

Essay

Podcast—The Remediation of Radio: A Media Theoretical Framework for Podcast Research

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Abstract: The study aims to investigate, describe, and contextualize the media theoretical characteristics of podcasts. Initially, it examines the media technological advancements that facilitated the emergence of podcasts, followed by an exploration of the parallel innovations in content production. Subsequently, the analysis focuses on key dimensions relevant to defining podcasts as a medium: the evolution of audio technology, the heterogeneity of content, and the patterns of individual and collective usage. The transition of podcasts from a novel cultural form to a recognized medium was a gradual process spanning approximately two decades. The aim of this study is to examine how podcasts emerged as a distinct medium, combining the characteristics of traditional radio with modern digital technologies, using Bolter and Grusin's remediation concept as a media theoretical framework. This paper posits that the most suitable theoretical framework for understanding podcasts as a medium is Bolter and Grusin's theory of remediation. According to this framework, media are defined through processes of remediation. In the case of podcasts, however, a unique form of convergent remediation emerges, wherein the medium integrates elements of traditional radio with the distinctive characteristics of networked communication.

Keywords: audio technology; convergent media; cultural form; podcast; remediation



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1. Introduction: The Development of the Podcast

Podcasts are one of the most popular forms of content consumption today, allowing people to create and share their own radio shows online. A podcast is a digital audio or video format that can be accessed online. Listeners can access the content anytime, anywhere. Podcasts usually focus on a specific topic and are divided into episodes that listeners receive at predetermined intervals. Podcasts are popular for several reasons. On the one hand, they give listeners the opportunity to consume content that is exactly tailored to their interests. On the other hand, podcasts are also attractive to creators, as they allow them to produce high-quality programs with low-cost tools. Voice-based communication is also a particularly effective means of audience building, as it creates a more direct, personal connection between the creator and the listener. Podcasts are an extremely versatile medium that offers countless opportunities for both content creators and listeners. Whether it is for entertainment, education, or marketing, the podcast format is flexible and is gaining ground in the digital world. Let us examine how it has developed since the early 2000s.

In the development of media technology at the beginning of the third millennium, new opportunities were created, such as the modular production and appearance of radio broadcasts or video content, and the spread of their consumption via mobile internet networks. At the end of the 20th century, text blogging became established, which created new opportunities for the development of journalism with a more personal tone, not

tied to an institutional system. This activity intensified in the United States during the 2001 terrorist attacks, both by amateur and professional journalists, and by 2002 its social impact had already gone far beyond the boundaries of the blogosphere. Thus, in addition to written blogs, the need for audio and video blogging arose. In an article published in *The Guardian* on 12 February 2004, Ben Hammersley, writing about the new amateur radio, asks what the new phenomenon should be called: Audioblog? Podcast? GuerillaMedia (Hammersley, 2004)? Eventually, the term podcast caught on and became so popular that, in 2005, the Oxford Dictionary chose it as the word of the year (Wired, 2005).

In other words, in the early 2000s, the idea arose to not only blog in written form—to create entries discussing personal and public issues—but also to start creating the possibility of audio blogging. To implement this, it was first necessary to develop web technology. The solution for transmitting digital audio files in RSS¹ feeds was achieved by software developer Dave Winer, with the new RSS version 0.92 he developed, which was released for Christmas 2000² (Hammersley, 2003, pp. 5, 18, 31). Dave Winer was a Berkman Fellow at Harvard University at the time of development³. Starting in the summer of 2003, he and his colleagues examined several portable audio recorders, audio editing software, and compression devices that could be suitable for recording audio files, uploading them to the network, and ensuring easy accessibility and automatic updating for consumers (Potier, 2003). Winer organized the BloggerCON conference at Harvard in October 2003, which was a great professional success and gave further impetus to the development of audio technology (Hammersley, 2003). In addition to technology engineers, the conference was also attended by many journalists and bloggers representing the content production side. Among them, two prominent journalists, Christopher Lydon and Adam Curry, later became pioneers of podcasts, both in their application and dissemination. Lydon was a former reporter for the *New York Times* and host of several talk shows on NPR (National Public Radio), while Curry worked at Music Television at the time and was also the host of several radio shows. Lydon and Winer had a closer working relationship, so he was the first to be taught the technique of audio blogging, and then together they launched BlogAudio.org to document experiments with sound. The situation was unique in that Lydon, a radio host, had previously produced radio content in state-of-the-art studios, surrounded by sound engineers, while when creating a podcast, he was alone with his recorder, laptop editor, and the equipment necessary to upload his audio to a media server. That same year, in 2003, Lydon recorded about 50 interviews on public policy topics using the new podcast technology, published text descriptions of them on the Harvard weblog, and uploaded the audio link to the skyBuilders.com website media server owned by Bob Doyle. That is why the interview Lydon conducted with Winer in July 2003 is considered the first podcast (Lydon, 2004). Another prominent journalist at BloggerCON was Adam Curry. Curry performed a live show after BloggerCON on 13 August 2004, which software developers could test for their downloadable software. In this regard, Curry was one of the first to fill the available audio technology with content, edited in a format like a radio show (Berry, 2006). In January 2005, Curry and his business partner Ron Bloom founded PodShow, now Mevio, a company that deals with advertising and podcast promotion in addition to program production. For all these reasons, the American radio host is somewhat humorously called the Podfather, the father of podcasts (Miller, 2006). His best-known show was *Daily Source Code*, which had more than 500,000 subscribers at its peak. It is instructive for later generations that his successes were overshadowed and set back by two things: one was a technological (software) problem, and the other was his occasional irregular publication, as he sometimes took breaks of several days in publishing podcasts.

