

In media(tization) studies we love metaphors^a

Nos estudos de mídia(tização), adoramos metáforas

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ABSTRACT

The long history of mass communication theories is full of metaphors, from Shannon and Weaver's 'transmission channel' to Noelle-Neumann's 'spiral of silence'. The objective of the chapter is to give an overview of the use of metaphors and models in mediatized communication studies. Special attention is given to the metaphors that support the representations of digital and interactive communication practices; in this context, the chapter deals with the metaphors of the Internet, the World Wide Web, and new platforms and introduces the main metaphors of media change. The chapter concludes with a series of reflections on the risks and benefits of metaphorical reasoning and includes a call for 'metaphorical experimentation'.

Keywords: Media, mediatization, theory, models, metaphors

RESUMO

A longa história das teorias da comunicação de massa é cheia de metáforas: do 'canal de transmissão' de Shannon e Weaver à 'espiral do silêncio' de Noelle-Neumann. O objetivo deste capítulo é fornecer uma visão geral do uso das metáforas e modelos nos estudos de comunicação midiaticizada. É dada especial atenção às metáforas que apoiam as representações de práticas de comunicação digital e interativa; neste contexto, este capítulo lida com as metáforas da internet, a *World Wide Web* e novas plataformas e introduz as principais metáforas da mudança de mídia. O capítulo conclui com uma série de reflexões sobre os riscos e benefícios do raciocínio metafórico, além de incluir uma chamada para a 'experimentação metafórica'.

Palavras-chave: Mídia, midiaticização, teoria, modelos, metáforas

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In media(tization) studies we love metaphors

THE LONG HISTORY of mass communication theories (Rodrigo Alsina, 1995; McQuail & Deuze, 2020) is full of metaphors, from Shannon and Weaver's 'transmission channel' to Noelle-Neumann's 'spiral of silence'. It could be said that behind any theoretical model of communication, there is a metaphor. Collateral disciplines like semiotics are no exception: from Roman Jakobson's initial incorporation of the informational model (his 'functions' of language were inspired by Shannon and Weaver's mathematical model of communication) to Verón's 'network' of social semiosis, or Eco's vision of the text as a 'battlefield' where two 'strategies' confront each other. The discipline that analyzes sense production and interpretation processes has imported or developed powerful metaphors.

The objective of this chapter is to give an overview of the use of metaphors and models in mediatized communication studies, understood as a broad and transdisciplinary field or "intellectual trading zone" (Waisbord, 2019), in which many disciplines – linguistic, semiotics, sociology, psychology, political economy, anthropology, design, engineering, etc. – take part in the theoretical conversations (Scolari, 2009). After an introduction to the use of metaphors in scientific discourses, which includes my personal experience working with these rhetorical devices (Section 1), the chapter looks at the tradition of mass communication models (Section 2). Special attention will be given to the metaphors that support the representations of digital and interactive communication practices. In this context, Section 3 focuses on the metaphors of the Internet, the World Wide Web, and the new platforms. Finally, Section 4 introduces the main metaphors of media change. The chapter concludes with a series of reflections on the use of metaphors in media and mediatized communication studies.

As it is impossible to include all the metaphors applied in a century of research, the chapter will only focus on the most important ones. Although the chapter centers on the metaphors present in scientific discourses, sometimes their use goes beyond the academic circuit (especially in the conversations on new digital media). Both the tone of the chapter and the topics addressed are aimed at a young reader/researcher who is starting out in media and mediatized communication research, and we conclude it with an invitation to the new generation of researchers.

Now, at the end of this introductory section, we pose a question: Why is it so important to analyze the scientific construction and use of metaphors? According to Neil Postman,

our best poets and scientists are those who have created the most vivid and enduring metaphors (in Gozzi, 2001, p. xvi).

If media and mediatized communication researchers want to improve their theoretical models, it is fundamental to know how to create and deal with metaphors.

DOING THINGS WITH METAPHORS¹

If John L. Austin (1962) asked, “What can we do with words?” in his book *How to do things with words*, we could also ask, “What can we do with metaphors?” Once again Neil Postman comes to our aid:

all language is metaphorical, and often in the subtlest ways. In the simplest sentence, sometimes in the simplest word, we do more than merely express ourselves. We construct reality along certain lines. We make the world according to our own imagery (in Gozzi, 2001, p. xv).

Speakers do not only express themselves using metaphors: as any other language construction, they create realities through metaphors. The main objective of this chapter is to reflect on how media and mediatized communication researchers ‘construct (theoretical) realities’ using metaphors. From a linguistic–cognitive perspective, the metaphor has been defined as understanding one conceptual domain in terms of another conceptual domain; for example, when speakers say: ‘life is a journey’. In this context, the metaphor consists of

two conceptual domains, in which one domain is understood in terms of another. A conceptual domain is any coherent organization of experience. Thus, for example, we have coherently organized knowledge about journeys that we rely on in understanding life (Kövecses, 2010, p. 4).

The conceptual domain from which the speaker draws metaphorical expressions to understand another conceptual domain is called the ‘source’ domain, whereas the conceptual domain that is understood, is the ‘target’ domain. In the case of ‘life is a journey’, the source domain is ‘journey’ and the target domain is ‘life’. Their classic *Metaphors We Live By* Lakoff and Johnson (1980) presented many classic examples of metaphors in everyday conversations. Let us look at one of them: if ‘an argument is war’, different linguistic expressions could be generated under the umbrella of this specific metaphor:

Your claims are *indefensible*.
He *attacked every weak point in my argument*.

