

# Historicism, Hermeneutics, Second Order Observation: Luhmann Observed by a Historian

Jaap den Hollander  
*University of Groningen,  
The Netherlands*

## 1. Introduction

An element shared by sociology and history, and to a certain extent by social or cultural anthropology as well, is their claim to study society as a whole. Whereas economy, law, political science, religious studies or linguistics concentrate on a single aspect of society, the aforementioned disciplines aspire to integrate all aspects into a comprehensive and coherent picture. This requires, first, specialist knowledge about the several subsystems of society, which is provided by a great number of subdisciplines, and, second, a theory synthesizing all this knowledge and explaining how these subsystems hang together. The second requirement is hard to satisfy because of the great complexity of the task.

First, there is the complexity of the network of relations between the subsystems of society. Social theorists, particularly modernization theorists often oversimplified this reality by reducing the development of society to a single system, most often the economy. A classic case is the economic determinism of Marxism. A more recent example is Neoliberalism with its claim that everything starts with the free market, including political democracy. It is undoubtedly true that democracy prospers in a free and thriving society, but utterly misleading to suggest that politics depends on the economy in a linear-causal way. One might just as well argue that there would be no free market without a state prohibiting monopolies and safeguarding legal security and other public services. These opposing views show that we should not think in terms of linear but of circular relations. Politics and economy condition each other, and so do all other subsystems of society, which adds up to an overwhelming complexity.

Second, macro theories must take into account another circularity, namely between subject and object. Each attempt to describe a social whole of which one is oneself a part entails an element of subjectivity or self-referentiality, which is a serious problem from the perspective of traditional epistemology. For historians the problem becomes serious when they start thinking about contextualism. It seems perfectly all right to place a text or event in its historical context, but the question is how to define context. It seems that we can circumscribe a context only from the perspective of a wider context, but then we will have to look for the context of this wider context, and so on. This infinite regress will go on until we reach the ultimate context of world history or universal history, which can be defined only

from a transcendent level. Without a God's eye view, we can only resign in the conclusion that there is no final closure and no way to escape self-reference (Priest, 1995, 123-195).<sup>1</sup> Among sociologists Karl Mannheim, who based his sociology of knowledge on historicism, proved most sensitive to the problem of self-referentiality or "reflexivity" (Laube, 2004).<sup>2</sup> Not coincidentally, the sociology of knowledge became the springboard of social constructivism later on (Berger & Luckmann, 1966).

The social theory of Niklas Luhmann stands out as the most successful attempt to deal with the problem of complexity. It gives a clear definition of modern society in terms of functional subsystems while taking self-referentiality explicitly into account. From a historian's perspective, it has the additional advantage of solving two central problems of historicism, respectively historical individuality and the historical method. The problem of individuality refers to the historicist focus on uniqueness as opposed to the scientist focus on general rules, also known as the ideographic-nomothetic distinction of Windelband. It has not so much to do with personal individuality as with the individuality of social wholes, which is a controversial issue. The problem with the historical method, on the other hand, is that history does not qualify as a normal, empirical science in the sense that it directly observes its own object of study. Historians usually work with relics from the past, mostly with texts. So, one might say, that they are second order observers, who observe how people from the past observed their own world. This creates peculiar problems, to which methodologists have been blind most of the time.

It is the aim of this chapter to explain that Luhmann offers a solution to the two problems of historicism. First, systems theory can function as a bridge between the ideographic and nomothetic perspective. In this context Luhmann's concept of the autopoietic system is especially useful. Although it obeys the rules of general systems theory, it fulfils the same role as the historicist notion of individual, organic wholes. Second, in connection with the concept of autopoietic systems Luhmann developed an epistemological theory of "second order observation", which explains what history and the humanities always practiced but were never able to put in words adequately. Before discussing these two topics, I will give a short introduction on Luhmann's position with respect to historicism.

## 2. Historicism and Luhmann

Although Luhmann did not consider himself an exponent of historicism, it is possible to interpret him that way with the help of the related concept of functionalism, which plays a central role in his work (Hollander, 2010). Luhmann himself recognizes the close connection between the two concepts when writing, "Historicism and functionalism originated simultaneously and are closely connected" and, next, "The problems occasioned by theoretical reflection on the historicism and functionalism of social discourse are still

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<sup>1</sup> Priest sees the "inclosure schema" implied by Russell's paradox as the basic structure of all paradoxes of self-reference. Briefly stated the problem is as follows. If the application of an operation to a totality of some kind produces a novel entity of that kind, in our case a new context, the application of the same operation to the totality of all entities of that kind will produce something that is both inside and outside that totality.

<sup>2</sup> An interesting detail is that Laube (61-68) discusses Luhmann's thought as a continuation of Mannheim's historicism.

unsolved after 200 years" (Luhmann, 1993, 9-10). The common background of functionalism and historicism was the intellectual revolution that took place between 1750 and 1850 and that was described by Mannheim as the transformation of a "static" into a "dynamic" worldview (Mannheim, 1952). Historians usually speak about "the rise of historicism", as Friedrich Meinecke's classic work of the same name shows (Cassirer, 1923). Luhmann spoke about functionalism, because he was inspired as a young man by Ernst Cassirer's *Substance and Function* (1910) dealing with the same subject matter, though from a more specifically philosophical point of view. Cassirer's thesis was that the traditional, Aristotelian philosophy of substances and essences gave way to modern thinking in terms of functions and relations. His work had a great influence on system thinkers like Talcott Parsons and Luhmann (Horster, 2005, 26; Rill, 1995; Jensen, 1980, 29).

In the second half of the eighteenth century, change became the key concept to understand social reality. It was not a new concept, of course, but it was used in a new, less restricted way. In pre-modern thought, change was restricted in the sense that it was supposed not to affect the "substance" of a thing, only its "accidental" properties. Even today, this idea still has some plausibility, because common sense tells us that there must always be *something* that changes and that must therefore be unchangeable itself. The Aristotelian-Thomist tradition applied the substantialist view of change not only to individuals but also to the species "man", which was, technically speaking, a "second substance" inhering in "first substances" such as Socrates or Cicero. The implication was that human creatures have essential properties that should be unchangeable over time. This was the basis of the natural law theory, which postulated rules of conduct valid at all times and all places. Understandably, this body of thought left little room for history.

Before the eighteenth century the role of history was modelled on the saying *historia magistra vitae*, viz. history is the preceptor of life (Koselleck, 1985). The idea was that history should teach "morality by example". For instance, by reading Cicero a young nobleman expected to learn how to deal with public affairs. From the fifteenth century, onwards hermeneutic interpreters of the Bible and of the Roman Law Corpus however spread the idea that temporal and cultural distance might be an obstacle for understanding the past, but this idea only gained currency with early historicist thinkers like Vico and Herder. An important factor was the criticism of natural law philosophy by David Hume and others. This cleared the way for new ideas of historical change and evolution. Johan Gottfried Herder, for example, began to experiment with the idea of non-substantialist change, suggesting that the substance itself might be a subject of change. A typical Herderian quote is "I am what I have become" (Meinecke, 1965, 377). It articulates the idea that our essence or identity lies in our own past and that "being" must be derived from "becoming". Herder based this idea on Leibniz, who had conceived of substances as individual "monads" with an inherent force of change. Interestingly enough, Leibniz is also the principal person in Cassirer's book, where he is responsible for modern thinking in terms of functional relations.

