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THINKING ABOUT THE SOCIAL OUTSIDE THE INDIVIDUAL/SOCIETY DUALITY: NIKLAS LUHMANN'S THEORY[1]

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Abstract: This work aims to present some central elements of the thought of German sociologist Niklas Luhmann. With emphasis on his writings on communication, we aim to demonstrate how this author's theory presents a way of thinking about society that does not fit into the individual/society duality, which has always permeated sociological thinking. Communication, for Luhmann, is not an exclusive attribute of individuals: any process or operation capable of producing meaning participates in communication, be they a scientific article, a criminal case, a class, a video, etc. For Luhmann, all these elements communicate and form communication networks that create the bases for a continuous reproduction of society. This network is created neither by free individual initiative nor by social coercion, but is updated based on its own horizons, so that a past communication serves as the basis for the next future communication. Thus, for Luhmann, only communication is capable of communicating.

INTRODUCTION

The object of our text is Luhmann's sociological theory, especially his writings on communication. The objective of the work is to expose a central aspect of Luhmann's theory, which is his theory of communication, aiming to demonstrate how it constitutes an original theoretical effort that escapes the duality between individual and society, which has marked most sociological practice over time.

One of the great milestones that characterizes sociology throughout history concerns the duality between individual and society, which owes its existence to the following question: does society make individuals, or do individuals make society? Each in its own way, most consolidated sociological theories address this issue, directly or indirectly, and construct their archetypes, sometimes placing more emphasis on the role of society, sometimes on individuals, and sometimes on a combination of both. In any case, doing sociological theory meant, for a long time, talking about the relationship between the individual and society. For sociology, in this sense, it is a great challenge to make known social theories that are not based on the individual/society duality. Niklas Luhmann's theory of social systems is one of these proposals. Built on a constant interdisciplinarity with fields unusual to sociology, such as cybernetics and biology, Luhmann's sociological theory seeks to explain social dynamics by choosing as the main agent neither the individual nor society, but communication. Communication is the basic element that constitutes society. Society is a system made up of communications (Luhmann, 1991, p.192).

Saying that society is a system made up of communications is a proposition that requires a double theoretical treatment, which explains what is meant by system and what is meant by communication. Despite being concepts that complement each other, they are constructed separately by Luhmann. Firstly, we will explore the idea of system and show how it relates to a fundamental sociological question that concerns thinking about social order. In a second moment, we will explore the concept of communication, showing its centrality as one of the founding sociological elements of Luhmannian thought.

SOCIAL SYSTEMS: THE EMERGENCE OF SOCIAL REALITY

In an abstract way, systems can be understood as a set of elements that enter into a relationship (Luhmann, 1991, p. 41). But this relationship is not a pre-defined or naturally given state of affairs, but rather a contingent process. The concept of contingency is central

in Luhmannian theory, as it indicates that a certain state of things can occur in another way. This means that, among these elements that enter into a relationship, there are always other elements that were left aside. Systems are formed, therefore, through selective relationships, because they always choose possibilities taking into consideration, a list of other possibilities.

From the moment a system is formed through the relationship of these elements, it closes itself to its environment[2]. The environment of a system is simply everything that is not part of that system and that, therefore, is a much more complex environment than it. A system, in this sense, is defined precisely by its difference in relation to its environment, and not in an autological way. A system does not exist "in itself", but always in a difference. A system cannot contain all possible relationships within itself, because otherwise it loses its difference as a system. Systems thus emerge in an attempt to provide an order (even if arbitrary) to a state of things. The environment works as a horizon observable by the system so that it can plan its operations. Furthermore, the environment is fundamental to the existence of the system from a material point of view: autopoietic systems are made up of only one specific element, but this does not mean that they do not depend on other things in their environment to exist. It is necessary to make a distinction here between, on the one hand, the elements of the system and, on the other, as Luhmann (1991, p. 245) says, its conditions of possibility. The clearest examples of conditions of possibility are the physical-chemical realities of nature: the sun, air, heat or water are strictly necessary for systems such as law, art or politics to exist, but they are not constituent elements of these systems.