¹ This article is part of ongoing research on metaphors of media and mediatization processes. To show that we cannot do less than apply metaphors in our discourses, throughout the text I have indicated the metaphors that I have used with ‘quotation marks’. It is very likely that many of them have gone unnoticed, even by the author.

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His criticisms were *right on target*.
I *demolished* his argument.
I've never *won* an argument with him.
You disagree? Okay, *shoot!*
If you use that *strategy*, he'll *wipe you out*.
He *shot down* all of my arguments.

According to Kövecses

the linguistic expressions (i.e., ways of talking) make explicit, or are manifestations of, the conceptual metaphors (i.e., ways of thinking). To put the same thing differently, it is the metaphorical linguistic expressions that reveal the existence of the conceptual metaphors (Kövecses, 2010, p. 7).

One of the characteristics of these rhetorical 'devices' is that conceptual metaphors "typically employ a more abstract concept as target and a more concrete or physical concept as their source" (Kövecses, 2010, p. 7). If we want to understand an abstract concept (like 'life' or 'argument'), it makes sense to connect it to a more concrete, physical, or tangible concept ('journey' or 'war', respectively). This relationship is not reversible: we do not understand a 'journey as a life' or a 'war as an argument'. This is called the principle of unidirectionality: the metaphorical relation only goes from the concrete to the abstract.

Metaphors never come alone. If we 'buy' a metaphor it comes with a collateral set of expressions. If 'life is a journey', then we must include in the same pack the travelers, the vehicle, the distance covered, the obstacles, the destination, and other components included in the act of traveling from one place to another. This systematic set of correspondences is known as 'mapping'.

As it has been seen throughout the preceding paragraphs, it is almost impossible not to use metaphors. While explaining the fundamental principles of their functioning, I have applied several metaphors, from the metaphor as a 'device' to 'buying' metaphors. We think in metaphors and depend on metaphors to explain the world that surrounds us. In this context, scientific knowledge is not an exception. Let's go back to Lakoff and Johnson (1980). These authors analyzed the 'construction of theories' from a metaphorical perspective. If 'theories are buildings', then it is not so strange to hear expressions like:

Is that the *foundation* for your theory?
The theory needs more *support*.
We need to *construct* a *strong* argument for that.

We need to *buttress* the theory with *solid* arguments.
 The theory will *stand* or *fall* on the *strength* of that argument.
 So far we have *put together* only the *framework* of the theory.

Beyond the use of metaphors when we talk about ‘theory building’, these rhetorical ‘devices’ have been present in scientific discourses since their initial and hesitant beginnings more than twenty–five centuries ago, from classic philosophers (Plato’s ‘cavern’) to contemporary borderlands of science (i.e., ‘black holes’, ‘string’ theory, etc.). According to Gozzi (2001),

when metaphors are used as bridges into the unknown, they gain power from showing us structural similarities, and suggesting paths to follow to discover new insights into the unknown domain (Gozzi, 2001, p. 57).

Researchers continuously create, recover, negotiate, discuss, refine and apply metaphors. This creation and acceptance of metaphors is never a neutral or frictionless process. But once the metaphor is ‘materialized’ in a theoretical model and accepted by the scientific community, it is not questioned for long. As Lizcano puts it,

Those metaphors, those negotiations of meaning, those power pulses that were at the origin of scientific concepts and theories, remain in the most absolute oblivion, lose their condition of ways of speaking and doing, to impose themselves as the only way of saying reality, as a mere discovery of facts that no one has done and that has always been out there, covered (Lizcano, 2006, p. 76).

The disappearance of the metaphorical ‘device’ could be considered as part of the process of ‘blackboxing’ identified by Latour (1999)². The analysis of how scientific objects are constructed, modeled, and put into speech through metaphors is fundamental, not only for understanding the evolution of a single discipline, but also to comprehend the entire logic of scientific discourses.

² For Latour **blackboxing** is “the way scientific and technical work is made invisible by its own success. When a machine runs efficiently, when a matter of fact is settled, one need focus only on its inputs and outputs and not on its internal complexity. Thus, paradoxically, the more science and technology succeed, the more opaque and obscure they become” (Latour, 1999, p. 304).

Interfaces and metaphors

A very personal example could serve to frame the subject at hand better. The discourses around computers are full of metaphors, from the ‘virus’ that infects the digital machines to the ‘windows’ (or the ‘menus’) that are opened and closed with a single click on the ‘mouse’. When, twenty-five years ago, I began to research the universe of interfaces, one of the first things that surprised me

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was the wide variety of concepts used in the scientific and professional fields. This proliferation of conceptions led me to collect definitions and metaphors of the interface: the interface as an ‘instrument’, the interface as a ‘conversation’, the interface as a ‘surface’, the interface as a ‘space’, etc. That was the first step of my PhD research on the semiotics of human–computer interaction (Scolari, 2004).

Each metaphor of the interface ‘illuminates’ certain aspects of the human–computer relationship, privileging some of its properties while hiding the others. However, the simple summation of metaphors is not enough to fully illuminate a research object (in this case, the interaction between humans and computers): the different perspectives would never merge into a single and coherent construction. If we think that the interface is an ‘instrument’, we will never be able to consider it as an ‘environment’ of interaction, or a ‘conversation’.

