Abstracts (sorted by author first name, A-Z)

Guiding Distinctions

Observed with Social Systems Theory

The Primacy of Functional Differentiation and the Creation of Social Hierarchies. Implications of Luhmann's Theory of Society for the Analysis of Racial and Ethnic Discrimination

By: Albert Scherr, University of Education Freiburg/Germany, Institute of Sociology

"For Luhmann's theory of society, the assumption that modern society can be characterized as a functionally differentiated world society is of central importance (Luhmann 1997: 145ff and 743ff). With this assumption, Luhmann explicitly follows Marx's analysis of the differentiation of the capitalist economy as a self-referential subsystem (Luhmann 1992: 23ff.; cf. Scherr 2016), and he situates his theory at a level of abstraction similar to Marx's theory of capitalism. In other words, these are theories that aim to determine the general structural characteristics of modern society and as such intentionally disregard differences in the specific characteristics between national societies within modernity, or use them only as examples to illustrate the traits and effects of these structures.
In contrast to Marx's theory of capitalism, however, Luhmann's theory of the functionally differentiated world society rejects the assumption of the primacy of the economy for the social structure and the dynamics of society. It replaces this with an understanding of society as a constellation of differentiated subsystems without a top or control center. As a consequence, his theory calls for all social phenomena to be analyzed in the perspective of the effects that the structure of functional differentiation has on them. Accordingly, Luhmann has presented, among other issues, an examination of the concept of social classes, which argues that the distinction between wage labor and capital is still relevant the economy of modern society, but can no longer be understood as the basis of an order that shapes the social structure of society as a whole (Luhmann 1985). A perspective is thus put in place that argues that historically older principles of social order are not dissolved or replaced with the implementation of structural differentiation, but are subject to considerable adaptation and change under conditions of functional differentiation.
Against his background, the planned contribution will examine the implications of the theory of functional differentiation for an analysis of forms of racial and ethnic discrimination. To this end, a sociological understanding of discrimination will first be outlined, which understands discrimination as the use of categorical distinctions of social groups to enable, establish and justify positional assignments in social hierarchies and structures of inequality (Scherr 2023). Following on from this, it is then argued that the use of discriminatory distinctions such as race and ethnicity in modern society presupposes that these are available in social semantics and can therefore be taken up by organizations and actors, but that under conditions of functional differentiation this does not take place in a uniform manner in all spheres of society. Rather, it is necessary to analyze whether and, if so, why and how discriminatory distinctions are used in the social functional systems and organizations in a way that can present itself as a useful solution to their respective problems, or whether it proves to be superfluous or dysfunctional. On the basis of our own research, this is first demonstrated in relation to the function of discriminatory and non-discriminatory practices in the economy, using the case of personnel decisions in companies, and it is shown that this is related to the degree of internationalization of companies and the extent of globalization of their production and exploitation chains.
It is then argued in a second step that the forms of racist and ethnic discrimination cannot be adequately understood only as a consequence of the after-effects of historically handed down semantics, and also not at the level of abstraction of the theory of a functionally differentiated world society. This is because ethnic and racial distinctions are historically inscribed to nation-state

regulations of membership as well as to positions in socio-economic inequalities and political hierarchies, which are diff…

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Leadership as Regulation – Learning from Dance, Design and Tourism

by: Albrecht Fritzsche, IEDC Bled School of Management

Leadership has not received a lot of attention in classical works on social systems theory. From the few times that it is mentioned, e.g. by Luhmann (1995), one can conclude that it is mainly associated to systems operating in the medium of power (Roth and Schütz, 2015). As noted by Clausen (2024), this notion of leadership is reflected in heroic imagery, but also questioned in a world of increased complexity (see e.g. Sobral and Furtado, 2019). A deeper look into contemporary management research shows that leadership in organization is indeed practiced in a variety of different styles (Goleman, 2017; Kleefstra, 2019), reflecting codes from various different social systems at the same time. For example, leadership is considered as a way of transforming organizations and advancing professional biographies in suitable directions (Shields, 2010; Bukusi 2020), or as a form of altruistic assistance to increase the well-being of employees (Eva et al., 2019). The ongoing spread of interconnected digital devices, continuous information flows and automated data processing adds further pressure on traditional notions of leadership. A distinction of leaders and followers in terms of power or attribution of agency over collective action does not seem applicable in such scenarios anymore.
The work presented here explores the possibilities and implications of reconstructing the leader-follower distinction based on a generic pattern of second-order systems operation, which is usually addressed as regulatory intervention. According to Ashby (1999), regulatory intervention does not directly control operations in a system. It merely establishes conditions under which such control can take place. This is accomplished by the reduction of deviations from the equilibrate state in which systems operations are balanced out. In one way or another, all accounts of leadership given in contemporary management literature refer to regulatory intervention as a key task of a leader. Moreover, regulatory intervention takes place in all kinds of social systems, independently from the codes and dichotomies informing their structural organization. It therefore seems appropriate to propose a general notion of leadership based on the assignment of the task of regulatory intervention.

