



THE FIRST THEORIES OF COMMUNICATION UNDER AN INTERDISCIPLINARY PERSPECTIVE

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ABSTRACT – A social activity that has existed since the dawn of humanity, communication has changed with the emergence of technologies that innovated the communicational process, initiating the emergence of the first communicational theories. These presented a more limited study on this process, mainly regarding the receiver's role in communication, which came to be considered a passive element, which reacts mechanically to what is presented to it. As new theories were being formulated, the perception of the receiver's role changed, improving how communication relations are processed. However, it was only later that communication was perceived as an interdisciplinary field, considering other areas' contributions and how such an aspect could hinder the delimitation of its object of study as an autonomous discipline.

KEYWORDS – Communication;
communicational theories;
interdisciplinarity

RESUMO – Ato social existente desde os primórdios da humanidade, a comunicação alterou-se com o surgimento das tecnologias que inovaram o processo comunicacional, dando início ao surgimento das primeiras teorias comunicacionais. Estas apresentavam um estudo mais limitado sobre tal processo, principalmente quanto ao papel do receptor na comunicação, que chegou a ser considerado um elemento passivo, que reage de forma mecanicista ao que lhe é apresentado. Conforme novas teorias foram sendo formuladas, mudou-se a percepção do papel do receptor, aprimorando a visão de como se processam as relações comunicacionais. Mas, foi somente mais tarde, que se percebeu a comunicação como campo interdisciplinar, considerando as contribuições de outras áreas e como tal aspecto poderia dificultar a delimitação de seu objeto de estudo, enquanto disciplina autônoma.

PALAVRAS-CHAVE – comunicação;
teorias comunicacionais;
interdisciplinaridade



Introduction

The interdisciplinary practice is an urgent need, and, despite being present in the theoretical realm, its implementation is far from practice. Its deconstruction proves to be a great challenge, even among those who say to be interdisciplinary; after all, such people encounter barriers already in the first steps due to the need for cognitive openness towards the new and unknown.

Such a situation, however, should not be credited to contemporaneity alone. With the advancement of science, from the 18th-century onwards, knowledge began to fragment sharply; but, if, on the one hand, specialization has allowed deepening in specific areas; on the other hand, it contributed to them becoming more and more cloistered. However, in a world like ours, whose problems demand increasingly interdisciplinary solutions, fragmentation has become an obstacle. The lack of balance between specialization and the interrelation of knowledge makes critical thinking difficult, which should be fostered from primary education.

In the communicational scope, the interdisciplinary view is also necessary to understand the development of his studies. The process formed by the sender, receiver, and a channel that transmits a message was analyzed from different perspectives, generating the so-called **Communication Theories**.

The first theories analyzed this phenomenon superficially, focusing on the transmitter channel and the communicator, reducing the receiver's role to a mere passive individual.

However, as new theories emerged, psychological and sociological considerations were raised, expanding its scope and constituting the discipline of communication as an interdisciplinary area, without this aspect being perceived at the beginning of the first studies.

Thus, although the first theories were considered outdated, they played a fundamental role in developing this research. Therefore, they must be analyzed not in isolation but interrelated with the others, thus characterizing an interdisciplinary study. Another issue to be raised, paradoxically, is that, as it was later realized, interdisciplinarity in communication could make it difficult to define its object of study as an autonomous discipline. However, when analyzing the communicational process from interdisciplinary contributions, it is possible not only to reach an object of study but to understand it in its entirety, as we will see later.

Objectives and method

Based on such considerations, this article proposes to answer how interdisciplinarity contributes to the communicational study from an interdisciplinary analysis of the first theories of communication. The research aims to analyze the interdisciplinary view's contributions to communication, from the delimitation of its object of study to the first communication research. However, they have limitations regarding the studied subject and complement each other to understand the communicational process.



For this, we adopted descriptive research based on the contributions of renowned communication theorists such as Mauro Wolf, Luiz Martino, Francisco Rüdiger, among others, based on a better explanation of the concept of interdisciplinarity highlighted by authors such as Hilton Japiassu and Ivani Fazenda.

The theme's concern was based on the need to explain interdisciplinarity's meaning since the communicational realm itself is configured as interdisciplinary, as it received contributions from different areas. However, its first theories presented limited studies that, although they have deficits, they cannot be ruled out. After all, the understanding of the whole is given by the parts. It precisely understands the theories from an interdisciplinary perspective that will allow more in-depth learning about the communication process. The decision to restrict the research to only the first theories was made because it does not intend to exhaust the subject but offers a new perspective that can trigger new research.

Interdisciplinary practice ahead of its time

Interdisciplinarity began to spread in the 1960s, in Europe, with student movements' demands for new models of school and university institutions. This search for breaking paradigms arises because of the new yearnings for an education that would overcome barriers and transcend specializations, many of which are responsible for privileging specific sciences over others, based on

power and capital as a parameter for an accurate hierarchical scale.

However, it is defined only in such a period does not mean that interdisciplinary thinking arose. On the contrary, its practices were disseminated even before their concept could be formed or even idealized.

There were significant contributions to the development of human knowledge in algebra, the arts, and architecture in the Middle Ages, not to mention universities' emergence. The knowledge's imiscution was already present in the dialogue between sciences; after all, the sage was at the same time "a thinker, a philosopher, and a theologian" (JAPIASSU, 1976, p. 70).

