | 2.7%        | 19.9%       | 46.6%   | 21.6%    | 2.3%   | 6.9%      |
| UK Public       | 3.5%        | 34.8%       | 13.1%   | 22.4%    | 12.8%  | 13.3%     |
| Commercial      | 2.7%        | 21.3%       | 23.4%   | 31.3%    | 6.3%   | 14.9%     |

Source: PGC2018-094863-B-100 Project (MCIU-Feder).

\(^2\) This category also contains children’s animated television series.
French general-interest channels, both public and private, are the leaders in the children's macro-genre at 7.7% of the total, and specifically 9% of the commercial supply and 6.3% of the public one. It should be noted that this is the only market that does not have free and open thematic children's channels operated by national public or private corporations. Thus, all children's channels are available via satellite, cable or IPTV systems such as Télétoon, Mangas or Piwi.

In Germany, the public channels continue the trend of offering a low but continuous commitment by allocating 4.15% of their schedule due to the long tradition and strength of the public thematic channel Kika, launched in 1997 by the public channels ARD and ZDF, which is an important part of the core axis of the provision of children to the German public corporation (Bourgett, 2014). The general-interest commercial channels, which already had a minimal commitment to children's content in the last decade, ceased their children's broadcasts entirely. The importance of the commercial thematic channel Super RTL by the RTL Group should be highlighted. Launched in 1995, it has been a leader from the very beginning (Statista, 2021) and the main pillar of German commercial children's content.

In the Spanish television market, the public corporation RTVE and the commercial group Mediaset España transferred all their children's programming to their respective thematic channels, Clan TV in the case of RTVE; and Boing for Mediaset, after the analogue switch-off in 2010. It should be noted that Clan TV, although established in 2005, was only consolidated in 2007 as the first Spanish children's thematic channel (Fernández-Gómez, 2012), which occupies the entire broadcast space. Furthermore, this was only completed in 2010 with the analogue switch-off, leading to an average annual market share of 3.2% (Barlovento Comunicación, 2011).

Antena 3, from Atresmedia group, was the only general-interest channel that still dedicated part of its schedule to children's content until 2016, specifically 6.2%, continuing the programmatic strategy from the end of the previous decade (Román-Portas & Fernández-Gómez, 2012). However, since the end of Megatrix, its main children's block, in June 2013, only a few isolated programmes remained, with a drastic reduction of 52% in its children's programming in the second half of the decade, with only 4% supply of programmes aimed at minors. It is also important to highlight the introduction of a children's section in Neox, the group's thematic youth channel.

In Italy, children's programmes are clearly minimal, with only 2.1% of the total schedule allocated, commercial channels with 2.7% and 1.5% by public broadcasters. Due to the analogue switch-off of 2012, the children's segments of the public Rai Uno, Rai Due and Rai Tre were moved to the thematic channel Rai Yoyo which is aimed at preschoolers; and Rai Gulp, specialising in older children and teenagers. Similarly, the commercial general-interest channels of the Mediaset group, Canale 5 and Italia 1, which until then had allocated part of their schedules to children, transferred most of their content to Boing. Thus, Italia 1 was the only channel that maintained children's content throughout the decade, at 8.2% of its schedule.

Finally, despite the fact that children's content has been key on British television, the strategies of general-interest channels in relation to this macrogenre have been drastically modified over the last decade. Thus, occupies an average of 3.1% of the total schedule, specifically 3.5% of the public channels supply and 2.7% of the commercial. With the analogue switch-off at the end of 2012, children's programming disappeared from BBC One and BBC Two due to economic pressures, as noted by Steemers and D'Arma (2012), and was instead broadcast exclusively on the public thematic channels CBBC and Cbeebies. However, BBC Two occasionally broadcast some content after 2017, with titles such as Saturday Mash-up! (2017), Top Class (2016–2019) or Show me what you’re made of (2017–2018). Regarding the commercial

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3 Years of the sample in which the programme has been broadcasted.
groups, only ITV, from the UK’s leading audience group, owns a thematic children’s channel, CITV. After the analogue switch-off, Channel 4 implemented a policy change by moving away from children to focus on the teenage audience between 13 and 15 years old (Ofcom, 2019). ITV for its part, reserved a small portion of the schedule throughout the decade (4.4%), despite transferring much of its content to its own children’s thematic channel and being subjected to commercial, competitive and political pressures (Bignell, 2017).

