

The post-humanism of Niklas Luhmann's systems theory

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Abstract

Luhmann (2012, vol 1: 12) declares about his sociological theory, that it is radically anti-humanistic, radically anti-regional and radically constructivist. This short paper tries to introduce to Luhmann's systems theoretical communication sociology and explain why and how it is anti-humanistic and, in that regard, also post-humanistic. The rationale for presenting the paper at this conference, is to contribute with the explanation of an already fully developed theory which observes itself as a post-humanistic theory. The paper does not go into the observation of non-human observers, or the earth as an observer, as promised in the first abstract.¹ It's a short paper that is just aiming at introducing to and explaining some basic traits of the theory. It refrains from introducing further potentially disturbing aspects and perspectives.

Introduction

Luhmann's systems theory is a form of methodological anti-humanism, as it discards the human being as guiding reference of sociological observation. Instead, systems theory distinguishes between three levels of systems formation: the biological, the psychic, and the social. The systems on each level of system formation observes their surrounding world through their own unique kind of reproduction medium: life,

¹ If interested in observing how non-humans observe see Bryant 2016; 2011; Tække 2019.

consciousness and communication. This paper tries to introduce to Luhmann's theory by first sum up his take on observation and then lay out how systems observe, and then describe in more detail how communication observes and (re)produce social systems. After this short introduction to the theory the paper ends by shortly straightens out and discuss how the theory is post-humanistic by being methodological anti-humanism and post-Darwin evolutionary.

Observation

Inspired by the logician George Spencer-Brown (1969), Luhmann (2012) defines observation as the distinction between indication and distinction. If one draws a distinction, a marked inside is distinguished from an unmarked outside. The two sides and the distinction between them together form a form (form = marked | unmarked). This means that observation is a paradox because invisibility becomes the condition of visibility (Luhmann 2018: 381). We only see the marked side of the distinction. The identity of the difference is the unity of differentiation, and the conditional basis of the observation, but the invisibility of the outer side of the distinction, means that the observation is un-reflected – it only sees what it sees, but does not see what it does not see. Based on another concept by Spencer-Brown (1969: 69-76), namely *reentry*, Luhmann explains how to observe the first observation by making a new observation. An observation of an observation is a reentry of the form *observation* into the form observation and is referred to by Luhmann, as a second order observation. With a second order observation a system can observe its own observations and reflect about the distinctions that make them possible - which is to acknowledge their contingences (that they could be different). However, a second order observation is merely a new first order observation that is blind to its own constitutive difference, i.e. blind to the difference it distinguishes itself from. What Luhmann suggests is to observe how observes observe which means that this paper will have to observe how Luhmann observes, to observe how his methodological anti-humanism observes.

Observation and system

One sees only the indicated, but neither the unmarked nor the distinction that enables the observation, to which another distinction would give another

observation. The question now is which distinction to choose? Following Luhmann the answer is straightforward; we must select the distinction that the system of observation selects. For example, if we want to observe an organization, we must observe the distinctions the organization itself uses for its observations, and perhaps even to what extent it reflexively observes its own observations (Luhmann 2018). When we observe how others observe, we become second-order observers and here the concept of autopoiesis comes into play, for the theory of *autopoiesis*, which means self-production, is precisely a theory that focuses on the distinctions an observing system itself produces. The term autopoiesis is taken from the neurobiologist Humberto Maturana who together with Francisco Varela (1980) describes what characterizes a living system, which is first and foremost that it is operationally closed and structural coupled. A living system maintains itself within its own boundaries: The cell consists in a network of interrelated components that through their organization produces the components that in interaction generate the same network that produces them. So, autopoietic systems produce their elements through their own elements, they cannot operate in the environment, yet they can differentiate between themselves and the environment, between the system and the environment. Even an amoeba must be able to distinguish itself from its environment or else it would eat itself. The theory of autopoiesis has a concept of element (component) that denotes physical chemical entities; and the operation we can observe, is that these elements are reproduced through their interrelationships or networks within the boundaries of a biological system, e.g. a cell. Luhmann abstracts and generalizes the concept of *element* to also describe and define reproduction processes in psychic and social systems. First, Luhmann (1995; 2012) rejects that elements exist in advance, before being selected by a system. Next, Luhmann rejects that elements must be characterized by extension in time and space, and not just as events (operations). Thus, an element for Luhmann is something the system itself constitutes as element, by selecting it as an element by connecting to it as an event in the system. On this general systems theoretical level, Luhmann can therefore observe thoughts as elements in psychic systems and communications as elements in social systems. In the psychic system, nothing suddenly comes in from the outside, neither the thoughts of others, communications or cells, it operates within its own boundaries and every thought reproduces the distinction between system and environment, by being a thought and nothing else. The selections I make