From a Luhmannian perspective, associating leadership with regulatory intervention raises very specific questions that can inform future work in management research. As social systems are considered to be autopoietic, the attribution of leadership must be expected to result from communicative processes in the system, contributing to a reduction of complexity in systems operations. Like any other distinction, the distinction between leader and follower should eventually increase efficiency, making it easier to operate successfully as a system. At the same time, the effect of leadership as regulatory intervention depends on the performance indicators that are observed and the degrees of deviation perceived to require an intervention, as well as the type of intervention that is chosen. Interestingly enough, these questions are not systematically addressed in leadership literature.
To show how these questions affect research on leadership the distinction of leaders and followers alongside regulatory intervention is discussed on selected examples from different domains. This includes Tango dancing, engineering design and guided city tours. The examples are used to show how different leadership styles can be described from the perspective of systems theory regarding causes and types of intervention. In particular, it will be shown how leadership relies on other distinctions affecting the point of view from which systems are observed, which holds numerous implications for the practice of management.

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From Digital Divide to AI Divide: a Luhmann Perspective on Social Hierarchies in the Age of AI

by: Anahit Hakobyan, University of Bremen

"This article seeks to explore the relationship between AI technology and social inequality by analyzing current developments of societal differentiation in light of the mass adoption of AI (Artificial Intelligence) technology and its penetration into diverse spheres of human activity. Through recent decades, scholars have been discussing inequalities caused by the use of digital tools under the umbrella term ""digital divide"". The rapid development of AI technology has shaped new manifestations of possible inequalities, driven by AI and LLMs (large language models), now referred to as the ""AI divide"".
Luhmann's theory of social differentiation is applied to analyze the impact and societal consequences of the mass usage of AI technology on existing forms of differentiation. According to Luhmann, changes in media and communication technologies shape new complexities in society, thus creating new structures and forms of differentiation. Following this logic, contemporary functionally differentiated societies inevitably create new hierarchies and forms of differentiation aimed at addressing the complexities arising from the continuous datafication of society and advancements in AI technology. This necessitates examination of the changes concerning theoretical distinctions such as center and periphery, bourgeoisie and proletariat, and online and offline across various forms and levels.
1. Geographical and non-geographical segmentation: The rapid development of AI technology deepens the center-periphery differentiation between the countries that own the most advanced technologies for data collection and processing and those that provide cheap labor for the further advancement of these technologies. Capital-intensive AI innovations are challenging to implement and operate in many developing countries due to underdeveloped digital infrastructure and restricted innovation potential. Furthermore, ""data colonization"" establishes a hierarchy where workers in the

Global South are tasked with cleaning data and developing algorithms, while those in the Global North gain the benefits of their labor. Another manifestation of the center-periphery distinction extends beyond geographical segmentation and arises from the commodification of data by the big tech companies. Big tech companies utilize the data provided by the users to train LLMs and seek to obtain the rights to use as much data as possible, that is available on the web, in order to enhance AI's capacity. Meanwhile, users continually supply LLMs with personal, organizational, behavioral, transactional, demographic, and other types of data and contribute to training them by assigning various tasks.

2. Stratification determined by AI-related skills: The AI divide includes inequalities related to individuals' access to AI, ability to use AI and the outcomes of AI engagement. On the one hand, AI is expected to boost productivity. AI tools empower workers by enhancing their skills and capacities. On the other hand, AI has the potential to replace professionals involved in intellectual work including thise in higher-wage positions. Psychic systems are expected to be more solidly coupled with AI technology, thus shaping hierarchies within existing groups or creating new ones between them. Consequently, AI-related skills become crucial for the inclusion/exclusion of individuals in various functional systems of society. AI-related skills become crucial in determining the inclusion of workers in certain social strata, potentially creating new hierarchies due to differences in the ability to use the new technology. Additionally, AI tools with the most extensive training data remain concentrated in the center (Global North and big tech companies), which may limit access to the most advanced technology for those in periphery.