The use of metaphors ‘condemns’ the researcher to an always limited and hypothetical knowledge that is never definitive. Like the lighting designer for a theatrical production who plays with the lights until finding the appropriate angle for each situation, the researcher must ‘move the spotlight’ to ‘shed light on’ the object that is being described or explained in the best possible way. However, saying that each metaphor ‘illuminates’ some properties of the object does not mean that all metaphors are equally clear in their representation: there are metaphors that ‘illuminate’ more, or ‘hide less’, than the others. Paraphrasing Lakoff and Johnson (1980), it could be said that a theory of interfaces and interaction processes, like any other scientific field, must “be aware of its metaphors”, know “what they hide”, and be willing to sacrifice them for more appropriate “alternative metaphors”.

Metaphors: between the new and the old

The introduction of new metaphors into scientific discourses usually runs parallel to the emergence of new theoretical models³. For example, metaphors like ‘the atom is a miniature solar system’ oriented the first years of the research into subatomic particles. In the same line, if we consider that interfaces are ‘conversations’, then one of the researcher’s objectives will be to reconstruct the ‘grammar’ of the exchanges.

In other cases, the metaphor works as a ‘brake’ that ‘stops’ the development of new scientific perspectives. According to Maasen,

from a macroperspective of scientific change, it becomes apparent that once a metaphor is part of a discourse and its mechanics, the capacity of scientists or even scientific communities to control them is limited (Maasen, 1995, p. 30).

³ For a short overview of the relationships between theoretical models and metaphors, see Rivadulla (2006).

However,

scientists should not be afraid of metaphors since the innovative – which always means destabilizing – effect of metaphors is counterbalanced by a number of stabilizing factors (Maasen, 1995, p. 30).

After this short introduction to the world of metaphors and their use in scientific discourse, the time has come to focus on one of the topics of the chapter: the use of metaphors by the media and mediatized communication researchers.

METAPHORS OF MASS COMMUNICATION

Metaphors appear every time a new media or technology emerges. The new thing “creates blank, unnamed regions in our linguistic and conceptual maps of experience” (Gozzi, 2001, p. 5) that require a known concept to explain them. When broadcasting emerged in the early 20th century, the first generation of media and mediatized communication researchers looked for a metaphor to understand it. As it is well-known, the first attempts to develop a model of media influence in the 1920s and 1930s were based on a simple and basic conception (media were supposed to have a direct ‘impact’ on audiences) that, later, was caricaturized by scholars in the ‘magic bullet’ and ‘hypodermic needle’ theories.

However, the best and most popular model would arrive at the end of the next decade: the idea that communication was a linear transmission of information from a ‘sender’ to a ‘receiver’ was part of both Lasswell’s (1948) and Shannon and Weaver’s (1949) models. Laswell popularized his five questions (who says what, in which channel, etc.), whereas Shannon and Weaver contributed to this metaphor with a simple and ‘viral’ graphic model of information ‘transmission’. In the following years, media and mediatized communication studies witnessed an explosion of theoretical models with a strong metaphorical imprint, for example Schramm’s ‘tuba’ (1954), Dance’s ‘spiral’ (1970), Noelle–Neumann’s ‘spiral of silence’ (1974), and the Palo Alto School’s model of the ‘orchestra’ as opposite to the ‘telegraph’ model (Winkin, 1981).

In a classic contribution, Pepper (1942) identified four ‘root metaphors’ that underlie the major philosophical systems in Western philosophy: *mechanism*, *organicism*, *contextualism*, and *formism*. Similarly, we could also ask what the ‘deep’ metaphors in media and mediatized communication studies are⁴. Meyrowitz (1993) identified three underlying metaphors:

that virtually all the specific questions and arguments about a particular medium, or media in general, can be linked to one of three underlying metaphors for what

⁴ This chapter deals with models and metaphors of mediatized communication. For an overview of the deep metaphors in general communication studies, see Krippendorff (1993).

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a medium is. Although various terms could be used to convey the general sense of these three metaphorical constructs, I summarize them here as media as ‘conduits’, media as ‘languages’, media as ‘environments’ (Meyrowitz, 1993, p. 57)

Most of the traditional models of mass communication were inspired by the metaphor of the ‘channel’ that ‘transmits’ a content. For Meyrowitz (1993, p. 57) “this metaphor is so common because content is the first thing we react to when we use a medium”. Based on the metaphor of ‘language’, researchers have analyzed the ‘grammar’ of each media, establishing a difference with respect to the previous metaphor:

Rather than viewing the medium as a relatively passive conduit, grammar analysts look at the plasticity of the medium in altering the presentation and meaning of content elements While the conduit metaphor leads one to analyse content that crosses easily from medium to medium and from live interaction to medium and back, the language metaphor tends to focus attention on those variables that function only within a specific medium or within a particular type of media (Meyrowitz, 1993, p. 59).

I consider the third metaphor, media as ‘environments’, as one of the best possible metaphors to understand the transformations of the ‘mediasphere’. If this metaphor is the one that best ‘illuminates’ the research object (media) and its ‘mutations’, then it would be a wise decision to dedicate the next section to it.