Before the compartmentalization of knowledge, the historical-cultural context itself demanded totalizing practices that could meet the various problems, not for nothing

Greek, Hellenistic, Roman, and medieval thinkers were philosophers, mathematicians, doctors, politicians, teachers [...] who produced their works without the slightest concern to indicate which area they belonged to (CAMPOS, 2015, p. 52).

Education was given in its entirety thanks to a natural unity of thought that facilitated the interrelationships between the most diverse areas of knowledge, practiced by naturally interdisciplinary individuals.

Interdisciplinary thoughts and practices underwent significant changes with the arrival of the Modern Age when



the Renaissance's discoveries made the universe wider. The cognitive demands expanded, contributing to a new way of knowing: the fragmented. In the Enlightenment, a delimitation of the disciplines was initiated, leading to the construction of barriers between them, breaking the existing bridges in the Middle Ages.

Thus, the medieval interdisciplinary being, characterized by harmonious thinking and aware of the importance of the collective, gives way to the specialized and egocentric being that is afraid to share his knowledge, as he sees in them a way of overcoming others, not of instructing them through the sharing and exchange of experiences.

When the interdisciplinary concern resonated in the 1960s, a thought was born that opposed any knowledge that privileged "epistemological capitalism of certain sciences" (FAZENDA, 2012, p. 19). The absence of a view that values totality, fostered by the encasement of knowledge, came to be seen as a threat to civilizational development.

Thus, one of the precursors of interdisciplinarity, Georges Gusdorf, exhibited, in 1961, an interdisciplinary project focused on the Human Sciences (JAPIASSU, 1976), whose intention would be to guide them towards convergence. Its objective would be to reduce the gap between theory and practice in its epistemological field.

In the 1970s, there was a concern to seek a philosophical explanation for interdisciplinarity since the effort undertaken in the period "revealed that

the assumptions of a conventional epistemology would not lead to the advance of understanding" (FAZENDA, 2012, p. 27) of its theoretical implications. For this reason, more than a restricted study on its implementation, means were sought to maintain disciplinary conversations that could elucidate relations between development and social progress; until the search for a sociological guideline that marked the 1980s was reached.

Japiassu talks about developing an "integral personality," resulting from education in its entirety, which is not just a juxtaposition of knowledge and encyclopedic knowledge but also a joint construction of different knowledge (JAPIASSU, 1976).

However, the recurring concern with the transposition of cognitive barriers and the look and apprehension for the totality has not been translated into practice, as defined by the theory. Paradoxically, since the 1970s, there has never been so much talk about interdisciplinarity, and, at the same time, it has been so little interdisciplinary.

The consolidation of globalization, starting the 1980s, reinforced this finding with the homogenization of customs, beliefs, and values that extinguished other cultural distinctions and ways of thinking in a way opposite to that propagated by their practices. Thus, there is a social change "that leads to the replacement of nation-states by a system of large international corporations and national cultures by a soulless commitment" (LENOIR, 2005, s / p).



Such a commitment synthesizes the globalization phenomenon, which, by disregarding specific knowledge, also ignores the past and all its achievements. However, it is forgotten that every moment of humanity was critical, specifically for its time; and that each discovery, throughout history, was only possible thanks to previous achievements that allowed new advances.

Unfortunately, it seeks to ignore such a process and focuses only on the now, as if the past, essential for civilizing development, did not bring any relevance to today. A moment in which the “arrogance of the present time” is verified (BRANDÃO, 2015, p. 10) when there is no full view of everything that happens around.

Thus, although the term interdisciplinarity has been discussed for decades, its practice still falls short of the real attitudes necessary to break disciplinary boundaries and social barriers that promote prejudice and inequality.

The full view is often stifled not by the incapacity of interdisciplinary thinking but by different groups with power. In the disciplinary interrelationship, they see a threat to their centralizing model; after all, the interdisciplinary being leads to a critical, bold, and transforming thought that aims to solve problems, something inherent to the trans-conceptual value of scientific discoveries (BRANDÃO, 2015).

The numerous specializations and the arrogance of the present nullify, in practice, this opening of the sciences, when it turns out that they are often reduced to multidisciplinary attitudes as if

they were interdisciplinary. That is due to the lack of clarity of the term and its practices: such a model does not have an immutable concept that can express, in a comprehensive way, its breadth since its practice involves a continuous construction process, allowing for discoveries and diverse inter-relations.

To understanding the concept of **interdisciplinarity**, two means can be used: the etymological or the comparative. When analyzing the word from which it originates – **discipline** – it can be said that it is “a systematic and organized set of knowledge that has its characteristics in terms of teaching, training, methods, and subjects” (JAPIASSU, 1976, p. 72). Therefore, it involves limited and specific knowledge that translates into two knowledge areas: the pedagogical and the epistemological. Similarly, it can compare its family’s terms as **multidisciplinary** and **pluridisciplinary**. The former is characterized as a group of disciplines of a single level and varied objectives, without any relations between them; the latter, in turn, is defined as a juxtaposition of several disciplines, usually located at the same hierarchical level, in which specific cooperation between them is perceived, but lack of ordering (JAPIASSU, 1976). However, both diverge from interdisciplinarity, as this allows deconstruction to build a joint and interrelational discipline.