With the increasing spread of portable music players, podcasting began to become popular among listeners from 2004. However, between 2005 and 2013, podcasting as a

media form was slow to achieve a breakthrough. On the one hand, this was because video blogging was more popular and developed more dynamically during this period (see the founding of YouTube in 2005). On the other hand, industry players attributed this slow expansion to two other reasons. One is the lack of mature business models related to the distribution and consumption of podcasts. The other is the problem of naming, which is closely linked to a single company, Apple, and a single product, the iPod. Overall, before the 2010s, podcasting could not be considered a medium in the classical sense. The emergence of the new medium was solidified technologically in June 2015, when Apple updated iTunes to 4.9, the first version of the software to provide fully integrated podcast support. Apple's new podcast library made it easy for everyday users to find and subscribe to podcasts, and iTunes 4.9 brought podcasts into the mainstream of cultural consumption (Bottomley, 2015). In 2013 there were about 250,000 unique podcasts, with a total of eight million episodes, in more than 100 languages. This number had reached 285,000 podcasts by the beginning of 2015. According to a study by the Pew Research Center, the number of podcast listeners in the US almost doubled between 2008 and 2015 (Vogt, 2015). Furthermore, podcast fans are mostly highly engaged listeners who consume more content over time than those who listen to AM/FM radio, streamed music, or any other audio content (Edison Research, 2014). In 2023, Spotify offered 2.62 million podcast channels, which means 86 million episodes with 768 new uploads per day (Gray, 2024). Globally, there are about half a billion listeners (460 million), which also means that 1 in 5 internet users listen to podcasts. In the United States, 49 percent of the adult population (about 140 million) listens to podcasts (Pew, 2023).

In terms of naming, podcasting is a web technology that enables the serial publication of digital audio, video, and other files on the internet so that users can subscribe to channels containing episodes of a given program. The name of the programs published in this way, using this technology, is podcast. The word was created by merging the words iPod and broadcast. Podcast also refers to on-demand, or non-linear, broadcasting, meaning that users can consume content according to their needs, in a personalized way, according to their time schedule.

Podcasting is therefore more than a new audio distribution method; it is also a new cultural form. In terms of content, early podcasts were generally independent, mostly amateur-produced media content that came from outside the traditional media industry. After the rise of the new audio media form around 2005, more and more well-known media personalities and institutions—from the BBC to NPR—entered the field of podcast production. However, the entry of radio stations into podcast production has led many to believe that podcasts are simply downloads of audio programs that have already been broadcast elsewhere, that is, quasi-archival material. However, this is in stark contrast to the early days of podcasting, which included original material. This confusion is not surprising when we consider that many of today's most successful "podcasts" began as terrestrial radio programs and continued to air on radio. The unique relationship between podcasting and radio (which this study calls remediation) makes it difficult for both audiences and the industry to identify the podcast as a unique media form.

To accurately describe the podcast as a medium, we must first review how media studies approach the concept of the medium and what opportunities it offers for approaching the phenomenon.