According to Ankersmit, it is possible to distinguish four meanings of historicism (Ankersmit, 2010). The first and most important meaning is the idea that the essence or identity of a thing is to be found in its past, in its own development. Derived from this is the second meaning, according to which a thing differs at each phase of its development substantially from what it was before, which is an argument in favour of historical uniqueness. Together, these two connotations define the non-substantialist view of change

mentioned above. From this new ontological premise, historians inferred a third, more methodological meaning defined by Maurice Mandelbaum as “the belief that an adequate understanding of the nature of any phenomenon and an adequate assessment of its value are to be gained through considering it in terms of the place it occupied and the role it played within a process of development” (Mandelbaum, 1971, 42). This implies among other things that historians should not approach their subject in an anachronistic way, by looking at it solely through the lens of their own time. The fourth meaning, put forward by Karl Popper, stands somewhat apart from the rest. It refers to “The belief... that it is the task of the social sciences to lay bare the law of evolution of society in order to foretell its future” (Popper, 2002). Most historians will subscribe to Popper’s criticism of this version of historicism, because of their deep-rooted belief in historical contingency. Therefore, this definition of historicism clearly stands apart from the three previous ones.

Historicism was not entirely successful in driving out the traditional ontology of substances and essences, because common sense keeps telling us that change is attributable only to something remaining the same through time. However, it undeniably made western thought more receptive to the idea of historical change. An important discovery, already made by the philosophers of the Scottish Enlightenment, was the “law of unintended consequences”. The Scottish philosophers realized the insufficiency of the individual action perspective characteristic of the Aristotelian tradition of practical or moral philosophy. This perspective could not explain all phenomena in socio-historical reality as Adam Ferguson so eloquently put it in 1767: “Every step and every movement of the multitude, even in what are termed enlightened ages, are made with equal blindness to the future; and nations stumble upon establishments, which are indeed the result of human action, but not the execution of any human design.” (Ferguson, 1995)

The discovery of “the law of unintended consequences” was important to history as well as the social sciences, because it showed that we have to reckon with “invisible” or latent structures developing as it were behind people’s back. It did not completely rule out the individual agent’s perspective, of course, as historical narratives in particular show. An important aspect of the modern narrative is historical irony, which is rooted in the tension between the viewpoint of the narrator and that of his characters. In fictional as well as in nonfictional narratives the authorial, omniscient narrator knows more than his characters. He knows their future and the unintended consequences of their actions. This may give an ironic twist to the description of the agent’s actions, because it shows that people are often doing other things than they think they are doing. At the same time, it opens the possibility to show an unconscious development, the growth of a character or of an institution. Novelists as well as historians exploited this scheme. Summarizing we can say that the narrator’s viewpoint is structural and anachronistic and that it has a counterweight in the historical agent’s viewpoint with which the reader is supposed to identify him- or herself.

A difficult epistemological question is, whether the latent structures and processes mentioned in nonfictional narratives are “made” or “found”. For example, are “nations”, “cultures”, or “epochs” parts of socio-historical reality or narrative constructions? Early historicists like Leopold von Ranke and Wilhelm von Humboldt were ambiguous about the status of what they often called “organic wholes”. They tried to solve this problem with the notion of the “historical idea”, which is a kind of temporalized Platonic idea, referring not to the timeless forms Plato had in mind but to historical, time-bound forms like *Zeitgeist* and

*Volksgeist*, or, to give some more recent examples, ideology, mentality, paradigm, discourse or episteme. These ideational wholes may be “invisible” but the historicists considered them nonetheless as real, discrete entities, in the same way as mathematicians often do in the case of numbers. Historical ideas were said to possess, moreover, a motivating force or organizing principle (*entelechy*), which makes them into a kind of individual, historical monads. This historical idealism appealed to historians, but the public was not convinced, which was another reason why the idea of non-substantialist change was not widely accepted. In the course of the twentieth century, even historians seemed to turn their back on historicism.

In the 1960s and 1970s, many academic historians advocated a merger of their department with social science departments like sociology, political science and anthropology. We can think for instance of the *Annales* group in France and the German movement “beyond historicism” (Mommsen, 1971). Young leftist historians in Germany criticized the nationalistic historiography of the older generation and even went so far as to accuse historicism of having paved the way for National Socialism. Their rallying point was the so-called Bielefeld School led by Hans-Ulrich Wehler and Jürgen Kocka, who were promoters of a “historical social science”. The irony of the situation was that their Bielefeld colleague Niklas Luhmann at the same time criticized his fellow-sociologists for their a-historical or even anti-historical attitude. A telling detail is that Luhmann started his academic career in 1967 with an inaugural lecture on “Sociological Enlightenment”, in which he advocated a more critical attitude towards the Enlightenment. He characterized this attitude with the pun *Abklärung der Aufklärung* (purification of the Enlightenment) (Luhmann, 2005).

Luhmann’s programmatic statement cannot but remind historians of the Romantic period, the founding era of their own scholarship, which started the criticism of the Enlightenment. Contrary to what many people believe, however, Romanticism was not simply a “Counter-Enlightenment”, at least not as far as history was concerned (Berlin, 1997). Historians like Ranke did not disapprove of the enlightened campaign against prejudices, but declared, on the contrary, that it did not go far enough. In their view the *philosophes* had failed to meet their own standard by overlooking a major prejudice, namely the bias of their own time. Voltaire, for example, had viewed the past only through the lens of the present, and it was this presentist or hodiecentric state of mind that Ranke denounced in his often-quoted statement “To history has been assigned the office of judging the past, of instructing the present for the benefit of future ages. To such high offices this work does not aspire: It wants only to show what actually happened (*wie es eigentlich gewesen*).” (Ranke, 1973). In short, by unmasking the biased character of the rationalist approach of the past the romantic historicists radicalized the Enlightenment programme. That is why Mannheim wrote in his study on romantic-conservative thought, “Romanticism achieved a rationalization which the bourgeois Enlightenment could never have carried through” and why Hans-Georg Gadamer sharing the same opinion in *Truth and Method* wrote “the historical consciousness that emerges in romanticism involves a radicalization of the Enlightenment” (Mannheim, 1993; Gadamer, 2004, 277).