Media as ‘environments’

According to this ‘ecological’ conception, each media creates an ‘environment’ that has “characteristics and effects that transcend variations in content and manipulations of production variables” (Meyrowitz, 1993, p. 61). This leads to what Meyrowitz calls “medium analysis”. Beyond the medium’s content or grammar, the environmental model focuses specifically on “advancing our understanding of the ways in which the differences among media make a difference” (61). Within medium analysis, the focus is on “those environmental features of the medium that are largely out of the control of users once the medium is in use” (62). According to Meyrowitz, researchers can study media by setting both the micro, single–situation level, and the macro, societal level. On the micro level, medium analyses “explore the implications of choosing one medium over another in a given situation”; on the macro level, “medium analysis deals with the larger social implications of the widespread use of a medium” (62).

Beyond the specific field of Media Ecology and Meyrowitz's medium theory, an approach rooted in the works of Marshall McLuhan and Neil Postman (Scolari, 2015; Strate, 2017; Cali, 2017), many researchers have applied the 'media as environments' metaphor. For example, there is a strong connection between the European approach to mediatizations and Meyrowitz's medium theory (see Krotz, 2014). If medium theory states that media create 'environments' that affect and model subjects, mediatization researchers advocate that those media affect and model institutions (i.e., Hjarvard, 2014; Verón, 2014; Couldry & Hepp, 2017). The deepening of the dialogue between these two approaches (media ecology/medium theory and mediatization studies) has just begun and there is still a large territory to continue exploring and carrying out interdisciplinary exchanges.

Before ending this quick journey through metaphors of media, it could be useful to remember that Marshall McLuhan proposed considering media as both 'metaphors' and 'translators'. The Canadian scholar introduced this idea in *Understanding Media* (1964):

All media are active metaphors in their power to translate experience into new forms. The spoken word was the first technology by which man was able to let go of his environment in order to grasp it in a new way. . . . Words are complex systems of metaphors and symbols that translate experience into our uttered or outered systems (McLuhan, 1964, p. 57).

Other members of the Media Ecology school have developed this idea. For example, Ong (1977) and Postman (1985) also considered that media can be internalized and function as 'deep' metaphors for the mind and knowledge:

A message denotes a specific, concrete statement about the world. But the forms of our media, including the symbols through which they permit conversation, do not make such statements. They are rather like metaphors, working by unobtrusive but powerful implication to enforce their special definitions of reality. Whether we are experiencing the world through the lens of speech or the printed word or the television camera, our media-metaphors classify the world for us, sequence it, frame it, enlarge it, reduce it, colour it, argue a case for what the world is like (Postman, 1985, p. 10).

Like any other research field, media and mediatized communication studies have used metaphors as a way of translating very complex processes into simplified theoretical models. At the same time, metaphors have been used to model the research objects and methodologies: if the media is a 'cannon'

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that shoots a ‘bullet’, then researchers will try to measure their ‘impact’; in the same way, if media are a ‘language’, then researchers will try to reconstruct their ‘grammars’. In other words, metaphors have translated a very complex domain (mediatized communication processes) into terms of a simpler domain (a tube, a transmission channel, a grammar). The metaphors were simultaneously solving a current problem (proposing a model for mediatized communication processes) and modeling future research (suggesting questions and methodologies based on the metaphor).

After this overview of the traditional metaphors of mass media and mediatized communication processes, the time has arrived to present the new metaphors of the media that have emerged in the last decades.

NEW METAPHORS FOR A NEW MEDIA

The ‘emergence’ of new digital media and technologies in the last thirty years generated an ‘explosion’ of metaphors. For example, it could be said that the ‘arrival’ of the World Wide ‘Web’ produced an ‘acceleration’ of the ‘mutations’ in the media ‘ecosystem’ and generated an ‘explosion’ of new media (Scolari, 2009, 2013, 2015; Scolari & Rapa, 2019). A recent article by Wyatt (2021) presented a good ‘map’ of this new ‘territory’. According to this researcher from Maastricht University

In the mid–1990s, when the Internet went public and the World Wide Web became available, many different metaphors were in use as people tried to make sense of the possibilities of this amazing new medium, capable of instantly transmitting data and information around the world (Wyatt, 2021, p. 407).

Many researchers have ‘mapped’ the metaphorical ‘territory’ around the ‘emerging’ new media. The spatial metaphor (‘territory’) is not casual: many of the representations of the Internet are rooted in a ‘deep’ spatial metaphor (the ‘Internet as a place’). Stefik (1996) described the early metaphors of the Internet and organized them into four archetypes: library/keeper of knowledge, mail/communicator, markets/trader, and digital worlds/adventurer. Markham (2003), for her part, identified three distinctive and interrelated metaphors: the Internet as a ‘tool’ (‘container’, ‘conduit’, etc.), the Internet as a ‘place’ (‘frontier’, ‘cyberspace’), and the Internet as a ‘way of being’ (‘cyborg’, etc.). As it can be seen, many of the metaphors applied to the mass media (media as a ‘container’, media as a ‘conduit’, etc.) and interfaces (interface as a ‘tool’, interfaces as a ‘place’, etc.) have also been applied to the Internet. Many other researchers have

analyzed the emergence and uses of metaphors in digital society (i.e., Gozzi, 2001, Gómez Cruz, 2007; Markham & Tiidenberg, 2020). The following table presents some of the main metaphors of the Internet and the World Wide ‘Web’ developed in the last three decades (see Table 1). Obviously, as the Web is still developing, this table should be considered as a general overview that is open to new incorporations.

