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The evolution of the public sphere

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Single Sentence Summary: Publicity or the public sphere has evolved with complex societies from their very outset adopting different forms as a result of a complex dynamics between two kinds of communication media, namely, success and dissemination.

Abstract:

Purpose

The aim of this article is to rethink the issue of publicity from a cross-cultural and evolutionary perspective.

Design/ Methodology/ Approach

Assuming that there is a dominant paradigm in the studies of the public sphere centered on Habermas' ideas, media theory (and especially Luhmann, taken as a media theorist) is selected as a new context providing different concepts, ideas, language-games, and metaphors that allow the re-foundation of the study of publicity.

Findings

Publicity as a social structure emerges –and acquires different forms during history– out of the complex dynamics resulting from the interaction between success media, such as power, and different kinds of dissemination media.

Originality/ Value

A research into the forms of publicity not only promotes awareness of the ubiquity of the phenomenon across cultural evolution, but also offers tools to make new discoveries and systematize what is already known about the subject and its ramifications. Keywords: Publicity, Public Sphere, Medium/ Form, Communication Media, Mediality, Sociocultural Evolution, Media Theory.

Type: Conceptual paper

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1. Introduction

As soon as a colleague learns that someone in her/his department is interested in publicity, publicness and/or the public sphere, she/he might immediately make some remark with reference to Habermas' *The Structural Transformation of the Public Sphere (1999)*. Habermas' concepts and ideas have become common places and are so deeply rooted in our culture, that it becomes hard to make oneself clear if daring to talk about the subject using other language-games, concepts and/or reference frames. It is striking how difficult it is to talk about a wellknown issue without walking the well-trodden path. When trying to innovate expectations are raised too high and they become easily disappointed due to the fact that it is impossible to fulfill everybody's expectations. Nevertheless, if one is to re-think some problem, if one is to rephrase it in unconventional ways, that is exactly the risk to be taken.

The fate of this kind of enterprise seems to oscillate between pouring old wine in a new bottle and that of advancing ambitious yet disappointing alternatives. The difficulties are so huge as to cause faint and dismay. Yet, what if we face the challenge with some creativity? Let us try a thought experiment.

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Let us make as if we had no theory of the public sphere. Let us make as if Habermas' book does not exist. How could we theorize about the public, publicity, publicness or the public sphere? To what theories would we reach out to? To which concepts would we resort to in order to construct the object "public sphere"? What can be taken as the starting point?

For certain, Habermas did not invent the concepts of the public and the public sphere. What Habermas delivered was an interpretation and a systematization of the theories of the public opinion that emerged short before, during, and after the French Revolution. So the first question is: should we accept the framework provided by the tradition of the Enlightenment? Should we take for granted that the problem of publicness and/or its conceptualization is a hallmark of western history and western societies?

If we are interested in normative political theory and the theory of democracy, it seems obvious that there are hardly better alternatives. After all, therein lies the origins of modern democratic systems. The political language of today is the heritage of the enlightened philosophy. The intellectual historian would also consider that there is no other point to begin with, since there are no earlier sources accounting for the phenomenon.

However, if we try to think of a theory of publicity as such, we are in no need to make the assumption that the public sphere is a modern phenomenon —just as archaeologists do, for physical evidence suggests that cultures at different stages of development tend to create "public spaces". It must be recognized that the semantics of publicity and public opinion only acquired relevance and became systematic during the French Revolution and later —at least that is what the available sources allow to tell. Notwithstanding, if we are interested in the question of publicity as a socio-structural feature —or in other words, as a transformation of the form of organization of a society— it is necessary to think in more general terms. One cannot think, as some historians usually do, in terms of —almost unrepeatable— singularities. On the contrary, the investigator has to ask

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herself/himself how and under which conditions certain societies can acquire those features, patterns or behaviors described as publicity, public sphere, publicness, and the like. And this is a very reasonable approach for it is well-known that other societies, such as China, have developed concepts of the public and have seen the emergence of public spaces —see, for instance, (Jansen, 2000).

The point is that, independently of the question of who came first with the idea and the institution, societies and political systems under certain conditions become public and/or develop some sort of public sphere. Which are these conditions and how is it possible for these possibilities to reproduce or to materialize in different cultural and temporal contexts? What if we begin to think of the public sphere as Janus-faced: on the one hand, there is the semantic side (of which pretty much is known —at least for western social systems); and on the other, there is a sociostructural side, the darker side, of which much is ignored, or else what is known is poorly systematized?

Which theories, traditions and backgrounds can be mobilized in support? What concepts, language-games and/or metaphors can help us to make of this issue a scientific object of knowledge?

It will be suggested that media theory, and specifically the contributions of Niklas Luhmann to this field, represent a promising alternative to achieve this goal.

2. Media studies and the public sphere

As is the case with many others social concepts, such as power, community, society, and so on, the concept of the public sphere embraces the whole of the social sciences: political science, sociology, social psychology, history, philosophy, media studies, journalism, communication sciences, and even economics, all of these sciences shed some light on at least one dimension of the problem. As a consequence, concepts such as the public sphere play the role of semantic and conceptual crossroads between these disciplines. The result is not only a polysemic Gordian knot, but also the contexts in which to meaningfully place the

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concept are multiplied. And not only linguistic contexts helping to elucidate the meaning of the concept are being touched on, but first and foremost scientific contexts consisting in corpuses of literature, theories, methods, language-games, etc. Therefore, there are far too many theoretical choices available to grasp the question of publicity.

But if there are so many alternatives why are we opting for media theory and how can this theoretical decision be justified?

Relating publicity to media seems, in fact, an obvious and by no means original choice. Many scholars have remarked that the development of publicity (or a new form of publicity) has been tightly linked to the invention of the printing press —a thesis closely linked to the ground-breaking works of Elizabeth Eisenstein (1979; 2005). However, drawing conclusions and generalizations from this fact has proved troublesome. There is no a clear and lineal causal relationship between literacy, the multiplication of public spheres and the growth of public opinion. For instance, there is a lack of correlation between the spreading of printed material (pamphlets, newspapers, books, and so on) and the levels of literacy in the population (Petrucci, 1988;Shofield, 2005; Farge, 1995) and it is hard to tell if and to what extent this phenomenon by itself became a source of social and political change. The truth be told, most part of the historians prefer to explain the emergence of the public sphere as a result of the evolution of democratic and representative political systems during the so-called age of revolutions (Pocock, 2003; Edelstein, 2009; Fontana, 2008) — neutralizing the problem of the growth of information caused by modern media by labeling it as a "cultural transformation". So it is known that the printing press, especially in the form of newspapers (Barker and Burrows, 2002), played a crucial role in political representation, nevertheless, accounting for the reasons of this outcome have proved difficult. The fact that historical evidence suggests that different and heterogeneous media come at play in times of social upheaval (Darnton, 2010) only contributes to make the problem more puzzling. Remarkably, most of the explanations have taken the path of political philosophy and turned into normative justification; the marriage of free press and democracy has become a matter of principle, the foundations of modern polity.

In light of these assumptions, social sciences currently deal first and foremost with the question of if and to what extent new media threaten the marriage with democracy. Although written 20 years ago the state of the art depicted by Paolo Carpignano (1999) still claims validity:

"That the current dynamics of the public sphere are intrinsically related to the development and transformation of the media environment, is hardly a new discovery...And yet, in academic analysis the media and the public sphere have remained relegated to their respective domains, media studies on the one hand, and sociology and political science on the other. Exploring the connectivity and interference of these two strands of research has, at best, meant putting them side by side to see how they add to or subtract from each other, while leaving intact their conceptual definitions. Thus, for example, from the viewpoint of the public sphere it has been a matter of evaluating to what extent the media affect or distort the expression of free public discourse, and from the viewpoint of the media, of seeing what kind of a public function it might be able to perform, as in the case of the unending discussion about the advantages of public versus private ownership of television." (p. 178)

If media studies are to provide a framework to rephrase the issue of the public sphere, they have to deliver an explanation of both: a) what is exactly the role of the media in the emergence of the public sphere?; and b) how and why do media (printing press, television, social media) bolster transformations in the organization of society and the political system? Nevertheless, first of all, media theory has to account for the conditions of the possibility for the emergence of something like the public sphere; it has to provide, to state it again, a sort of genealogy of the public.

Media studies are a complex interdisciplinary and transdisciplinary field. Although it might be questionable to call them a discipline, there is no doubt that the field has experimented an exponential growth in the last decades. In media studies we can find media archaeology, media history, media philosophy, media sociology, and mediology. As a matter of fact, there is no consensus about the meaning of the fundamental concept of medium. However, that seems to be the

hallmark of disciplinarity in most cases: an implicit agreement about the profound disagreement regarding the meaning of the most crucial notions defining a research field. As a result, there is an interesting ecology of media theories. Let us briefly review some of the most influential:

- Marshall McLuhan and the Toronto School: For many media theorists McLuhan was a visionary and, indeed, he was. Although the characterization of media (hot media vs. cold media; the eye vs. the ear, electronic vs. typographic and so forth) is one of the most speculative and questionable facets of his work, many of his ideas are still inspirational in media studies research. For instance, that: a) media contain other media; b) the medium is the message, for it is not content what is important but the change of scale produced by the medium itself; c) media mark the character of civilizations, namely, their forms of sensibility, their artistic forms of expression, and their political organization; d) media are extensions of human senses for they shape perceptions, feelings and ways of thinking; and, finally, that e) mass media, such as electronic media, stand out for creating simultaneity and restoring causality (McLuhan, 1994). The idea of a conflict between the eye and the ear was also supported by the contributions of Walter Ong (Ong and Hartley, 2012), Eric Havelock (2004), and Jack Goody (Goody and Watt, 1963) —although Goody, properly speaking, do not belong to the so-called Toronto School- regarding the nature of oral societies, their social memory and how these social systems faced literacy and literate societies. It is significant to remark that McLuhan himself was not interested in something like "the effects of media in the public sphere", because from his point of view media worked not on the discursive and rational side of man, as expressed in public opinion (itself a creation of literate societies), but on the sensitive side. The public sphere was to him mere content, "debased forms of human expression and experience" (McLuhan, 1994, p. 210).
 - *Friedrich Kittler and media archaeology*: Media theory, as devised by Kittler, is the outcome of the tradition of French structuralism. Kittler combined

Foucault's archaeology with presentism —understood as a critique of hermeneutics, put forward by H. U. Gumbrecht and others— and in the search for the archives of culture, he discovered the importance of technical media (Kittler, 1999). For Kittler the information flows generated by technical media stand for the *Real* and become the basis for the *Imaginary* and the *Symbolic* (Kittler and Gumbrecht, 2013, p. 48). Paraphrasing Kittler: media, as the real, determine our situation. Again, the issue of the public sphere is barely mentioned.