when I speak (sounds that are immediately gone again) can similarly be included as elements of a social system, if linked to by later operations. Interconnected utterances can constitute an individual system, that observe through the very same operations (elements) that constitutes and produces it. Such a system can be observed by an external observer, who observes that a distinction can be drawn between system and environment, because the observed system differs from its environment by producing a special kind of elements that operatively distinguishes it from its environment. Thus, at the general level, an operational difference between what communicates and what does not communicate can be observed, while at the sociological level, different communication systems can be distinguished by their different criteria for which communications are selected as elements (Luhmann 1995). Political communication, for instance, can be distinguished from scientific communication.

As a second-order observer, one must find a specific form of operation through which a system reproduces itself, so one can speak of autopoiesis. On the basis of general systems theory, Luhmann (1995) defines three different levels of system formation, all of which can be observed in form of a distinctive kind of operation, the psychic, the social and the biological, where again differentiations can be observed at the social and the biological level.²

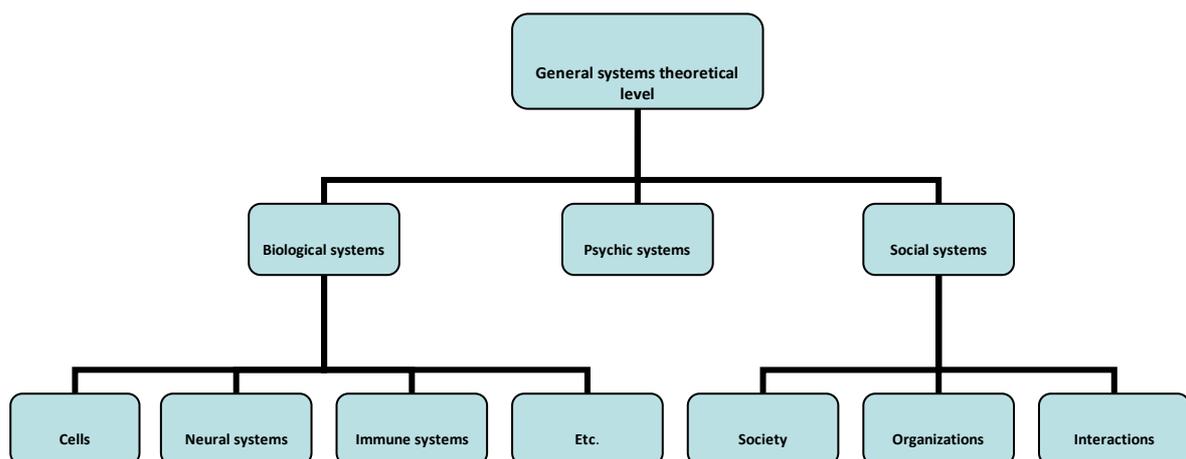


Figure 1. Different levels of systems formation.

² Luhmann does not reject the idea of other levels of system formation, e.g., Luhmann (2012 vol 1: 66) where he speculates if the computer in the future would form a new structural coupling between a reality, they become able to construct and consciousness or communicative systems.

