The Double Understanding of Norms and the Prospectives of Current Socio-technical Developments

Gesa LINDEMANN

Carl von Ossietzky Universität Oldenburg, Germany

Introduction

This paper takes a theory of society perspective on the ongoing digital transformation of society. In current diagnoses of society it is indisputable that the use of digital data collection and analysis technologies will have an influence on people's lives and may even change the entire structure of society (Baecker 2018; Mason 2015; Pohle 2012; Zuboff 2019). This paper takes up this time-diagnostic perspective, and relates it to a contradictory insight from the theory of social differentiation.

The contradictory insight: On the one hand, modern, horizontally differentiated society is characterized by a preference for cognitive, i.e. learning-oriented forms of social control, whereas normative forms tend to lose significance (Luhmann 2005, p. 68ff). On the other hand, there is also the finding that Western modern societies themselves are based on strong normative foundations that are centered around the institution of the human individual, equal in freedom and dignity (Joas 2011; Lindemann 2018; Luhmann 1999). If the first assumption is correct, one would expect that the development of automated prognosis and control technology would merely reinforce an existing socio-technical tendency. According to this understanding, dramatic crisis scenarios would be inaccurate (Nassehi 2019). If the second finding is correct, the automated generation of estimates and predictions based on digital traces of behaviour could have the potential to fundamentally change societal structures. The implementation of these technologies strengthens the dominance of cognitive-prognostic social control and undermines the normative foundations of modern society.

These contradictory findings have a basis in a double understanding of individuality, which characterizes modern horizontal differentiation. The crucial point is that the human individual is understood as a societal institution (Lindemann 2018) required as precondition of horizontal differentiation. Horizontal differentiation and the institution of the human being, equal in freedom and dignity, secure each other, as Luhmann (1999) puts it

in his analysis of fundamental rights. To safeguard the relationship of mutual precondition between horizontal differentiation and the institution of the individual, requires a balance between the knowledge about individuals in different contexts and the protection of the individual from an excess of knowledge about it (Pohle 2012). This means, for example, that the knowledge of an organization about an employee should not include the knowledge about this person in relation to his or her overall economic behavior. Or: The knowledge that is generated about an individual in the context of consumer behavior should not be used to forecast family behavior. The individual is thus understood in a twofold way: it is endowed with freedom and dignity and it is a predictable individual, based on the stock knowledge about it, gathered by other actors or organizations. My thesis is that horizontal differentiation and its institutionalized double understanding of the individual are endangered by current socio-technical developments.

I unfold my argument in four steps. First, I unfold the idea of the individual as an institutional condition of horizontal differentiation (Section 1 and 2). Second, I argue that the double understanding of the individual parallels a double understanding of norms, which steer social processes. I distinguish between functional and moral aspects of norms. This enables us to analyze modern society as a society composed of skinnerboxes (section 3). Third, I investigate whether the development of the new platform technologies and their possibilities of data storage, collection and evaluation have to be identified a) as a threat to the structures of horizontal differentiation or b) as a confirmation of these structures. Herewith, the text provides an in-depth-discussion of the tension in the understanding of the ongoing digital transformation of society: have we to understand these developments as the fulfillment of existing tendencies or as a fundamental threat to the normative structures of modern societies (Section 4).

1 The double understanding of the individual

I understand the idea of the individual as an historical contingent form of sociation. This requires a theoretical starting point, which does not presuppose the idea of the individual. In this respect I refer to the "social undecidedness relation" (Lindemann 2019). Based on an interpretation of Plessners theory of the shared world (Plessner 1975). According to Plessner lived bodily selves find themselves always already in relationships of touch that is, in a shared world, the members of which affect each other. That is, "lived bodily selves

exist as a reflexive turning upon the factual state of existing in relationships of touch." (Lindemann 2019: 101) This opens up different possibilities of understanding social life, each of which has to be institutionally consolidated. One institutionally consolidated possibility is that lived bodily selves experience themselves from the perspective of a third party as a single individual who can enter into relationships with others. If this possibility is institutionally consolidated, a given historical context would be structured by an individualizing form of sociation. The other possibility would be that the aspect of existence in relationships is institutionally consolidated. In this case we find historical contexts, which are structured by a dividualizing form of sociation.