3. Algorithmic bias and data unrepresentativeness: Algorithmic bias is inherent in the way LLMs select information and the data they are trained on. As a part of the online world, AI systems often replicate the inequalities and biases present in the offline world. Additionally, they produce hallucinations, which increase the potential for distorting or unpredictably reflecting these inequalities. Algorithmic bias is deepened by the scarcity of AI research in countries of the Global South and the low representation of data from these regions. Additionally, data from marginalized groups is frequently underrepresented. These advancements blur the line between online and offline worlds, creating interdependencies through their mutual influence.

This article discusses the impact of AI technology on social differentiation in light of the mentioned developments and explores how the existing forms of differentiation, described by Luhmann, are transformed in a society where communication, decision-making, and inclusion/exclusion are mediated by AI technology. In this respect, the article analyzes the ways distinctions such as center/periphery, bourgeoisie/proletariat and online/offline are challenged by AI technology and their prospects of remaining relevant for the social theory. By examining the mentioned advancements, critical issues are emphasized, that are essential to the development of more dynamic theoretical understanding for social inequality in the age of AI.

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The Incompatibility of Function and Performance in the Subsystem of Education

By: Angela Valeo, Toronto MU

This paper uses Luhmann's social systems theory to examine the system of education. As one of a number of systems in a differentiated society alongside other autonomous systems such as law, economics, and politics, education is thought to be autopoietic using communications to maintain a distinction between itself and other systems. But education differs from other systems with one of these differences reflected in the duelling nature of the roles of function and performance. The lack of symbiosis between the attributes of function and performance in the system of education creates a schism in the system with repercussions for the rest of society. This dichotomy may result from education's humanistic pedagogical legacy of the 16th century which the system could not fully reconcile when faced with the full differentiation of society, the creation of mass schooling, and the need to meet demands from other systems such as that of economics. Evidence of this tension between function and performance of the system is evident in the school reform literature and in the media with an continual, oscillating dialogue between a call to return to humanistic principles of education pitted against education's usefulness in increasing human capital.

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Behind the screens: Unraveling trust in Armenian social media communications

by: Anrieta Karapetyan, Yerevan state university

"Social networks play a crucial role in sharing information and connecting people. Trust in this information is vital for shaping public opinion and decision-making.

Drawing from social theories of trust, particularly those of Giddens (1990) and Luhmann (1979), trust is conceptualized as a fundamental element in social communications, essential for establishing and maintaining relationships within society.
Additionally, the study integrates elements of social capital theory (Putnam, 1995) to understand how trust contributes to the formation of social networks and the exchange of information within online communities. Trust is viewed as a resource that facilitates collaboration and cooperation among users, shaping the dynamics of information dissemination and opinion formation on social media platforms.
Furthermore, drawing upon communication theories such as the uses and gratifications approach (Katz et al., 1973), the study explores the motivations underlying individuals' use of social media for information acquisition.
Within the context of social media, trust operates as a mechanism for evaluating the reliability and credibility of information shared online, influencing individuals' perceptions and behaviors.
At the same time fake news profoundly impacts trust among Armenian social media users, fostering skepticism, echo chambers, and damaging legitimate sources' credibility.
This study explores trust dynamics among Armenian social media users, analyzing factors affecting trust and perceptions of content reliability, including demographics like age and education.
This study employs a mixed-methods approach to investigate trust dynamics in social media communications among Armenian users. The research design integrates quantitative surveys and qualitative interviews to capture both the breadth and depth of users' experiences and perceptions regarding trust on social media platforms.
It utilizes a stratified sampling technique to ensure the representation of diverse demographic groups within the Armenian population. Participants are selected based on factors such as age, education level, and geographical location to capture a comprehensive range of perspectives on trust dynamics in social media communications.
Findings reveal varying levels of trust, with some users showing complete trust while others express skepticism. Users mainly rely on social networks for information across various topics, with information acquisition being the primary goal.
Gender comparison shows consistent trust levels, but age emerges as a significant factor, with older users demonstrating higher trust due to life experiences and a desire for social connection. Conversely, younger users exhibit greater trust, possibly due to cognitive development and technological familiarity.
Our analysis illuminates the nuanced dynamics of trust across different age groups. Older users, drawing from their life experiences, tend to lean towards trust, seeking social connection and validation in their online interactions. Conversely, younger users, influenced by their cognitive development and technological fluency, exhibit a propensity for trust, albeit with a discerning eye.
By shedding light on these trust dynamics, this study contributes to broader discussions on combating misinformation, nurturing digital literacy, and cultivating a culture of trust within Armenian online communities. Through a humanistic lens, this research underscores the importance of understanding and fostering trust in shaping the digital landscape of tomorrow.
The study of trust in social networks is crucial in contemporary sociology, examining how individuals perceive, evaluate, and interact with information on platforms like Facebook, Instagram, YouTube, Odnoklassniki, Vkontakte, TikTok, and others. Trust is influenced by factors such as the information source, content type, and user's past experiences and predispositions.
Understanding trust in social network information is essential "