A new perception of the subject based on interdisciplinarity

In **Theory of Knowledge**, Hessen (2000) addresses three essential elements



in its constitution: subject, object, and image. Based on the relationship of the first two, the subject forms a perception of the object by apprehending it and thus associates it with the information already acquired, something already addressed by Piaget (1982) in the process of reconstructing knowledge when explains the **assimilation** schemes – when the student receives new information and integrates it with what he already knows to build new knowledge – and **accommodation** – when the student reorganizes the contents he has in his mind to receive the new information and formulate new learning (HESSEN, 2000).

The subject changes himself based on the object's interaction, expanding his vision when apprehending it. Simultaneously, the latter is still an object when analyzed by the former, which does not change itself despite this process. As the object determines the subject in the cognitive field (HESSEN, 2000), the question of the subject's passive receptivity cannot be considered, but an active one, in constant mutation with each new apprehension.

Such mutability also allows for the enrichment of knowledge that, in the scientific case, does not occur only in a quantitative way but from the rupture from one theory to another. Such contestation denotes cognitive enrichment since knowledge cannot remain cloistered. That transformation is due to the same object's multiple apprehensions by different subjects, which assimilate it and produce other experiences.

This mutability, therefore, a unique characteristic of the science being, is possible thanks to the interdisciplinary view that does not privilege the part to the detriment of the whole: each subject becomes interdisciplinary when observing an object, not only imputing its own representations to it but also adding it to those of different subjects; thus constituting the reality of that object.

Therefore, the knowledge's essence is linked to the concept of truth present in the agreement of the images with the object (HESSEN, 2000). However, there is a mistake here if we consider that each of the many translations of an object is just that: a translation because each subject has its interpretation. These distinctions are not nullifying but complementary, allowing questions and confrontations and the emergence of new ideas and consequent discoveries.

Piaget, Morin, and Hessen's interdisciplinary view concerning the subject's constitution and the new theories prove fundamental to counter the hyperspecializations of the 19th-century, which started with Descartes still in the 17th-century. For him, the object – *res extensa* – was seen as something distinct from the subject – *ego cogitans* –, reinforcing the objectivity/subjectivity dichotomy; consequently, the division between Human and Natural Sciences. (MORIN, 2013)

There is another underestimated issue in the knowledge reconstruction process, the issue of **error**. We were not trained and qualified to make mistakes but to get it right. This misconception makes learning



and cognitive development difficult since each discovery occurs based on the contestation of certain aspects that open new spaces. Therefore, the subject needs to give himself the chance to make mistakes to understand the old and reconstruct it. To face the error as a step backward or as a contradiction to specific stability or norm is detrimental to improving knowledge.

We have something similar with the conception of **truth** because it aggravates the issue of error. After all, whoever thinks he is the owner of it becomes insensitive (MORIN, 2013). Besides, anyone who believes himself to be the owner of the truth is mistaken for considering his perception to be correct, disqualifying the others.

The concept of communication

As with the word interdisciplinarity, communication does not have an immutable and limited concept, but a continuous and transforming one. It unfolds in human society when new perceptions about its process were better known and formulated. Besides, this concept is not only similar to the mutability of the word “interdisciplinary.” Still, it is inseparable from it since Communication results from research from other disciplines have contributed to its understanding.

Rüdiger (2011) defines it as a “historical and polysemic concept that evolved, between the 19th and the 20th-century, from the designation of the set of channels and means of transport to that of the social process of interaction [...], formed

by practices, speeches and ideas [...] and social transmission of messages [...]” (p. 9)

This passage was fundamental for the studies that followed, based on the communicational analysis based on the social relationship and the connection between sender-receiver-message, an essential triad of this process. However, the way it is triggered in society or how the recipient receives the message will undergo profound changes.

However, in the face of the communicational concept’s polysemy, it is impossible to establish a single definition and consider it valid. Something applicable not only in the communicational field but also in several others. From Hessen’s considerations, we observe no absolute truths but different perceptions of the same object that complement each other, improving the cognitive process. Martino (2001) also highlights this aspect when stating that the conceptual definition is not immutable and does not constitute an absolute truth, but involves establishing an agreement on the aspects to be outlined and what is interesting to be researched at the moment. “Then try to talk about the same thing and not to establish the ultimate truth about what communication is” (MARTINO, 2001, p.10).

When reflecting on communication from a more straightforward conceptualization, one of the first explanations that spontaneously come to our mind is the simple dialogue between two or more people, consisting of a sender who sends a message to one or more recipients referent. However, the communicational process goes far beyond



this statement, as it does not exist only between individuals, but between objects, like two computers that communicate by modem. These two images relate so that one is affected by the other, among several other examples. So, what is necessary for communication to take place and how to define it? We reflect this questioning based on Martino's explanation of the term:

The term communication comes from the Latin *communicatio*, from which we distinguish three elements: a root, *munis*, which means "to be in charge of"; the prefix *co-*, which expresses simultaneity, reunion, we have the idea of an "activity carried out together"; completed by the ending *-tio*, which in turn reinforces the notion of activity. That was its first meaning in the religious vocabulary where the term first appears (MARTINO, 2001, p. 13).