3.2. Cartoons supply on general-interest channels during the decade 2010-2020
Cartoons have traditionally played a leading role in the provision of children’s programmes by public and commercial European general-interest channels, whether independently broadcast independently or included in container programmes. The latter were considered a flagship formula of the commercial children’s programming model and are the origin of the Club format, which was a key content in the 1990s. Containers gained special importance in Spain and Italy, distinguished by their low production price, the creation of a brand image and their performance as an assortment, including cartoons, games or music programmes; and generally accompanied by a large quantity of advertising and commercial content (Rajadell-Puiggròs, Pujol-Maura & Violant-Holz, 2005). Examples of container programmes with the Club format include the Club Dorothée (TF1) in France, which is the originator of this formula; and Tigerenten Club (Das Erste) (2011-2019), whose editorial concept and transmedia character have been widely recognized and awarded over the years, being considered a successful model for the transfer of scientific, social and cultural knowledge to children (Dujmovic, 2006).

Figure 1. Distribution of children’s genre by country, 2010-2020 (%).

Over the last decade, the prominence of cartoons has persisted, dominating the children’s supply, with an average of 44.7% of the total children’s supply, specifically, 45.7% of the public channels and 43.8% of the commercial. The importance given by the Italian general channels stands out, where this genre is allocated 71.1% of the children’s broadcasts, thanks to the clear strength of the commercial channel Italia 1. Its offering is characterized by the broadcast of US hits with diverse narratives, whether from the tradition of North American comics like Iron Man (2012-2019), to products such as I Pinguini di Madagascar (2012-2017) or Scooby Doo (2011-2017), whose protagonists are highly recurrent humanized animals, used from the beginning of the animation genre because of their appeal to children and, according to Darwinian or metaphorical issues (Coyne, 2012) ability to captivate the imagination. Along with US productions, its supply highlights a large quantity of Japanese anime, mainly framed in the shōjo demographic genre, with L’incantevole Creamy (2012-2017) or Sailor Moon (2010-2014); and shonen, such as Naruto (2010-2012). These two genres are the most popular forms of anime, with shōjo targeting a female pre-teen audience with narratives that portray sentimental relationships combined with elements of fantasy and action, while shonen, to the male pre-teen audience with a mixture of action and humour and is characterized by narratives driven mainly by physical confrontations or martial arts combats (Torrents, 2015).
From a quantitative approach, the number of cartoons found in the broadcasting schedule is very low in all countries.

**Table 3.** Cartoons presence in the schedule by country, 2010-2020 (%).

<table>
<thead>
<tr>
<th></th>
<th>Cartoons</th>
<th>Container</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>0.7%</td>
<td>0.1%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Spain</td>
<td>0.02%</td>
<td>0.18%</td>
<td>0.9%</td>
</tr>
<tr>
<td>France</td>
<td>3.3%</td>
<td>4.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Italy</td>
<td>1.5%</td>
<td>0.2%</td>
<td>0.4%</td>
</tr>
<tr>
<td>UK</td>
<td>1.5%</td>
<td>0.2%</td>
<td>1.4%</td>
</tr>
</tbody>
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Source: PGC2018-094863-B-100 Project (MCIU-Feder).

French general interest-channels, with an average of 3.3% of the total supply, 3.1% of the public schedules and 3.5% of the commercial, show the greatest dedication to the broadcast of cartoons in the decade, with a wide variety by public channel *France 3* and the commercial *M6*. Within their cartoon catalogue, French productions and co-productions stand out in both cases, following the national measures to promote and encourage French animation (D’Arma & Steemers, 2013). *Martine (M6)* (2012-2019) or *Les Lapins Crétins (France 3)* (2014-2018) are examples of this. These more local titles coexist with those of North American origin, whether classics such as *Garfield (France 3)* (2012-2018), which presents a caricature of a sedentary lifestyle (Jiménez, 2006); or others more recently released, such as *Alvin et les Chipmunks (M6)* (2015-2019). Regarding the content of these last two titles, both present animal protagonists and again confirm their importance, which, among other reasons, allows to avoid representations of gender or race (Krueger & Krueger, 2018) and ease the design and creation of the characters.