Communication

We now take a closer look at communication as the basic process in social systems, explaining why it is only communication that communicates and why therefore social systems can be claimed to constitute an independent level of system formation in its own right, able to creating its own reality (Luhmann 2002). To understand this postulate, we must turn our attention to Luhmann's definition of communication. Communication is seen as the unity of three selections: information, utterance and understanding (Luhmann 2012: 36). So, an element in social systems consist in the unity of *information, utterance and understanding*. Luhmann builds the notion of information on Gregory Bateson as a difference which makes a difference (Luhmann 1995: 40). Bateson exemplifies that a map provides information about the difference between, for example, road, field and streams. To make a statement, or simply to say something about the world, is to mark a difference, and to accept that there is knowledge about the world, which is why an opinion will always make a difference to what might otherwise be said. If other people must become aware of the information you have selected, you must utter it, e.g. by using your voice. Information and utterance can be seen in line with Saussure's concepts of signified and signifier. For Saussure, the signified is always a mental idea, while the signifier may be a sound. For example, there is a knock on the door to the office, the employee in the office must now distinguish the information (that someone wants to enter) from the utterance (the knocking noise) and recognize, or observe the noise, not just as noise or a rhythm, but as a communication attempt. To distinguish between information and utterance for Luhmann (1995; 2012) is *understanding*.³ This is because understanding is the selection of another system than the uttering one. However, selection of understanding must itself be uttered as an information and thereby as a new communicative element connected to the first element, to complete the communication. One element does not provide a system, only consisting of information, utterance and anticipation of understanding. The employee must say 'come in' or 'stay out' in the form of a new uttering behavior that reflects his / her selection of information which at the same time mediate the selection of

³ This distinction is also decisive for which understanding is selected, for example, if the knocking sound is hard, it may be an angry person who wants to enter.

understanding, before an element is produced as a part of the social system emerging or maintained by the same process. It is always, and this is the crucial point, up to others (or more correctly according to Luhmann, up the social level of system formation) to select an understanding – and not before this happens a communicative element is produced as a process in a social system (re)producing it and at the same time differentiating it from its environment. One must wait for an answer before one can say what the social consequences of the utterance were and also what intentionality one was attributed as a person (Luhmann 1995: 140). This makes communication a chain of processes (elements) that link back in time to previous communications (elements). Someone must relate to what has been said before the communication contribution can be said to be part of the social structure that forms the basis for future communications. Here it is important to state that it is up to the social level to select understanding. “Humans cannot communicate; not even their brains can communicate; not even their conscious minds can communicate. Only communication can communicate” (Luhmann 2002: 169). Even psychic systems cannot communicate or direct the social. Maybe in one organization it is decided, or culture, that you must knock at the door before entering but it differs from organization to organization. If you are knocking at the door in an organization where it is not decided or culture to knock before entering – who knows what they will understand? Social systems, over time, build an interaction history that structures further communication because communication as a process changes information, utterance and understanding into the acceptance or rejection of meaning proposals. What you say when you want to buy something in a shop and what you say to your lover is different, like the response is - it is the social system and situation that provide communication with meaning and makes an understanding probable. Communication is not just about concrete matters, for example whether you must come in or not, but also about how communication can process legitimately in the future and basically also about how decisions can be made. Communication processes at one and the same level, but at this level communication can raise itself to the level of second-order observation, to the level of reflective communication. Reflective communication is communication about communication, which is the mode in which social systems observe their own observations. Meetings, for instance, often begin with deciding the legitimacy of the decisions in the minutes from the last meeting.

So, understanding is always to draw a distinction between information and utterance, and each time that happens a communicative element is created. This is the explanation for why it is only communication that communicates, why social systems are autopoietic: it is up to others (read the social) to distinguish information from utterance. The social, on this basis, is not directive for individuals, it has its own reality and constitutes a level of system formation in its own right in line with the biological and the psychic systems. Therefore, sociologically seen, except from the old European tradition and semantics, there are no humans but different levels of system formation.

Luhmann as post-humanist

The general systems theory with the three levels of systems formation is a break with the Cartesian mind-body dualism. Instead of mind-body dualism systems theory suggest pluralism between many systems. The body is observed as consisting in number of interconnected systems, like immune, neural, and visual systems that again consists in cells which are also autopoietic with elements like DNA, RNA, proteins etc. Psychic systems are boring we only have one each but there are almost 8 billion of them. They are embodied and can in a nonlinearly and unconsciously way use some of the neural complexity by a number of systems | environment distinctions enabling psychic systems to see, feel, remember and think. They can remember traits of their own history, their name, birthday and the like, but they are intransparent to themselves and do not know what they will do in the future, and can only like other observers, try to observe how they themselves observe (Luhmann 2000: 62). To understand their own body when it e.g. hurts, besides what the instincts tell them, they need the social level of system formation, which also is the case when it comes to attempts to understand themselves as selves.