From such initial considerations, it is noticeable that the communication act involves an activity carried out together, something fundamental for its implementation. However, such an act goes much further, as it requires interaction and harmony between the elements together. In this way, "the term communication does not designate being, nor the action on the matter, nor the social praxis, but a type of intentional relationship exercised on others (MARTINO, 2001, p. 14). Therefore, based on this statement, we can say that an individual communicates with the other when he receives the message and interprets it in a manner consistent with the objective proposed by the sender.

Thus, the intentional relationship of this process materializes.

However, the message does not always reach its objective. There is a risk that the receiver will interpret the purpose of the sender's message inconsistently, forming a noise that prevents communication. It must also be stressed that this does not stop if the receiver's interpretation is not entirely consistent with the communicator's objective. The essence of the message must be understood, after all, as seen in Hessen's Theory of Knowledge and the accommodation process described by Piaget, each one apprehends the object according to their perception of it, and with the training they have, that is, the same message generates different interactions with each receiver to which it is sent. Still, communication occurs with everyone, as each of them absorbs the essence of the message so that the interpretation is within a margin.

Nevertheless, such questions only came to instigate researchers from the 1900s, when communication became an object of study due to the impact of new technologies. The development of new communication means, such as the telegraph, radically changed the exchange of messages that started to be mediated through the channels of transmission, circulation, and reception of signifiers (RÜDIGER, 2011).

However, technologies should be considered only to improve the communication process, whose definition must be based on its original social interaction principle. That does not depend on those to materialize, as it arises



from the relationship established between the sender-receiver-message.

Therefore, communication media should not be confused with communication since it is linked to human interaction and its exchange of messages. Thus, areas such as advertising and journalism are not communication, but techniques that use the communicational function; even communication “is not a science, but a field of multidisciplinary study, whose methods of analysis have no specificity and were developed by the various branches of philosophical, historical and sociological knowledge” (RÜDIGER, 2011, p. 17).

Understanding the term communicational in its breadth needs an observation that transcends its area and involves other knowledge branches. It demands, therefore, an interdisciplinary study due to its presence in different parts of expertise. Thus, the complexity’s understanding of this matter and the need to resort to other areas of knowledge reveals a challenge for the communicational field, precisely defining the object of the study of communication as a discipline.

In the 20th-century, several scientific disciplines emerged, and, among these, the emergence of a field aimed at understanding communication processes. However, this young science was unable to establish its purpose of the study, and because of that, it became commonplace to resort to interdisciplinarity as an evasive strategy (MARTINO, 2002).

As highlighted, the communicational study arose from other disciplinary areas’

contribution, configuring it as interdisciplinary. Therefore, it is not a question of denying interdisciplinarity, which, in turn, helps to understand communication in its entirety, but, from it, that is, from a more comprehensive study, arrive at a discussion that allows us to identify the specificity of this area.

To address this issue, Martino (2002) distinguishes two communication problems: one philosophical, the foundation of the Human Being, and the other historical, related to the meaning of the communicative process from a new emerging social organization (MARTINO, 2002).

Regarding the first problem, the author uses the German philosopher Friedrich Nietzsche to emphasize the close relationship between communication and human consciousness. The first arises from the second, more specifically, from the need for humanity to communicate, an act defined as a relationship between consciences. Regarding the second issue, Martino recalls the changes pointed out by sociologists regarding the emergence of a new collective organization called society in the 18th-century, resulting from deep political and social crises, the Industrial Revolution, the demographic explosion, among other aspects, that provoked a reflection on the communicational process (MARTINO, 2002).

To better understand the changes brought about by the new social organization, it is essential to remember that before the 18th century’s events described above, the individual was



defined according to his traditional values, blood ties.

Besides, it was not perceived individually, but always within a collective, as the notion of autonomy and identity of an individual would only be recognized later, with the social reorganization in which, from then on, the individual would no longer be defined by values and blood ties. Still, it would need to create an autonomous bond with society. For this, he had to resort to the communicational process because his insertion in the collective happens through the relationships he establishes, whether at work, in the neighborhood, with friends or family. Through social bonds, he would set his identity and the condition to be perceived socially.

According to Martino (2002), it is at that moment, then, that communication gains visibility as an object of study and begins to attract researchers' attention. Therefore, when this new society begins to be analyzed, the individual's need for communication is realized to engage in the collective and, on the other hand, the importance that the media acquire in this engagement's realization.

Thus, when the communicational process begins to be studied, Psychology and Sociology start to offer their contributions as we will see better in developing the first communicational theories. As Martino (2002) points out, as such a process will always be psychological, sociological, or political, in essence, interdisciplinary, there is a need to establish boundaries that can trace the purpose of communication. However, this

is not about setting rigid and prohibitive boundaries that are highly accurate to specify the discipline (MARTINO, 2002).

Such a caveat is important to highlight, as already explained, that, without interdisciplinarity, it would not be possible to constitute or analyze the communicative process. Therefore, it is through it that specificity will be reached. In this regard, the author asks us a question: should the interdisciplinary nature of communicational research be understood as a contest of independent disciplines, with their specific interests, or as a synthesis of this knowledge that will constitute the specific objective of communication? According to the author, the adequate answer to such a question would be the second alternative for seeking autonomy for the communicational process (MARTINO, 2002).