2. Media Characteristics of Podcasts

The aim of this study is to examine how podcasts emerged as a distinct medium, combining the characteristics of traditional radio with modern digital technologies, using Bolter and Grusin's remediation concept as a media theoretical framework. Accordingly,

in this essay, I first explore the technological connections between radio and network communication. Then, this essay presents the thematic sources of podcasts in relation to classical mass media (radio, television) and network communication. After that, the text turns to aspects of individual and social use.

2.1. *Technological Connections*

In the 20th century, the media transformed from a channel for transmitting messages into an institution producing message systems, a part of the human environment, and a context for actions in a few decades. The complexity of the concept of media is worth reviewing from several angles: the media technology and content approach provide the first intersections, while the individual and social use provide the others.

The technological turn in media research was brought about by Marshall McLuhan and the Toronto School he founded in the 1960s, claiming that media technology is what determines human perception and will thus be the cause of social change. If our perception changes due to the way we communicate, the way people organize their experiences also changes. The change in technology is the change in human relationships. Social reality is determined by communication technology (McLuhan, 1994). The systematic distinction between research on media technology and media content, reflected in its name, can be found in Joshua Meyrowitz's article "Media Theory" published in 1994. Meyrowitz called media theory the theories and research dealing with media content issues (cultivation theory, thematization), and media theory emphasizes the individual and community consequences of using technology (technological determinism) (Meyrowitz, 2003). In the research directions indicated above, the separation between technology and content, and technology and culture, is very sharp, so it is no coincidence that in media research we also encounter approaches and criticisms that emphasize the close connection and inseparability of the two. This is what Manuel Castells, Judy Wajcman and the theory of critical technology research, and James Carey, the developer of the ritual model of communication, do. They believe that technology also has a cultural embeddedness, since the human mind created technological tools to solve various problems and to assist in human work. Of course, technology leaves its mark on sociocultural organizations, but by no means in a deterministic way or following a cause-and-effect relationship (Castells, 2005; MacKenzie & Wajcman, 1999; Wajcman, 2004; Carey, 2008). In other words, the concept of medium unfolds, changes, and evolves in the common force field of technology and content, sometimes due to technological innovation, and sometimes due to the power of changing social needs.

Let us now examine this duality, the issue of technology and content, in relation to podcasts. The media technological characteristics of podcasts are not exclusively rooted in radio, although both are audio media (Rime et al., 2022). In addition to radio, many more elements can be linked to the technological characteristics of network communication. For the sake of conceptual precision, this study uses the following definitions for network communication, social media, and social media sites. Computer-mediated communication is a process in which human data interact with each other via one or more telecommunications networks. Network communication also includes various types of network technologies and software, such as e-mail, Internet Relay Chat (IRC), instant messaging (IM), Usenet, or mailing list servers. The internet is a worldwide system of interconnected networks, built on a communications infrastructure, and which today supports many computer-based types of communication (McQuail, 2015, p. 690). Web 1.0 represents the first stage of the development of the World Wide Web for civilian use, which can be described as a one-way process from content creators providing web services to users. Web 2.0 is the collective name for internet sites and services that enable users, forming virtual communities and

networks, to interact and collaborate with each other (Antal et al., 2015, p. 235). According to Kaplan and Haenlein, social media is a group of internet applications “that build on the ideological and technological foundations of Web 2.0 and that enable the publication and exchange of user-generated content”. Within social media, there are various types of social media sites (social network sites—SNSs) (Kaplan & Haenlein, 2010, p. 59). These are “web-based services that allow individuals to (1) create public or semi-public profiles within a bounded system; (2) create a list displaying connections with other users; (3) browse their own and other users’ contact lists within the system” (Bboyd & Ellison, 2007, p. 211). In the case of podcasts, we can see that 73 percent of them are present on both Web 1.0 and Web 2.0 platforms (Pew, 2023, p. 8).