Table 1

The metaphors of the Internet and the World Wide Web. Based on Stefik (1996), Gozzi (2001), Gómez Cruz, (2007), Johnston (2009), Markham and Tiidenberg (2020), Wyatt (2021) and contributions of the author and colleagues.

The Internet and the World Wide Web as a ...	
town hall	
agora	
market	A collaborative/competitive place for political, cultural, social, or economic exchanges.
village square	
(virtual) community	
library	
archive	An open and potentially infinite repository of data, information, and knowledge.
world brain	
frontier	
cyberspace	A libertarian and free space to be explored (or surfed) and conquered by pioneers.
sea	
highway of information	A public space for data traffic that could be regulated by the State.
drug	A media that creates addiction so users must detoxify.
dark (place)	
deep (place)	A secret and clandestine space whose contents are not indexed by standard web search engines.
invisible (place)	
hidden (place)	

Although this is an incomplete map of metaphors of the Internet and the World Wide ‘Web’, it is enough to begin reflecting on their main traits and dynamics. The first issue is the prevalence of spatial metaphors. This is not so strange: when the World Wide ‘Web’ appeared in the early 1990s, the concept of ‘cyberspace’, introduced by William Gibson in his cyberpunk novel *Neuromancer* (1984), was already very popular. The metaphor of the ‘place’ is easy to understand and can be modulated in different ways: it can be a human–created space (an ‘agora’, a ‘village’, or a ‘library’) or a natural environment (the web as a ‘sea’). From a chronological perspective, it is evident that in the 1990s and 2000s the metaphors were optimistic (the Internet as a ‘place’ of freedom and open

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knowledge) whereas, in recent years, an increasingly pessimistic view has dominated the discourses, like the Internet and, more generally, digital technologies understood as a ‘tool’ for domination and control, or the ‘Web’ as a ‘dark’, ‘deep’, and potentially dangerous place.

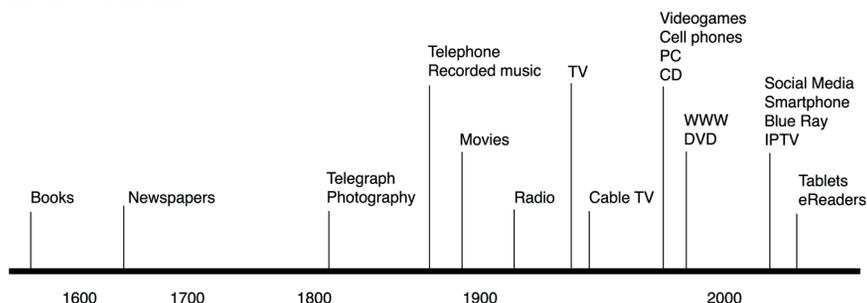
The same path from optimism to pessimism can be found in the metaphors of new social networking sites. When the ‘Web 2.0’ arrived in the early 2000s (O’Reilly, 2005), it adopted many of the positive metaphors of the Internet and the World Wide ‘Web’: the new collaborative web as a ‘place’ for political, cultural, social or economic exchanges. More than a static online ‘library’, the new web promised the realization of Pierre Lévy’s concept of ‘collective intelligence’ (1997). Fifteen years after the appearance of Facebook (2004), YouTube (2005) and Twitter (2006), the situation is quite the opposite: now social networking sites are under suspicion.

Today, social networking sites, now renamed ‘platforms’, are still considered ‘places’, but very dangerous ones. On one hand, these ‘places’ are not open anymore: they are ‘walled gardens’ where users must be registered so that powerful hardware and software ‘machines’, managed by an ‘artificial intelligence’, can obtain information about the users’ activities. In other words, the anarchic and freedom-centered representation of the early World Wide ‘Web’ has radically changed: now these platforms are ‘territories’ under control. In this sense, more than a ‘place’ the new metaphors promote the idea of a ‘tool of control’: concepts like ‘Big Brother’ or ‘digital panopticon’ are more and more present in scientific and popular conversations. This negative view of the platforms as ‘surveillance and control devices’ complements their representation as promoters of ‘digital labor’, ‘digital capitalism’, and ‘data exploitation’. The title of popular books published by researchers like Nick Srnicek (*Platform Capitalism*, 2016) and Shoshana Zuboff (*The Age of Surveillance Capitalism*, 2019) are good examples of these negative metaphorical constructions.

BEYOND THE ‘MEDIA AS A PLACE’: THE TIME DIMENSION

The use and abuse of spatial metaphors in media and mediated communication studies has a clear limit: they may illuminate a set of actors and their relationships but, at the same time, *they may cancel out the time dimension*. How can we understand media change? There are different theories and models of media change, and obviously each of them is based on a metaphor. For some scholars, media change adopts the form of a ‘line’ (for example Neuman, 2010), in which the different technologies are represented along a linear sequence (a ‘timeline’).

Figure 1
Timeline of media



Note. Based on Neuman (2010), Grant & Meadows (2018), and others.