It is common sense that modern societies is characterized by individualization (Dumont 1991). But it is highly disputed what "individualization" means. There are at least two different conceptions of individuality in modernity, which can be understood on the basis of the difference between the particular and the singular. The particular is that which can be grasped by a general knowledge. This aspect is elaborated within the tradition of Foucault (Foucault 1975). According to these studies being an individual is the effect of knowledge and power, the individual is governed by governing itself (Lemke 2002). In this sense, lived bodily selves would be individualized by Google, Amazon or other tech-organizations. They grasp the individual as a particular accumulation of measurable properties. The individual is the intersection of general characteristics. It is expected that the individual will govern itself according to the suggestions a particular tech-organization offer to him/her. In a similar sense, we behave in everyday life when we use our knowledge of individuals to form expectations related to their behavior. The individual as particular is the individual insofar as something is or can be known about it and insofar the individual behaves according to the expected expectations.

The individual as a singular has to be understood in a different way. As a single individual, the individual is that which is not grasped by the particular knowledge about it. The individual as singular is the individual that is not determined to behave in a particular way. The singular individual is the particular individual, insofar as it relates itself to itself. Therefore it is not determined by internal or external causes. Instead, the individual is supposed to be free that is the individual is able to determine itself. This thought can be found for example in Simmel (1983) as well as in Luhmann (1984) – to name only two important sociological theorists. And has been part of modern philosophy since Kant.

276

Luhmann or Simmel take this double unterstanding as general premise of sociality (Simmel) or communication (Luhmann). Following Plessner, I take a different path. Unlike Simmel or Luhmann, I analyze this understanding of individuality as a historically contingent form of the social. The individual equal in freedom and dignity is an institution of modern horizontally differentiated society. Contrary to that Simmel describes the individual and its relations as "aprioric conditions of sociation" (Simmel 1983, p. 24) in general. Luhmann argues in a similar way, as I will show in more detail. I argue that the institutional form of the modern individual includes two aspects: the individual exists as a particular (the individual characterized by positive knowledge about it) and as a single (the individual, insofar as it relates itself to itself and is not fully determined by its knowable conditions). These two aspects are understood by Luhmann as the general premise of his concept of communication.

"Two irreconcilable possibilities offer themselves to (Alters, GL) self-understanding. As far as information is concerned, Alter must view himself as part of the meaning world in which information is true or false, is relevant, repays utterance, and can be understood. But as someone who utters it, he must have the freedom to speak, to do this or not. In one respect he must interpret himself as part of what can be known about the world, for the information refers back to him (otherwise he could not apply it). In another regard, he controls himself as a self-referential system. Dieter Henrich calls this the "distance between his being a subject and his belongig to the world" ... Viewed sociologically, this distance, however is nothing natural, and even philosophy knew nothing of it before Kant. We do not view it as the facticity of a transcendental position, but as the effect of the fact that ego interprets the behavior of Alter as communication and therefore expects Alter to accept this distance." (Luhmann 1995: 141)

Luhmann describes two ways of Alter Ego to understand him/herself. If Alter Ego is understood as a part of the meaning world, it is possible to gather information about Alter Ego and it is possible that Alter Ego him/herself gathers information about him/herself. Alter Ego is understood as a knowable being about which more or less complete information can be gathered. In this respect Alter Ego is not different from weather and weather forecast. We gather information about everything that may influence the weather tomorrow. Based on such information we try to forecast the weather, as well as we can try to forecast the behavior of Alter Ego. We collect information on Alter Ego, and can improve

277

our predictions by gathering more and more information. If we expect Alter Ego to be determined by the factual knowledge about him/her, we would expect that the more information we have, the better our prediction will be. In this respect Alter Ego is a particular individual.