The audio engineering elements of radio are, of course, extremely important for podcasting, as Winer’s pioneering work between 2000 and 2003 shows. The idea of digital audio recording, cutting, editing, and live broadcasting can ultimately be traced back to radio. It was present in the period of classic, analog radio, and in digital as well. At the same time, network communication provides the technological background for network sharing and automated content updates using RSS. The emergence and spread of mobile internet is the basis for the possibility of “placeshift”, while the “on demand” service is the basis for the possibility of “timeshift”. We can therefore say that network communication provides the recipient with control over where and when they want to listen to a The researcher intentionally writes her name in lowercase: <https://www.danah.org/name.html> given podcast (Sullivan, 2019). The media convergence of network communication also enables multimediality in podcasts, meaning that in some cases the receivers can not only hear audio text, but also see the studio, with the host (or hosts) and possibly the guest or guests. This media convergence is made possible by digital network technology (Andok, 2016). Finally, the phenomenon of platformization is also characteristic of the sharing and consumption of podcasts due to the economic organizational mechanisms of the network, not of Web 1.0, but of Web 2.0, social media (Sullivan, 2019). By platformization, we mean the leading digital media technology companies as platforms, which try to connect users to their own services and interfaces and collect data about them during their activities on the platform (Van Dijck et al., 2018). As a last element, I would mention the possibility of an immersive experience with the technology provided by network communication, since not only visual but also auditory content is suitable for creating immersion (Manovich, 2002, p. 192; Witmer & Singer, 1998). Network technology ensures continuous availability and with it presence, as well as the quick searchability of individual contents (Andok, 2016, p. 106). Overall, we can say that the technology of the podcast is based on the convergence of radio and network communication, but draws more from the opportunities provided by the network. Radio as a medium and as a technology, due to its auditory nature, had a certain personality, and it built a certain intimacy between the listener and the radio (Rime et al., 2022). With the rise of the MP3 format and portable media players, from the early 2000s people became accustomed to controlling their music consumption, and at the same time they turned away from radio, which attracted fewer young people every year. This is not surprising, since the media consumption choices and expectations of young people have changed. From 2005 onwards, however, more and more people turned to podcasts, which increasingly effectively replaced the traditional functions of radio and provided the personalization, freedom, and convenience that comes with using a portable audio device (such as an iPod) (Den Uijl et al., 2013).

In summary, we can see what the podcast “inherited” from radio and network media technology:

1. Technological elements related to radio:
 - audio recording;

- audio editing;
 - live broadcasting.
2. Technological elements related to network communication:
- network sharing;
 - automatic updating;
 - mobile internet—non-local consumption (space shift);
 - on demand service—content consumption independent of broadcast time (time shift);
 - contextual control of reception is in the hands of the listener;
 - multimedia options;
 - platformization;
 - immersive experience;
 - fast searchability of content;
 - continuous availability.

2.2. Thematic Connections

After reviewing the technological elements, let us now examine the dominant content of podcasts. Having reviewed the technological aspects, we shall now analyze the predominant content of podcasts. The content characteristics of podcasts also stem from the combination of radio and network communication, but some thematic elements come from the world of film and television. Let us first look at the characteristics that make them like radio. In terms of genre proportions, we see interesting differences compared to radio. Although in principle all genres of radio could also appear in podcasts, we still see that news-based (news, reporting, information) genres are less popular, and transitional (interview) and opinion genres (commentary) dominate (Pew, 2023, pp. 17–18, 24). Also, the editorial aspects of morning shows are reflected, and the personality of the hosts is decisive. In other words, evaluation, opinion-giving, and contextualization take place more strongly in podcast content than in pure news reporting. In addition to conversations, music also plays a decisive role. From a thematic point of view, all the content of radio appears, from public life to culture to sports. From a content-structure point of view, we must also mention seriality, which is of outstanding importance in terms of audience retention. When analyzing the content of podcasts, we can link several characteristics to the specificities of network communication. One of these is the incredible content diversity, from which consumers can choose the content that best fits their own personalized media consumption. Podcast consumers actively choose among the content options and can also perform other types of interactivity; for example, they can rate, scale the content, recommend it, and add comments to it.

In terms of content, we should also mention a third source, the world of film and television. This is where the most popular thematic block of podcasts comes from, the so-called true crime podcast series, which deals with real crimes. This documentary, or more precisely, an entertaining documentary (docutainment) series, appeared and became popular on television in the 1980s. The first of this format was released as a podcast in 2014 and the series *Serial*, edited by Sarah Koenig, which covers a real crime using investigative journalism tools, set listening records. Season 1 investigated the 1999 murder of Hae Min Lee, an 18-year-old student at Woodlawn High School in Baltimore County. The series was at number one on the iTunes list for a long time and by September 2018, the episodes of seasons 1 and 2 had been downloaded more than 340 million times (Serial Tells One Story, 2016). Several podcast scholars have highlighted the importance of *Serial*. Berry argues in his article that *Serial* elevated podcasting from a niche activity to a mainstream media form and improved the quality of production (Berry, 2015, pp. 171–176). But like Berry,