Likewise, Luhmann believed that an enlightened sociology should avoid the “lazy rationalism” of the eighteenth century by paying more attention to the complexity of the world and the ensuing need to reduce this complexity. In his lecture, he mentions four promising approaches in sociology, which would not be out of place in history either. The

first approach invites us to see a text or event from a surprising and unlikely standpoint, a “perspective by incongruity”, as the literary theorist Kenneth Burke called it. This comes close to the metaphorical interpretation of historians, which is sometimes visible already on a purely linguistic level. For example, by characterizing the fifteenth century as the autumn of the Middle Ages the Dutch historian Johan Huizinga completely reversed the (metaphorical) image of the springtime of Modernity as introduced by Burckhardt (Huizinga, 1924). The second approach mentioned by Luhmann is to be found in Freud’s concept of latency, which found its way in sociology through Robert Merton’s notion of “latent functions” (Merton, 1957). According to Luhmann, the repression of important aspects of social reality is a way to cope with the problem of complexity. Sociologists have the important task to enlighten people about their “unconscious” motives, but they should do this only if they have a clear view on the function of the latency and if they are able to offer functional-equivalent alternatives. The third approach suggests the replacement of factor theories by system theories. By “factor theories” Luhmann understands the monocausal theories discussed already in the introduction, viz. those reducing modernity to the industrial revolution or the Enlightenment.

The fourth and last approach, which Luhmann discerns in sociology, is the functional method. This approach requires somewhat more attention, since functionalism was a continuous thread in Luhmann’s thought. The source was Cassirer’s book on Leibniz’s function concept that Luhmann read in his youth and to which he refers in his lecture when saying, “Stimulated by philosophy functionalism is on its way to dissolve all substances into functions and to compare everything with alternative possibilities” (Luhmann, 2005, 91). Luhmann’s interpretation of functionalism differs from the traditional organicist and teleological idea that parts have a function for the benefit of the whole. This idea lived on in the structural functionalist theory focusing on the function of social structures such as hierarchy, social roles or centre-periphery relations. Luhmann’s objection was that the structure concept was thus granted priority to the function concept, with the risk of passing over fundamental questions about the rationale of structures or about the *raison d’être* of an entire system. This was also, where Luhmann disagreed with Talcott Parsons though being quite close to him in other respects. When Luhmann described his own approach half in jest, half in earnest as “functional structuralism”, he indicated that it should be possible to discuss the function of structures in terms of “functional equivalents”, even without assuming an encompassing system (Luhmann, 2004). He felt free to compare widely diverging aspects of socio-historical reality and in this he resembled historians using metaphors with a maximal scope in order to compare with each other seemingly incongruent phenomena.

### 3. Autopoietic systems

A classic dispute in the social sciences is that between methodological individualists and methodological holists. While methodological individualists depart from the empiricist principle that social phenomena are fully explainable in terms of observable individual actions, methodological holists object that this will not bring us very far and, moreover, that individual actions are often understandable only in terms of “societal facts”, to use an expression of Mandelbaum (Mandelbaum, 1959). An example of a “societal fact” is getting money from an ATM machine. How to explain this to a Martian? The action of someone

withdrawing banknotes from the wall of a building makes sense only to an observer knowing what a bank is and how the money system works. In a complex world like ours, little room seems to be left for old-fashioned empiricists. However, there is also a moral side to the dispute, which explains why empiricist individualists still hold ground. Holism has the unpleasant reputation of subordinating the individual to the greater good of church, class or nation. The experience of totalitarian regimes in the twentieth century has made this aspect of organicist and historicist theories highly suspect.

Against this background, Luhmann's radical holism may seem dubious, but as a matter of fact it is immune against possible moral objections, because it breaks with the container concept of society that considers individuals as constituent elements of social wholes. Luhmann contends that social systems do not consist of human beings but of communications. Strictly speaking, individuals do not belong to the social system but to its environment. They can partake in organizations as occupiers of functional roles, but it would be an illusion to think that they are an integral part of a social whole, especially in modern society where the dominance of ascribed status has been broken. Luhmann makes a hard cut between social communication system and individual psychic systems. These two kinds of systems have a lot in common. They are both meaning systems, characterized by intentionality or "aboutness"; they are closely connected by language, and are arguably even co-evolutionary. However, a crucial difference is that they cannot perform each other's operations. Communication systems cannot think and consciousness systems cannot communicate, in the sense of acting outside their own operational domain. The distinction between both kinds of system is the linchpin of Luhmann's theory. Many people find it hard to accept, because it contradicts our humanistic understanding that society is composed of indivisible called "individuals".

The resistance against Luhmann's theory and to systems theory in general seems often motivated by the fear of a mechanist worldview. This fear is based on a static, thing-like idea of systems, which is, however, not characteristic of Luhmann's theory but rather of the traditional definition of system as a whole consisting of parts. This definition is not so much wrong as one-sided, because it leaves aside the question whether or not the parts are ready-made, which is an important criterion for differentiating between machines and living beings, as the Chilean neuroscientists Humberto Maturana and Francisco Varela explain with the help of their distinction between "allopoietic" and "autopoietic machines". Allopoietic machines are made by others from ready-made parts, while autopoietic machines (re)produce their own components, in the way living organisms do (Varela & Maturana & Uribe, 1974; Maturana & Varela, 1980). Admittedly, human beings are also "made" by others, but they become autopoietic as soon as the umbilical cord is cut and the organism starts its own cell production. Autopoietic systems are not only dynamic; they are also circular in the sense that part and whole constitute each other. Saying that an organism is composed of cells is only half-true, because the cells are in their turn products of the organism as a whole. It is not clear where to start, with the whole or with the parts. This implies that autopoietic systems are operationally closed. They are open as far as they exchange matter with the environment, but they are closed in the sense that they control their own processes, without direct causal influence from the outside. It is eventually possible to destruct an organism by an external force, but in all other cases, the system decides for itself how to deal with external influences or "irritations".

In analogy to the Maturana-Varela proposal Heinz von Foerster distinguishes between “trivial” and “non-trivial” or “historical” machines (Foerster, 2003). The difference is that trivial machines are dependent only on their input state, while non-trivial machines depend also on their internal state. Non-trivial machines are “historical”, because the relation between input and output depends on values of their internal state depending in their turn on the input. This makes them analytically indeterminable and therefore unpredictable. It would be interesting to compare this recent view of organisms with Leibniz’s view of monads. For example, the recursive character of internal processes described by Foerster reminds of the entelechy or inner force of monads, which Leibniz describes as the “appetition” or striving from one perception to another. There is no room to dwell on this point, but we may hypothesize that the concept of autopoietic or historical machines comes close to the monadic inspired “organic wholes” of the historicists, especially when we take into account Luhmann’s broadening of the autopoiesis concept.

It took some time before Luhmann had a clear system concept. Starting with Talcott Parsons’s notion of action system, which focuses on social roles rather than on individuals, he went on to experiment with the idea of meaning systems, which drew on Husserl’s philosophy of consciousness. According to Husserl, consciousness is characterized by intentionality or “aboutness”. It is a recursive whole in the sense that each intention falls apart into retention and protention. This means that an individual thought or experience only exists by its reference to a previous and a possible next thought or experience. In other words, consciousness is a closed network. This conclusion worried Husserl, because it seemed to have solipsistic consequences. How can the ego be sure of the existence of other similar egos outside itself? Luhmann commented that Husserl seemed unable to deduce an intersubjective sphere from his “monadic subject” and he concluded that society should be seen as an independent “meaning system”. Critics argue that he thus shifted the monadic problem from the level of individual consciousness to the level of social communication (Habermas, 1985; Knudsen 2006). This is a serious objection, but Luhmann rejected the implicit accusation of solipsism, as we shall see below.