As a singular individual Alter Ego is described as being a subject. Alter Ego is described as someone who is a self-referential system. Alter relates itself to itself and therefore is not determined by the facts others can know about him/her. Even if actors would have gathered all in informations available about Alter Ego, they would not be able to produce safe predictions, because Alter Ego is not determined by its known factual existence. Luhmann understands the double understanding of the individual as singular and particular as the general basis of his concept of communication. Communication for Luhmann requires to treat each other not only as a particular individual but also as a singular individual. The individual as a particular is the individual as a part of the meaning world. In this respect particular information can be collected about Alter Ego by others and Alter Ego itself. This is the basis for actors to predict each other's behavior. Actors have to treat each other as predictable actors, otherwise structured communication would not be possible. On the other hand, according to Luhmann, actors have to treat each other as beings, who are not determined by the information making them predictable. They have to treat each other as free and responsible individual actors that is as subjects. Beings in a subject-position are individuals as singular.

Luhmann and Simmel grasp the double understanding of the individual as a universal concept of communication or interaction. Following Plessner, this double understanding of the individual has to be understood as a structural element of modern society. It is a structural feature of horizontal differentiation. Taking this perspective allows to understand the development of digital surveillance technologies as well as its critique as elements of modern society. In the following section I unfold this argument in two steps. First I describe how the double understanding of the individual can be analyzed as a structural feature of horizontal differentiation. Second, I analyze how the discourse on on digitalization refers to the distinction between the individual as singular and as particular.

278

2 Theory of functional/horizontal differentiation

If one understands the difference between the singular and the particular individual as a historically contingent form of social life, the question arises as to how this form is institutionalized. Here the theory of horizontal/functional differentiation becomes relevant. Modern societies are characterized by functional differentiation (Luhmann 1997) or horizontal differentiation (Lindemann 2018). Horizontal differentiation requires different forms of being an individual, which I have described as the individual as singular and particular. The difference between the singular and the particular individual is institutionally required by horizontal differentiation. Within the institutional order of functional/horizontal differentiation the individual exists on the one hand in particular contexts of action, such as familiy, organizations or societal contexts of communications such as the law, economy, politics etc. (Lindemann 2018, pp. 157ff; Luhmann 1997, pp. 707ff). Within each of these structured contexts of action and communication individuals need to be predictable. Therefore information about the individual is required to make it predictable or calculable. However, such knowledge should always be limited to particular contexts of action, i.e., within different contexts of action the knowledge about the individual should be different. There is a knowledge about the individual related to the family, to the organization in which it works (company) etc. A fragmented knowledge about the individual is the institutional guarantee for the individual not being fully absorbed in the knowledge that exists about him/her in a particular context. Due to fragmentation of knowledge, within no context of action the individual can be predicted with certainty. (Pohle 2012)

At the same time, this institutional arrangement is accompanied by the suspicion that the individual would be completely predictable, if one knew everything about it. This is the suspicion of behaviorism, e.g.: Skinner (1971), with its predecessors Planck and Meyer (Zuboff 2019). All discourses that describe people as completely determined would fall into this category.

Thus, two levels have to be distinguished for the discursive shaping of the understanding of individuality: the discourse about the reduction to the particular (and predictible) individual and the discourse about saving the single individual.

As far as the particular individual is concerned, it would only be a question of knowledge growth until the individual would become completely predictable. In this sense, the institutional structure of horizontal differentiation would be understood merely as an inhibition to the further development of knowledge about the particular individual, which could be much better adapted to the functional rules of society, if these inhibitions were overcome.

With respect to the single individual, the focus is on the difference between the two understandings of individuality. The individual cannot exist as a mere singular (single individual), for as a singular it is always related to itself as a particular individual. The individual as singular describes the self-referential relation to the individual as particular. Every attempt to save the singular emphasizes that it is a general structural condition for communication or interaction. In Luhmann, too, the double characteristic (as single and as particular) does not belong to the individual in the sense of a transcendental assumption, but nevertheless in the sense of a necessary precondition for the practice of communication.

The double understanding of the individual parallels a double understanding of norms. With respect to norms I distinguish between moral norms and functional norms. Whereas moral norms require an understanding of the individual as singular and as a particular, functional norms would require the individual only as a particular. I explain this difference in the next section.