many others have noted that *Serial* opened a new era in podcasting. According to Hancock and McMurtry, *Serial* brought a formal and aesthetic renewal to radio journalism, while according to McHugh, it transformed the narrative of storytelling (Hancock & McMurtry, 2018; McHugh, 2016). Overall, true crime podcasts are still extremely popular today, with the most downloaded shows of all time falling into this category, including *Limetown*, *Up and Vanished*, and *S-Town* (Pew, 2023, p. 5).

Among the content elements adopted from television, we should also mention news and information analysis programs. These are mostly background discussions (Newman & Gallo, 2019; Litman et al., 2021). But it is also important to mention the thematic appearance of fiction and comedy (Smith, 2019; Hancock & McMurtry, 2018; Kleege, 2023). Educational podcasts also cover a large area (Drew, 2017; McNamara & Drew, 2019), as do the use of sound design techniques to create soundscapes that build an immersive experience and the use of rich descriptions that allow listeners to “visualize” narrated scenes (Salselas et al., 2021; Salselas & Penha, 2019; Snyder, 2020).⁴

Regarding the content aspects of the podcast, we can also say that it hybridizes radio, network, and partly television content in a convergent manner.

1. Content elements related to radio:
 - Dominance of interviews and opinion genres;
 - Morning magazine format;
 - Importance of the role of the host;
 - Seriality;
 - Music content.
2. Content elements related to television:
 - True crime contents;
 - News and information analysis programs, background discussions;
 - Fiction;
 - Comedy;
 - Educational content;
 - Sound design techniques to create an immersive experience;
 - Use of rich descriptions to “visualize” narrated scenes.
3. Technology elements related to network communication:
 - Dominance of individual consumer preferences;
 - Extremely diverse content, niche consumer segments;
 - Active choice, inclusion;
 - Interactivity with content, e.g., scalability.

We can therefore see that in the case of podcasts, hybridization, convergence, radio and television, and network communication are clearly visible from both the technological and content sides.

2.3. Individual and Social Use

After one axis of defining the medium, which is between technology and content, let us now look at the other, related to individual and social use. This other possibility of defining the media means the difference between individual or micro-level use, and social and community, i.e., macro-level use. The background of the social theoretical approaches to the media, i.e., the macro-level ideas, is that mass communication, i.e., the media, is a social-level process, and as such creates social-level relationships and visibility. The media as an institutional system is subject to legal regulation and its normative operation can be expected or enforced. This is the basic setting of sociologically motivated media theories. The priority of the individual use of the media lies in the embeddedness of the media in

everyday life, and in the research related to this (Silverstone, 2008, 2013). Of course, in the case of most media, we must take into account both micro- and macro-level effects. We can say that the podcast satisfies individual needs, primarily the need for entertainment, inspiration, and relaxation, and only secondarily addresses issues of social awareness and belonging (Chan-Olmsted & Wang, 2022; Perks & Turner, 2019; McClung & Johnson, 2010). Researchers specifically concerned with defining podcasts as a medium, Rime and his colleagues, recommend six additional aspects for review in relation to this question (Rime et al., 2022). According to them, it is worth examining to what extent podcasts (1) are created through personalized or automated content production, (2) involve independent producers rather than large content producers, (3) deal with unique or universal content, (4) are aimed at an existing audience or rather at a potential, accessible audience, (5) are more likely to be characterized by immersion or interactivity, and finally (6) are more likely to be art or technology. They refer to these six elements as a framework, which is not fixed, and it is necessary to examine on a case-by-case basis where a given podcast can be placed along these dimensions and in what way is it actualized as a medium. Large providers such as BBC Sounds, Spotify, Global Player, or Castbox tend to produce universal content, while smaller producers produce more personalized content. Furthermore, the big ones skim a significant part of the industry's profits (Pew, 2023, pp. 14–15). With the expansion of the podcast industry, the audience also transformed by the end of the 2010s. It changed from an elite medium to an important mass medium for many. While in 2009 most podcast listeners were men with technology skills, degrees, and high socioeconomic status, this changed dramatically by 2024, although more men than women still listen to podcasts (McClung & Johnson, 2010; Sharon & John, 2019).