Other scholars prefer to talk about sequences of ‘explosive’ and ‘reflective’ periods. Ortoleva (1997) analyzed media change in the last centuries as a succession of innovative moments (when multiple new media emerge) and reflective moments (when the innovation slows down and the diffusion of existing technologies is the main process). Ortoleva identified four ‘explosive’ moments in contemporary media history:

- 1830-40: telegraph, postage stamp, photography, steam printing machines, etc.
- 1875-95: linotype, stereoscope, typewriting, Kodak popular camera, phonograph, gramophone, kinoscope, cinematograph, telephone, radiotelegraph, etc.
- 1920-1935: roto-calc printing, telephotography, photocopy, iconoscope (proto-television), magnetophonon, talking cinema, color cinema, etc.
- 1975-95: videorecorder, digital audio devices, personal computers, teletext, optic fiber networks, etc.

Although the book was published in 1997, Ortoleva did not include the World Wide ‘Web’ in the four explosions. Following his model, a fifth explosion could be identified from 2005 to 2020: smartphones, social media, augmented reality, platforms, etc. According to Ortoleva, during these ‘explosive’ periods not only do technological innovations appear, but institutions and commercial beings are also transformed. In other words, “each time, the entire communications system is redefined in every aspect” (1997, p. 43). Even if Ortoleva did not explicitly use these concepts, his model of media change fits perfectly into the metaphor of the ‘wave’, understood as a succession of technological ‘impacts’ and their expanding ‘effects’.

Another possible metaphor of media change comes from the ecological metaphor (see Section 2.1). In this context, media change could be approached

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as an ‘evolutionary’ process. First of all, it must be said that media ecology has always included a strong interest in the evolution of media. Beyond the classic contributions of scholars such as Innis (1950), researchers like Levinson (1997) and Logan (2004) have developed valuable contributions for understanding the ‘evolution’ of the media ‘ecosystem’. In recent years, many scholars, even outside the tradition of media ecology, have been using the metaphor of media evolution in their theoretical and analytical discourses (i.e., Napoli, 2001; van Dijck, 2013; Manovich, 2013). If media ecology ‘thinks’ space (synchronic plane), then media evolution ‘thinks’ time (diachronic plane). However, although media historians have developed linear or waveform models, media evolution considers media change as a ‘network’ where any media can affect or take components from any other present or past media (Scolari, 2013, 2018, 2020; Scolari & Rapa, 2018).

Mediatization studies, like any other theoretical discourse, have applied different temporal and spatial metaphors. Beyond describing mediatization as a ‘radial’, ‘accumulative’, and ‘non-linear’ process of change, Verón (2014) evidenced periodic ‘accelerations’ of historical time, for example, when in the Upper Paleolithic the production of stone tools passed from twenty basic types to two hundred varieties, or when Gutenberg’s printing machine multiplied the number of books and changed European society profoundly in a couple of centuries. In the case of the Internet, the digital network has altered “the conditions of access to scientific knowledge more than these conditions have changed since the surge of modern scientific institutions during the seventeenth century” (Verón, 2014, p. 168). Other researchers like Hjarvard (2008) have also highlighted the ‘acceleration’ of mediatization processes in late Modernity.

The metaphor of the ‘wave’ is also present in mediatization theories. For Couldry and Hepp (2017), “mediatization comes in waves – mechanization, electrification, digitalization – which each changed the whole media environment fundamentally” (2017, p. 53). But these ‘waves’ should not be confused with the ‘diffusion waves’ of one single dominant medium: they must be understood as a “process of increasing deepening of technology-based interdependence” (2017, p. 53). The concept of ‘deep’ mediatization is now at the center of the international scientific conversations on mediatization processes (Hepp, 2020). It is interesting to note that, at this point, temporal and spatial metaphors converge in a single theoretical ‘construction’ in which the concept of ‘deepening’ has two senses:

First, that over the past 600 years an acceleration of technological innovations in media has taken place; and second that, over the same period, media have become

increasingly relevant to articulating the kind of cultures and societies we live in, because of media's changing role in the conditions of human interdependence (Couldry & Hepp, 2017, p. 53)

With this reference to mediatization studies we come to the end of this journey through the metaphors of media and mediatized communication processes. As already indicated, it is impossible to include all the metaphors developed in the last century in this specific area of scientific discourse production. However, this is enough to initiate a reflection on the production and use of metaphors in media and mediatized communication studies.

RISKS AND BENEFITS OF METAPHORICAL REASONING

A series of conclusions can be 'extracted' from this brief overview of the metaphors of media and mediatized communication processes. More than 'closed' conclusions, the following are simply a series of issues that could 'orient' future research and 'conversations' on the use of metaphors in media and mediatized communication studies.

1. It seems to be impossible to think in media and mediatized communication processes without using metaphors. The list of metaphors used in scientific and non-scientific discourses in the last century is almost endless and, considering the transformations of the research object, we can assume that this list will continue to grow.
2. Like in any other scientific domain, in media and mediatized communication studies, each metaphor 'illuminates' certain aspects of the research objects, privileging some of their properties while 'hiding' the others. As it is very difficult to add and integrate metaphors because they are often incompatible with each other, there is a constant search for new, broader, and more 'illuminating' metaphors.
3. In the case of traditional mass media, the metaphor of the 'conduit' dominated much of the 20th century and is still, unfortunately, in good health in the 21st century. Many journalists, publicists, politicians, and media and communication students (and scholars!) still believe that communication is an 'arrow' that 'impacts' a 'target'. The arrival of new metaphors like the 'orchestra' or the 'environment' attempts to break this linear and simplistic vision of mediatized communication.
4. The 'emergence' of the World Wide 'Web' in the early 1990s 'placed' spatial metaphors at the 'center' of the discourses. Both the critical-apocalyptic and the integrated-optimistic approaches regard the

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Internet and the World Wide ‘Web’ as a ‘place’ or a ‘space’. It could be said that the metaphors are trans-ideological: the same ‘place’ could be simultaneously considered as an emancipatory or hyper-controlled space.