For Luhmann, social systems are autopoietic. Autopoiesis is a concept created by biologists Maturana and Varela (1974), and indicates that a given system is capable of reproducing itself only from its own elements. In the case of these authors, the cell is considered an autopoietic system, as only one cell is capable of generating other cells. In Luhmann's case, only communication is capable of producing new communications. Because they produce their own elements, autopoietic systems are closed to their environment. We do not have space to explore this proposition in depth, but it indicates that the system only allows selective openings to its environment, not exchanging elements. Let's take an example from sociology: in Parsons (1970), who works with an open systems theory (the AGIL scheme), politics and economics work in line with each other: politics defines objectives to be pursued by society and the economy provides the material resources to achieve this objective. With the theory of closed autopoietic systems, this does not occur: political decisions and the circulation of economic resources are treated as constitutive elements of the political and economic systems, respectively. The communication of the economic system always refers to market fluctuations and not to the demands of political objectives. Likewise, political decisions refer to fluctuations in public opinion rather than market realities. In this sense, politics and economics do not have a determined cause and effect relationship between them. They actually have complex relationships that depend on the objectives of each system.

Luhmann (1991, p. 16) identifies four autopoietic systems: living organisms, constituted by life; machines, constituted by programming; the psychic, which is made up of thoughts; and the social, which is constituted by communication. Within the social

2. It is important to highlight that Luhmann works with the idea of closed systems, but there are systemic theories (e.g. Parsons) that use ideas of systems open to their environment.

system, we have 3 other types of subsystems: those of interaction (common encounters between people), organizations (companies, schools, universities, etc.) and functional systems (politics, law, economics, science, religion, etc). The social system, society, is therefore not composed of individuals, but of communication. For Luhmann, in reality, "individual" is a very complex category that encompasses both organic, psychic and social aspects and confuses systemic references. For this reason, to refer specifically to the psychic system, to individual consciousness, the author prefers to use the term "people". People are a condition of possibility for the existence of communication because they provide meaning for it, but they are located outside the social system. People's thoughts cannot be part of communication because they cannot be processed by society as thoughts. It only becomes a component of society if it is expressed communicatively in some way.

The separation between people and society, in the same way as the separation between politics and economy, prevents thinking about these two dimensions in a deterministic way (such as social coercion on the individual). As society and consciousness are systems closed to each other, it is impossible to determine how a particular communication interacts with each person's interpretation of it. With the separation between the social system and the psychic system (consciousness), the relationship between individuals and society becomes more complex. "Because they are part of the social system environment, human beings are given greater freedom (greater complexity) than social roles, norms and structures would allow" (Vanderstraeten, 2005, p 474). "Freedom" cannot be understood here as the absence of coercion or rational capacity for choice. What Luhmann draws attention to is the fact that any communication has the chance of being rejected by individuals because they are not blank slates, but have their own reality (psychic reality) that interacts with the social world in ways that are not predetermined by this.

DOUBLE CONTINGENCY

How are social systems formed? Here, Luhmann resorts to the concept of double contingency. It is, in fact, a concept initially formulated by Talcott Parsons to demonstrate a social problem (which has the same name as the concept: the problem of double contingency) and the way to solve it. Lu-hmann maintains the definition of the problem but, when it comes to addressing its resolution, he separates himself from Parsons. Before we get into the concept properly, a brief contextualization: if we talk about a simple contingency (*single contingency*), this concerns theories of rational choice, in which the agent makes an informed decision in the face of a given reality, although changeable. Ultimately, this agent seeks to make the correct decision (or the best possible) through methods that guide him in this objectively given reality (Kessler, 2016). The double contingency adds a level of complexity to this hypothetical situation because now the agent is no longer facing an objective reality, but facing another agent, who not only does not have an objectively given behavior, but who will act accordingly. according to the choices of the first agent. The idea of double contingency begins with Parsons, who poses the question as follows:

> There is *a double contingency* inherent in interactions: On the one hand, ego gratifications are contingent upon your selection among available alternatives. On the other hand, the alter's reaction will be contingent on ego selection and will result from a complementary selection on the alter's part. Because of this double contingency, communication, which is the concern with cultural patterns, could not exist without the

generalization of the particularity of specific situations (which are never identical for ego and alter) and of the stability of meaning that can only be assured by ' conventions' observed by both parties (Parsons and Shils, 1951, p 16) (our translation) [3]

Parsons also presents the problem in a summarized way in the form of principles that govern interaction, of which there are two: "1) Each actor is an agent in action and an object of guidance for themselves and others; and 2)[...] as an agent in action, he is oriented towards himself and others and, as an object, has meaning for himself and others" (Parsons, 1968, p 436). From these principles, the author argues (Parsons, 1968), it is concluded that the results are contingent not only on the manipulation of objects in the environment by agents, but also on the intervention of these objects (which are other agents) in the course of events.