3 The double understanding of norms and the possibility of a skinnerbox-like form of social steering

I analyze norms from the perspective of disappointment of expectations. Actors expect a particular course of events. For example, Ego says "hallo" and expects Alter Ego to greet back, but Alter Ego does not greet back. The expectations of Ego have been disappointed. Ego is somehow affected or even concerned about it. This is the "ipseistic dimension of expectations": Ego is affected or concerned, whether its expectations will be disappointed or fullfilled (Lindemann 2014, p. 220). If expectations are disappointed, Ego can react in two different ways, it can learn and change its expectations or it can hold to its expectations. If Ego would learn, it would expect cognitively. If Ego would hold to its expections, it would expect normatively. The distinction between normative and cognitive

expectations was first made by Galtung (1959) and introduced by Luhmann into sociology (Luhmann 1972). Turning back to the greeting-example: If Ego would expect cognitively, it might say, "I was talking too softly, Alter Ego probably couldn't hear me". In this case, Ego will not expect any longer to be greeted back in this particular situation. Ego does not hold to its expectations instead Ego changes its expectations. If Ego would expect normatively, it would hold to its expectations. This can be done with respect to different aspects of norms.

3.1 The double understandig of norms

If Ego would expect in a normative way, Ego would hold to its expectations, although they have been disappointed. In this case Ego must show its disappointment to make it socially relevant. Ego could say "hello" in a loud voice, or Ego could ask Alter Ego "why don't you greet back". These two reactions refer to different aspects of the norm: the functional and the moral aspect.

Functional aspect: If Ego would greet in a loud voice and if Alter Ego would greet back, the normal course of events would be re-established. Here the focus is on re-establishing the functional order of events. A greeting should be returned. If it has not been returned, actors have to take care that the normal course of events will be reestablished. This is the functional aspect of norms. Norms are explicit or implicit assumptions on how things should happen. In case of a deviation, actors have to find back to the normal course of events.

Moral aspect: If Ego would ask Alter Ego "why don't you greet back", it is not about reestablishing the normal course of events. In this case Ego treats Alter Ego as a morally responsible actor, who has breached an expectation, which one should hold to. This is the moral aspect of norms. In this case, Alter Ego is addressed as an actor who can see the meaning of the norm and that he has made a mistake. Ego also implies that Alter Ego could have acted differently. From the perspective of Ego the other actor has freely chosen an action and can be held responsible. Therefore Alter Ego is asked to give reasons for his/her behavior. If the focus is on the moral aspect of norms, it is about treating the Alter Ego as a responsible and reasonable actor. The focus is not on reestablishing the normal course of events.

The moral aspect of norms requires necessarily the individual as a singular. As singular the individual is assumed to be free, its actions cannot be understood as the effect of a causal chain of events, about which a more or less complete knowledge exists. Reducing the understanding of norms to functional norms, would have severe consequences for our understanding of social steering. If we would understand norms only as functional norms, society would take on the form of a skinnerbox.

A skinnerbox is a set of functional norms and it is about teaching its inhabitants to follow these norms. The inhabitants need not to understand the rules according to which the skinnerbox is built. Inhabitants of a skinnerbox are not asked, why they follow a norm or not. They simply follow the norm, otherwise they are made to do so by operant conditioning. There is no symbolic representation of the functional rule. Nobody has to give reasons for his/her behavior. There is simply the fact that organisms behave according to positive or negative reinforcements. If an organism in the skinnerbox shows a behavior which does not correspond to a functional rule, this could only be a case of an erroneous prediction. If this behavior is not classified as corresponding to a functional rule, a negative sanction can automatically be imposed so that the particular individual learns to behave differently in the future.

Let us assume that we have identified a typical course of action and that we can predict, whether actors (rats or humans) will follow the expected course of events, or whether they will deviate from the normal course of events. In this case it would be functional to prevent deviating behavior to occur at all. This is, what "predictive policing" aims at: Predict deviating behavior and prevent it. In this case the practice of law would be changed into a skinnerbox-like mechanism.