Luhmann defines the structural coupling between the psychic and the social level of systems formation as language. In conscious psychic systems language is the foundation for cognition, observation and thinking (Luhmann 2002: 175). They are intransparent to themselves but have a selective memory letting them think of something and nothing else related to the situations they are in. In social systems

language is also the condition for cognition and observation. A school as an organizational system for example, observes the students and involve them in educational interactions and provide them with grades. Socio(media)evolutionary seen, language is also the condition for self-reference (communication about communication; consciousness about consciousness) (Luhmann 1995). In the co-evolution between psychic and social systems oral language were the condition for social systems to emerge as systems in their right. Not before after the acquisition of language social structures of norms for behavior became possible which demanded a degree of psychic freedom from the biological determination of behavior (demanding self-reflexivity). From the emergence of oral language, a co-evolution between psychic and social systems began with a mutual increase of complexity on both sides of the distinction mark (psychic | social). The social level of systems formation began an internal differentiation not least influenced by the emergence of new communication media like writing and printing ending (for now) with functional differentiation.⁴ The triadism of biological, psychic and social systems is a post-humanistic solution to the mind-body problem. There is no “human” as such that can manage its body around in third person like in the humanism. There is no human as such that can steer and determine the social, and the social, on the other hand, cannot determine the consciousness of psychic systems. The theory is so radical that, most surprisingly, even politic cannot govern the other functional systems, of course, there are structural couplings but for example, prices on the stock market is for the economic system to regulate through the system’s own immanent re-production mechanisms.⁵

Evolutionary seen, in society like in an ecological system, all subsystems co-evolve, and changes in one subsystem has consequences for the other subsystems. If the health system e.g. is under pressure because of corona virus, prices on the stock

⁴ According to Luhmann (2012) nowadays society is functionally differentiated. One of the most important results of this is that each functional system (i.e., economy, politics, science etc.) functions in an operational self-referential way. Political power, for instance, cannot be ensured by scientific truth or vice versa. Each functional system has its own criteria of success, its own medium (e.g. money in economy, power in politics etc.) and its own forms (e.g. prices, legislation etc.). In modern society, the probability of functional effects within each system are increased, but side effects across the systems become less likely.

⁵ Another somewhat thought-provokingly example is that Luhmann (2006) argues that political reforms of the system of education do not really alter the system of education (at best or worst they only alter some balances within the system of education, e.g., the balance between general education and specific aims), but only reproduce the political system itself.

market may go down, because the future looks less promising - while politicians nervously seek to influence the economy in an upward direction. As a consequence of Luhmann's post-Darwin evolutionary theory there is no space for any kind of creationism. There are no transcendent elements in the theory where gods interfere, or any transcendental elements a priori to society like human rationality (Habermas) that guides the development. There is no overall direction of history in the theory like we find in Hegel's *Phenomenology of spirit* (here the spirit that during history manifest itself as conscious cognition is transcendental to social history). Luhmann does anyhow understand society in terms of cognition, but not like cognition is based on spirit (Moeller 2012: 39). For Luhmann cognition can be spiritual (in the psychic system) but it can also be social and biological. Social systems cognize as much as minds or cells, but there is no common foundation for these types of cognition (ibid). According to Moeller, Luhmann has a genealogical view on history where: "Genealogy may be defined as history minus progress" (Moeller 2012: 73). And Luhmann is not a social Darwinist but a social post-Darwinist that do not believe that evolution automatically provides social progress. (ibid: 74). There is nothing in the other levels of system formation that determine society to be a special kind of (e.g. humanistic) society – that is up to the social system itself, to its own communicative processes to decide, of course, with the other levels of systems formation as conditioning environment that can irritate and provide conditions. Autopoietic systems are always already adapted to their environment and left to their own immanent observations.

The reason why Luhmann's theory is methodologically anti-humanistic is analytical, because the anthropocentric concepts offer no possibility for connecting with the psychic | social distinction (Luhmann 2012, vol 1: 6). If we assume that society consist of humans our analysis become imprecise and blurred. With Luhmann's theory it is possible to find a relevant system reference for a sociological analysis e.g. a family or an organization – like we do not describe a house using terms like nails and bricks, but terms like rooms and floors, the term "human", is an imprecise concept for describing society. With Luhmann's systems theoretical theory there is a full developed suggestion for an adequate post-humanistic theory of society.

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