- Sybille Krämer and the theory of transmission: What is striking about Krämer's media theory is her contribution to the definition of the mediality of media, namely, its singularity and defining trait as a social phenomenon. Krämer understands that all media deal with communicative issues and that all communicative actions or processes involve transmission. Therefore, she sets about to unravel the implications of a deep-seated cultural metaphor, namely, that of Hermes, the messenger. The main idea suggests that communication implies connecting two different worlds or entities and that the bridge allowing this connection are media; communication media enable the transmission of messages, however, they can only fulfill this function as long as media themselves remain invisible —otherwise, noise emerges. Significantly, this postal model of communication is contrasted to an erotic model of communication where communication is understood as dialog, understanding and whose goal is to integrate individuals in social interaction and into a community (Krämer and Enns, 2015). In trying to debase the erotic model of communication Krämer makes of publicity, understood as public and rational deliberation about issues concerning the welfare of the community, something utopic ---or simply a wrong description of what is really going on.
- Bolter & Grusin's remediations: The thesis of Bolter and Grusin (1999) is that new technological media oscillate between two contradictory logics, namely, immediacy and hypermediacy, transparency and opacity. Inasmuch as new media promise to render evermore authentic experiences, as long

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as successful, they achieve immediacy. However, since media depend on other media and were developed from previous older media, and since often interactive interfaces involve multiple media (multimedia), the experience of media is more than ever hypermedial. Remediation is the concept that allows the observer to keep track of the ways in which media refashion the technological network they are embedded into. One more time, there is no reference to publicness, publicity or the public sphere.

- Regis Debray's mediology: Debray was interested in the power of signs and he reached the conclusion that only by studying the materiality of meaning could this phenomenon be understood. Therefore, for Debray the medium appears as the material trace of meaning —that is, forms of inscription or of archiving. But the function of media is far more complex: media are procedures of symbolizing, a means of social communication, and are embedded in distribution networks that involve a flow of labor, know-how, knowledge, in short, a process of mediation. That is how media produce meaning, namely, by mediating. However, that process of mediation also involves the set of social conditions that makes it possible, that is, a media ecology. The issue of public opinion concerns Debray inasmuch as it reveals an instinctual mediology, that is to say, a historical instance (eighteenth century) when the powerful realized of the power of words (Debray, 1996, p. 98).
- Stieg Hjarvard and the concept of mediatization: In contrast to the literature reviewed so far, the work of Hjarvard is inscribed within the more traditional current of media sociology. For Hjarvard (2013, p. 19) mediatization consists in a long-term process whereby the growth of the influence of media alters cultural institutions and modes of interaction. What is remarkable is not the problem in itself, because it has been addressed by many others theorists. His contribution consist in distinguishing between mediation and mediatization, in other words, what Hjarvard achieved was to isolate a problem from a far more general context. However, the author tackles the problem of the public sphere resorting to the framework of the marriage

between publicity and democracy —an insight from which we wish to take some distance.

It is not by chance that most of the media theories ignore the issue of the public sphere. They all want to point to something that underlies our common assumptions about what media are and how do they relate to politics and society. And the case of Hjarvard is just like the exception confirming the rule, because the need to distinguish between mediation and mediatization reveals the presence of different layers of complexity and the recognition of the distinctiveness of the mediality of media. Particularly remarkable is the case of Krämer, for she explicitly accounts for the opposition between the Habermasian model of communication and the postal model for which she advocates. Certainly, as Carpignano (1999) showed, the mediology of Debray can be tuned in to Habermas theory of the public sphere. However, that can only be achieved at the expense of the silences and subtle suggestions found in the work of Debray. In short, what is notable of these theories is that they make implausible the Habermasian model of the public sphere, because they point towards the rules constituting experience and discourse, towards the technical conditions of possibility of transmitting speech and experiencing someone else's voice or look; to put it another way, these theories undermine the normative and dialogical assumptions on which Habermas built his thesis.

The question is: how can media theory help us to think of the emergence and evolution of the public?

3. Niklas Luhmann and his theory of communication media

In spite of the heterogeneity of the approaches reviewed above, there are some common denominators. The first is that media are deeply related to the problem of communication. The second is the thesis that the communicative function played by media is that of mediating between two or more separate entities by means of transmitting a message from one point to another —an idea that Shannon & Weaver's (1975) *Mathematical Theory of Communication* has helped to root.

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Regarding the first idea, it is an important point to make: communication theory should be the framework of media theory. However, with reference to the second idea, the postal model of communication —as Krämer described it— relies on a few assumptions the author would not wish to follow.

Transmission is just an instance of technically supported communication, but it cannot be made the ultimate model of communication (Luhmann, 1995a, p. 140; 2012, p. 37) Besides, thinking of communication as transmission of messages involves the fallacy of *telementalism* (Harris and Wolf, 1998), that is to say, it is taken for granted that humans think of something and decide to communicate it to others by translating their thoughts to language and by emitting sounds others can hear and understand. This is a quite popular but utterly oversimplified and erroneous way of "thinking" of language, thought and communication. It is just a language-game or a discourse which creates its own subjects, objects and manners for attributing action and passion that neither stands for the truth nor provides an accurate (or at least, thought-provoking) description of what is going on. It is ironic how contradictory it is for theorists who advocate materialism or materiality (just like media archaeologists) to fall pray of assumptions like these.

As a result of availing of the concept and metaphor of transmission, the function of media or the mediality of media, is confused with the technical procedure of transmitting a signal. In other words, communication technologies (carrier pigeons, smoke signals, electrically and/or electronically transmitted signals...) and the materialities supporting communication processes (stone, papyrus, paper, and so forth) are being conflated with *mediality*, which is to say, —interpreting McLuhan the scaling up of information.

Within this context our attention shall be drawn to a cybernetic approach to media developed by Niklas Luhmann. The reason is that in contrast to other media theories that have fallen victim to the metaphor of mediation and transmission, the German sociologist observes media through the glasses of a distinction, namely, the difference between medium and form.

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At this point the informed reader might wonder why to try with Luhmann's media theory and not to straightforwardly address his conception of the public opinion (Luhmann, 1994; 2000a; 1990a; 2002, pp. 274-318) and compare it to Habermas —after all, the Habermas-Luhmann controversy offers an attractive point of departure. There has been indeed an interesting reception of Luhmann ideas in the literature concerned with the public sphere and mass media (Bechmann and Stehr, 2011; Gripsrud and Eide, 2010; Bentele, 2003; Gestrich, 2006; Marcinkowski, 1993; Landgraf, 2015; Marcinkowski et al., 2009). However, one gets the feeling that the ideas of Luhmann have been emasculated because what has been at stake is what answers could Luhmann provide to the problem of the public sphere, and not how could the problem of publicity/public sphere be system-theoretically (re)formulated.

In a similar vein, the reception of the controversy between Habermas and Luhmann has tended rather to emphasize the convergences between both authors, assuming that in order for political science and political theory to adopt Luhmannian systems theory it is necessary first to reconcile it with normativism (think, for instance, in the writings of Hauke Brunkhorst and Poul Kjaer, among others). This essay could have certainly begun by making a critical assessment of the reception of Luhmann ideas about the public sphere and write another chapter in the Habermas-Luhmann debate, notwithstanding, this path would have lead astray from point the author wants to make: that the modern public sphere is a late outcome of the evolution of communication media and that sociocultural evolution has produced a wide range of publicity forms —something well beyond the terms of the Habermas-Luhmann diferendo and irreducible to a matter of political theory.

It is suggested that by digging in in Luhmann's sociology, specifically in his theory of communication media, one could find the general guidelines of a model that would account for how publicities emerge and what conditions their evolution.

It should come as no surprise that the most suggestive descriptions Luhmann made about the distinction of medium and form appear in his writings about arts Page 13 of 66

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(Luhmann, 2000b; Luhmann and Roberts, 1987). Since arts are the domain of the form, the field for experimenting with form, perception and communication, it seems logical that any attempt the trace a genealogy of media begins precisely at this point. No wonder that the origins of writing are intermingled with forms of artistic expression (Schmandt-Besserat, 2007); no wonder either that we, as western observers, tend to confuse the communication media of other cultures with arts (Golte, 2009; Blanco Rivero, 2018)

However, a discussion about the issue of the origins of the distinction will be avoided, for the problem has already been exhausted (Baecker, 1999; Esposito, 2004; Esposito, 2006; Schiltz, 2003; Brauns, 2002; Stäheli, 2018); it is well-known that Luhmann made a very creative interpretation of Fritz Heider's theory of perception, turning it into a principle of cognition. Further, Luhmann's earlier ideas concerning modal theory and the notion of symbolic generalization (closely related to Parsonian sociology) shall be counted as the first conceptualizations of the theory of communication media. In any case, in contrast to the Parsonian theoretical design (still impregnating Luhmann's late writings), we shall interpret media based primarily on the latest Spencer-Brownian theoretical design (Roth, 2017).