About 1980 Luhmann started to rebuild his theory around the concept of the autopoietic system, despite objections from Maturana and others that biological-spatial concepts are inapplicable to social reality. His laconic answer was that borrowing concepts from other disciplines is no problem at all, as long as these concepts are sufficiently abstract. This condition is satisfied in the case of individual psychic and social communication systems, according to Luhmann, because both kinds of systems (re)produce their own elements, respectively thoughts and communications. Of course, autopoietic systems have more characteristics, which would occupy Luhmann for many years, but this (re-) production of their own elements is a distinguishing feature and a key to the solution of the problem of nonsubstantialist change that had puzzled historicists since Herder.

To explain the relation between organic, psychic and communication systems Luhmann uses the idea of emergence claiming that complex systems have properties that are not present in lower level entities. Think of a heap of molecules transforming into a living cell. Although nobody has a satisfactory definition of “life” the concept is crucial for the distinction between inorganic and organic sciences. The same goes for “consciousness”, which marks the next step to behavioural sciences such as ethology, psychology, cognitive science, anthropology. What lacks in the classification of sciences is a general acceptance of



“communication” as an emergent property. Communication may be a vague concept, but so are life and consciousness. Moreover, vagueness is not a convincing argument for reducing social phenomena to individual consciousness systems, for this might start a train ending with the bizarre conclusion that everything is deducible to the study of elementary particles. Another, practical argument against psychological reductionism is that sociologists and historians can impossibly take billions of individual brains into account when they discuss for example a global financial crisis. Biological reductionism is undesirable as well, as the confusion between social-cultural and natural evolution shows.

Acceptance of the idea that social communication is an emergent phenomenon seems necessary for the development of a consistent theory of social evolution. It is not very helpful to base such a theory on the notion of natural evolution. Of course, there are biological constraints that we must keep in mind, but they cannot explain the enormous outburst of historical change since the Neolithic revolution down to the present. Individual human beings did not change that much in the last 10.000 years, but society all the more. This shows the need for a theory enabling us to explain the inherent dynamic of social life. Social Darwinism of the nineteenth and early twentieth century was a nonstarter. It just made historians wary of the concept of evolution, even though Darwin’s evolutionary mechanism was never applied consistently to society. The problem with many so-called evolutionary theories is that they keep focusing on humans beings, individually or collectively. If we shift our attention to communication, as Luhmann proposes, Darwin’s algorithm of variation, selection, and retention (an addition by Donald Campbell) seems eminently workable (Campbell, 1960). Variation occurs on the elementary level of communicative events; expectations and norms function as selection structures; and retention means that the system finally integrates successful structures. A good illustration would be the juridical system.

As in natural evolution, internal differentiation explains much of what happens in social evolution. It implies a recurrence of the distinction between system and environment in the system itself. The system becomes, in other words, an environment for its own subsystems. Internal differentiation is usually triggered by adaptation problems. If a system is at home in a certain niche, there is no need to become more complex, as is demonstrated by simple life forms hardly changing over millions of years. However, primates had to adapt to new circumstances, as we all know. They became more differentiated, not only physically but also in their social communication. Luhmann picks up the evolutionary thread, when human beings started to live in family based societies. He distinguishes three types of social differentiation, namely segmentary differentiation, social stratification, and functional differentiation. These types roughly correspond with the three communication phases of orality, chirography and typography. The criterion of distinction is equal-unequal.

In a segmentary society, the basic units of families and clans are equal because they descend from the same ancestor and belong to the same kin group. In a stratified society like the Indian caste system or the European class society, the inequality of high and low birth is decisive. These societies were based on different kin groups, because the nobility dissociated itself from the people by means of endogamy. In modern society, the structure of social strata has given way to the differentiation of functional subsystems, which are equal in their inequality. Function systems are unequal in the sense that they fulfil unique tasks in the field of respectively religion, politics, law, science, economy, or art. At the same time they are equal in the sense that they are each indispensable and therefore hard to classify in

a ranking order. Modern society does no longer fit into a hierarchical model and could be more adequately described as a heterarchical network, which is characterized by lateral control.

It is impossible to sketch in detail Luhmann's contribution to the understanding of modern society, but an exception must be made for the subject of social self-description, which is of great concern to both sociologists and historians. Self-description is an important aspect of the closure of autopoietic systems. It is a paradoxical notion, because the "self" is taken at the same time as condition and result of the description. A good illustration is the psychological birth of the human infant. When a child is born and separated from its mother, it undergoes its first closure as an organic, autopoietic system. In psychological respect, however, the symbiosis holds on until the separation-individuation phase in the first year, when the child becomes able to make an internal representation of its mother and itself (Mahler & Pine & Bergman, 1975; Greenberg & Mitchell, 1983). This is the beginning of the closure of the psychic system and the growth of an inner self, which is crucial to the cognitive and emotional development of the human individual.

The mechanism of "double closure" also applies to social systems according to Luhmann. In order to establish their own identity most systems develop reflexive theories aiming at a "re-entry" of the distinction between system and environment in the system itself. By means of an inner symbolic representation of "self" and "other" or "ego" and "alter ego", the system acquires the ability to distinguish between self-reference and other-reference. The latter term may sound awkward but is more informative than "reference" tout court. The ability to discriminate between the two kinds of reference is crucial for a successful adaptation to the environment as defined by Jean Piaget's twin process of assimilation and accommodation.

An example of double closure in society is the use of political theory since Machiavelli (Luhmann, 2000). The disembedding of the political system had already started in the Middle Ages, when monarchs centralized political power and began to build bureaucratic structures. In the Early modern period, rulers obtained the exclusive right of legislation, which was the defining characteristic of sovereign power according to political thinkers like Jean Bodin and Thomas Hobbes. Making collective binding rules became the core business of politics. According to Luhmann, decision-making is a recursive process, in which each decision links up to earlier decisions while enabling further decisions in the future. This process contributed to the operational closure of "the state", as the political system began to describe itself. The boundary of the state was still disputed, though. The eighteenth century constitutional debate was decisive, because it realized a re-entry of the distinction between the political system and the rest of society in the political system itself. This re-entry enabled the political system to refer *internally* to "state" and "society", the last term being a shorthand label for all the other social subsystems. The result was an impressive self-limitation of political power, which is laid down in principles such as the separation of church and state, the separation of powers, a free economic market, academic freedom, freedom of the press, autonomous art, et cetera. In short, the constitutional state became the safeguard of the functionally differentiated society and the target of extremists who strived for de-differentiation by subordinating the entire society to one single subsystem, be it religion, politics, or the economy.