From an evolutionary point of view, a continuous line can be seen in all territories over the decade, with similar broadcasting results, with the exception of the United Kingdom, which has had a drastic reduction, losing 77% of the cartoons supply. Here, general-interest channels collapsed from 2.3% of cartoons to a tiny 0.5%, due to the aforementioned end of broadcasts of cartoons and other children’s content on public *BBC One* and *BBC Two* channels.

Despite these results, it is important to discuss the variations in the strength and stability of the cartoon supply in each territory, channel and ownership. The German public general-interest channels *Das Erste* and *ZDF*, as well as the commercial channels *Italia 1* in Italy and *ITV1* in the United Kingdom, have the greatest stability in the analysed markets, being the only channels that extend over the entire decade. By contrast, the general-interest Spanish channels and the BBC maintain a policy based on variability and high change rates when broadcasting cartoons.

On the one hand, the supply of cartoons on Spanish general-interest channels has been token, heading to their almost complete removal. Regarding the BBC, the low level of cartoons in the last decade is due to the aforementioned and almost total disappearance of children’s content on general-interest channels from December 2012. Taking this into account, the children’s supply in the first two seasons of the decade was mainly driven by *BBC Two*, with cartoons dominating 56% of children’s broadcasting, *BBC One* for its part, followed its standard practises in those first two years of the decade, focusing on offering more diverse content, varying in style, genre and content (Adams in Oswell, 2002), in line with its public service principles, based on informing, educating and entertaining. Thus, they opted to a greater extent for children’s fiction programmes such as *Hotel Trubble* (2011) or *Dani’s House*...
(2010), and shows such as Barney’s Latin America (2011) or infoshows, like Deadly 60 (2010–2011).

The German public channel Das Erste stands out among the channels that choose greater stability in the cartoons broadcast. Despite a seemingly limited dedication to the total children’s supply over the last decade of 20%, they have a solid and stable structural model.

3.3. Cartoons and the hegemony of the morning slot

A common strategy in all countries and ownerships is in the preferred time slot for the broadcast of children’s products. By implementing a child blocking strategy, based on grouping similar programmes aimed at the same target, a homogeneous audience flow is created. The general-interest channels of the five markets schedule almost all children’s content in the mornings of working days and weekends, in particular, an average of 92% of all children’s programmes.

This behaviour extends to cartoon programming policies, with an average of 93% of the cartoons broadcast in the morning slot. 100% of the cartoons are scheduled by the Spanish general-interest channels in this slot, while the Italian ones have the lowest levels, although not negligible at 85.2%. Regarding possible divergences based on the ownership of the channels, the public channels achieve the highest rates in the morning with 96%.

The morning television consumption habits of minors before going to school in the different territories are fundamental for television programmers. The morning slot between 7.00 and 8.00 is the core for children’s programmes, with an average of 43% of cartoons, and of particular importance to the general-interest commercial channels, which host 48% of this content. The distinctive social and family behaviour in the UK and Germany translates into a set forward in the children’s television morning schedule. Thus, 38.7% of cartoons are scheduled between 6.00 and 7.00 on the German channels and 35.2% in the United Kingdom.

The few remaining children’s programmes are essentially distributed between the Noon and After-lunch blocks. The policy of the public channel BBC Two (11%) is particularly notable when it comes to Noon, where domestic programmes such as In the Night Garden (2010–2011) or Postman Pat (2010) are broadcast, both with a long tradition in the British market targeted at preschoolers, launched respectively in 2007 and 1981.

On the other hand, in the After-lunch slot, the practice of broadcasting imported cartoons (7.6%), mainly Japanese anime such as Naruto (2010–2012) and Sailor Moon (2010–2014), by the Italian commercial channel Italia 1 should be highlighted. In addition, Italia 1 stands out from the general strategy of the other markets and channels by offering cartoons in numerous blocks besides the Morning and After-lunch; this includes Noon with the broadcast of Zig & Sharko (2011); Afternoon, hosting among others Justice League (2011); Prime Time, where I Pinguini di Madagascar (2012–2017) is found; and even Night, where Iron Man (2012–2019) is broadcast. The cartoons scheduled in these blocks prioritise the profiles of middle childhood and pre-teens over the preschool audience, with mostly fantasy narratives and stories of superheroes living in worlds with a clear dichotomy between good and evil, whose purpose is to preserve a model of conservative justice (Vollum & Adkinson, 2003; Stoddart, 2006).