In this sense, tracing a sort of conceptual history that splits the notions of form and medium leading to the conclusion that there are different concepts of medium in Luhmann —for there is little doubt that the concept of form is closely knitted to the work of Spencer-Brown (Baecker, 2013a; Baecker, 2013b; Schiltz, 2007)— is also of little interest to us. From a logical-formal point of view, such as that advocated by Luhmann himself, what matters are differences and differences even the temporal ones— are always simultaneous.

Straightforwardly, a medium consists of the unity of two sides, on the one hand, loosely coupled elements that constitute the *medial substrate*, and on the other hand, tightly coupled elements giving rise to *forms*. From this very simple idea, Luhmann draws a series a theoretical conclusions involving not only the

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dimensions of time, objectivity and sociability, but also the philosophy of science (Luhmann, 1995b; 2000b, pp.102-120; 2012, pp. 113-120; 1991a; 1999) (Table 1).

Indeed, the idea is not always easy to follow and, as to its theoretical backgrounds refers, it might seem quite arbitrary or far-fetched —especially if the reader strands in the references to Heider. In light of these remarks, computer models can provide valuable insights, first, by allowing the reader to visualize and play with the model, and second, by showing that isomorphic behavior also takes place in other realms of nature. The kinetics of enzymes (Stieff and Wilensky, 2001a) (Figure 1) and a model representing LeChatelier's Principle (Stieff and Wilensky, 2001b) (Figure 2) are two examples of patterns resembling a complex dynamics of (*form*)ation and dissolution (medium).

By comparing these models with the descriptions provided by Luhmann, a distinction might be brought to the attention of the observer, namely, the difference between the distinction medium/form itself and what shall be called mediality. As a distinction the first thing being brought to the fore is that the difference medium/form is drawn by an observer (she/he does not need to be human at all) and that, in the act of being performed, it appears as form. For only forms can be observed; only distinctions can yield information. As a distinction and therefore, as a two-sided form, it has significant implications for the architecture of the theory and, in broad terms, for the philosophy of science (i.e. it is by drawing this distinction that systems theory intends to replace ontology). But if we turn towards the other side, what remains is mediality as potential, as structured and nonarbitrary contingency. By distinguishing between the distinction and mediality we are discriminating between the observation itself and what is being observed. However, again, the distinction is also a form —this is the paradoxical side; seen the other way around, the distinction medium/form is self-referential because it is almost impossible to define it without implying it at the same time —here is the tautological side.

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In any case, emphasis should be placed on mediality. The very etymology of the word is tricky for the reason that it seems to suggest a quality or essence. Notwithstanding, was is meant is —in Spencer-Brown's terms— the link between marking and crossing, namely, latency, uncertainty, in short, the capacity to produce information. If asked for a description accounting for the unity of the difference of medium and form, it could be said that media are *information sources*.

The Enzyme Kinetics model (Figure 1) nicely illustrates this point: red shapes couple with green triangles to form an envelope-looking shape —here the act of tight coupling can be seen; but when an enzyme-substrate is formed (envelop-looking shapes) a blue triangle emerges as a product —by the same token, the emergent outcome of communication media is information.

Just as media cannot emerge but within social systems (Luhmann, 2000b, p. 104), information cannot emerge outside media (of course, in order for information to be brought about observers are needed —and that is precisely what social systems are). The point is that information is media-relative; there is no transmission of information, only signals are transmitted, only data is stored.

Now, if we are right, the concept of communication devised by Luhmann becomes problematic (Luhmann, 1995a, pp. 148-158). Looked at closely, it becomes obvious that when Luhmann thought of communication he was envisioning the most common and pervasive communication medium in society, that is, language. Utterance, the truth be told, is a valid description of the second selection integrating communication only within the medium of language. But actually communication cannot be brought about without the *selection of a communication medium* in which frames the meaningful interplay between information and understanding finds its place.

This re-description remains consistent with the rest of the theory, for instance, the description of meaning —in the vein of Husserl's phenomenology— as a preand supra-linguistic phenomenon (Luhmann, 1990b) and, especially, the assumption that communication media overcome the improbability of communication being accepted (success media) and of extending its outreach (dissemination media), thus steering sociocultural evolution (Luhmann, 1990c).

4. Communication media and sociocultural evolution

Luhmann intended to base his sociology on a tripod consisting of systems theory, communication (media) theory and evolution theory, whereby each of these self-referential theories would back each other in a mutual limitation relationship. Evolution theory would account for complexity growth and system differentiation, while communication media theory and systems theory would explain the emergence of mechanisms of variation, selection, and re-stabilization (Luhmann, 1991b) —please notice that this very same tripod is the structure of his magnus opus *Theory of Society* (Luhmann, 2012).

In this guise, the German sociologist assigns to language the function of variation in the context of segmented social systems; writing and printing press, on the other hand, are made responsible for the differentiation of interaction and society while holding the selection function (together with success media such as power and money) in the transition to a functionally differentiated society (Luhmann, 1981; 1991c; 1990d; 1995a, pp,159-163; 2012, pp. 120-180) —this is, of course, a very tight synthesis.

Within the framework briefly sketched above the author would like to bring to the fore the evolutionary dynamics between success (power, money, love, and truth) and dissemination media (writing, printing press, electronic media). This is an underdeveloped dimension of evolution theory or sociocultural evolution with tremendous potential for theoretical development. Specially because there is a vast repertoire of empiric research in the fields of cultural anthropology, history of the book, history of literacy, paleography, art history, political anthropology, intellectual history, media history and media archaeology/ archaeology of media, among others, that could be used not only to support research hypothesis, but also, eventually, to provide data to run computer simulations. Page 17 of 66

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For the moment, a brief survey of the main literature of these disciplines suggests that the relationship between success and dissemination media is complex, dynamic, non-linear, chaotic, self-organizing and adaptive. Since there are too many intervening variables, the author shall focus on the medium of influence/power on the grounds that this medium (especially political power) plays a crucial role in fostering and in putting obstacles as well in the development of dissemination media —Goody (2000) again offers interesting supporting evidence in this regard. Moreover, literature tends to lend more attention to power than truth or money, not to mention love.

In the first place, there is a strong connection between the processes of generalization and symbolization of influence and the development and extended use of primitive dissemination media, such as the erection of stelae (which eventually might show inscriptions or depictions) and building complexes. A positive feedback loop arises between big men longing for more influence and artisans (or priests, as in the case of the Maya people) that gain social status and enhance their skills by crafting a wide variety of artifacts and structures.

In the second place, when conditions are appropriated, dissemination media get an impulse of their own carrying social consequences that cannot be totally controlled by political organizations —in fact, they cannot be organizationally controlled. For instance, Europe between the Renaissance and late modernity constituted a social system integrated by different political organizations, none of them being able to exert sovereignty over the whole region —although universal monarchy persisted as an unrealized ideal of submitting Europe under a same crown. As a result, boundaries between states not only became a source of irritation for the organization of power (monarchic or republican), but also served for maturing conditions for the printing press to develop, not only furthering new forms of sociability (Lilti, 2017; Sauter, 2009), but also opening up a new and profitable market: the book market (Darnton, 1979). Furthermore, the literature about the emergence of the modern public sphere in Europe shows how the printing press challenged power structures (traditional forms of authority, as

historians say) (Darnton, 2014; Melton, 2001; Sawyer, 1990) But on the other hand, as Luhmann showed, it also meant the growth of complexity of the medium of power and the emergence of a functionally differentiated system for politics (Luhmann, 2002).

Success and dissemination media behave like a dynamical system exhibiting very interesting patterns. Under some configurations scaling can be observed, especially when a determined medium such as the printing press or architecture is boosted; but in other cases, the existing media ecology results in a variety of potential equilibrium states. Our thesis is that within this *Spielraum* (play space), among the medialities of these media, there arises what I shall call forms of *publicity*.

5. Forms of publicity

Up to this point the reader might wonder what allows the author to say that whatever that emerges between success and dissemination media is public or can account for publicness.

If, as a starting point, it is considered that common usages of the concepts of publicity, public, publicness, and public sphere have to do with a kind of action (namely, to make something known), with a type of social space where this sort of actions are performed (i.e. theaters, squares, forums, balconies, and so on), involving the usage of some kind of material (e.g. stone, textiles, ceramics, furs, paper, wood, pigments, etc.) and/or some kind of technology (e.g. painting, dancing, rhetoric, sculpting, writing, printing, broadcasting, transmitting, and so forth) serving for this purpose, and last but not least, that these kind of behaviors are observed in every known type of social system —regardless of the semantic artifacts employed to describe them—, then, it is justified to call publicity any social setting enabling and being enabled by the observation of observations (second order observation). For this is what, in the end, publicity reduces to: the two-sidedness of visibility and invisibility, distinction and indication, markedness and unmarkedness, form and medium, publicness and secrecy.

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In light of these considerations, and without trying to be exhaustive, five forms of publicity can be identified (Figure 3):

- a. Ritual: Ritual seems to be ubiguitous at all levels of social complexity. In ancient social formations normative expectation structures usually take the shape of rituality, while in modern ones its efficiency is subdued to functional systems (e.g. as liturgy in the system of religion or as protocols symbolizing sovereignty or majesty in the political system). Still, there are always certain kinds of rituals (or, there is always a side of rituals) that shape and define group identities -even in our modern rationalized and secularized world. Exactly this reference to a definite whole is what makes the publicness of ritual. Unity has to be represented, symbolized, embodied, and/or animated (visibility), but at that very instant when unity is indicated, the contingency of the selection appears as latency, as a potential source of divergent interpretation, as means to express disarray or to institute the dominance of a new self-proclaimed elite (invisibility). The difference between invisibility and visibility is invariably accomplished by dissemination media at different levels: the architectural layout is typically inscribed in a program of graphic display (Petrucci, 1999), therefore, architecture also works as a dissemination medium (Moore, 2005); scriptures, symbols, paintings, ceramics, and the like, not only represent and/or reproduce a set of beliefs of crucial importance for the ritual but also play a performative role in the execution of the ritual; rituals can also be represented in rituals by means of dissemination media, performing thus a reentry of the form into the form. In spite of the standardized pragmatic dimension of rituality (i.e. the ritual performance as such), ritual involves a highly dynamic and flexible communication structure. This means that authority, influence, power and truth are always at stake in the ritual praxis (i.e. there are often challenges to the capacity of the elite to monopolize among the populace the authority to officiate rituals) (Swenson, 2006; 2011). Although commonly embedded in ritual, the following two forms deserve special attention because of their specificity.