Luhmann keeps intact the definition of the concept of double contingency and the sociological problem it presents regarding the difficulty of coordinating interactions between agents who are constantly observing each other. However, the author does not follow the reasoning proposed by Parsons to solve this problem. For Luhmann, consensus on social conventions is not the only possible solution, which, considering the individual/society duality, would be a solution through the "society" pole. Instead, Luhmann (1991, p. 150) proposes observing the problem from the temporal dimension, from which we can observe a first agent (alter) initiating some action[4] to define the situation and wait for the reaction of the other agent (ego). Ego feedback, in turn, provides new cues for new alter action. Each new interaction that occurs this way further reduces the degree of contingency of alter and ego actions because

both, increasingly, form expectations about how the other will act/react. Luhmann discards the idea of a definitive solution and proposes thinking about double contingency as a problem that is self-actualized, which means that, on the one hand, it already carries its own possibilities of overcoming as alter and ego reduce contingency but, on the other hand, the problem is always present, at least potentially, because the behavior of one or the other can change. It is a problem that, as Ocampo (2013) puts it, is updated as a horizon of meaning.

Returning again to the individual/society duality, could it be said, then, that the formation of Luhmann's systems is explained from the individual's perspective? That would be an erroneous conclusion. Luhmann speaks of "alter" and "ego" precisely to reinforce the fact that the double contingency does not only concern people (psychic systems), but also social systems (Luhmann, 1991, p. 151-152). The action of alter, therefore, does not necessarily concern the action of an individual. This is perhaps one of the most difficult elements to understand in Luhmann's theory of double contingency and also the one that generates the most controversy, since within sociology the notions of action generally refer to individuals. Indeed, communication (and action) requires people as a condition of possibility, but this does not allow us to say that, in reality, "ultimately", alter and ego would be people, because that would be leaving the epistemic center on which Luhmann's theory is built, which is communication. There is no entity that is "ultimately" responsible for events. This would be to fall back on the first criticisms directed at the discipline of sociology that postulated that, "ultimately", the social is just people acting. We could make an ad infinitum

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3. All translations made in this text are our own.

4. Although we constantly talk about actions, Luhmann's version of double contingency is not an attempt at a theory of action. Luhmann's theory is based on communication, but communication uses action to describe itself.

regression and say that people, "ultimately", are fabrications of the mind, and this, in turn, fabrications of chemical processes, which in turn are mere results of atomic dispositions, etc. In other words, there is no reason to give priority to individuals when talking about alters and egos. Within Luhmann's theory, it is more theoretically accurate to say, returning to the example, that publishing an article is an action carried out by the science system. Luhmann even speaks, in this sense, of a "free action of the subject" (Luhmann, 1991, p 167).

This way, roughly speaking, social systems can emerge from this continuous movement of reducing contingency between alter and ego. The principle adopted by Luhmann to explain double contingency points to the fact that the system opens up to chance (to the indeterminate) and from this generates structures, a process called *order from noise*.