5. The discourse of media and mediatized communication studies also discusses the transformations of media. Therefore, media change is also part of scientific conversations, especially due to the ‘acceleration’ of media ‘mutations’ in the last decades. Even in this case, different metaphors have been used to represent the transformations of media, from ‘explosion’ and ‘waves’ to ‘movement’ (‘acceleration’).
6. Scholars who analyze the processes of mediatization also work with metaphors, which are spatial (‘deep’ mediatization) or temporal (‘acceleration’ or even ‘waves’ of mediatization).

Metaphors are serious business. All researchers should reflect on the metaphors they apply and use in their scientific discourses:

Not only is it important for critical scholars of the Internet and digital media to analyse the metaphors of other social actors, we also need to be reflexive about our own use of language so that we do not unwittingly reinforce power structures that serve to exclude groups, organisations or regions, by promoting the inevitability of particular sociotechnical configurations, for example (Wyatt, 2021, p. 408).

As it can be seen in the preceding sections, I have made a strong commitment to eco-evolutionary models. I believe it is worth exploring these metaphors in order to understand the ‘mutations’ of the different actors that make up the media ‘ecosystem’. In this context, the eco-evolutionary metaphor offers the possibility to frame both long-term and short-term transformations, both in their micro and macro dimensions (Scolari, 2013, 2018, 2020; Scolari & Rapa, 2019).

It is important to remember that metaphors also ‘shape’ actions and technological developments:

The metaphors we use to frame our experiences . . . matter; in that they can construct both the enabling and limiting features of our technologies. These frames spread through everyday terminologies and visual imageries (Markham & Tiidenberg, 2020, p. 9).

Understanding media and mediated communication processes from an eco-evolutionary metaphor places at the center of attention the consequences of those actions on the rest of the actors, whether individual, institutional, technological, or biological. Finally, it should be remembered that metaphors never rest:

What we called ‘surfing’; we now call ‘sharing’. What was once ‘cyberspace’ and ‘The Net’ are now ‘platforms’. What we once called ‘online’ or ‘networked’ is now ‘IoT’ and ‘smart’. All of these are metaphors, but we might be less likely to notice them as such, because this is how dominant metaphors work (Markham & Tiidenberg, 2020, p. 9).

As Markham and Tiidenberg point out, metaphors are not fixed, they also ‘evolve’, expand their universes of meaning and ‘hybridize’ with other metaphors. Like a ‘virus’, metaphors contaminate not only our discourse but also our thinking. If metaphors make up an ‘ecosystem’ and ‘evolve’, then the eco–evolutionary approach could be considered as a *metaphorical meta–model for analyzing other metaphors, their relationships, and changes*.

To conclude this chapter, I would like to make a call for ‘metaphorical experimentation’. This is an invitation addressed especially to doctoral students: you must not limit yourselves to reproducing theoretical models, but rather you should create new analytical frameworks. The development of new and creative metaphors is part of that process. As Wyatt put it, despite the pitfalls of metaphorical constructions,

it is worth experimenting with our language. Metaphors, science fiction, speculation and imaginaries can reveal new thoughts or feelings to ourselves and to others and may open up new lines of theoretical enquiry, empirical investigation, technological design and political action (Wyatt, 2021, p. 413).

The choice, creation, and testing of metaphors is an unpredictable process that could lead to new theoretical developments and, why not, improve the quality of our mediatised communication processes. ■

REFERENCES

- Austin, J. L. (1962). *How to do things with words: The William James lectures delivered at Harvard University in 1955*. Clarendon Press.
- Cali, D. (2017). *Mapping media ecology: Introduction to the field*. Peter Lang.
- Couldry, N., & Hepp, A. (2017). *The mediated construction of reality*. Polity Press.
- Dance, F. E. X. (1970). A helical model of communication. In K. K. Sereno, & C. D. Mortensen (eds.), *Foundations of communication theory* (pp. 103-107). Harper & Row.
- Gibson, W. (1984). *Neuromancer*. Ace Books.
- Gómez Cruz, E. (2007). *Las metáforas de internet*. UOC Press.
- Gozzi, R. (2001). *The power of metaphor in the age of electronic media*. Hampton Press.