3.2 Skinnerbox – different constructions

Behaviorists conceptualize norms only as functional norms. The moral aspect of norms becomes superfluous in this perspective. With respect to behavior in a skinnerbox, it is only a question of the correctness or incorrectness of predictions or of preventing non-functional behavior. But actors are never addressed as a singular that is as actors acting freely and therefore being morally responsible.

Concerning the functioning of a skinnerbox two levels have to be distinguished. Those who build the skinnerbox have to realize that it makes sense to show a behavior that

corresponds to the functional norms. If they would not understand what they do, scientists would not be able to design the skinnerbox at all. It follows that there are two positions: The position of those who build the skinnerbox based on insight, and the position of those who act within a skinnerbox. If there is a split between these groups, there are two groups of actors: those who build the skinnerbox and those who live in a skinnerbox, whose actions are predicted and shaped by operant conditioning. It is claimed that the knowledge about those who live in the skinnerbox also applies to those who build it. However, the structure of the environmental relationship of those, who build the skinnerbox is of a much higher complexity, because they do not simply behave, but have to understand what a functional social behavior is. This is not necessary for those who live in the skinnerbox. From this follows: The assertion that the environmental relationship between the builders and the inhabitants of the skinnerbox is equally complex is tantamount to a performative self-contradiction, from which Apel (Apel 1979, p. 301) justifies the emancipatory interest in knowledge (Lindemann 2014, pp. 41ff).

If we take into account the two positions, two different models of constructing a skinnerbox can be distinguished in an idealtypical way:

Model 1: The builders of the skinnerbox do not inhabit it. The residents are subject to the skinnerbox's functional norms. It doesn't matter whether they understand it or not. It is enough that operant conditioning make them to behave according to functional norms.

A variant of model 1 could be called a nudging box. This is a skinnerbox with positive reinforcement only. Here incentives are set to behave in a certain way, but without using negative reinforcement, if the organism does not behave as expected. In this case, the builder of the skinnerbox must learn how to create better positive incentives to achieve the desired behavior. In fact, the nudging box aims to capture the attention of the particular individual so that s/he does not reflect on what s/he is doing. Nudging is a form of behavioral change without insight.

Model 2: In principle it is possible to switch between the groups of builders and inhabitants of the skinnerbox. Every builder knows that he is creating the situation, within which s/he will live. If s/he experiences a sanction as a resident, s/he can understand its meaning, or if s/he does not understand the meaning of this particular sanction, s/he can try in the position of the builder to change the functional norm. The structural complexity of this

situation is close to a double understanding of norms. Builders of the skinnerbox can demand reasonable arguments from each other, why it should make sense to construct the box in a particular way. As builders actors have to treat each other as free and responsible actors, who act based on insight. As builders, actors are not subjected to functional norms but they have to establish norms according to which a well functioning skinnerbox should be constructed. In short, as builders actors would not only act according to functional norms, but they would have to address each other as morally responsible actors. The moral aspect of norms of norms becomes relevant again.

Model two reveals the performative self-contradiction of the two positions. As an inhabitant, one is an organism that functions in the sense of operant conditioning. As a builder, one is involved as a speaker in a (scientific) discourse about the validity of functional norms and how they can be applied to concrete behaviour. As builders actors can hold each other responsible and address each other as morally responsible actors. As long as the groups of builders and inhabitants are separated, the performative self-contradiction must not become explicit. But if actors take both positions (builders and inhabitants), they are faced with the contradicting requirements of living in a skinnerbox and building a skinnerbox. In this case it would be harder to claim that that the knowledge about those, who live in the skinnerbox also applies to those who build it. Everybody who inhabits the skinnerbox, has the experience of building it and therefore has the practical experience of a more complex relationship to his/her environment.

I suspect that everyday life intertwines both aspects of Model 2 ad hoc. Actors are not only norm followers, but they also build and change norms. And actors treat each other in everyday life also as responsible actors. The functional and moral aspects of norms are intertwined in everyday life.