3. From Cultural Form to Medium

It is important to note when describing the podcast as a medium that a new media technology cannot be considered a medium from the moment of its birth/invention. The success and successful spread of the technology can lead to its users viewing it as a new medium. This is the path that the digital computer took during the 1990s, transforming from a cultural tool to a medium. In the early 1990s, the computer was still thought of as an imitation of the typewriter, the paintbrush, and the ruler—in other words, as a device that produces a cultural product, which, after being created, is stored and distributed using the medium already used for the given product: in the form of printed text, film, photograph, or electronic recording. Towards the end of the decade, the general image of the computer increasingly shifted towards a universal machine that can not only produce such products, but also store and distribute them: it can make all media accessible (Manovich, 2002). Manovich calls this process transcoding. In his work, transcoding is presented as one of the five characteristics of new media (numerical representation, modularity, automation, variability, and cultural transcoding). “The last, fifth principle of cultural transcoding aims to describe what in my view is the most substantial consequence of media’s computerization. As I have suggested, computerization turns media into computer data”. (Manovich, 2002, p. 63). By transcoding, he means: “Thus, operations should be seen as another case of the more general principle of new media—transcoding. Encoded in algorithms and implemented as software commands, operations exist independently from the media data to which they can be applied” (Manovich, 2002, p. 118). The Hungarian media researcher Hargitai sums up the process as follows: “A medium is always a certain technology, but a technology that provides or carries content is not necessarily an independent medium. (. . .) When a new technology appears as a medium, it does not yet appear as an independent medium in the McLuhanian sense, but for a while as a new technological packaging of an earlier medium, in which the content producer of the new technology takes the earlier

one as a model, and its consumer also applies his previous habits, looking in the ‘rearview mirror’” (Hargitai, 2011, p. 75). The podcast also went through this process, as it was different in 2004 than in 2024; in fact, it has transformed from a cultural form into an independent medium in the past twenty years (Hu & Liu, 2021). It is no coincidence that scientific studies produced in the 2010s linked podcasts even more to radio as a medium (Lacey, 2008). Only later research, such as Berry’s, argues that we are dealing with a new medium (Berry, 2016; Spinelli & Dann, 2019).

However, for podcasts to become a medium, another external, industry factor was needed, and that was the development of an effective, good business model alongside the new convergent media technology. How essential a suitable business model is, and figuring out what people could and would use the new medium for, is well illustrated by a 150-year-old story about the phonograph and its inventor, Edison. The American engineer created his first phonograph in 1877, and in describing his invention, he mentioned ten areas where he thought people would use the device: recording the last words of the dying, a loud clock, teaching spelling, and reading books. Edison found the playback of musical works as a cultural function too degrading and did not deal with it. So—since he did not quite find the mass form of use that people would be willing to use—a few years later he wrote to his assistant that his invention had no commercial value. Only after about twenty years, seeing the success of the Wurlitzers, did they give in and start using the phonograph to record and play music; with this came mass distribution and commercial success (Diamond, 2000, p. 243). In the process of becoming a medium, the fact that the new media technology is positioning itself from the world of early, amateur use and hobby to the world of professional production plays an important role. We should mention that podcasts are important not only for media enterprises operating from a commercial and business perspective, but also from a public service perspective. In an international context, among the early podcast producers we find the British public service medium, the BBC, which is also a significant producer. At the same time, a theoretical overview of the issue has also begun, with Aufderheide referring to the phenomenon with the term public podcasting (Aufderheide et al., 2020, p. 1683). Aufderheide and her colleagues analyze the role of podcasts in providing quality information and their credibility as a source of news, and therefore claim that podcasts fit well into Dewey’s concept of public service media (Aufderheide et al., 2020, p. 1687).