D

In media(tization) studies we love metaphors

- Hepp, A. (2020). *Deep mediatization*. Routledge.
- Hjarvard, S. (2008). The mediatization of society: A theory of the media as agents of social and cultural change. *Nordicom Review*, 29(2), 105-134.
- Hjarvard, S. (2014). Mediatization and cultural and social change: An institutional perspective. In K. Lundby (ed.), *Mediatization of communication* (pp. 199-226). De Gruyter.
- Innis, H. (1950). *Empire and communications*. Oxford University Press.
- Johnston, R. (2009). Salvation or destruction: metaphors of the internet. *First Monday*, 14(4). <https://bit.ly/41jn8Nb>
- Kövecses, Z. (2010). *Metaphors: A practical introduction*. Oxford University Press.
- Krotz, F. (2014). Mediatization as a mover in modernity: Social and cultural change in the context of media change. In K. Lundby (ed.), *Mediatization of communication* (pp. 131-62). De Gruyter.
- Krippendorff, K. (1993). Major metaphors of communication and some constructivist reflections on their use. *Cybernetics & human knowing*, 2(1), 3-25.
- Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. The University of Chicago Press.
- Latour, B. (1999). *Pandora's hope: essays on the reality of science studies*. Harvard University Press.
- Levinson, P. (1997). *The soft edge: A natural history and future of the information revolution*. Routledge.
- Lévy, P. (1997). *Collective intelligence: Mankind's emerging world in cyberspace*. Perseus Books.
- Lizcano, E. (2006). *Metáforas que nos piensan: Sobre ciencia, democracia y otras poderosas ficciones*. Traficantes de Sueños; Ediciones Bajo Cero.
- Logan, R. K. (2004). *The sixth language: Learning a living in the internet age*. Blackburn.
- Maasen, S. (1995). Who is afraid of metaphors? In S. Massen, E. Mendelshon, & P. Weingart (eds.), *Biology as society, society as biology: Metaphors* (pp. 11-36). Springer.
- Manovich, L. (2013). *Software takes command*. Bloomsbury Academic.
- Markham, A. (2003). *Metaphors reflecting and shaping the reality of the internet: Tool, place, way of being*. [Paper presentation] Conference of the International Association of Internet Researchers in Toronto, Canada. <https://bit.ly/3KqjWIu>
- Markham, A., & Tiidenberg, K. (ed.) (2020). *Metaphors of internet. Ways of being in the age of ubiquity*. Peter Lang.
- McQuail, D., & Deuze, M. (2020). *Media and mass communication theory*. Sage.
- McLuhan, M. (1964). *Understanding media: The extensions of man*. University of Toronto Press.

- Meyrowitz, J. (1993). Images of media: Hidden ferment –and harmony– in the field. *Journal of Communication*, 43(3), 55-66.
- Napoli, P. M. (2010). *Audience evolution: New technologies and the transformation of media audiences*. Columbia University Press.
- Neuman, W. R. (ed.) (2010). *Media, technology, and society: Theories of media evolution*. University of Michigan Press.
- Ong, W. (1977). *Interfaces of the word: Studies in the evolution of consciousness and culture*. Cornell University Press.
- Ortoleva, P. (1997). *Mediastoria: Comunicazione e cambiamento sociale nel mondo contemporaneo*. Practice Editrice.
- O'Reilly, T. (2005). *What Is Web 2.0: Design patterns and business models for the next generation of software*. <https://bit.ly/41fQz2t>
- Pepper, S.C. (1942). *World hypotheses: A study of evidence*. University of California Press.
- Postman, N. (1985). *Amusing ourselves to death*. Penguin.
- Rivadulla, A. (2006). Metáforas y modelos en ciencia y filosofía. *Revista de filosofía*, 31(2):189-202.
- Rodrigo Alsina, M. (1995). *Los modelos de la comunicación* (2nd edition). Tecnos.
- Schramm, W. (ed.) (1954). *The process and effects of mass communication*. University of Illinois Press.
- Scolari, C. A. (2004). *Hacer clic: Hacia una sociosemiótica de las interacciones digitales*. Gedisa.
- Scolari, C. A. (2009). Mapping conversations about new media: The theoretical field of digital communication. *New media & society*, 11, 943-64.
- Scolari, C. A. (2013). Media evolution: Emergence, dominance, survival and extinction in the media ecology. *International journal of communication*, 7, 1418-41.
- Scolari, C. A. (ed.) (2015). *Ecología de los medios*. Gedisa.
- Scolari, C. A. (2018). Media evolution. In P. Napoli (ed). *Mediated communication* (pp. 149-68). De Gruyter.
- Scolari, C. A. (2020). From media ecology to media evolution: Towards a long-term theory of media change. In M. Filimowicz, & V. Tzankova (eds). *Reimagining communication: Meaning* (pp. 272-287). Routledge.
- Scolari, C. A., & Rapa, F. (2019). *Media evolution*. La Marca.
- Srnicek, N. (2016). *Platform capitalism*. Polity Press.
- Stefik, M. (1996). *Internet dreams: Archetypes, myths, and metaphors*. MIT Press.
- Strate, L. (2017). *Media ecology: An approach to understanding the human condition*. Peter Lang.
- Van Dijck, J. (2013). *The culture of connectivity: A critical history of social media*. Oxford University Press.

D

In media(tization) studies we love metaphors

- Verón, E. (2014). Mediatization theory: A semio-anthropological perspective. In K. Lundby (ed.), *Mediatization of communication* (pp. 163-72). De Gruyter.
- Wyatt, S. (2021). Metaphors in critical Internet and digital media studies. *New media & society*, 23(2), 406-16.
- Waisbord, S. (2019). *Communication: A post-discipline*. Polity Press.
- Winkin, Y. (1981). *La nouvelle communication*. Seuil.
- Zuboff, S. (2019). *The age of surveillance capitalism. The fight for a human future at the new frontier of power*. Public Affairs.

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