- b. Feasting/Commensality: Sharing meals is a common pattern of socialization across many different cultures and this occurs mostly under the figure of feasts with a lot of food and drink. Feasting or commensality may have a religious connotation but it also accomplishes an important redistributive function. Feasts are occasions and social locations to see and to be seen: big men can exhibit their generosity, powerful chiefs can show their richness and magnanimity (competing with their rivals), tribal leaders can reinforce their bonds and achieve the necessary trust for consolidating alliances, and so on. Greek city-states, for instance, made of commensality a republican institution. Inasmuch as social formations became bigger and more complex, commensality lost its function of reaffirming community bonds (Bray, 2003).
- c. Games: Playing games is a common form of ritual. Games usually represent or intervene in the realm of natural forces in order to restore or guarantee cosmic equilibrium or assure good harvests. Independently of their goal, games involve staging: a well-delimited location where the players do their performances, and a periphery, delimited or not, from which the game is watched. Either the nature of games becomes religious or martial, they serve to expose individual performances to the eye of others: strength, ability, bravery, sagacity, intelligence, leadership, and so on. From this standpoint, social ranking differences are profiled, put to test and/or reaffirmed. Therefore, games are a suitable ground for developing strategies for symbolizing power (e.g. by representing a pinnacle of the system under the figure of the ruler) (Huizinga, 1980; Gentile, 1998; Scarborough et al., 1991; Baecker, 1999b).
- d. *Punishment*: The ability to punish the transgressor and at the same time to give example of the right behavior (whereby some power technologies such as confession, truth-telling, and avowal play a salient role (Foucault et al., 2014)) constitutes one essential feature in the structuring of power as a success medium (Foucault, 1977). Punishment is the execution of a penalty which in the same act of being performed dissuades other potential

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transgressors. This is how influence inflates to political power (Luhmann, 2002, pp. 63-65). Exposing the suffering of the punished is essential for its purposes (i.e. showing the corpses of the victims at the main square, announcing executions orally or in the newspapers for people to congregate and watch the spectacle, carving a stone depicting imprisonment and/or executions, and so on). Therefore, power and dissemination media weave together in the form of punishment with such intensity, shaping a long-lasting structural drift in sociocultural evolution.

e. Modern publicity: The heterarchy of modern functionally differentiated society owes pretty much to the modern form of publicity and vice versa. Modern publicity emerged since the eighteen century, when the semantics of publicness and opinion merged and entangled with the process of growing structural complexity of political power. In other words, the evolutionary process which fused the function of keeping the capacity of taking collective mandatory decisions with the solution consisting in achieving communicative success by means of the threat with sanctions (positive or negative), availed of the semantic of publicness in order to afford more contingency in the processes of decision-making and gain in complexity. Semantic and social structure created a loop, concretely a positive feedback, wherein semantic variations went in hand with political innovations. As a result, power acquired such a structural complexity never seen before in sociocultural evolution, namely, it became able to support second order observation, to inflate and deflate, it acquired processual reflexivity and a second coding (government/ opposition), it became able to symbolize the inclusion of the exclusion, and finally, it set the conditions for the differentiation of the functional system for politics (Luhmann, 2012, pp. 214-235). At the same time, while other functional systems also adapted to second order observation, the political semantics of publicness still continued to dominate the social self-descriptions of these developments – as a consequence, political publicity currently fixes most of the social

expectations regarding observing observations and the scientific descriptions of it.

6. Concluding remarks

Since interdisciplinary research about the public sphere constitute a discourse of its own with its characteristic concepts, problems and ways of thinking, the author has tried to bring to the fore an alien context with different keywords, assumptions, problems, and perspectives from where to rethink the problem of publicity as a socioestructural feature in the evolution of social systems. The thought-experiment consisting in making as if Habermas' work on the public sphere does not exist, allowed us —as a heuristic resource— to bring to the fore the theory of media in order to play this role. The advantage of media theory consists in that it has consciously avoided what the scientific and social discourse about the public sphere has taken for granted. In this sense, important contributions to the understanding of mediality and its technological and material dimensions have been made. The implications for the knowledge of the constitution of the public sphere are clear: nothing can be made known in the absence of communication media, no matter their degree of technical sophistication —and far from being a commonsensical statement this has deep theoretical overtones.

However, media theorists rely heavily on the problematic notion of transmission. In fact, the distinctiveness of transmission consists in the coupling of "media" of two different types, namely, physical and communication media. The first condition consists in finding structural regular patterns within physical media (i.e. the longitude of radio waves, patterns of electrical pulses, and so on) which are susceptible of manipulation, then, by means of specially ad hoc fashioned devices, the medium is employed to produce signals (i.e. a codified unit-pattern within the medium that, in turn, codifies one by one the units of a symbol-system) which are sent from one physical emitting point to another receiving point. Although these technologies have defied time and space, radically enhancing the function of dissemination media and their relationship with the material world, they and their

effects cannot be confused with the long-lasting performance of communication media as such. Mediality as the hallmark of communication media consist in their potential to generate and scale up information and thereby to increase social complexity.

In reading Luhmann as a media theorist not only an insight into mediality is gained, but also a framework that allows us to systematize the knowledge produced by diverse disciplines. Furthermore, complexity sciences offer a wide variety of methods, such as *Agent-based Modeling*, to study the interaction between success and dissemination media adumbrating future theoretical advancements.

Finally, the author wishes that more than a list with some forms of publicity, the reader retains the idea of the ubiquity of the phenomenon of publicity throughout social and cultural evolution and that the media evolution theory being advanced here offers concepts, ideas and intuitions that can help to account for it.

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The evolution of the public sphere

Single Sentence Summary: Publicity or the public sphere has evolved with complex societies from their very outset adopting different forms as a result of a complex dynamics between two kinds of communication media, namely, success and dissemination.

Abstract:

Purpose

The aim of this article is to rethink the issue of publicity from a cross-cultural and evolutionary perspective.

Design/ Methodology/ Approach

Assuming that there is a dominant paradigm in the studies of the public sphere centered on Habermas' ideas, media theory (and especially Luhmann, taken as a media theorist) is selected as a new context providing different concepts, ideas, language-games, and metaphors that allow the re-foundation of the study of publicity.

Findings

Publicity as a social structure emerges –and acquires different forms during history– out of the complex dynamics resulting from the interaction between success media, such as power, and different kinds of dissemination media.

Originality/ Value

A research into the forms of publicity not only promotes awareness of the ubiquity of the phenomenon across cultural evolution, but also offers tools to make new discoveries and systematize what is already known about the subject and its ramifications.

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Keywords: Publicity, Public Sphere, Medium/ Form, Communication Media, Mediality, Sociocultural Evolution, Media Theory.

Type: Conceptual paper

- 1. Introduction
- 2. Media studies and the public sphere
- 3. Niklas Luhmann and his theory of communication media
- 4. Communication media and sociocultural evolution
- 5. Forms of publicity
- 6. Concluding remarks

1. Introduction

As soon as a colleague learns that someone in her/his department is interested in publicity, publicness and/or the public sphere, she/he might immediately make some remark with reference to Habermas' *The Structural Transformation of the Public Sphere (1999)*. Habermas' concepts and ideas have become common places and are so deeply rooted in our culture, that it becomes hard to make oneself clear if daring to talk about the subject using other language-games, concepts and/or reference frames. It is striking how difficult it is to talk about a wellknown issue without walking the well-trodden path. When trying to innovate expectations are raised too high and they become easily disappointed due to the fact that it is impossible to fulfill everybody's expectations. Nevertheless, if one is to re-think some problem, if one is to rephrase it in unconventional ways, that is exactly the risk to be taken.

The fate of this kind of enterprise seems to oscillate between pouring old wine in a new bottle and that of advancing ambitious yet disappointing alternatives. The difficulties are so huge as to cause faint and dismay. Yet, what if we face the challenge with some creativity? Let us try a thought experiment.

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Let us make as if we had no theory of the public sphere. Let us make as if Habermas' book does not exist. How could we theorize about the public, publicity, publicness or the public sphere? To what theories would we reach out to? To which concepts would we resort to in order to construct the object "public sphere"? What can be taken as the starting point?

For certain, Habermas did not invent the concepts of the public and the public sphere. What Habermas delivered was an interpretation and a systematization of the theories of the public opinion that emerged short before, during, and after the French Revolution. So the first question is: should we accept the framework provided by the tradition of the Enlightenment? Should we take for granted that the problem of publicness and/or its conceptualization is a hallmark of western history and western societies?

If we are interested in normative political theory and the theory of democracy, it seems obvious that there are hardly better alternatives. After all, therein lies the origins of modern democratic systems. The political language of today is the heritage of the enlightened philosophy. The intellectual historian would also consider that there is no other point to begin with, since there are no earlier sources accounting for the phenomenon.