Alter and ego are black boxes for each other, that is, they cannot predict their behavior, they can only assume what the other will do. When these black boxes meet, however, they create windows of transparency that are clear enough to carry out an interaction. In principle, alter and ego are indeterminate for each other but produce determinability when observed. These windows are created because, according to Luhmann (1991, p. 172), there is an interest on both sides in getting out of this mutual situation of indetermination. What becomes visible, however, is only a small portion among many other processes that remain intransparent. Each agent chooses what he will make public and what he will keep hidden, like a theatrical game in which he alternates between the stage and the backstage[5]. Alter and ego, this way, only get feedback from each other regarding this visible, transparent and determined portion of their actions. Everything else remains hidden. However, even if not everything is revealed, the constant feedback made by

5. About the theatrical game, see Goffman, 2002.

these mutual observations makes it possible for a social system (an order) to emerge. Here we can see the dual role of contingency in the maintenance or transformation of social systems: on the one hand, windows of visibility reduce contingency for alter and ego, increasingly allowing each to operate more precisely based on the expectations of the other. On the other hand, the system presupposes the existence of an indeterminate side that it does not access but that is part of its environment, so contingency can force it to operate in other directions that are not structured. It is important to emphasize that alter and ego feedback does not need to be "correct", that is, correspond exactly to the expectations projected by the other. Even an error or a deviation becomes productive in this scenario because the system is formed in a self-referential, closed way, and not in reference to an external truth. An error in expectations may simply cause the other person to readjust their behavior to match what was projected. The system also acquires its own temporal limit. The selections refer to themselves in this established time, creating their own past and future. Luhmann (1991, p. 170-171) talks about the transformation of chance into possibilities for structural construction: chance means the lack of coordination between structures of a system and occurrences thereof. Over time, causal relationships are formed between them that are always, again, subject to contingency.

COMMUNICATION

Communication can be seen as the substance that fulfills the double contingency process: Alter and ego adjust their expectations of action in relation to each other using a communicative process. Luhmann (1991, p. 194-195) defines communication as the synthesis of 3 processes: a) selecting

information; b) issuing information and c) understanding information. It presupposes, then, participants who issue information and participants to whom it is addressed. The author refuses to speak of communication as a process of transmitting information, because this would imply saying that there is only one thing to be shared, that a message has the same meaning for those who send it and for those who receive it. What actually happens is that each of the participants selects a specific meaning for the message, which may or may not be the meaning shared by the other agent. However, the divergence of meaning does not prevent the completion of the communicative act. In the same way as in the double contingency, the error becomes productive because it can be adjusted to it.

> Communication is defined as a synthesis of three selections: Information / Issuance / Understanding. It is a complex operation, whose emergent unit is ordered as follows: a selection of "Information" (the subject of communication, the one about which it must be expressed) is initially processed by a specific sender (*alter*) who selects a certain *act in the world* ("Emission") – which can be a gesture, an oral, written locution, broadcast telecommunicatively or symbolically coded – so that it is observed by a certain receiver (ego) for whom such "acting" " is directed. However, given that communication is mutualistic, it cannot be reduced to the unilaterality of an emission, as it requires the ego to "act understanding" ("Understanding") and to distinguish between this doing of the sender in the world directed at it ("Emission") and its decoding of "Information" (Ocampo, 2013, p. 69)

Participation in communication, as well as in double contingency relationships, is not a specific attribute of people, but encompasses any process or operation capable of producing and processing meaning. For example, a commercial advertisement, a video on *Tiktok* or a criminal case are all communicative agents. As we explained previously, in reality, people (the psychic system) do not participate in communication. What participates is what they externalize through sounds, words, images, writings, etc., but people's thoughts remain outside the communication. Recently, attention has also been drawn to the inclusion of a new social agent that participates in communication: algorithms. Algorithms absorb our contingencies (our choices) and send them back to us in a new, unpredictable form (Esposito, 2017). The recently created GPT *chat* is an excellent example: despite not having a conscience, the platform can communicate with people through *machine learning* that is provided by the communication itself, stored in digital databases. Algorithms learn to communicate, translate texts and play games not because they have artificial intelligence or consciousness to learn spelling rules or how to play, but because they use billions of data about communications used in that context that are provided by the society itself.

> It can be said – and this is the idea I propose here – that what these programs reproduce is not intelligence, but communication. What makes algorithms socially relevant and useful is their ability to act as partners in communication that produces and circulates information, regardless of intelligence (Esposito, 2017, p. 253).

COMMUNICATION AND ITS IMPROBABILITIES

There are a series of barriers that communication needs to overcome in order for it to be successful (accepted by individuals). For Luhmann, communication is an unlikely process, and needs to create specific means to achieve it. Luhmann (1981) argues that communication has three improbabilities and that different media are created to overcome each of them.