Based on these statements and the considerations already raised about interdisciplinarity, it is possible to see how it can contribute to the communicational study's object. It involves the set of essences from different disciplines to be built together. Therefore, it is not from sociology or psychology that communication will be understood, but from an interdisciplinary perspective that involves the two areas and all those that offer contributions to the communicational field. That is precisely how we can understand communicational theories in their entirety and how the phenomenon of communication is processed.



The question, then, comes down to defining the interest and the object of communicational studies. From the social transformations raised by Martino (2012), who emphasizes the need for humanity to communicate to be inserted in the collective, the author highlights the media's relevance to facilitate the individual's social insertion. Therefore, it would not be an aberration to state that the purpose of communicational studies surrounds the media because, despite crossing several fields of knowledge, it is not the purpose of any survey.

Therefore, we arrive at a definition of the specificity of the Communication discipline. However, it is necessary to exercise caution when considering Martino's statements regarding the communicational field's research object. As pointed out, it was precisely the new communication technologies that instigated the theorists' speculations, giving rise to communicational theories. After all, the communicative process has changed so with technological innovations that have become the focus of study. However, although the new communication means are the starting point for research, they should concentrate their efforts on the new relations provided by the communication means and not on the analysis of these in themselves; otherwise, there is a risk of limiting the study too much and not encompassing its entirety.

On the other hand, Braga (2011) presents two alternatives that can be considered an object of communicational studies: a) everything that can have some

interactional exchange; b) everything that is restricted to the social media. Here we also have a problem, both in the first and in the second alternative. The first because it broadens the research object too much since everything that constitutes communication can bring an interactional exchange, while the second restricts the focus only to communicational means.

When considering the positions previously discussed, it is perceived that it is necessary to find a middle ground between social interaction and the media to problematize communication since the first was affected by the second. It is precisely this relationship that needs to be better evaluated. Thus, the interdisciplinary contributions to communication can help outline the study of communication, emphasizing the importance of the interdisciplinary view.

However, it is relevant to emphasize that such a look must go beyond a simple crossing of data and disciplines to understand the communicational field to involve a confluence of two or more domains in dialogue with others:

The concept of interdisciplinarity can mean two things: the first corresponds to the perception that a field of study today is inevitably crossed by data, knowledge, problems, and approaches designed and developed in other disciplines and/or technologies. In this case, all fields of expertise are "interdisciplinary"; that is, they do not have an isolated, watertight existence. [...] A second meaning is that of referring to a straightforward interface space, in which a particular scope of knowledge is made at the confluence of



two or more established disciplines - for example, Psychosociology, Legal Sociology, Biochemistry (BRAGA, 2011, p. 63).

Therefore, it is necessary to think of communication as a field constituted by already established relationships that allow us understanding the new communicational process from the interactions between the people and the communicational means to be inserted in society. In communicational studies, such interdisciplinary research on communication has been gradually taking place, as Wolf (1999) helps us perceive.

In dealing with the discussions about the relations between the media and the individual in the 1970s, these author addresses the discussion between **administrative research** – American analysis, strongly empirical – and **critical research** – European analysis based on the relationships between the social system and the media. This dichotomy was overcome by three factors: the need for a social approach to studies of communication media, the recognition of the relevance of multidisciplinary research in the sociological context, and changing the temporal perspective of this research field.

Recognizing the communicational study's sociological approach marks a significant change by overcoming empirical research/administrative research's dichotomy. Social interaction is recognized as a crucial element for communication and the presence of other areas involved in this process, resulting in recognition of the multidisciplinary study

that will culminate, later, for the interdisciplinary. All this will culminate in a better understanding of the communicational investigation object that consists of changes in communicational relations from the media. Thus, it is possible to understand the communicational specificity from an interdisciplinary perspective and without greatly expanding or reducing the study object, as we will see better below.

Constitution of the first Communication Theories

The concept of theory here must be understood in a restricted way. It is not to be confused with the so-called communication research programs; therefore, it does not include methodologies. Thus, it is related to the structural concept and the communicational meaning in the philosophical and sociological scope (RÜDIGER, 2011).

The theories that emerged to study the communicational process were defined first as **Theory of Mass Communication**, an expression used in the definition “mass society,” which has changed throughout history. For the conservative character of the 19th-century political thought, the mass society results from “progressive industrialization, transport revolution, the diffusion of abstract values of equality and freedom” (WOLF, 1999, p. 7). These social processes have weakened the elites' power, exposed to the masses, and traditional family, religious, and community ties.



In contrast to the cultured individual, the mass-man would represent the jurisdiction of the incompetent, “the triumph of an anthropological species that exists in all social classes and that bases its action on specialized knowledge linked to technique and science” (WOLF, 1999, p. 7). However, such a statement demonstrates the absence of an interdisciplinary view, revealing a superficial conceptualization that does not analyze society members’ breadth.

The homogenizing view of the mass is noticeable in the formulation of the first theories of communication, which did not consider the receiver’s active participation in the communicational process, as is the case with the **Theory of Information and Hypodermic**.

Shannon and Weaver proposed a general theory of communication, the **Mathematical Theory of Information**, which served as a conceptual paradigm in the field of communicational study for years. It considers communication as a purely formal process of transmitting information from a sender to a receiver. It receives the mathematical concept for focusing only on operative and automated processes, ignoring the kinds of symbols at play, whether letters or written words, musical notes, and other information (WEAVER, 1980).