Reflexive theories are not to be found only in politics but in other functional systems as well, as Luhmann shows in a series of books on law, education, economy, religion, science, and art. Although they are often clad in an academic gown, they are first of all practical theories aiming at the self-description of a particular subsystem. This raises the question of the self-description of society as a whole. It seems that less practical forms of scholarship like history and sociology have a special task here. Despite their participation in the scientific and educational system, historians and sociologists are not directly committed to the viewpoint of a particular social subsystem. In this respect, they resemble Mannheim's "free-floating intellectuals." However, this does not mean that they take an elevated position enabling them to compare and integrate neutrally all specialist views on society. In fact, a "poly-contextural" society like ours knows of no neutral or higher positions. It would also be an error to think that sociologists and historians could somehow overlook society and define its identity. This idea is a relic from the traditional, pyramidal society.

The primary distinction of systems theory is no longer between part and whole but between system and environment. An important implication of this paradigm shift is that the identity of a system is definable only in terms of other systems. This creates a problem for the concept of society as an overarching communication system, especially today when only one, global society seems to be left. Before the modern age it made sense to speak about several societies living next to each other as cultural enclaves, but since the great discoveries and the European expansion the world has seen an increasing "disenclavement" (Chaunu, 1969). Nowadays, we live in a "world society" with globalizing function systems (Luhmann, 1997b). As a matter of fact, the concept of a world society raises the same problem as the concept of world history, mentioned earlier in this chapter. It does not allow for a wider context from which we could circumscribe our object. To be sure, society has a natural environment, but nature does not qualify as an external observation post because it is by definition beyond the reach of communication.

The conclusion is that a theory of modern society cannot but be self-referential and constructivist, which is in line with the premise that autopoietic systems create their own representations of reality. This does not mean, though, that there is nothing else than self-reference and constructivism. Luhmann rejects any accusation of solipsism (Luhmann, 1990, 61, 100, 304, 494). First, self-reference logically implies other-reference. It makes no sense to talk about a system without an environment and vice versa. Second, operational closure does not mean total closure. Autopoietic systems are open to stimuli and irritations from their environment, and although they use this input for an internal construction of the outside world (in-formation in a literal sense), it would be farfetched to say that they dream up this world. So, the accusation of solipsism often brought against Leibniz's "windowless monads" does not seem to apply here. Third, systems can communicate how they observe the world and thus correct each other's views. This is another difference with Leibniz. The evolutionary theory of communication makes his metaphysical concept of "pre-established harmony" superfluous. How systems are able to correct each other's observations will be explained below.

#### **4. Second order observation**

Closely connected to the concept of autopoietic systems is a new observation theory, which differs from the common empiricist understanding of observation. This is good news for

historians because their activities have never fit well in the category of empirical sciences. The point is that historians cannot literally see what they describe, except for contemporary events to some extent. The idea that historians gather empirical knowledge dates perhaps from the time in which they proceeded like reporters or political observers, which was common practice before the eighteenth century. The tradition that went back to Herodotus and Thucydides was based on the methodical principle of “autopsy” or seeing with your own eyes (Schepens, 1980). This classical understanding of history lived on in the Middle Ages as Isidore of Seville made clear in his *Etymologiae* from about 600 AD. Compiling all existing knowledge from Antiquity, Isidore also canonized the idea that the historian is someone who describes events he had witnessed and seen for himself (Ernst, 1957). Of course, medieval monks started their annals and chronicles dutifully with the Creation, but what really mattered was the recent history of their own monastery or Christianity at large.

To understand the pre-modern orientation towards the past something must be said about the traditional notion of time, that was founded on Aristotle’s distinction between rest and movement. The natural condition was rest, according to Aristotle, and movement or change was in need of explanation. Consequently, Aristotle’s cosmology started with the Unmoved Mover, who was an efficient and final cause at the same time, the alpha where everything begins and the omega where everything ends. Time was part of the creation. It was associated with movement and change and presupposed therefore the non-time of rest. This explains the basic distinction between *aeternitas* and *tempus*. Secular time was divided into past and future, of course, but this distinction had not the same fundamental meaning, which it has for us today. The modern meaning of time has to do without the concept of eternity. This concept became obsolete when traditional ontology gave way under the development of modern science. Galilei’s law of inertia reversed the relation between movement and rest. Movement became the normal condition, and rest something that asked for an explanation. Final causes abandoned the field and left behind a cosmos without an inherent purpose and meaning. When the belief in eternity dwindled, secular time came into its own and this explains why the distinction between past and future became more prominent. According to Luhmann and his Bielefeld colleague Reinhart Koselleck this intellectual revolution was part of the structural change from traditional to modern society (Luhmann, 1995; Luhmann, 1997a, 997-1016; Koselleck, 2004).

The distinction between past and future is relative to a present, which is logically speaking an excluded middle. The present is a moment at which we do not have time, because anything temporal seems already to have found a place in either past or future. In its timelessness, the present reminds of the earlier concept of eternity, with the difference that it is eternally shifting. The continuous constitution of time at the or, rather, a present is a paradoxical affair, not only because it takes place in time but also because the result is always relative to a present. Being two sides of the same distinction past and future are simultaneously present as horizons of the here and now, that is to say as *present past* and *present future*. This is paradoxical, of course, because past and future are by definition different from the present. According to Luhmann, historicists rendered this paradox harmless by introducing a new, opposing distinction between *past present* and *future present* (Luhmann, 1997a, 1074). They pointed out that each random point in past and future counts as a present in its own right. As already said, Ranke criticized authors like Voltaire for viewing the past through the lens of their own present. The implication was that historians should approach historical actors as persons living in *their* own present, equally ignorant about their own future as we are about ours.

This new consciousness of historical time partially explains why historians reconsidered their attitude towards the past. Another factor was that they became more critical about the use of historical sources and started to apply hermeneutic insights to the study of the past. An important pioneer was the German theologian Martin Chladenius, who lived in the first half of the eighteenth century. Inspired by Leibniz's idea that each monad has its own "point of view" Chladenius argued that comparison of sources might enable an interpreter to recognize and cancel out subjective distortions in descriptions of the same event(s) (Grondin, 2001). In this way, it might be possible to arrive at an objective reconstruction of what had really happened. This procedure became the basis of the so-called historical philological method, which focused exclusively on the study of written historical sources. Historians turned away from the idea that they should proceed as a kind of reporters, presenting first hand evidence on contemporary events. They became "scientific historians" specialised in the earlier periods of the past and leaving the recent past to amateurs and journalists. Only after the Second World War contemporary history would become part of the academic curriculum, which was an indication of the much-debated "crisis of historicism".

With hindsight, the historians of the early nineteenth century took a radical step from empirical observation to observing (results from) empirical observations. They became "second-order observers", to use a term that Maturana and Varela introduced together with their theory on autopoietic systems (Hollander, 2011). The term has its origin in a branch of cybernetics that specialized in biological or living systems and called itself "second order cybernetics". Whereas first order cybernetics had restricted itself to the observation of allopoietic machines, second order cybernetics observed autopoietic machines, which are observers in their own right. Autopoietic systems are objects that look back, so to speak. This entailed a rethinking of the traditional subject-object dichotomy. The distinction between first- and second order observation proved a helpful alternative.