4 Conclusions

With respect to societal developments driven by digital technology crucial questions arise. Do socio-technical processes described as digitialization or informatization endanger the structure of horizontal differentiation. Zuboff's (2019) analysis of Google's development suggests this. At first, people used Google's search algorithm and their search behavior was fed back into the construction of the algorithm. Thus the users became co-constructors of the search algorithm. Then venture capital investors threatened to cut off

the money supply to Google, if the company would not make money. Thereupon, Google turned to advertising. In other words, the behavioral traces (e.g.: digital trace of a google-search) of users were turned into money by developing prediction algorithms based on the behavioral traces. The predictions were sold and used to effectively place targeted advertising. Thus, Google produces personalized search results and sells the opportunities to produce personalized advertising offers. Google users are nudged to click and buy according to the presented personalized advertisements. This creates a relationship between Google and its users according to model 1, because everything users contribute to the search algorithm primarily serves to improve the accuracy of advertisements to make users more efficiently to buy things. Google uses increasingly negative reinforcement: One cannot take a service up, if one does not agree into the use of the own data.

There is a self-portrayal (Google, Tesla, Facebook, etc.) that describes users as coauthors of technology development. This is also sociologically affirmed with the concept of the prosumer, which understands consumers as co-producers. This would be an arrangement according to model two. Everyone is working on the construction of the skinnerbox. At the same time, there is a drift to model one when the data of prosumers are used to improve a behavior control, the functional norm of which prosumers cannot influence.

If there are complete enough stocks of knowledge about the individual to reliably predict behavior in different social contexts, the principle of horizontal differentiation would be overruled, at least for those who have the corresponding knowledge. Some organizations like the big tech-companies have enough knowledge to predict the behavior of their users in different social realms. For example, Facebook has enough data to predict behavior in different social contexts, be it the family, politics or consumer behavior. For organizations like Facebook horizontal differentiation seems not to exist any longer, instead there is only the difference between the positions of inhabitant and builder of the skinnerbox. If society would be dominated by such tech-firms, the institution of the individual equal in freedom and dignity would no longer be required.

Nevertheless, there would still be the participants of the scientific discourse within which the functional norms of the skinnerbox are defined. This discursive knowledge is administered by organizations with only a few technology developers. The ones, who participate in building the predictive technologies of the skinnerbox are different from its residents. Perhaps there would be several organizations with different stocks of knowledge and differently constructed skinnerboxes.

From a sociological point of view it is relevant to ask, which form of being an individual is institutionally required to produce and reproduce a society, structured by differently governed skinnerboxes. The decisive factor would be the effective institutionalization of the belief that knowledge about actors is complete enough to predict the behavior of the particular individuals in different fields of action. This development would require the individual to exist institutionally only as a particular individal, which is determined by the knowledge about it. If this understanding of individuals is effectively institutionalized, those ones, who have gathered enough information (like Facebook) are believed to successfully predict the individual's behavior. This institutional understanding of the individual includes an institutionalized belief into the reliability of predictions. If it is institutionalized that there is only an individual as a particular, each failure of prediction will be interpreted as caused by a lack of knowledge. Within such an institutional arrangement one question would not occur: Is a false prediction an indication of the individual as a particular, each failer only to the individual as particular, each false prediction has to be treated as an indication of a lack of information.

When the Internet of things is realized, there will be a large amount of additional data sources. This would provide the basis for overcoming the fragmentation of knowledge in an even more efficient way. I have argued, that fragmentation of knowledge functions as an institutional safeguard for the individual not being fully absorbed in the knowledge that exists about him/her in a particular context. Therefore, the internet of things probably has to be interpreted as a further threat to horizontal differentiation.

If knowledge about individuals could not be fragmented efficiently, the socio-technical developments will lead us to one form of the skinnerbox or the other: model one or model two. Even if we would end up in skinnerbox model two, horizontal differentiation and its double understanding of the individual and of norms would be gone. But the necessity to (scientifically) construct the skinnerbox would have its own institutional requirements. Perhaps we would face a new version of the double understanding of the individual and the double understanding of norms. According to model two, there must be a scientific

discourse on how to construct the skinnerbox properly. The participants of the discourse have to recognize each other as responsible speakers. Nevertheless, this community would have quasi-totalitarian features. All participants would be transparent to each other because everyone would be in the position of the knowledge generator and the knowledge object. Due to the organizational dependency there would always also be a drift to model one at the same time. Both developments wold be incompatible with the institutional order of horizontal differentiation and its double understanding of individuality. The uncertainties of the "social undecidedness relation" would have to be fixed by new institutions: the responsible scientific constructor of the skinnerbox and the known individual, which needs to be better known – to improve the functional norms and the well-being of us all.