He classified the communication problem into three levels: the technical, the semantic, and the pragmatic: when solving the first, all the others will be solved (RÜDIGER, 2011). Such a theory was not concerned with the value and meaning of the messages transmitted, only

with its form of organization and transmission from the machinist perspective (D’AZEVEDO, 1971). In it, the sender is the subject who sends the message, determining the elements of the repertoire that can be shared; the transmitting channel is the support, through which the message is transformed into a signal and sent to the receiver; the latter, in turn, decodes the information to understand it.

If the message reaches the receiver differently from the intended one, there will have been noise in the communication. Hence the importance of feedback, with which the sender checks how the message was/is received by the receiver, to proceed with new messages (RÜDIGER, 2011). It is also worth mentioning the information and the redundancy since the former is “all-new content conveyed in a system by a given message to keep it functioning” (RÜDIGER, 2011, p. 41); and the latter, the latent effect that is reinforced to be fixed and accepted by the receiver.

The theory ignores the social relations, the perceptions of the sender and the receiver, and the quality of the messages sent, fundamental elements to govern the communicational process, together with the philosophical and historical problems contained in it. Therefore, it is a non-interdisciplinary theory that exerted a significant influence on communication studies due to the ease with which it outlined the man-machine relationship (RÜDIGER, 2011). However, concerning such a theory, we cannot consider the annulment of social relations in



communication as part of a total lack of knowledge about them. Their purpose was, strictly, mathematical to study technical problems in the physical channels that transmit a message (FRANÇA. SIMÕES, 2016). However, there is no way to disregard the contribution that his scheme brought to communication, serving as a conceptual paradigm for a long time (WEAVER, 1980). Therefore, although it is technical research that, precisely for that reason, does not address all the elements involved in a communicational relationship, its scheme was necessary for the initial analysis of how communication is processed, which, as already highlighted, goes far beyond the structure raised for such a theory.

After all, communication

presupposes subjects (whose identity and presence are constituted before the signifying operation) and objects (signified concepts, a thought meaning that the passage of communication will have neither to constitute nor, by all rights, to transform). (DERRIDA, 1981, p. 23)

Not for nothing, real communication is present in reciprocity and in the interaction between agent and patient, when the interlocutor speaks and is heard (PASQUALI, 1973), not only in the technical aspect.

With the development of social systems and the emergence of more complex societies, the communication process becomes more problematic, as the media audience is increasingly fragmented

and heterogeneous. Because of this scenario, new means of communication are created, the diffusing media, which could correspond to the various social interactions present, are no longer solved by current language alone (RÜDIGER, 2011).

The functionalist current appears to study society as a complex functional relations system, resulting from its members' collaboration. Such thinking is intended to explore the mass media's problem based on society's functioning and the contribution that the media can offer (WOLF, 1999).

After the First World War, the warning about the growth and sharp rise of the masses led to a deeper reflection of communicational phenomena. Political and social transformations fermented the appearance of a new intellectuality from which the **Hypodermic Theory** (RÜDIGER, 2011) would emerge, which considered communication to be a process whose message would successfully influence the receiver.

The debtor of behaviorism defended that all information transmitted produces a stimulus in the individual-receiver, influencing his behavior persuasively. In this way, the "great masses of individuals were represented, according to habits of heterogeneous thoughts [...] as atomized, alienated, primitive" (WOLF, 1999, p. 29).

Despite recognizing the subjects as distinct and heterogeneous beings, Hypodermic does not consider the receiver subject's totality, employing heterogeneity to highlight different subjects who receive the information.



Therefore, the absence of an interdisciplinary view in this theory that labels the subject as totally moldable by the sender continues.

The manipulation of the masses' habits and opinions has become a fundamental element in society's study, forming an invisible government, which starts to acquire notoriety and respect for its manipulative role, imposing itself over the others. The Hypodermic Theory assumes that it is the sender's actions, whose function is to provoke reactions in another person, which structure the circuits of social action, shaping them in their way (RÜDIGER, 2011). Because of this definition, communication seems to be associated with unilateralism, not reciprocal interaction.

While the Theory of Information focused on the messages transmitter channel, Hypodermic sees the sender as the protagonist of the action and the receiver as a supporting role. Therefore, it is not known who the recipient is, their background, perception, and values, nor how these elements influence the reception of information and the formulation of new knowledge. The absence of looking at the whole prevents a complete definition of communication.

In the course of the 1950s, however, the hypodermic scheme was reworked by the functionalist current, which began to criticize the unilateral limitation sender-receiver, breaking a barrier that prevented a more comprehensive view of all elements on this process. In this way, the subject can be both a sender and a receiver in a communication process. Thus the

receiver is also seen as subjects who do not react because they have been affected by the communicator mechanically; after all, communication can be efficient, even if it cannot affect the receiver according to initial intention (RÜDIGER, 2011).

Lasswell's model marks such overcoming, when contested the communicational' asymmetry process in which a sender produces the stimulus to a passive mass; the fact that the communication is intentional and aims to produce an effect on the receiver; and the separation of the roles of the sender and the receiver, regardless of social relations (WOLF, 1999).