Unwittingly, second order cybernetics picked up a thread from the hermeneutic tradition, a fact soon pointed out by sociologists, though (Schneider, 1991; Esposito, 1996). From the fifteenth century onwards, exegetes of the Bible and the Roman Law Corpus had already noticed that both writing and reading are circular processes in which one switches from part to whole and vice versa. This is the origin of the idea that text interpretation needs a "context". When historians developed the hermeneutic insights of theologians and jurists into an overall historical method, they transferred the notion of the context from the world of the book to the real world. In this way, they entangled themselves in a part-whole discussion that transformed the hermeneutic circle from a methodological into an epistemological and even ontological problem. Most historians clung to the Kantian notion of a transcendental subject, thinking that they could historicize the whole world except themselves, but in the end, they stumbled on the problem of universal history, which was discussed above. This brought the hermeneutic philosophers Martin Heidegger and Hans-Georg Gadamer to a reinterpretation of the hermeneutic circle.

Contrary to the Neokantian philosophers of his time, Heidegger took the distinction between subject and object not as an *explanans* but as an *explanandum*. In his philosophy, subject and object are embedded in an "ontological field" that can be clarified only by hermeneutic understanding. We can think here of the situation in which people are part of the whole they attempt to describe. In situations like this, it is unavoidable that the subject has a biased or prejudiced opinion about its object, but according to Heidegger we should

not judge this situation in a negative but a positive way (Heidegger, 1962). The foreknowledge (*Vorgriff*) of what has to be understood is a necessary starting point for asking questions and testing hypotheses. Applying Heidegger's ideas to history, Gadamer points out that we can criticize a tradition only if we are familiar with it in the first place. The aim of hermeneutic understanding is to estrange the familiar into something "objective". In short, the hermeneutic circle is not a vicious but a virtuous one, because it conditions our understanding of the world.

The "ontological turn" of Heidegger and Gadamer was, no doubt, an important contribution to hermeneutic philosophy, but another, rivalling contribution in the tradition of Wilhelm Dilthey's *Lebensphilosophie* needs mentioning too. Georg Misch, Dilthey's son in law, and Helmuth Plessner came with an "alternative hermeneutic" that paid more attention to the bodily and historical existence of the human being. They criticized Heidegger for not having broken completely with the subject philosophy. Especially Plessner was outspoken on this point. In his own magnum opus, bearing the telling title *The Levels of the Organic and Man*, he replaced the subject-object distinction with the distinction between organism and environment (Plessner, 1981; Grene, 1966). It is not possible to go further into his ideas here, but they show interesting connections between historical-hermeneutic thought and modern systems theory and anticipations of second order cybernetics. With hindsight, one can only be sorry for the fact that Plessner and his contemporaries had to work with the clumsy concept "life" and did not yet possess the technical concept of autopoiesis.

The distinction between the (organic) system and the environment seems rather straightforward, but a disconcerting question is who makes it. An external observer is undoubtedly qualified for that. But what about the system itself? Does a system involve itself in the observation of its environment?. It may know, of course, that there is a distinction, but the question is whether it is able to observe it. These questions explain the interest of second order cyberneticists in the logic of distinctions put forward by the mathematician George Spencer-Brown (Spencer-Brown, 1972). Foerster, Maturana, and especially Varela were enthusiastic about his work (Varela, 1979). Luhmann gave it a central place in his theory (Luhmann, 1990). He interpreted Spencer Brown's Boolean-like logic as an abstract observation theory that is applicable to divergent circumstances such as sensual perception, electronic devices and social systems. The basic idea is that observation is a combination of two operations presupposing each other, namely distinction and indication. Distinction implies a division of the world in two sides and indication is the marking of one of both sides, in the sense of "this" and not the rest. It will be clear that an indication is only possible when there is a distinction between two sides and, conversely, that a distinction makes only sense if at least one side is marked or indicated.

Leaving aside electronic switches, which were Spencer Brown's original field of research, we illustrate this abstract theory with the sensual perception of, say, a vase. When we perceive an object like this, we implicitly distinguish between figure (vase) and ground (room). Since we focus on the former, we are unaware of the fact that our perception is asymmetrical. We have eyes only for the vase, without realizing that it is merely a vase because of its contrast with the environment. If both sides of the distinction were black, we would see no contrast at all and fail to recognize the object in question. This raises an interesting question about the shape or form of the things that we perceive. Common sense tells us that a thing *has* a form, thus suggesting that a form is the property of the thing itself. According to the

observation theory under discussion, form is, rather, the distinction between a thing and its environment. This is an odd idea with far reaching consequences. It seems to imply for instance that a system is a function of itself and its environment, or  $S = f(S, E)$ .

In everyday situations, we are unaware of our perceiving the world asymmetrically. We notice it only if we observe ambiguous Gestalt images or engravings of M.C. Escher enabling us to alternate between figure and ground. A well-known example is Rubin's vase, which lets us choose what to see on the foreground: a vase or two faces. Another example is the rabbit-duck of Joseph Jastrow, used by Wittgenstein and later on by Thomas Kuhn in his discussion of the Gestalt switch (Wittgenstein, 1958; Kuhn, 1996). The clue is that we can see in the drawing either a rabbit or a duck, but not both figures at the same time. The so-called Necker cube with its typical flip-flop effect even better illustrates this oscillation. It clearly shows that each time we switch from one Gestalt to another our brain needs a pause to form the new pattern.

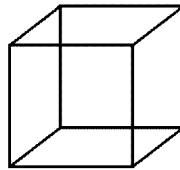


Fig. 1. Necker Cube

Examples like these confront us with the pertinent question how we know that we are dealing with two sides of the same distinction. What makes us think that the rabbit and the duck or the two views of the cube belong together, if we can see only one side of the distinction at the same time? The answer lies in our memory. Given the fact that we cannot see both sides simultaneously, it is the only possible explanation. The distinction is paradoxical because its logical structure presupposes the simultaneous presence of two sides, whereas in reality we need time to cross from one side to the other. An attempt to see "the unity of the distinction" or "the identity of the difference" would amount to eliminating the time factor, which is punished with an eternal oscillation, the same oscillation we encounter in paradoxes of the liar type. For example, "This sentence is false" is false if it is true and true if it is false. Generalizing from this, one might say that our way of observing "the world" obeys the same rule. If we try to see the world as an identity of subject and object, we end up with a paralyzing paradox.

Summing up, we may say that the distinction guiding all our observations remains itself unobservable, as a kind of blind spot. We know, of course, through communication with others, that there is a distinction between the environment and ourselves, but this is irrelevant to the observation theory under discussion. The crucial point is that we cannot *observe* it. For example, I cannot see what is behind my back right now. Only others are in the position to do this and to exclaim if necessary, "Watch out, behind you!" With the asymmetry between my position as an observer and the position of others, we arrive at the crucial difference between first and second order observation. Whereas I observe only my own environment, other people observe *me in my own environment*. They notice that I observe the world from a particular point of view, while I am unable to see this. This means that second order observation introduces an element of perspectivity and contingency in our way of observing.