A development also that is prominent in the programming strategy is the importance of weekend mornings over the weekly set, even though the morning slot from Monday to Friday has the largest number of cartoons. The weekend broadcast is still significant for programmers, both from public (42.6%) and commercial channels (37.8%). It is important to underline the practices of German public channels, the Spanish commercial channels and the British ITV, where the programmers schedule all their cartoons on weekend mornings. This behaviour consolidates a programmatic practice that began in the 1970s and 1980s, which was also combined with a large quantity of cartoons on Saturdays (Bignell, 2007). The programming formula in the Saturday morning slot is linked to the Saturday Morning Cartoons.
US trend, which was the only time specifically reserved for the national broadcast of children’s programmes and also had a large amount of advertising content, as it was a highly effective slot for advertisers due to the attention of children (O’Melia, 2019).

3.4. Origin of cartoons broadcast on general-interest channels during the decade 2010-2020

The supply of cartoons broadcast on European general-interest channels shows a high level of acquisitions, with rates exceeding an average of 60%, and reaching higher percentages in Spain (100%) and Italy (94%). While part of the local offering is gathered in the thematic channels, the programmers of the generalist channels opt for the broadcast of imports in the aforementioned countries. In addition, there is little interest in local investment in Italy due to a lack of production incentives and the absence of quotas for Italian commercial broadcasters (D’Arma & Steemers, 2012).

As Lustyik (2012) states, the contemporary children’s media context is greatly shaped by transnational media conglomerates and commercial interests, which shows the adoption of a commercial and low-cost children’s programming strategy. Which, as Paz and Martínez (2014) notes, are largely amortised by their long-term presence in the schedule.

In this scenario, the United States dominates, although to a lesser degree than in earlier decades, the productive context of imported cartoons in all markets, with the exception of the BBC’s British public channels. These opt for the purchase of French products with narratives that try to break with traditional and stereotyped roles: Leon (BBC Two) (2010–2011), which shows a counter-vision of the animal world, or Loïe (BBC Two) (2011), aimed at preschool audiences; and co-productions between Canada and Australia, such as Dirtgirlworld (BBC Two) (2010–2011), which shows a story committed to an ethical and ecological sense, presenting humanity’s responsibility of coexisting in harmony with nature (Ward, 2012).

Despite this being noted, it should be recalled that quantitatively the presence of cartoons on these channels is very low compared to other broadcasters.

More than half of imported content comes from the United States, at 54.4%, with Japan as the second largest, which finds its core in Italy, especially on the commercial channel Italia 1, where 32% of all cartoons broadcast are Japanese anime. These results show the importance of anime in the children’s supply. In fact, this has a long tradition in the Italian market (Pellitteri, 2010), with examples of imports on the commercial channels found in the late 1970s. These results demonstrate, as Ortega-Mohedano, Jiménez-Sánchez and Lavín (2018) affirm, the persistent existence of an American and Japanese oligopoly in cultural and industrial production that cuts the diversity of content and creates an agenda setting that offer a lack of plurality of visions.

Protectionist measures to stimulate local production should promote greater national production. However, in many cases, local or domestic production is more of a qualitative phenomenon than a quantitative one since its implementation is subject to the editorial procedures of the channels. Nevertheless, it is the publicly owned channels that programme more self-produced cartoons than the commercial ones.
The distribution of cartoons on public channels differs from commercials in terms of the broadcast of local products. It should also be recalled that public corporations own the largest number of thematic children’s channels on the television market. In addition, Germany, France and the United Kingdom are the territories with the highest number of domestic cartoon productions in the last decade.

Specifically, the German market is the leader in the broadcast of local productions, with approximately 57% of cartoons broadcast on general-interest public channels being in-house. This is due to the implementation of a programming policy clearly distinct from their commercial rivals, because of greater domestic content, among other reasons (Lange, 2015; Windeler & Sydow, 2014).