While in the Hypodermic conception, informal relations between audience members were unimportant, since it was directly influenced by the mediated message, in Lasswell's scheme, the behaviorist relationship is overcome by inserting the rejection's concept of the information by the receiver, that is, this chooses to accept it or not, breaking the question of surrender in a mechanistic way.

Katz, Lazarsfeld, and Merton, through empirical social research, also contested the Hypodermic Theory when they stated that communication is not defined only by the stimulus-response relationship between communicator and receiver and that messages are unable to determine qualitative changes in people's behavior. According to them, social structures are responsible for deciding how to communicate and are influenced by Communication (RÜDIGER, 2011). The rise of the recipient's resistance and



reinterpretation concepts are fundamental in this new vision, which deconstructs communication as a stimulus-response effect.

Considering the subject's social aspects when receiving a message also meant a revolution for communication' study. More than other models, studies were beginning to expand with contributions from other areas, but overcoming the Hypodermic Theory was crucial for the emergence of new theories and the consequent communication's study improvement. More than other models, concepts from other areas were used, such as experimental psychological studies that began to analyze the success and failure of messages designed to persuade receivers. Persuading receivers "is a possible objective if the form and the organization of the message are appropriate to the personal factors that the recipient activates when interpreting the message itself" (WOLF, 1999, p. 12); that is, it is successful when the information sent is consistent with the reality of the recipients.

That, however, is not the only way to persuade. Otherwise, the communicators would never succeed when their messages were different from the environment involving the receivers. Therefore, there are several elements for the message to reach its objective, such as the latent effect. If the message's context is not inserted in the receiver's reality, the former can be shaped according to the latter, making him believe it is part of his meanings.

The **Theory of Persuasion** or Psychological-Experimental allowed a psychological look at the communicational process, whose studies until then did not consider the subject's participation. Although it seems to be just another look from another area on communication, it should be borne in mind that knowledge is never limited and tends to transform and improve each time it receives input from new areas, especially from an interdisciplinary perspective.

Thus, while the Hypodermic Theory addressed manipulation and the Psychological-Experimental persuasion, that of **Limited Effects** arises, which surpassed the communication process elements by including opinion leaders' role. According to this theory, the mediated information would not directly influence the public, but on specific factors that would affect the social environment where they are inserted; therefore, it addresses sociological aspects by highlighting the social context that involves the individual (WOLF, 1999).

The first communicational theories in an interdisciplinary perspective

Both communication and interdisciplinarity have undergone profound conceptual changes over time, to the point that, in the case of the former, we verify their practice even before their terminology, as is the case of medieval polymaths, whose knowledge was interconnected to different areas of expertise.

In the communicational sphere, a similar situation was found; because, as



new models emerged, they became part of its definition. However, such practices existed long before such recognition, since social interactions, essential for communication, emerged from the first contacts that human beings made with their neighbors before history itself.

Therefore, it is not from the formulation of a particular concept that it comes into existence; after all, its practices could have been established long before, needing only to be named and deepened. In this way, communicational theories cannot be seen as isolated discoveries but as complementary means to understand the communication process, even if that understanding has gradually consolidated.

With the emergence of specializations and the consequent encasement of disciplines, hyper-specialization created interdisciplinary dialogue. Thus, such fragmentation influenced the first studies of communicational processes that had several deficits by focusing solely on the mechanistic aspect of sending the message from the sender to the receiver, disregarding the subject's totality and the entire sociological, psychological and historical process of communication. To focus only on the transmitting channels, as if the communicational phenomenon had arisen only from communication technologies.

All of this is entirely explainable in the statement "arrogance of the present time" (BRANDÃO, 2015, p. 10) when it highlights the ignorance of the historical process caused by global innovations, which tend to focus only on the momentary. Thus, since this presumption

prevents knowledge of the whole, there is a dangerous phenomenon, favors the alienation of society and the manipulative power of more powerful groups, holders of knowledge.

In the communicational sphere, the whole's incomprehension is visible in the formulation of theories such as Hypodermic, which excludes the relevance of the phenomenon's subject-receiver. This partial analysis contradicts the statements of Japiassu (1976), who advocated the development of an "integral personality" (p. 47), resulting from education for the totality that would allow a critical spirit.

Critical thinking, resulting from interdisciplinary exercise, is fundamental to the development of humanity and its discoveries. It gradually appeared in the study of communication processes. The lack of criticality right at the beginning of communicational research revealed not only the absence of an interdisciplinary look but the realization that the concern of theorists of the time was more focused on formulating models that could offer some explanation for the communicational process than in delve into such studies (RÜDIGER, 2011).

In Hypodermic Theory, for example, the receiver, considered a manipulable individual, started to be seen heterogeneously (WOLF, 1999). However, they did not care about the subject's social and psychological aspects, revealed by an interdisciplinary study.

When the functionalist current began to rethink the communicational process and its complexity – with the emergence



of new interpretations that considered the receiver's relevance in the communicational phenomenon – other areas of knowledge made their contributions. The study object came out of its dimension to receive observations from other disciplines that could improve it.

The **Theory of Persuasion** sought contributions from psychology. Still, here, too, it cannot be said that there was an interdisciplinary look, perhaps with another multidisciplinary study, when new areas contribute without interrelating. A similar situation occurred with the Theory of Limited Effects, which brought sociological contributions but did not promote their dialogue with other knowledge areas.