A first order observer is necessarily self-centred and convinced that the world is as he sees it. He is prone to all sorts of “centrism” like egocentrism, geocentrism, ethnocentrism, and hodiecentrism. Second order observation on the other hand has a decentring effect. It does not only apply to situations in which people observe one another, but it can also take the form of self-observation. I can take a second order look at myself, but only after some time. Right now, I am unable to do this, because that would amount to an attempt to observe the very distinction that guides my observations. We can observe (distinguish!) a *Leitdifferenz* or guiding distinction only with the help of another *Leitdifferenz*. Only on this condition are we able to see both sides of a distinction at a single glance. This may happen in two ways. If we observe the *Leitdifferenz* of other people in the here and now, we follow a “social” approach coming so naturally that nobody has ever felt the need to take notice of it, except for cases in which cultural understanding becomes a problem. For these cases, we have specialist studies like cultural anthropology. The other possibility is the observation of our own *Leitdifferenz*, be it as an individual or as a group. Since we are unable to do this *in actu*, only a “temporal” or historical approach will do. Using our own memory or “experiential” records, like letters, photographs, diaries, and interviews, we may be able to reflect on how we perceived the world at earlier moments. This approach is typical for cultural history.

Studies like cultural anthropology and cultural history date from the late eighteenth and early nineteenth century. In that time, second order observation became a dominant cultural feature. This is not to say, that people did not observe in such a way before that time. As an individual performance, second order observation is as old as humanity itself. Socially and culturally, however, it was uncommon and even unacceptable for a long time, because the traditional ontology claimed orthodoxy for itself and not tolerating heterodox or “heretic” visions. Theologians had their own idea of second order observation, when they urged religious believers to look at themselves through the eyes of the Great Observer, an idea that is still present in the masonic symbol of the “all-seeing eye” (Luhmann, 1998). With hindsight, it seems like an anticipation of later developments.

The complexity of modern society explains why second order observation became to the fore. Important was, first, the fragmentation of the traditional worldview by the differentiation of functional subsystems having each their own perspective on society. A telling example is the conflict between the religious and the scientific worldview in the time of Bruno and Galilei. A second point is that second order observation realizes a reduction of social complexity by focusing on observations instead of events. First observation serves then as an intermediate layer for reaching the world. A second order observer can still see *what* first order observers see, albeit from a different perspective, but more important is that he can at the same time observe *how* they see it. This means that how-questions become important next to what-questions.

If we look at the natural and the social sciences, second order observation has different functions. In the natural sciences it serves as a means to standardize first order observations. Scientific experiments are arranged in such a way that researchers can expect the same result when they are repeating them. In social and cultural studies this controlled observation does not really work. A practical reason is that there is little room for experiments, but more important is that observation counts as a research object in its own right.



In the humanities and the social sciences second order observation usually means comparing the different worldviews of social and cultural groups. A case in point is the history of science, more in particular Thomas Kuhn's *The Structure of Scientific Revolutions* (1962). This book shows that even scientific observations are historical relative. Scientists and philosophers of science were shocked by Kuhn's concept of paradigms and are still struggling with it. Especially in English speaking countries, the word 'relativism' still is like a red rag to a bull. This is hard to imagine for adherents of the theory of second order observation, because to them it seems obvious that observations are always made by someone and from a certain point of view.

## 5. Conclusion

It was the aim of this article to show that Luhmann's social theory offers a solution for two problems in the tradition of historicist thought, the status of individual social wholes and the historical method with its relativistic consequences. To that end, I discussed two central concepts of this theory, respectively autopoietic systems and second order observation. To accentuate the similarities between historicism and Luhmann's version of functionalism I pointed out that Luhmann's "Sociological Enlightenment" has much in common with the tradition of romantic-historic thought and the older Leibnizian philosophy. Of course, there are differences as well and although they were not subject of discussion in this chapter, I want to point at an obvious contrast by way of epilogue. Contrary to sociologists historians are self-conscious storytellers, as Luhmann rightly though somewhat condescendingly notices (Luhmann, 1997a, 570). They can take advantage of a systems theory like Luhmann's, but only in their capacity of auctorial narrator. The theory may help them in asking the right questions and finding new structures, but it represents only the perspective of the present past, the voice-over so to speak. Historians should also pay attention to the viewpoint of the historical agent in his or her past present in order to keep the narrative lively. This explains why they are more interested in the past as such than sociologists are and why they will not soon give up the individual action perspective. The tension between the perspectives of present past and past present is and will probably remain an important ingredient of modern historiography.

## 6. References

- Ankersmit, Frank (2010) "Historicism", in: Mark Bevir, ed., *Encyclopedia of Political Theory*, 3 vols., Thousand Oaks, CA, Sage, Vol 2, 640-644.
- Berger, P.L. and T. Luckmann (1966) *The Social Construction of Reality : A Treatise in the Sociology of Knowledge*. Garden City, NY, Anchor Books.
- Berlin, Isaiah (1997) "The Counter-Enlightenment" in *The Proper Study of Mankind: An Anthology of Essays*, Ed. Henry Hardy and Roger Hausheer. London, Pimlico.
- Campbell, D.T. (1960) "Blind variation and selective retention in creative thought as in other knowledge processes", *Psychological Review*, 67 (1960), 380-400.
- Cassirer, Ernst (1923) *Substance and Function*. Chicago, Open Court.
- Chaunu, Pierre (1969). *L'expansion européenne du XIIIe à XVe siècles*. Paris, Presses universitaires de France, 54-58.
- Ernst, Fritz (1957) "Zeitgeschehen und Geschichtsschreibung. Eine Skizze", *Die Welt als Geschichte. Zeitschrift für universalgeschichtliche Forschung*, 17 (1957), 137-189.