The emergence of the podcast as a new medium was also influenced by the remediation of radio and its convergence with network communication. This phenomenon is not unique in the world of new media technology. For example, Lobato reveals a similar mechanism in streaming television, which he believes is a remediation of classical television (Lobato, 2018). Regarding the podcast, Bonini describes it as a hybrid process, starting from critical technology research and ultimately identifying it not as a medium but as a broader cultural form (Bonini, 2022). Sharon’s (2023) study, which is also a guiding paper for future podcast research, examines the issue along two strands. He believes that (1) the identification of the podcast as a medium can be linked to the technological tradition and (2) its conceptualization as a cultural practice is rooted in the sociocultural tradition, while (3) its conception as a genre can be justified from a formalist perspective (Sharon, 2023). One can agree with the first two, but not with the third at all; the podcast is not a single genre, it cannot be classified into a single text type. In fact, a multitude of text types and genres are presented as podcasts. But returning to Sharon’s writing, she recommends six aspects in her study for further examination of podcasts, which we list below. 1. The collection of podcasting technologies and practices, where their exploration is a research task. 2. The podcast is primarily auditory; therefore, it should deal more deeply with the foundational studies under the auspices of sound studies. 3. Podcasts are embedded in everyday life

and therefore their everyday use in the lives of ordinary people must be examined. 4. An archiving operation also takes place during the creation of a podcast, which is also worth paying attention to. 5. Podcasts build and shape the process of conversations and the construction of reality. 6. Research attention should also be paid to the media economics examination of podcasts (Sharon, 2023). With this, the media researcher from the University of Amsterdam has outlined the framework for a medium-term analysis program.

4. Convergent Remediation of Radio and Network Communication

The idea of remediation plays an important role in how we conceptualize the relationship between old and new media. The process of remediation is necessary in the emergence and development of new media, because no medium has an isolated meaning and existence; any medium can only realize its own meaning and existence in interaction with other media (McLuhan, 1994, p. 56) The concept of remediation was first developed in detail in media research by Jay Bolter and Richard Grusin (Bolter & Grusin, 2000). The authors' definition of media is extremely simple, although somewhat tautological: A medium is something that remediates, i.e., something that takes over the techniques, forms, and even social significance of other media. In other words, remediation—repackaging into another medium—is not only a material practice; it also has social, political, and power implications. The first remediation practice was brought about by printing, when it replaced handwriting. The importance of the role of the social dimension is supported by Bolter with the shift from painting to photography, when photographers took over the place of the earlier (portrait) painters by the end of the 19th century. The authors define the concept of remediation as follows: "Remediation as the mediation of mediation. Each act of mediation depends on other acts of mediation. Media are continuously commenting on, reproducing, and replacing each other, and this process is integral to media. Media need each other in order to function as media at all". (Bolter & Grusin, 2000, p. 55). As written later: "Media are hybrids in Latour's sense and are therefore real for the cultures that create and use them. . . . The reality of digital graphics and the World Wide Web is attested to by the web of economic and cultural relationships that have grown up in a few years around the products from Netscape and Microsoft" (Bolter & Grusin, 2000, p. 58). Remediation can also imply reform in a social or political sense, and again this sense has emerged with particular clarity in the case of digital media, according to the authors. Moreover, the very concept of medium is linked to remediation: "We offer this simple definition: a medium is that which remediates. It is that which appropriates the techniques, forms, and social significance of other media and attempts to rival or refashion them in the name of the real. A medium in our culture can never operate in isolation, because it must enter into relationships of respect and rivalry with others media. There may be or may have been cultures in which a single form of representation (perhaps painting or song) exists with little or no reference to other media" (Bolter & Grusin, 2000, p. 65). New York University professor John Guillory himself includes remediation in his analysis, defining the concept as remediation that makes the medium visible (Guillory, 2012).

We should therefore think of remediation as being related to the social spread of new media technology. If the new technology is rare and/or expensive, or if only people with higher education and higher socioeconomic status can access it, its remedial function will be limited. We saw this in the case of the podcast, which only became a medium after it entered the social and economic circulation of the business sphere. In 2000, the new sound recording device was not yet considered a medium, but more than a decade later, together with the social and cultural functions it took over from radio, it became one. Of course, the possibility of becoming a medium is also present in the development phase, as Bolter and

colleagues put it: the professionals working on the device are aware of where it would fit in the media economy and what it will remediates (Bolter & Grusin, 2000).

The dominant medial character of the new sound recording technology, the podcast, is formed in a network of formal, material, and social practices. The economic aspect of remediation is that each new medium must find its economic place by replacing or substituting what is already available; but it will only be well received and thus economically successful if consumers can be convinced that the new medium improves on the experience provided by older tools (Bolter & Grusin, 2000, p. 68). Bolter and colleagues believe that the material practice of remediation also involves the remediation of social arrangements, primarily because practitioners of the new medium can claim the status of those who worked with the previous tool. In our case, this means that podcasters consider themselves journalists, even if traditional journalists view them as amateurs.