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Guiding Distinctions in Brazilian Racial Identity: A Luhmannian Perspective on Inclusion and Exclusion

by: Augusto Sales*,* Next Society Institute (NSI)

"This paper delves into the distinction between ""black"" and ""white"" within Brazilian society through the lens of Niklas Luhmann's social systems theory, focusing on inclusion and exclusion mechanisms. The analysis centres on the classification of ""pardo"" (multiracial individuals) and the implications of racial categorization in Brazil. By leveraging Luhmann's framework, this study illuminates how these distinctions are constructed and maintained through communicative acts, serving as guiding distinctions that organize social reality.

Racial classification in Brazil is complex, encompassing categories such as white, pardo, black, yellow, and indigenous. The term ""pardo"" illustrates the multifaceted nature of racial identity in Brazil, transcending mere skin colour to include socio-economic and historical dimensions (Hanchard, 1996). This paper explores how these distinctions operate within Luhmann's social systems theory, which posits that society is composed of communication systems rather than individuals, providing a radical perspective on social differentiation and the processes of inclusion and exclusion (Luhmann, 1995).

The classification of racial categories in Brazil has evolved over time. Initially, racial distinctions were influenced by colonial and post-colonial dynamics, establishing a rigid hierarchy with whiteness at the top (Fredrickson, 2002). Over time, intermarriage and cultural assimilation contributed to the erosion of earlier notions of racial difference (Waters, 1990). Modern scholarship recognizes race as a social construct, constantly reshaped by political and economic pressures (Omi & Winant, 1994). This perspective underscores the importance of understanding race not as a fixed biological fact but as a dynamic social phenomenon shaped by historical contexts and power relations (Guinier, 1995).

The 2022 Brazil Census data provides an illuminating backdrop to the discourse on racial representation. With blacks making up 10.2% of the population, whites 43.4%, and pardos 45.3%, it becomes evident that the majority of Brazilians identify with a racial identity that transcends the traditional black-white binary (Instituto Brasileiro de Geografia e Estatística, 2022). The conflation of blacks and pardos into a single group by certain intellectuals and activists reflects a broader attempt to address the historical marginalization of these communities, but it raises questions about the erasure of the distinct identities and experiences of pardos (Nascimento, 1989; Petruccelli, 2001). Simplifying racial dynamics into binary terms risks erasing the rich multiracial heritage that characterizes Brazilian society, akin to the linguistic manipulation depicted in George Orwell's ""1984"" (Orwell, 1949). Policies and practices that embrace this complexity can contribute to social justice initiatives by ensuring that all racial identities are recognized and valued.

Luhmann's theory offers a framework for understanding the construction and impact of racial distinctions. Social systems are constituted by communications, and distinctions are central to their functioning (Luhmann, 1995). In racial classification, ""black"" versus ""white"" operates as a guiding distinction, influencing how social systems identify, categorize, and treat individuals, maintained through communicative acts reflecting societal values and power structures (Luhmann, 2012).

This paper argues for a nuanced approach to understanding racial dynamics, advocating for the preservation of Brazil's diverse racial identities. By applying Luhmann's social systems theory, the analysis provides a deeper understanding of how racial distinctions function as guiding distinctions within social systems, informing academic discourse on race and impacting policy-making and social justice initiatives."

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How to Destabilize a System: Polarization, Niche Construction, and the Weaponization of Guiding Distinctions

by: Constantijn-Alexander Kusters, Erasmus University Rotterdam, Erasmus School of Philosophy

"As the world transitions from an era of relative peace and prosperity into one where populism and autocracy strain the international order, pushing the world over the edge is becoming an ever more attainable goal. To empower those willing to revel in this suffering, this article sets out to develop the concept of polarization as an effect of the niche construction present in the autopoietic operations of

the media system. In doing so, the concept of polarization, usually confined to either social psychology, political science, or epistemology, is shown to be best understood through social systems theory, especially for dastardly purposes.