- Esposito, Elena (1996) 'Observing interpretation: a sociological view of hermeneutics', *Modern Language Notes* 111 (1996), 593-619.
- Ferguson, Adam (1995) *An Essay on the History of Civil Society*. Cambridge Texts in the History of Political Thought. Cambridge, Cambridge University Press, 119.
- Foerster, Heinz von (2003) *Understanding Understanding. Essays on Cybernetics and Cognition*. New York: Springer Verlag, 133-168. The original article is from 1970.
- Gadamer, Hans-Georg (2004) *Truth and Method*. London & New York, Continuum.
- Greenberg, Jay R. & Stephen A. Mitchell (1983) *Object Relations in Psychoanalytic Theory*. Cambridge, Mass., Harvard University Press.
- Grene, Marjorie (1966) "Positionality in the Philosophy of Helmuth Plessner", *The Review of Metaphysics*, 20 (1966), 250-277.
- Grondin, Jean (2001) *Einführung in die philosophische Hermeneutik*. Darmstadt: Wissenschaftliche Buchgesellschaft, 80-86.
- Habermas, Jürgen (1985) "Exkurs zu Luhmanns systemtheoretischer Aneignung der subjektphilosophischen Erbmasse" in: Idem, *Der philosophische Diskurs der Moderne. Zwölf Vorlesungen*. Suhrkamp Verlag, Frankfurt am Main, 426-445.
- Heidegger, Martin (1962) *Being and Time*. Oxford, Blackwell, 194.
- Hollander, Jaap den (2010) 'Beyond Historicism: From Leibniz to Luhmann', *Journal of the Philosophy of History* 4 (2010), 210-225.
- Hollander, Jaap den (2011) "Contemporary History and the Art of Self-Distancing", *History and Theory*, Theme Issue 50: Historical Distance: Reflections on a Metaphor. 50 (2011), 51-67.
- Horster, Detlef (2005) *Sozialphilosophie*. Leipzig, Reklam, 26.
- Huizinga, Johan (1924) *The Waning of the Middle Ages*. London: Edward Arnold & Co. Dutch original published in 1919 as *Herfsttij der Middeleeuwen*.
- Jensen, Stefan (1980) *Talcott Parsons. Eine Einführung*. Stuttgart, Teubner.
- Knudsen, Sven-Eric (2006) *Luhmann und Husserl. Systemtheorie im Verhältnis zur Phänomenologie*. Würzburg, Königshausen & Neumann.
- Koselleck, Reinart (2004) "'Space of Experience' and 'Horizon of Expectation'. Two Historical Categories" in: Idem, *Futures Past: on the Semantics of Historical Time*, transl. Keith Tribe. New York, Columbia University Press, 255-277.
- Kuhn, Thomas (1996) *The Structure of Scientific Revolutions*. Chicago & London, The University of Chicago Press, 111-114.
- Laube, Reinhard (2004) *Karl Mannheim und die Krise des Historismus: Historismus als wissenssoziologischer Perspektivismus*. Göttingen, Vandenhoeck & Ruprecht.
- Luhmann, Niklas (1990) *Die Wissenschaft der Gesellschaft*. Frankfurt, Suhrkamp. Chapter 2 "Beobachten", 68-122.
- Luhmann, Niklas (1993) *Gesellschaftsstruktur und Semantik: Studien zur Wissenssoziologie der modernen Gesellschaft*. Vol. 1, Frankfurt, Suhrkamp.
- Luhmann, Niklas (1995) *Social Systems*, trans. J. Bednarz Jr with Dirk Baecker. Stanford, Stanford University Press, 310-312.
- Luhmann, Niklas (1997a) *Die Gesellschaft der Gesellschaft*. 2 vols. Frankfurt, Suhrkamp.
- Luhmann, Niklas (1997b) "Globalization or World Society: How to Conceive of Modern Society?", *International Review of Sociology*, 7 (1997), 67-79.
- Luhmann, Niklas (1998) *Observations on Modernity*. Translated by William Whobrey. Stanford, Calif., Stanford University Press, 51 sqq.

- Luhmann, Niklas (2000) *Die Politik der Gesellschaft*. Frankfurt, Suhrkamp. Ch. 9 "Selbstbeschreibungen", 310-372.
- Luhmann, Niklas (2005) 'Soziologische Aufklärung' (1967) in: Idem, *Soziologische Aufklärung*, vol. 1. Cologne-Opladen, Westdeutscher Verlag, 83-116.
- Mahler, Margaret S. & Fred Pine & Anni Bergman (1975) *The Psychological Birth of the Human Infant: Symbiosis and Individuation*. London & New York, Karnac.
- Mandelbaum, M (1971) *History, Man, & Reason*. Baltimore & London, The John Hopkins Press.
- Mandelbaum, Maurice (1959) 'Societal Facts', in: P. Gardiner ed., *Theories of History*. New York, Barnes & Noble, 476-488.
- Mannheim, Karl (1952) *Essays on the Sociology of Knowledge*. New York, Oxford University Press, 84-133.
- Mannheim, Karl (1993) *From Karl Mannheim*, ed. Kurt H.Wolff. New Brunswick, NJ, Transaction Publishers, 275.
- Maturana, H. & F.Varela (1980) *Autopoiesis and Cognition: The realization of the living*. Boston, D.Reidel.
- Meinecke, Friedrich (1965) *Die Entstehung des Historismus*. München, R. Oldenbourg Verlag . First edition 1936.
- Merton, Robert K. (1957) *Social Theory and Social Structure*. Glencoe, IL, Free Press, 60 - 69.
- Mommsen, Wolfgang J. (1971) *Geschichtswissenschaft jenseits des Historismus*. Inaugural lecture Düsseldorf. Düsseldorf, Droste.
- Plessner, Helmuth (1981) *Die Stufen des Organischen und der Mensch. Einleitung in die philosophische Anthropologie* (1928) in: Idem, *Gesammelte Schriften*, IV, Frankfurt am Main.
- Popper, Karl (2002) *The Poverty of Historicism*. London, Routledge, 96-97.
- Priest, Graham (1995) *Beyond the Limits of Thought*. Cambridge, Cambridge University Press. 123-195.
- Ranke, Leopold von (1973) "Preface: Histories of the Latin and Germanic Nations from 1494-1514" (1824), as cited in *The Varieties of History: From Voltaire to the Present*, ed. Fritz Stern. New York, Vintage Books, 57.
- Reinhart Koselleck (1985) "Historia magistra vitae: the dissolution of the topos in the perspective of a modernized historical process" in: Idem, *Futures past: on the semantics of historical time*. Translated by Keith Tribe. Studies in contemporary German social thought. Cambridge, Mass., MIT Press.
- Rill, Ingo (1995) *Symbolische Identität. Dynamik und Stabilität bei Ernst Cassirer und Niklas Luhmann*. Würzburg, Königshausen & Neumann.
- Schepens, G. (1980) "L' Autopsie' dans la methode des historiens grecs du Ve siècle avant J.-C.", *Verhandelingen van de Koninklijke Academie voor Wetenschappen, Letteren en Schone Kunsten van België*, Klasse der Letteren 42, nr. 93, Brussels, Koninklijke Academie.
- Schneider, Wolfgang Ludwig (1991) *Objektives Verstehen. Rekonstruktion eines Paradigmas: Gadamer, Popper, Toulmin, Luhmann*. Opladen, Westdeutscher Verlag.
- Spencer-Brown, George (1972) *Laws of Form*. New York, The Julian Press, Inc.
- Varela, F & H. Maturana & R.Uribe (1974) 'Autopoiesis: The organization of living systems, its characterization and a model', *Biosystems* 5 (1974), 187-196.

Varela, Francisco J. (1979) *Principles of Biological Autonomy*. The North Holland Series in General Systems Research 2. New York & Oxford, Appleton & Lange.

Wittgenstein, Ludwig (1958) *Philosophical Investigations*. Oxford, Basil Blackwell, 194.