On the other hand, the French production system, both on public and commercial channels, follows a marked promotion of local products, with a strong media and cultural policy based on a highly protectionist model that applies measures and initiatives to promote and encourage local animation (Wescott, 2002). In addition, it is also the market with the highest levels of support for the media industry through subsidies and fees (D’Arma & Steemers, 2012).

Finally, the United Kingdom is considered one of the most important European countries in the production of cartoons for television (Bignell, 2007), mainly thanks to the quotas set by the regulatory body Ofcom, which traditionally seeks to promote local products. Within this market, the behaviour between public and commercial channels also differs, with greater local production on public channels. Being loyal to its commitments and production quotas, BBC Two positioned itself during this decade as the main actor in local children’s production, hoping to reflect the national identity (Buckingham, 2005). As stated by Steemers and D’Arma (2012), its production capacity becomes a differentiating element from its competitors and offers the opportunity to reflect and promote values rooted in public tradition, such as education, creativity, citizenship and social diversity.

It should be noted that the economic pressures and financial difficulties of the last decade have increased the search for new sources of profit, including among others, international sales (Steemers & D’Arma, 2012). The export and adaptation of content through international networks is gaining ground, with the United Kingdom being the main exponent (Bignell, 2017), as it has extensive and demonstrated capacity for globalization and the export of children’s programmes. This underlines the strength of the British market and the great interest in its content, especially cartoons aimed at preschoolers, being recognized as the world’s largest producer and distributor of this type of programmes since the mid-1990s (Steemers, 2010).

75% of the cartoons created and broadcast in the United Kingdom in the last decade on public and commercial general-interest channels in the last decade have been successfully introduced into the foreign markets. Almost all of these productions are canned programmes.
produced for a particular market and then exported completely, either without any kind of adaptation or only minor changes such as subtitles, dubbing or voiceovers. This includes long-established domestic and international productions such as Postman Pat (BBC Two), created in 1981 by the Woodland Animation studio and exported to nearly fifty countries; as well as other products released in the last decade, which have also achieved remarkable international distribution. Examples include animation series for preschooler like Everything's Rosie (BBC Two) (2010), produced for a particular market and then exported completely, either without any kind of adaptation or only minor changes such as subtitles, dubbing or voiceovers. This includes long-established domestic and international productions such as Postman Pat (BBC Two), created in 1981 by the Woodland Animation studio and exported to nearly fifty countries; as well as other products released in the last decade, which have also achieved remarkable international distribution. Examples include animation series for preschooler like Everything's Rosie (BBC Two) (2010), launched in 2010 by the production company V&S Entertainment, which is broadcast in more than 160 territories; or The Hive (ITV1) (2011-2013), a joint production by DQ Entertainment, Lupus Films and Monumental Productions and also released in 2010, distributed to 150 countries. The core audience of the aforementioned programmes are preschoolers, whose products are considered key in the children’s content export market, due to their international appearance, their simplicity of dubbing and the cyclical repetition of their episodes, which extends the useful life cycle compared to other television genres (Steemers, 2010).

Beyond the profitability of local products, these export movements bring other realities to light and underline the existing relationship between national cultures and the transnational, hybrid and globalized nature of current production and consumption logics (Bignell, 2007; Chalaby, 2002; Potter & Steemers, 2017). In addition, these question the idea of local cultural identities in the children’s audience and national specificity (Bignell, 2017), which creates a unified concept of childhood and its needs. According to Buckingham (2002), this would lead to the creation of new hybrid or cosmopolitan cultural identities, which would give a more fluid or transitory meaning to cultural expression and would blur the boundaries between local and global, while extolling the sense of commercial culture (McAllister & Giglio, 2005), as an essential pillar of children’s cartoon supply.

Along with increased domestic production, co–productions have also been strengthened over the last decade as a form of hybridization of identities (Kraidy, 2005). These are advocated as the main stimulator of local production systems and are positioned as a valid option to promote the creation of domestic content, but with lower investment levels (Westcott, 2002), being considered a passport to achieve international recognition.