However, if we try to think of a theory of publicity as such, we are in no need to make the assumption that the public sphere is a modern phenomenon —just as archaeologists do, for physical evidence suggests that cultures at different stages of development tend to create "public spaces". It must be recognized that the semantics of publicity and public opinion only acquired relevance and became systematic during the French Revolution and later —at least that is what the available sources allow to tell. Notwithstanding, if we are interested in the question of publicity as a socio-structural feature —or in other words, as a transformation of the form of organization of a society— it is necessary to think in more general terms. One cannot think, as some historians usually do, in terms of —almost unrepeatable— singularities. On the contrary, the investigator has to ask

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herself/himself how and under which conditions certain societies can acquire those features, patterns or behaviors described as publicity, public sphere, publicness, and the like. And this is a very reasonable approach for it is well-known that other societies, such as China, have developed concepts of the public and have seen the emergence of public spaces —see, for instance, (Jansen, 2000).

The point is that, independently of the question of who came first with the idea and the institution, societies and political systems under certain conditions become public and/or develop some sort of public sphere. Which are these conditions and how is it possible for these possibilities to reproduce or to materialize in different cultural and temporal contexts? What if we begin to think of the public sphere as Janus-faced: on the one hand, there is the semantic side (of which pretty much is known —at least for western social systems); and on the other, there is a sociostructural side, the darker side, of which much is ignored, or else what is known is poorly systematized?

Which theories, traditions and backgrounds can be mobilized in support? What concepts, language-games and/or metaphors can help us to make of this issue a scientific object of knowledge?

It will be suggested that media theory, and specifically the contributions of Niklas Luhmann to this field, represent a promising alternative to achieve this goal.

2. Media studies and the public sphere

As is the case with many others social concepts, such as power, community, society, and so on, the concept of the public sphere embraces the whole of the social sciences: political science, sociology, social psychology, history, philosophy, media studies, journalism, communication sciences, and even economics, all of these sciences shed some light on at least one dimension of the problem. As a consequence, concepts such as the public sphere play the role of semantic and conceptual crossroads between these disciplines. The result is not only a polysemic Gordian knot, but also the contexts in which to meaningfully place the

concept are multiplied. And not only linguistic contexts helping to elucidate the meaning of the concept are being touched on, but first and foremost scientific contexts consisting in corpuses of literature, theories, methods, language-games, etc. Therefore, there are far too many theoretical choices available to grasp the question of publicity.

But if there are so many alternatives why are we opting for media theory and how can this theoretical decision be justified?

Relating publicity to media seems, in fact, an obvious and by no means original choice. Many scholars have remarked that the development of publicity (or a new form of publicity) has been tightly linked to the invention of the printing press —a thesis closely linked to the ground-breaking works of Elizabeth Eisenstein (1979; 2005). However, drawing conclusions and generalizations from this fact has proved troublesome. There is no a clear and lineal causal relationship between literacy, the multiplication of public spheres and the growth of public opinion. For instance, there is a lack of correlation between the spreading of printed material (pamphlets, newspapers, books, and so on) and the levels of literacy in the population (Petrucci, 1988;Shofield, 2005; Farge, 1995) and it is hard to tell if and to what extent this phenomenon by itself became a source of social and political change. The truth be told, most part of the historians prefer to explain the emergence of the public sphere as a result of the evolution of democratic and representative political systems during the so-called age of revolutions (Pocock, 2003; Edelstein, 2009; Fontana, 2008) — neutralizing the problem of the growth of information caused by modern media by labeling it as a "cultural transformation". So it is known that the printing press, especially in the form of newspapers (Barker and Burrows, 2002), played a crucial role in political representation, nevertheless, accounting for the reasons of this outcome have proved difficult. The fact that historical evidence suggests that different and heterogeneous media come at play in times of social upheaval (Darnton, 2010) only contributes to make the problem more puzzling. Remarkably, most of the explanations have taken the path of political philosophy

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and turned into normative justification; the marriage of free press and democracy has become a matter of principle, the foundations of modern polity.

In light of these assumptions, social sciences currently deal first and foremost with the question of if and to what extent new media threaten the marriage with democracy. Although written 20 years ago the state of the art depicted by Paolo Carpignano (1999) still claims validity:

"That the current dynamics of the public sphere are intrinsically related to the development and transformation of the media environment, is hardly a new discovery...And yet, in academic analysis the media and the public sphere have remained relegated to their respective domains, media studies on the one hand, and sociology and political science on the other. Exploring the connectivity and interference of these two strands of research has, at best, meant putting them side by side to see how they add to or subtract from each other, while leaving intact their conceptual definitions. Thus, for example, from the viewpoint of the public sphere it has been a matter of evaluating to what extent the media affect or distort the expression of free public discourse, and from the viewpoint of the media, of seeing what kind of a public function it might be able to perform, as in the case of the unending discussion about the advantages of public versus private ownership of television." (p. 178)

If media studies are to provide a framework to rephrase the issue of the public sphere, they have to deliver an explanation of both: a) what is exactly the role of the media in the emergence of the public sphere?; and b) how and why do media (printing press, television, social media) bolster transformations in the organization of society and the political system? Nevertheless, first of all, media theory has to account for the conditions of the possibility for the emergence of something like the public sphere; it has to provide, to state it again, a sort of genealogy of the public.

Media studies are a complex interdisciplinary and transdisciplinary field. Although it might be questionable to call them a discipline, there is no doubt that the field has experimented an exponential growth in the last decades. In media studies we can find media archaeology, media history, media philosophy, media sociology, and mediology. As a matter of fact, there is no consensus about the meaning of the fundamental concept of medium. However, that seems to be the hallmark of disciplinarity in most cases: an implicit agreement about the profound disagreement regarding the meaning of the most crucial notions defining a research field. As a result, there is an interesting ecology of media theories. Let us briefly review some of the most influential:

- Marshall McLuhan and the Toronto School: For many media theorists McLuhan was a visionary and, indeed, he was. Although the characterization of media (hot media vs. cold media; the eye vs. the ear, electronic vs. typographic and so forth) is one of the most speculative and questionable facets of his work, many of his ideas are still inspirational in media studies research. For instance, that: a) media contain other media; b) the medium is the message, for it is not content what is important but the change of scale produced by the medium itself; c) media mark the character of civilizations, namely, their forms of sensibility, their artistic forms of expression, and their political organization; d) media are extensions of human senses for they shape perceptions, feelings and ways of thinking; and, finally, that e) mass media, such as electronic media, stand out for creating simultaneity and restoring causality (McLuhan, 1994). The idea of a conflict between the eye and the ear was also supported by the contributions of Walter Ong (Ong and Hartley, 2012), Eric Havelock (2004), and Jack Goody (Goody and Watt, 1963) —although Goody, properly speaking, do not belong to the so-called Toronto School- regarding the nature of oral societies, their social memory and how these social systems faced literacy and literate societies. It is significant to remark that McLuhan himself was not interested in something like "the effects of media in the public sphere", because from his point of view media worked not on the discursive and rational side of man, as expressed in public opinion (itself a creation of literate societies), but on the sensitive side. The public sphere was to him mere content, "debased forms of human expression and experience" (McLuhan, 1994, p. 210).
- *Friedrich Kittler and media archaeology*: Media theory, as devised by Kittler, is the outcome of the tradition of French structuralism. Kittler combined

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Foucault's archaeology with presentism —understood as a critique of hermeneutics, put forward by H. U. Gumbrecht and others— and in the search for the archives of culture, he discovered the importance of technical media (Kittler, 1999). For Kittler the information flows generated by technical media stand for the *Real* and become the basis for the *Imaginary* and the *Symbolic* (Kittler and Gumbrecht, 2013, p. 48). Paraphrasing Kittler: media, as the real, determine our situation. Again, the issue of the public sphere is barely mentioned.

- Sybille Krämer and the theory of transmission: What is striking about Krämer's media theory is her contribution to the definition of the mediality of media, namely, its singularity and defining trait as a social phenomenon. Krämer understands that all media deal with communicative issues and that all communicative actions or processes involve transmission. Therefore, she sets about to unravel the implications of a deep-seated cultural metaphor, namely, that of Hermes, the messenger. The main idea suggests that communication implies connecting two different worlds or entities and that the bridge allowing this connection are media; communication media enable the transmission of messages, however, they can only fulfill this function as long as media themselves remain invisible ---otherwise, noise emerges. Significantly, this postal model of communication is contrasted to an erotic model of communication where communication is understood as dialog, understanding and whose goal is to integrate individuals in social interaction and into a community (Krämer and Enns, 2015). In trying to debase the erotic model of communication Krämer makes of publicity, understood as public and rational deliberation about issues concerning the welfare of the community, something utopic ---or simply a wrong description of what is really going on.
- Bolter & Grusin's remediations: The thesis of Bolter and Grusin (1999) is that new technological media oscillate between two contradictory logics, namely, immediacy and hypermediacy, transparency and opacity. Inasmuch as new media promise to render evermore authentic experiences, as long

as successful, they achieve immediacy. However, since media depend on other media and were developed from previous older media, and since often interactive interfaces involve multiple media (multimedia), the experience of media is more than ever hypermedial. Remediation is the concept that allows the observer to keep track of the ways in which media refashion the technological network they are embedded into. One more time, there is no reference to publicness, publicity or the public sphere.

- Regis Debray's mediology: Debray was interested in the power of signs and he reached the conclusion that only by studying the materiality of meaning could this phenomenon be understood. Therefore, for Debray the medium appears as the material trace of meaning —that is, forms of inscription or of archiving. But the function of media is far more complex: media are procedures of symbolizing, a means of social communication, and are embedded in distribution networks that involve a flow of labor, know-how, knowledge, in short, a process of mediation. That is how media produce meaning, namely, by mediating. However, that process of mediation also involves the set of social conditions that makes it possible, that is, a media ecology. The issue of public opinion concerns Debray inasmuch as it reveals an instinctual mediology, that is to say, a historical instance (eighteenth century) when the powerful realized of the power of words (Debray, 1996, p. 98).
- Stieg Hjarvard and the concept of mediatization: In contrast to the literature reviewed so far, the work of Hjarvard is inscribed within the more traditional current of media sociology. For Hjarvard (2013, p. 19) mediatization consists in a long-term process whereby the growth of the influence of media alters cultural institutions and modes of interaction. What is remarkable is not the problem in itself, because it has been addressed by many others theorists. His contribution consist in distinguishing between mediation and mediatization, in other words, what Hjarvard achieved was to isolate a problem from a far more general context. However, the author tackles the problem of the public sphere resorting to the framework of the marriage

between publicity and democracy —an insight from which we wish to take some distance.