Remediation also includes the adaptation of the new medium to the users' everyday media consumption, which can be captured with the concept of domestication. Bonini and Sullivan also argue that three levels of remediation can be identified in the relationship between radio and podcast. The first is production, the second is content, while the third is the level of reception (Bonini, 2022; Sullivan et al., 2020).

Regarding the podcast, we can still build on Bolter's theory and say that it is not only about remediation, but also about convergence. According to their definition, "Convergence is the mutual remediation of at least three important technologies—telephone, television, and computer—each which is a hybrid of technical, social, and economic practice and each of which offers its own path to immediacy" (Bolter & Grusin, 2000, p. 224) "Convergence is often misunderstood to mean a single solution, but in fact, as these technologies appear, they remediate each other in various ways and in various ratios to produce different devices and practices. Convergence means greater diversity for digital technologies in our culture" (Bolter & Grusin, 2000, p. 225).

Reviewing what has been said so far, the podcast can be considered an independent medium based on the convergent remediation of radio and network communication and can be defined as follows: A podcast as a medium is a media form in which audio content becomes available episodically, regularly, on the internet, and automatically appears to the listener. A podcast is a medium born from the convergent remediation of radio and network communication. A podcast can contain music, news, interviews, and other previous media genres. This audio material can be listened to on the internet via various websites and applications, or it can be downloaded. The phenomenon of platformization can be identified during its sharing (Spotify, Apple Podcasts, Google Podcasts).

5. Summary

The aim of the study was to analyze the podcast as a media technology and as media content, and to show whether it can be approached and defined as a new medium or not. First, this paper presented the medial characteristics of the podcast, showing which characteristics were inherited from radio, and which were inherited from network communication and television. The review showed that the characteristics of network communication dominate in the case of podcasts in both technological and content terms. We have linked elements to podcasts in terms of technology and content to the radio medium, such as sound recording, sound editing, audio editing, live broadcast, the dominance of interview and opinion genres, the format of morning magazine shows, the importance of the host's role, seriality, and musical content. For network communication, we have linked the following elements to podcasts: network sharing; automatic updating; mobile internet—non-location-bound consumption (spaceshift); on-demand service—content consumption independent of broadcast time (timeshift); contextual control of reception is in the hands of the listener;

multimedia options; platformization; immersive experience; quick searchability of content; continuous availability; dominance of individual consumer preferences; extremely diverse content; niche consumer segments; active choice; reception; and interactivity with the content, e.g., scalability. The content element related to television was the processing of true crime. Because of these factors, reviewing what has been done so far, we can consider the podcast as a new, independent medium based on the convergent remediation of radio and network communication. As a media theoretical framework, this article suggested that, starting from Bolter and Grusin's remediation theory, it is worth grasping the podcast phenomenon and conceptualizing it as a new medium born from the convergent remediation of radio and network communication. The chosen media theoretical framework provides this opportunity. As to why podcasts are not so clearly identifiable as a medium for users in everyday life, we can answer that in a dominantly visual culture, acoustic media receive less attention, even if they are used in everyday life. Another reason may be that the platforms serve podcasts in a fragmented way. However, we can still consider them as a medium based on Carey, who states in his article *Communication as culture*:

modern communication has radically changed perception, awareness, interest and the perception of the everyday existence of life and social relations. Communication media are not tools—in terms of will or goals—but cultural forms belonging to human life, which reproduce our thoughts, actions and social relations. (Carey, 2008)

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Notes

- ¹ RSS stands for Rich Site Summary and is an XML file format for web collaboration that allows users to be notified immediately when a given page is updated. By subscribing to RSS feeds, users can pre-select where they want to receive the latest news, so they don't have to visit each one regularly to find the information they are interested in.
- ² RSS0.92—<https://www.oreilly.com/library/view/content-syndication-with/0596003838/ch03s02.html> (accessed on 19 December 2024).
- ³ The Berkman Klein Center for Internet & Society, a research center founded by Harvard University and Harvard Law School, has provided scholarships to network experts such as Danah Boyd and Ethan Zuckermann, among others.
- ⁴ The latter two aspects are the intellectual product of the reviewer of the essay, for which I am grateful.

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