Public channels in the United Kingdom and Germany are the main drivers of this trend, accounting for more than 25% of their broadcasts. Co–productions in the United Kingdom with shared linguistic markets dominate (Kraidy, 2002), highlighting those between the United Kingdom and Canada, considered a major market for international co–productions (Westcott, 2002), with Guess with Jess (BBC Two) (2010–2011) and Waybuloo (BBC Two) (2010–2011), two products aimed at preschoolers; and between the UK and Australia, with the Koala Brothers (BBC Two) (2010) and Dennis & Gnasher (BBC Two) (2010–2011). Similarly, Germany favours co–productions with territories that share the same language or with border countries such as the Netherlands or Luxembourg. However, unlike the United Kingdom, coalitions with world leaders such as Japan also stand out and co–productions created by more than two countries thrive, with preschool products of long–running commercial success such as Die Biene Maja (ZDF) (2014–2019) or Wickie und die starken Männer (ZDF) (2013–2019), both co–produced between Germany, Japan and Denmark; or Mia and Me (ZDF) (2012–2019), co–produced between the Netherlands, Germany, Italy and Canada.

4. Conclusions
The supply of children’s programmes from the main general–interest channels of the five European markets analysed is proof of the transformations that have taken place in the television scenario over the last decade. This is marked by the consolidation of the consumption of children’s content on VOD platforms and the value of children’s thematic channels in the policies of broadcasting groups regarding content loyalty by the youngest audience. Digital terrestrial television became an important tool in the introduction of the
narrowcasting strategy, which would guide programming towards a more specific audience, including children, seeing in it an opportunity to meet demands and diversify the television business (Zallo, 2011).

The low level of children’s programmes coexists with the strategy followed by the corporations when selecting the products to broadcast on their general-interest channels and, also, with the policies relating to the origin of the productions. The policy of the general-interest channels regarding children’s programming is clearly driven by the existence or absence of free-to-air thematic children’s channels.

The cartoon genre, which has been considered the main form of television entertainment for children since the 1960s (Pecora, Murray & Wartella, 2007), continues to have significant value despite the very limited quantities of children’s products on general free-to-air television. This is confirmed by the high results achieved, reaching an average of 45.7% on public channels and 43.8% on commercial ones out of an overall children’s offer, which accounts for an average of 3% of the entire programming schedule.

Each of the five territories pursues different strategies, among which the policy of the French general-interest channels, both public and private, stands out, thanks to the leadership of children’s programming compared to other countries. Another important factor is the stability of cartoons in the schedules of the German public broadcasters Das Erste and ZDF over the last decade, and the commercial television channels Italia 1 in Italy and ITV in the United Kingdom. In the case of Spain, the thematic children’s channel Clan TV received all of RTVE’s children’s products. Similarly, the attention of children in the field of British general-interest channels has shifted to thematic channels.

One of the most homogeneous factors in terms of children’s programming policy in all countries and ownerships is its broadcasting in the morning slot, with the period between 6.00 or 7.00 and 8.00 being the preferred time for programmers to attract children’s audiences. Similarly, the importance of weekend morning programming compared to weekday mornings stands out, and therefore a common practice that adapts to the socio-family behaviour that contextualizes children’s audiences is consolidated.

The link between local production and the ownership of general-interest free-to-air channels allows us to highlight the responsibility of public channels over the commercial ones, with the former programming more domestic cartoons. This is even more clearly illustrated in the case of the German public broadcasters, which maintain a solid protectionist policy by promoting the local children’s media industry. Promoting the supply of in-house cartoons on general-interest channels is also a policy promoted in the French and British markets. Regarding the latter, we should not forget the commitment of the programmers to the production of local cartoons, being a practice monitored and controlled by the Ofcom agency (Yoon & Malecki, 2009). Germany and the United Kingdom are also the countries that reaffirm their editorial policy regarding domestic products, demonstrating a significant presence of co-productions aimed at minors.

The transfer of most children’s content to thematic children’s channels along with the consumption of VOD has resulted in very few children’s products on the general-interest channels in the five territories. However, this trend is accompanied by the uniqueness of the programmers in relation to two key factors, which are the policies on the origin of the broadcast production and the distinctive role of public broadcasters.

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References