Since the first studies on communication, there have been significant changes in the communicational phenomenon's epistemological perspective, when several theories have been elaborated. However, it would be a mistake to limit the communication process to just such studies; after all, communication is a process in constant transformation; and the more innovations that emerge, new demands will be needed to understand them.

The arrogance of the present-time and early theories

We have difficulty in delimiting study communication, precisely because it is an interdisciplinary area. On the other hand, the first communicational theories showed certain deficiencies in the

communicational relationship precisely because of the lack of an interdisciplinary view. It is noticeable that the definition of communication as something interdisciplinary occurred after the emergence of theories, due to the perception of the contribution of different areas to this field and that this finding is the result of an interdisciplinary look, because, at first, researchers used the term abandonment to discard the theories that were contested. Despite its shortcomings, the use of the term abandonment is dangerous. It means discarding something that contributed to the improvement of studies: it was through a critical look at it that new concepts emerged, offering a stimulus for developing a critical spirit, characteristic of interdisciplinarity.

Morin (2013) stressed this when he explained that theories need to be contested for cognitive development; otherwise, it is not science but dogma. There is a certain obviousness in this statement. However, it needs reinforcing by how the discoveries are studied; after all, the new's emergence is the improvement of the old and only exists because of it (MORIN, 2013).

The ability to make mistakes allows the search for new paths that transcend other areas. It was precisely an epistemological error on communication, raised by the Theory of Information, which led to its questioning and searching for new models. Something similar happened with Hypodermic, which already defined the recipient subject as heterogeneous, but still saw him as a manipulable individual, whose psychological and social



characteristics were ignored. When the functionalist current also questions this theory, its communicational model is reworked.

If the Theory of Information was contested for focusing only on the channel that transmits the message, and the Hypodermic, for considering only the sender's role, not that of the receiver, both were reading those researchers, their truth. Thus, theories cannot merely be studied as a thought removed to make room for others, but as something transforming, fundamental to research progress. The same applies to the Theory of Persuasion or Limited Effects, even when embracing other disciplines.

Therefore, interdisciplinarity requires a historical view of the whole: each discovery, theory, formula needs to be understood in its entirety. When we ignore history, we erase the whole's understanding and become slaves of the present, trapped in fragmented and incomplete knowledge.

Similarly, we cannot stick solely to the past or the future because "while we have one foot in the past and the other in the future, we do not perceive, nor see what is going on under them, or that is our tangible present. [...] We can only see today, seeing yesterday and envisioning tomorrow" (BRANDÃO, 2015, p.10).

If we analyze the theories described above in isolation, we will distance ourselves from an interdisciplinary view and fragment the knowledge about communication. Even considering the ideas beyond the communicational

dimension, we cannot isolate them and disregard previous studies' importance for their emergence.

Thus, in a communicational relationship, we can think that the individual receiving a message from the sender will react to it based on his own psychological, sociological, historical, and cultural aspects. From an understanding of the theories' sociological and psychological contributions, we can understand the communicational process in its entirety and, never can a single idea encompass everything. Still, the interaction of all of them, under an interdisciplinary perspective, after all, we are interdisciplinary beings. Besides, interdisciplinarity helps to understand the communicational process from a relation of theories. Still, paradoxically, it leads to the specificity of communicational study's object, which is man's interaction with the communicational means. After all, it comes only to such a conclusion from an interdisciplinary look at other areas' contributions to the communicational field.

In this way, we can say that, in a communicational relationship with the media, for example, the same individual can react passively to a content, resembling the subject's behavior defended by the Hypodermic Theory and being persuaded by another message (Theory of Persuasion) in a demonstration of how they complement each other. Several other theories emerged, subsequently improving this understanding. Still, it is undeniable that the first communicational theories had a



principle of communicational studies and, from there, driving the emergence of other reviews about it.

Final considerations

When studying communication, one cannot ignore its entire historical process, nor fail to understand it within the society from which it came; after all, one must read the whole, in an interdisciplinary way, so studying its development helps in understanding how the public relates to the media and how it influences their decision making, which is the object of study of communication.

However, while theorists speak of the importance of thinking interdisciplinary, the practice falls short of theory. Therefore, to understand the communication process in its entirety, it is necessary to consider, mainly, the contributions of Sociology and Psychology to such a study, since the human being is interdisciplinary and will react to the contents sent by the sender based on his psychological characteristics, and also by the way he interacts with society, and it influences him. After all, the communicative process is sociological, psychological, historical, cultural, political,

among many other aspects, and they all affect the relationship between the communicational elements and the individual's way of insertion in society, who started to use the media to improve their interaction social, object of study of communication.

Thus, it is possible to analyze the receiver's different communicational process behaviors through an interdisciplinary look, as there is no single truth. Moreover, as seen, the same receiver can react differently to varying contents since the message's apprehension occurs from its psychological and sociological formation in interaction with what is presented, distinguishing itself from others' concerns. Still, communication will happen in all cases as long as the message's essence is consistent with the communicator's goal.

Through the interdisciplinary view, it was also possible to mediate the object of study of communication without restricting or enlarging it excessively by focusing on social interactions enhanced by communication technologies, considering the interdisciplinary areas existing in this process.



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