The kind of communication theory we are trying to announce therefore starts from the premise that communication is improbable, despite the fact that we experience and practice it every day of our lives and that we would not exist without it. This improbability of which we have become unconscious must first be understood, and this requires what can be described as a counter-phenomenological effort, seeing communication not as a phenomenon but as a problem; thus, instead of looking for the most appropriate concept to cover the facts, we must first ask how communication is possible (Luhmann, 1981, p. 123).

The first improbability is that of understanding: it is unlikely that a person will understand what another means, considering the fact that consciousnesses are individual and separate (Luhmann, 1981). The second improbability is that of reach: it is unlikely that a communication will reach more people beyond the local context in which it was created. This occurs because face-to-face interaction ensures that communication participants are committed to paying attention to the content of what is being said. This condition cannot be kept at a distance, because elsewhere people are paying attention to other things (Luhmann, 1981). The third improbability is that of success: it is unlikely that one person will agree with what another said, even if both are in agreement regarding the meaning of the message. For Luhmann (1981), accepting means someone taking that communication as a premise for their own behavior, as well as processing new information considering that the accepted communication is correct.

These improbabilities, the author argues (Luhmann, 1981), are not just barriers blocking certain messages from reaching their targets; They also function as virtual communication blocks, so that someone can simply give up trying to send a message if they consider the chance of one of these improbabilities occurring too high. On these occasions, there is a tendency to abstain from the communicative process. We can see a lot of this process in cases of political discussions, where we often hear people say "there's no point arguing with him, he won't change his mind!"

For Luhmann, there is no continuous and progressive solution to communication improbabilities, because they reinforce each other: the more one understands a communication, the more reasons there are to reject it; the more it expands beyond the local context, its meaning becomes more incomprehensible; the more you accept, the less you understand or achieve; etc. For this reason, the solution to communication problems related to these improbabilities cannot be thought of with reference to the entire society, but specific contexts: for example, interactions in informal environments produce communication overcoming only the barrier of understanding, no one is worried if a bar conversation will be heard by the whole society, and the participants do not have as their main objective the convincing of the other. In a television program, communication is created by overcoming the second improbability, but it is impossible to check whether viewers understood or agreed with the messages that were said. Finally, in an airplane flight scenario, the airline does not expect passengers to understand why they must turn off their cell phones inside the aircraft, only that they comply with orders.

The means created to overcome the first improbability, that of understanding, is language, which enables the expansion of communication beyond perception. Language creates not only common languages through which people can understand each other through signs, but it also creates the reflective capacity of communication that we exposed previously, which provides communication with the reaction on itself so

that two agents achieve the same meaning of a given emission. In short, argues Luhmann (1981), language creates the impression of mutual understanding, which provides a basis for subsequent communications. As for the second improbability, that of reach, it is overcome through the creation of the so-called means of diffusion (*Verbreitungsmedien*): these include, at first, writing, and later the press and what comes to be called mass media (radio, TV, newspapers, magazines, etc.).

Finally, overcoming the third improbability, that of success, is achieved through the creation of symbolically generalized means of communication (hereinafter, MCSG) (Luhmann, 1981). They ensure that a given communication is accepted. The MCSG have a greater theoretical relevance in Luhmann's work, which we do not have space to address in detail but which we must, at least, outline. The concept of MCSG is, in fact, a formulation by Parsons that Luhmann borrows and modifies. It refers to the types of communication that occur within functional subsystems and that allow their existence: considering that communication can be both accepted and rejected, MCSG ensure constant acceptance so that subsystems can develop their complexity. In this sense, the functional subsystems do not create the MCSG, as Parsons thought, but develop through them (Chernilo, 2002). Also, unlike Parsons, who considered MCSGs as means of exchange between systems, in Luhmann each MCSG makes reference to a specific functional subsystem: power (political system), money (economic system), truth (scientific system), law (legal system), etc. (Chernilo, 2002). Each of these means is recognized by the communication participants as something valid: it is unlikely that anyone will accept payment in the form of personal services, advertising or bags of rice. However, money ensures a way valid for everyone (therefore, generalized) through which people can purchase goods and services on the market. In politics, the execution or rejection of a project is determined by the form of power established, be it majority voting or the order of a dictator. In science, the criteria created to consider an article as "true" create the specific ideal of scientific communication (peer review, citation rules, blind experiments, etc.). There is no MCSG valid for all systems: you cannot obtain love through power, approve a project by appealing to its truth or approve a scientific article using a law. Cases of corruption can certainly occur, which are situations considered invalid under the rules of the game: someone can buy a judge, or pay their party to approve a project, but it is impossible for any functional subsystem to establish a per- constantly based on communications understood as corrupt, because they are the result of ad hoc situations, which are not connected to each other temporally. However, MCSG coexist within a certain subsystem: at school, there is recognition that the teacher and students are in a power relationship; scientific research needs to be financed; Law policies can be based, to some degree, on the truth of a concrete situation. The difference is that only one of these MCSG in each system serves as a catalyst for the system to develop its complexity: the democratic system is an evolution of forms of power; financial capital is an evolution of the use of money; The peer-review and double-blind research review system is an evolution of ways to achieve the truth.