It is not by chance that most of the media theories ignore the issue of the public sphere. They all want to point to something that underlies our common assumptions about what media are and how do they relate to politics and society. And the case of Hjarvard is just like the exception confirming the rule, because the need to distinguish between mediation and mediatization reveals the presence of different layers of complexity and the recognition of the distinctiveness of the mediality of media. Particularly remarkable is the case of Krämer, for she explicitly accounts for the opposition between the Habermasian model of communication and the postal model for which she advocates. Certainly, as Carpignano (1999) showed, the mediology of Debray can be tuned in to Habermas theory of the public sphere. However, that can only be achieved at the expense of the silences and subtle suggestions found in the work of Debray. In short, what is notable of these theories is that they make implausible the Habermasian model of the public sphere, because they point towards the rules constituting experience and discourse, towards the technical conditions of possibility of transmitting speech and experiencing someone else's voice or look; to put it another way, these theories undermine the normative and dialogical assumptions on which Habermas built his thesis.

The question is: how can media theory help us to think of the emergence and evolution of the public?

3. Niklas Luhmann and his theory of communication media

In spite of the heterogeneity of the approaches reviewed above, there are some common denominators. The first is that media are deeply related to the problem of communication. The second is the thesis that the communicative function played by media is that of mediating between two or more separate entities by means of transmitting a message from one point to another —an idea that Shannon & Weaver's (1975) *Mathematical Theory of Communication* has helped to root.

Regarding the first idea, it is an important point to make: communication theory should be the framework of media theory. However, with reference to the second idea, the postal model of communication —as Krämer described it— relies on a few assumptions the author would not wish to follow.

Transmission is just an instance of technically supported communication, but it cannot be made the ultimate model of communication (Luhmann, 1995a, p. 140; 2012, p. 37) Besides, thinking of communication as transmission of messages involves the fallacy of *telementalism* (Harris and Wolf, 1998), that is to say, it is taken for granted that humans think of something and decide to communicate it to others by translating their thoughts to language and by emitting sounds others can hear and understand. This is a quite popular but utterly oversimplified and erroneous way of "thinking" of language, thought and communication. It is just a language-game or a discourse which creates its own subjects, objects and manners for attributing action and passion that neither stands for the truth nor provides an accurate (or at least, thought-provoking) description of what is going on. It is ironic how contradictory it is for theorists who advocate materialism or materiality (just like media archaeologists) to fall pray of assumptions like these.

As a result of availing of the concept and metaphor of transmission, the function of media or the mediality of media, is confused with the technical procedure of transmitting a signal. In other words, communication technologies (carrier pigeons, smoke signals, electrically and/or electronically transmitted signals...) and the materialities supporting communication processes (stone, papyrus, paper, and so forth) are being conflated with *mediality*, which is to say, —interpreting McLuhan the scaling up of information.

Within this context our attention shall be drawn to a cybernetic approach to media developed by Niklas Luhmann. The reason is that in contrast to other media theories that have fallen victim to the metaphor of mediation and transmission, the German sociologist observes media through the glasses of a distinction, namely, the difference between medium and form.

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At this point the informed reader might wonder why to try with Luhmann's media theory and not to straightforwardly address his conception of the public opinion (Luhmann, 1994; 2000a; 1990a; 2002, pp. 274-318) and compare it to Habermas —after all, the Habermas-Luhmann controversy offers an attractive point of departure. There has been indeed an interesting reception of Luhmann ideas in the literature concerned with the public sphere and mass media (Bechmann and Stehr, 2011; Gripsrud and Eide, 2010; Bentele, 2003; Gestrich, 2006; Marcinkowski, 1993; Landgraf, 2015; Marcinkowski et al., 2009). However, one gets the feeling that the ideas of Luhmann have been emasculated because what has been at stake is what answers could Luhmann provide to the problem of the public sphere, and not how could the problem of publicity/public sphere be system-theoretically (re)formulated.

In a similar vein, the reception of the controversy between Habermas and Luhmann has tended rather to emphasize the convergences between both authors, assuming that in order for political science and political theory to adopt Luhmannian systems theory it is necessary first to reconcile it with normativism (think, for instance, in the writings of Hauke Brunkhorst and Poul Kjaer, among others). This essay could have certainly begun by making a critical assessment of the reception of Luhmann ideas about the public sphere and write another chapter in the Habermas-Luhmann debate, notwithstanding, this path would have lead astray from point the author wants to make: that the modern public sphere is a late outcome of the evolution of communication media and that sociocultural evolution has produced a wide range of publicity forms —something well beyond the terms of the Habermas-Luhmann diferendo and irreducible to a matter of political theory.

It is suggested that by digging in in Luhmann's sociology, specifically in his theory of communication media, one could find the general guidelines of a model that would account for how publicities emerge and what conditions their evolution.

It should come as no surprise that the most suggestive descriptions Luhmann made about the distinction of medium and form appear in his writings about arts (Luhmann, 2000b; Luhmann and Roberts, 1987). Since arts are the domain of the form, the field for experimenting with form, perception and communication, it seems logical that any attempt the trace a genealogy of media begins precisely at this point. No wonder that the origins of writing are intermingled with forms of artistic expression (Schmandt-Besserat, 2007); no wonder either that we, as western observers, tend to confuse the communication media of other cultures with arts (Golte, 2009; Blanco Rivero, 2018)

However, a discussion about the issue of the origins of the distinction will be avoided, for the problem has already been exhausted (Baecker, 1999; Esposito, 2004; Esposito, 2006; Schiltz, 2003; Brauns, 2002; Stäheli, 2018); it is well-known that Luhmann made a very creative interpretation of Fritz Heider's theory of perception, turning it into a principle of cognition. Further, Luhmann's earlier ideas concerning modal theory and the notion of symbolic generalization (closely related to Parsonian sociology) shall be counted as the first conceptualizations of the theory of communication media. In any case, in contrast to the Parsonian theoretical design (still impregnating Luhmann's late writings), we shall interpret media based primarily on the latest Spencer-Brownian theoretical design (Roth, 2017).

In this sense, tracing a sort of conceptual history that splits the notions of form and medium leading to the conclusion that there are different concepts of medium in Luhmann —for there is little doubt that the concept of form is closely knitted to the work of Spencer-Brown (Baecker, 2013a; Baecker, 2013b; Schiltz, 2007)— is also of little interest to us. From a logical-formal point of view, such as that advocated by Luhmann himself, what matters are differences and differences even the temporal ones— are always simultaneous.

Straightforwardly, a medium consists of the unity of two sides, on the one hand, loosely coupled elements that constitute the *medial substrate*, and on the other hand, tightly coupled elements giving rise to *forms*. From this very simple idea, Luhmann draws a series a theoretical conclusions involving not only the

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dimensions of time, objectivity and sociability, but also the philosophy of science (Luhmann, 1995b; 2000b, pp.102-120; 2012, pp. 113-120; 1991a; 1999) (Table 1).

Indeed, the idea is not always easy to follow and, as to its theoretical backgrounds refers, it might seem quite arbitrary or far-fetched —especially if the reader strands in the references to Heider. In light of these remarks, computer models can provide valuable insights, first, by allowing the reader to visualize and play with the model, and second, by showing that isomorphic behavior also takes place in other realms of nature. The kinetics of enzymes (Stieff and Wilensky, 2001a) (Figure 1) and a model representing LeChatelier's Principle (Stieff and Wilensky, 2001b) (Figure 2) are two examples of patterns resembling a complex dynamics of (*form*)ation and dissolution (medium).

By comparing these models with the descriptions provided by Luhmann, a distinction might be brought to the attention of the observer, namely, the difference between the distinction medium/form itself and what shall be called mediality. As a distinction the first thing being brought to the fore is that the difference medium/form is drawn by an observer (she/he does not need to be human at all) and that, in the act of being performed, it appears as form. For only forms can be observed; only distinctions can yield information. As a distinction and therefore, as a two-sided form, it has significant implications for the architecture of the theory and, in broad terms, for the philosophy of science (i.e. it is by drawing this distinction that systems theory intends to replace ontology). But if we turn towards the other side, what remains is mediality as potential, as structured and nonarbitrary contingency. By distinguishing between the distinction and mediality we are discriminating between the observation itself and what is being observed. However, again, the distinction is also a form —this is the paradoxical side; seen the other way around, the distinction medium/form is self-referential because it is almost impossible to define it without implying it at the same time —here is the tautological side.

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In any case, emphasis should be placed on mediality. The very etymology of the word is tricky for the reason that it seems to suggest a quality or essence. Notwithstanding, was is meant is —in Spencer-Brown's terms— the link between marking and crossing, namely, latency, uncertainty, in short, the capacity to produce information. If asked for a description accounting for the unity of the difference of medium and form, it could be said that media are *information sources*.

The Enzyme Kinetics model (Figure 1) nicely illustrates this point: red shapes couple with green triangles to form an envelope-looking shape —here the act of tight coupling can be seen; but when an enzyme-substrate is formed (envelop-looking shapes) a blue triangle emerges as a product —by the same token, the emergent outcome of communication media is information.

Just as media cannot emerge but within social systems (Luhmann, 2000b, p. 104), information cannot emerge outside media (of course, in order for information to be brought about observers are needed —and that is precisely what social systems are). The point is that information is media-relative; there is no transmission of information, only signals are transmitted, only data is stored.