References

Apel, K.-O. (1979). *Die Erklären:Verstehen-Kontroverse in transzendentalpragmatischer Sicht*. Frankfurt/M.: Suhrkamp.

Baecker, D. (2018). 4.0 oder Die Lücke die der Rechner lässt. Berlin: Merve.

Dumont, L. (1991). Dumont, Louis (1991) Essays on Individualism: Modern Ideology in Anthropological Perspective, Chicago, London: University of Chicago Press.

Foucault, M. (1975, 1979). Foucault, Michel (1975/1979) Überwachen und Strafen. Die Geburt des Gefängnisses, Frankfurt/M.: Suhrkamp.

Galtung, J. (1959). Expectations and Interactions. Inquiry, 2, 213-225.

Joas, H. (2011). Joas, Hans (2011) *Die Sakralität der Person. Eine neue Genealogie der Menschenrechte*, Frankfurt/M.: Suhrkamp.

Lemke, T. (2002). Foucault, Governmentality, and Critique. *Rethinking Marxism*, *14*(3), 49–64. https://s3.amazonaws.com/academia.edu.documents/34222326/

Lemke_2002_Foucault__Governmentality__and_Critique_Manuscript.pdf?response-contentdisposition=inline%3B%20filename%3DFoucault_Governmentality_and_Critique.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A%2F20190820%2Fuseast-1%2Fs3%2Faws4_request&X-Amz-Date=20190820T102758Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-

Signature=526866befbd14c910d46cb1cc94565b9971ea17b0ce6ddd350b369e23ba8314b. Zugegriffen: 20. August 2019

Lindemann, G. (2014). *Weltzugänge. Die mehrdimensionale Ordnung des Sozialen*. Weilerswist: Velbrück Wissenschaft.

Lindemann, G. (2018). *Strukturnotwendige Kritik. Theorie der modernen Gesellschaft Bd. 1*. Weilerswist: Velbrück Wissenschaft.

Lindemann, G. (2019). The Social Undecidedness Relation. Human Studies, 42(1), 101-121.

Luhmann, N. (1972). Rechtssoziologie (2. Bde.). Reinbek bei Hamburg: Rowohlt.

Luhmann, N. (1995). Social Systems, Stanford: Stanford University Press, Englisch translation of: *Soziale Systeme. Grundriß einer allgemeinen Theorie*. Frankfurt/M.: Suhrkamp, 1984.

Luhmann, N. (1997). Die Gesellschaft der Gesellschaft, 2 Bde. Frankfurt/M.: Suhrkamp.

Luhmann, N. (1999). Grundrechte als Institution. Berlin: Duncker und Humblot.

Luhmann, N. (2005). Die Weltgesellschaft. In *Soziologische Aufklärung 2. Aufsätze zur Theorie der Gesellschaft* (S. 63–88). Wiesbaden: VS.

Mason, P. (2015). Postkapitalismus. Grundrisse einer kommenden Ökonomie. Berlin: Suhrkamp.

Nassehi, A. (2019). Muster. Theorie der digitalen Gesellschaft. München: Beck.

Plessner, H. (1975). Die Stufen des Organischen und der Mensch. Berlin: de Gruyter.

Pohle, J. (2012). Pohle, Jörg (2012) Social Networks, Functional Differentiation of Society, and Data Protection, in: arXiv, 1206.3027.

Simmel, G. (1983). *Soziologie. Untersuchungen über die Formen der Vergesellschaftung*. Berlin: Duncker und Humblot.

Skinner, B. F. (1971). Beyond freedom and dignity. New York: Alfred A. Knopf, Inc.

Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. Public Affairs.