The Luhmannian argument makes it clear that the "acceptance" of communication does not necessarily concern free acceptance, verbal agreement with a given proposition. Political power ensures that citizens, for example, pay fines, but many people will consider that their fine was unfair and only pay it to avoid retaliation from the State. Likewise, I may want not to use money to pay for my goods, but I have no alternative because other people use it.

In this sense, acceptance can refer much more to complacency than to agreement, depending on the type of situation in question. This also makes it clearer why there is no necessary connection between understanding and acceptance of communication. In many cases, people are just following rules or conventions. Chernilo (2002) makes a similar suggestion when arguing that MCSG are forms of social coordination, that is, ways of ensuring that operations in a subsystem are based on these MCSG and produce future operations based on them (in other words, they guarantee the autopoiesis of a subsystem).

CONCLUSION

From the moment that any meaning-producing process or operation can be understood as a participant in communication, the individual/society dyad ceases to make sense in Luhmann's archetype. This is for two reasons: 1) This participant can be based on a collective organization, such as the standards of a company, the laws of a country or the conversation in a group of friends, as well as being the result of an individual act, such as the speech of a a political leader. 2) the participant may not even be part of this dyad, as in the case of social network algorithms that direct personalized content to users. There is no preference regarding which type of participant would be most crucial in interpreting social dynamics.

Society, this way, reproduces itself through the communications we generate on a daily basis. In modern society, much of this communication is differentiated into several systems (science, law, politics, economics, religion, etc.), with each of them building their own communication networks and communicating agents: masses are consolidated as typical communications of the religious system; publications as typical communications of the scientific system;

judgments as typical communications of the legal system; etc. In this process, there is no social coercion that determines which communication will be produced nor a free initiative to communicate what you want: present communications are constructed taking into consideration, past communications. For Luhmann, this means that the possibilities of accepting or rejecting the communication are equally open: a new publication can agree with or criticize an old one; new laws can annul or reinforce old laws; a restaurant can maintain or change its food according to feedback from its customers, etc. Through constant references to what has already been communicated, society produces new communications that can reinforce or change the communicative flow at stake.

As the main results of our presentation, we emphasize the appearance of the concept of communication as a theoretical novelty in the sense that it is not linked to any specific entity, which makes it external in relation to the individual/society dyad. Individual speeches, organization norms, algorithms, texts, videos, photographs and any process or operation capable of producing meaning are capable of producing and participating in communication. The concept of communication brought by Luhmann, this way, opens up possibilities for thinking about social dynamics without placing society or the individual as the main agents of them. For Luhmann, only communication is capable of communicating. Or, put another way, only that which enters the flow of present communication has the potential to transform communication in the future. A political speech can influence people's votes; a drop in shares on the stock exchange can trigger an economic crisis; self-help books can make people more motivated to work; videos on Instagram can entertain a group conversation; scientific publications can inspire public policies; songs

can become known worldwide; well-done advertising can increase consumption of a product; news can go viral and become a topic of conversation among people; Algorithms can shape the way we consume content. In all these examples, communication (and not society or individuals) is what transforms communication.

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