Now, if we are right, the concept of communication devised by Luhmann becomes problematic (Luhmann, 1995a, pp. 148-158). Looked at closely, it becomes obvious that when Luhmann thought of communication he was envisioning the most common and pervasive communication medium in society, that is, language. Utterance, the truth be told, is a valid description of the second selection integrating communication only within the medium of language. But actually communication cannot be brought about without the *selection of a communication medium* in which frames the meaningful interplay between information and understanding finds its place.

This re-description remains consistent with the rest of the theory, for instance, the description of meaning —in the vein of Husserl's phenomenology— as a preand supra-linguistic phenomenon (Luhmann, 1990b) and, especially, the assumption that communication media overcome the improbability of

communication being accepted (success media) and of extending its outreach (dissemination media), thus steering sociocultural evolution (Luhmann, 1990c).

4. Communication media and sociocultural evolution

Luhmann intended to base his sociology on a tripod consisting of systems theory, communication (media) theory and evolution theory, whereby each of these self-referential theories would back each other in a mutual limitation relationship. Evolution theory would account for complexity growth and system differentiation, while communication media theory and systems theory would explain the emergence of mechanisms of variation, selection, and re-stabilization (Luhmann, 1991b) —please notice that this very same tripod is the structure of his magnus opus *Theory of Society* (Luhmann, 2012).

In this guise, the German sociologist assigns to language the function of variation in the context of segmented social systems; writing and printing press, on the other hand, are made responsible for the differentiation of interaction and society while holding the selection function (together with success media such as power and money) in the transition to a functionally differentiated society (Luhmann, 1981; 1991c; 1990d; 1995a, pp,159-163; 2012, pp. 120-180) —this is, of course, a very tight synthesis.

Within the framework briefly sketched above the author would like to bring to the fore the evolutionary dynamics between success (power, money, love, and truth) and dissemination media (writing, printing press, electronic media). This is an underdeveloped dimension of evolution theory or sociocultural evolution with tremendous potential for theoretical development. Specially because there is a vast repertoire of empiric research in the fields of cultural anthropology, history of the book, history of literacy, paleography, art history, political anthropology, intellectual history, media history and media archaeology/ archaeology of media, among others, that could be used not only to support research hypothesis, but also, eventually, to provide data to run computer simulations.

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For the moment, a brief survey of the main literature of these disciplines suggests that the relationship between success and dissemination media is complex, dynamic, non-linear, chaotic, self-organizing and adaptive. Since there are too many intervening variables, the author shall focus on the medium of influence/power on the grounds that this medium (especially political power) plays a crucial role in fostering and in putting obstacles as well in the development of dissemination media —Goody (2000) again offers interesting supporting evidence in this regard. Moreover, literature tends to lend more attention to power than truth or money, not to mention love.

In the first place, there is a strong connection between the processes of generalization and symbolization of influence and the development and extended use of primitive dissemination media, such as the erection of stelae (which eventually might show inscriptions or depictions) and building complexes. A positive feedback loop arises between big men longing for more influence and artisans (or priests, as in the case of the Maya people) that gain social status and enhance their skills by crafting a wide variety of artifacts and structures.

In the second place, when conditions are appropriated, dissemination media get an impulse of their own carrying social consequences that cannot be totally controlled by political organizations —in fact, they cannot be organizationally controlled. For instance, Europe between the Renaissance and late modernity constituted a social system integrated by different political organizations, none of them being able to exert sovereignty over the whole region —although universal monarchy persisted as an unrealized ideal of submitting Europe under a same crown. As a result, boundaries between states not only became a source of irritation for the organization of power (monarchic or republican), but also served for maturing conditions for the printing press to develop, not only furthering new forms of sociability (Lilti, 2017; Sauter, 2009), but also opening up a new and profitable market: the book market (Darnton, 1979). Furthermore, the literature about the emergence of the modern public sphere in Europe shows how the printing press challenged power structures (traditional forms of authority, as

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historians say) (Darnton, 2014; Melton, 2001; Sawyer, 1990) But on the other hand, as Luhmann showed, it also meant the growth of complexity of the medium of power and the emergence of a functionally differentiated system for politics (Luhmann, 2002).

Success and dissemination media behave like a dynamical system exhibiting very interesting patterns. Under some configurations scaling can be observed, especially when a determined medium such as the printing press or architecture is boosted; but in other cases, the existing media ecology results in a variety of potential equilibrium states. Our thesis is that within this *Spielraum* (play space), among the medialities of these media, there arises what I shall call *forms of publicity*.

5. Forms of publicity

Up to this point the reader might wonder what allows the author to say that whatever that emerges between success and dissemination media is public or can account for publicness.

If, as a starting point, it is considered that common usages of the concepts of publicity, public, publicness, and public sphere have to do with a kind of action (namely, to make something known), with a type of social space where this sort of actions are performed (i.e. theaters, squares, forums, balconies, and so on), involving the usage of some kind of material (e.g. stone, textiles, ceramics, furs, paper, wood, pigments, etc.) and/or some kind of technology (e.g. painting, dancing, rhetoric, sculpting, writing, printing, broadcasting, transmitting, and so forth) serving for this purpose, and last but not least, that these kind of behaviors are observed in every known type of social system —regardless of the semantic artifacts employed to describe them—, then, it is justified to call publicity any social setting enabling and being enabled by the observation of observations (second order observation). For this is what, in the end, publicity reduces to: the two-sidedness of visibility and invisibility, distinction and indication, markedness and unmarkedness, form and medium, publicness and secrecy.

In light of these considerations, and without trying to be exhaustive, five forms of publicity can be identified (Figure 3):

- a. Ritual: Ritual seems to be ubiguitous at all levels of social complexity. In ancient social formations normative expectation structures usually take the shape of rituality, while in modern ones its efficiency is subdued to functional systems (e.g. as liturgy in the system of religion or as protocols symbolizing sovereignty or majesty in the political system). Still, there are always certain kinds of rituals (or, there is always a side of rituals) that shape and define group identities -even in our modern rationalized and secularized world. Exactly this reference to a definite whole is what makes the publicness of ritual. Unity has to be represented, symbolized, embodied, and/or animated (visibility), but at that very instant when unity is indicated, the contingency of the selection appears as latency, as a potential source of divergent interpretation, as means to express disarray or to institute the dominance of a new self-proclaimed elite (invisibility). The difference between invisibility and visibility is invariably accomplished by dissemination media at different levels: the architectural layout is typically inscribed in a program of graphic display (Petrucci, 1999), therefore, architecture also works as a dissemination medium (Moore, 2005); scriptures, symbols, paintings, ceramics, and the like, not only represent and/or reproduce a set of beliefs of crucial importance for the ritual but also play a performative role in the execution of the ritual; rituals can also be represented in rituals by means of dissemination media, performing thus a reentry of the form into the form. In spite of the standardized pragmatic dimension of rituality (i.e. the ritual performance as such), ritual involves a highly dynamic and flexible communication structure. This means that authority, influence, power and truth are always at stake in the ritual praxis (i.e. there are often challenges to the capacity of the elite to monopolize among the populace the authority to officiate rituals) (Swenson, 2006; 2011). Although commonly embedded in ritual, the following two forms deserve special attention because of their specificity.

- b. Feasting/Commensality: Sharing meals is a common pattern of socialization across many different cultures and this occurs mostly under the figure of feasts with a lot of food and drink. Feasting or commensality may have a religious connotation but it also accomplishes an important redistributive function. Feasts are occasions and social locations to see and to be seen: big men can exhibit their generosity, powerful chiefs can show their richness and magnanimity (competing with their rivals), tribal leaders can reinforce their bonds and achieve the necessary trust for consolidating alliances, and so on. Greek city-states, for instance, made of commensality a republican institution. Inasmuch as social formations became bigger and more complex, commensality lost its function of reaffirming community bonds (Bray, 2003).
- c. Games: Playing games is a common form of ritual. Games usually represent or intervene in the realm of natural forces in order to restore or guarantee cosmic equilibrium or assure good harvests. Independently of their goal, games involve staging: a well-delimited location where the players do their performances, and a periphery, delimited or not, from which the game is watched. Either the nature of games becomes religious or martial, they serve to expose individual performances to the eye of others: strength, ability, bravery, sagacity, intelligence, leadership, and so on. From this standpoint, social ranking differences are profiled, put to test and/or reaffirmed. Therefore, games are a suitable ground for developing strategies for symbolizing power (e.g. by representing a pinnacle of the system under the figure of the ruler) (Huizinga, 1980; Gentile, 1998; Scarborough et al., 1991; Baecker, 1999b).
- d. *Punishment*: The ability to punish the transgressor and at the same time to give example of the right behavior (whereby some power technologies such as confession, truth-telling, and avowal play a salient role (Foucault et al., 2014)) constitutes one essential feature in the structuring of power as a success medium (Foucault, 1977). Punishment is the execution of a penalty which in the same act of being performed dissuades other potential

transgressors. This is how influence inflates to political power (Luhmann, 2002, pp. 63-65). Exposing the suffering of the punished is essential for its purposes (i.e. showing the corpses of the victims at the main square, announcing executions orally or in the newspapers for people to congregate and watch the spectacle, carving a stone depicting imprisonment and/or executions, and so on). Therefore, power and dissemination media weave together in the form of punishment with such intensity, shaping a long-lasting structural drift in sociocultural evolution.

e. Modern publicity: The heterarchy of modern functionally differentiated society owes pretty much to the modern form of publicity and vice versa. Modern publicity emerged since the eighteen century, when the semantics of publicness and opinion merged and entangled with the process of growing structural complexity of political power. In other words, the evolutionary process which fused the function of keeping the capacity of taking collective mandatory decisions with the solution consisting in achieving communicative success by means of the threat with sanctions (positive or negative), availed of the semantic of publicness in order to afford more contingency in the processes of decision-making and gain in complexity. Semantic and social structure created a loop, concretely a positive feedback, wherein semantic variations went in hand with political innovations. As a result, power acquired such a structural complexity never seen before in sociocultural evolution, namely, it became able to support second order observation, to inflate and deflate, it acquired processual reflexivity and a second coding (government/ opposition), it became able to symbolize the inclusion of the exclusion, and finally, it set the conditions for the differentiation of the functional system for politics (Luhmann, 2012, pp. 214-235). At the same time, while other functional systems also adapted to second order observation, the political semantics of publicness still continued to dominate the social self-descriptions of these developments – as a consequence, political publicity currently fixes most of the social

expectations regarding observing observations and the scientific descriptions of it.

6. Concluding remarks

Since interdisciplinary research about the public sphere constitute a discourse of its own with its characteristic concepts, problems and ways of thinking, the author has tried to bring to the fore an alien context with different keywords, assumptions, problems, and perspectives from where to rethink the problem of publicity as a socioestructural feature in the evolution of social systems. The thought-experiment consisting in making as if Habermas' work on the public sphere does not exist, allowed us —as a heuristic resource— to bring to the fore the theory of media in order to play this role. The advantage of media theory consists in that it has consciously avoided what the scientific and social discourse about the public sphere has taken for granted. In this sense, important contributions to the understanding of mediality and its technological and material dimensions have been made. The implications for the knowledge of the constitution of the public sphere are clear: nothing can be made known in the absence of communication media, no matter their degree of technical sophistication —and far from being a commonsensical statement this has deep theoretical overtones.

However, media theorists rely heavily on the problematic notion of transmission. In fact, the distinctiveness of transmission consists in the coupling of "media" of two different types, namely, physical and communication media. The first condition consists in finding structural regular patterns within physical media (i.e. the longitude of radio waves, patterns of electrical pulses, and so on) which are susceptible of manipulation, then, by means of specially ad hoc fashioned devices, the medium is employed to produce signals (i.e. a codified unit-pattern within the medium that, in turn, codifies one by one the units of a symbol-system) which are sent from one physical emitting point to another receiving point. Although these technologies have defied time and space, radically enhancing the function of dissemination media and their relationship with the material world, they and their

effects cannot be confused with the long-lasting performance of communication media as such. Mediality as the hallmark of communication media consist in their potential to generate and scale up information and thereby to increase social complexity.

In reading Luhmann as a media theorist not only an insight into mediality is gained, but also a framework that allows us to systematize the knowledge produced by diverse disciplines. Furthermore, complexity sciences offer a wide variety of methods, such as *Agent-based Modeling*, to study the interaction between success and dissemination media adumbrating future theoretical advancements.

Finally, the author wishes that more than a list with some forms of publicity, the reader retains the idea of the ubiquity of the phenomenon of publicity throughout social and cultural evolution and that the media evolution theory being advanced here offers concepts, ideas and intuitions that can help to account for it.

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Meaning	Objective	Time	Social
dimensions Medium/Form	At the element level: • A medium is constituted by loosely coupled elements • When elements become tightly coupled, a form has arisen. From an information-theoretic perspective: • Loosely coupled elements are redundant, namely, they are little informative, they contain no novelty, no surprise. • Tightly coupled elements are informative, uncertain, novel, surprising, and unique – even if forms can be iterated. Observed from Spencer-Brown's Laws of Form: • Media regenerate their forms or circulate since the marked space occupied by a two-sided form invites the observer to cross towards the unmarked space. Unmarkedness is just another instance of surplus of possibilities. Implications for the philosophy of science: • Since the "element" is a function and not a quality, essence, entity or a thing, the distinction medium/form has significant epistemological consequences (e.g. it debases ontology and foundationalism as the constituting rules in the formation of knowledge)	 <u>At the synchronic level</u>: <i>Constancy and variety</i>: Inasmuch as the medium is more stable than forms, in relative terms, the medium remains constant and forms vary. In other words, differences of speed of change enable the medium to allow simultaneously stability and instability, variety and invariance, duration and eventness. <u>At the diachronic level</u>: <i>Connectivity</i>: Media play an irreplaceable role in assuring the autopoiesis of communication. By structuring possibilities, media structure communication itself. As a result, communicative events become processes. <u>Observation and description of time</u>: The inescapable simultaneity of every operation means that access to future or past events is impossible. However, the simultaneity of the two-sided form of the medium allows for the handy introduction of further distinctions, especially, <i>time distinctions</i> (i.e. before/after, past/future). Another current operation with temporal implications is the <i>memory</i> function. Delaying repetition is, so Luhmann, the way memory actually works –because events cannot be stored to be used later. Following the ideas of Spencer-Brown, time also appears as an <i>imaginary value</i> allowing paradoxes to unfold. 	Although more or less implicit Luhmann's descriptions, it plausible and consistent to assur that the fact that the same eleme might also work as a form for off media has consequences for the attributions schemes used distinguish between <i>ego</i> and <i>al</i> and also for system differentiation For instance, scientific concept often acquire different connotation (and as a result, become information for different media and different social systems) when taken out of the medium of truth and divulged in the press (dissemination media) or us in the scripts of sci-fi movies (mathing media system).

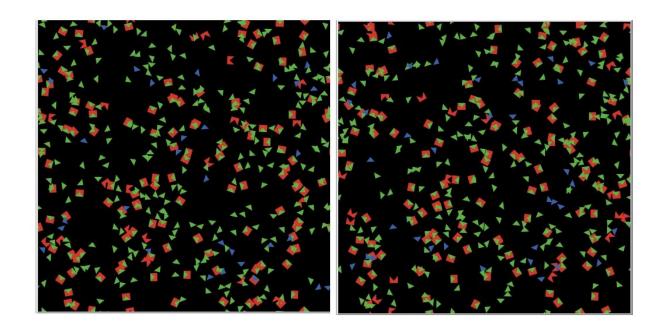


Figure 1. *Enzyme Kinetics model.* This model was designed to illustrate the kinetics of singlesubstrate enzyme-catalysis. This is a reaction that depends on the ratio of the rate of complex formation between the rate of complex dissociation. The similarities between the model and Luhmann's conception of media are striking. The picture depicts a brief sequence where the coupling between enzymes (red) and substrates (green) can be observed as well as the product being released (blue). In the same way as enzyme-substrates, forms are eventual couplings that fade away and regenerate once and again. Again, just as enzyme-substrates, forms are not a casual and meaningless event. Forms not only enable the circulation of the medium, but also produce information.

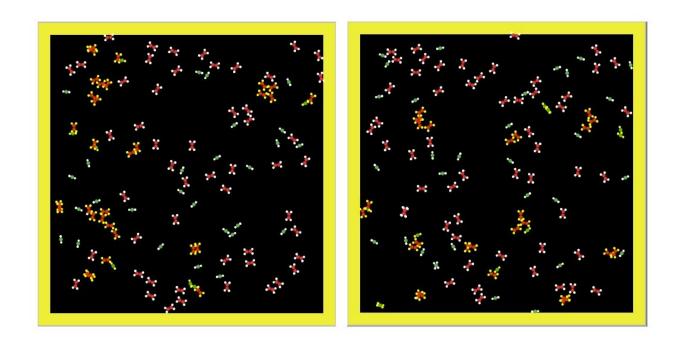
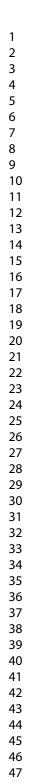


Figure 2. *Le Chatelier's Principle model.* This model was set up to illustrate how a system that is at equilibrium returns to an equilibrium state after being perturbed. Although in this case the parallels are not so obvious as in Figure 1, the pictures are useful to depict another feature of medial substrates and forms. Taking the highlighted dotted patterns as forms, the picture serves to illustrate the sheer variety forms can assume in contrast to Figure 1, where forms were only represented by envelope-looking shapes. On the other hand, it also shows the potential in the medial substrate to give rise to diverse tight couplings.



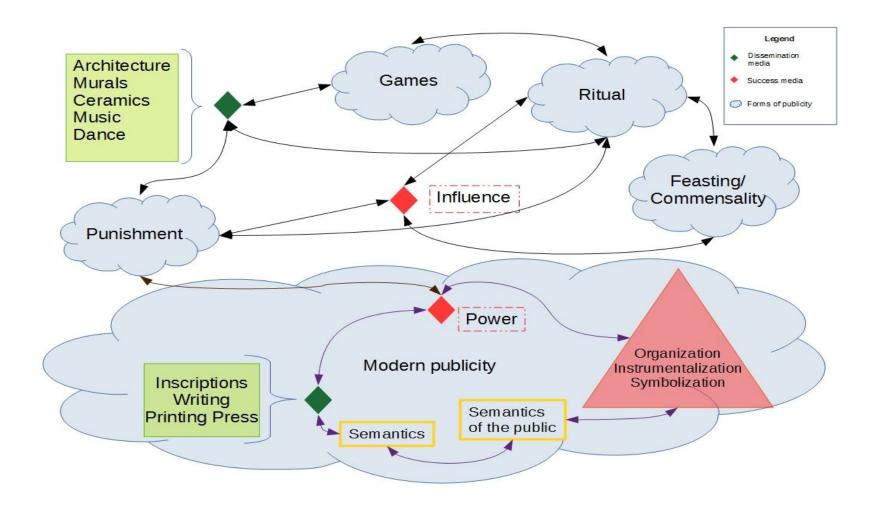


Figure 3. Forms of publicity and the dynamics of its emergence. The illustration basically depicts two major circuits or feedback loops (antique and modern) giving rise to different forms of publicity. The earlier one intends to show the growth of the medium of influence in social systems differentiated in segments, center-periphery and strata. The exertion of punishments is considered a key feature leading to the outdifferentiation of political power and introducing a new dynamics —along with the influence of new dissemination media. The modern circuit depicts a feedback loop between the semantics of the public, dissemination media and the structured complexity of power, having as an outcome a modern form of publicity.