Systems, organic and social, develop their capacity to react to their environment by functionally differentiating sub-systems such that information relevant for the guiding principle of that system can be processed by the system (Luhmann 1989). In developing its differentiations and programs however, it is not just the system that develops in reaction to its environment, it is also its environment which develops and changes as result of or as reaction to it.

In evolutionary biology the manner by which organisms significantly alter the conditions of their environment, such that they or others see changes in selection pressures, is called niche construction. The most prominent aspect of the media system's niche construction is the manner by which, as operation of the guiding distinction information/non-information, the selection of information constructs reality for psychic and social systems that are part of its environment (Luhmann et al. 2000). The media system influences what is deliberated in social communication which then becomes what is relevant for that society. Subsequently, the selection of information is itself influenced by the pressures of an environment that nominally constrains the functional success of possible autopoietic operations. The environment for the media system includes both social and psychic systems, and the effect which most prominently constructs its niche is polarization.

Polarization is the tendency of deliberating groups to, uni- or bi-directionally, incline towards more extreme positions than held before deliberation. Disappointingly, polarization is not automatically a harmful effect. If a group reads and deliberates on a news story about compelling evidence pointing towards the risks of climate change from a trusted source, it is neither epistemically, socially, nor politically inappropriate for this group to uni-directionally polarize towards the boring belief that there are risks to not dealing with climate change (Broncano-Berrocal and Carter 2021). Niche construction thus happens for the media system through the effect of polarizing society as it selects what for that society is deliberated on and therefore what it polarizes over. Simultaneously, the environment in active communicative deliberation puts some constraint on what selection of information is successfully autopoietic for the system.

As social media has amalgamated with the mass media, the media system has become less operationally closed. Where for mass media the "[c]onsumers make their presence felt at most in quantitative terms: through sales figures, through listener or viewer ratings, but not as a counteractive influence" (Luhmann et al. 2000, p. 16), for social media the user interaction influences visibility, and algorithms push for user engagement. This has put significant pressure on the success of the media's autopoietic operations as its resonance for such a drastically differently responding environment is limited, while its functional differentiation is threatened as its function within the system is colonized by systems traditionally outside the media.

As the functional differentiation of the media system diminishes, the opportunity for other systems to hijack these operations for their own purposes increases. For other systems the niche constructing effect of polarization, resultant from the operations of the media, is an invitation to loosen the environmental constraints on their own operational functions. There is however one issue, the environment constrains the functionally successful selection of information and this environment developed in relation to the existing media system. To successfully select information, which is relevant for, for instance, the political system's guiding distinction (power/no-power), therefore

requires a way to induce the environment to reject existing media processes in favor of those that are operationally autopoietic for the political system.

Luckily for those wanting to turn the media system's operational functions against its own differentiation, the role of the environmental consumers/communicators can in this new social media landscape be creatively supplanted. Fake accounts and troll farms are two of the more popular choices, graciously provided by the legal system through the anonymity and privacy of user information. Initial communicative deliberation can thus be faked, artificially creating or inflating communicative deliberation for the purposes of targeted polarization! This social media strategy does not even take that much money as after some time the artificially inflated communicative deliberation will itself induce actual communicators to join, polarizing them accordingly in a manner less constraining on the system functionally integrating the media system.

This process is delightfully destabilizing, in swiftly and artificially shifting the psychic and social systems that make up the environment for other systems, the functional programs existing within other systems are likely to resonate poorly. Not unlike climate change destroying biodiversity through quick environmental change, successful social systems require time to co-evolve with their environment if they are not to fail in their autopoietic operations. This failure of existing systems then further adds onto the distrust sown by the fracturing societal reality, further making the environment more prone to future polarization. So long as privacy laws remain in place that protect the capability to fake deliberative communication, the possibility of hijacking the social media system and destroying its functional differentiation remains safeguarded. Until these laws change this article will provide ample theoretical framework for anyone willing to turn the system's operations against itself and fracture the constructed reality of our system. Especially useful for those that functionally stand to win through the joys of chaos and instability.

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Is Ethics a utopia? Yes, when moral distinctions are going unchecked.

By: Diane Laflamme, Université du Québec à Montréal

"To claim that ethics is a utopia, as sometimes did Luhmann (1993: 1002; 2012: 245), does not imply that the concept is doomed to lose all of its interest for social scientists and humanities scholars. Luhmann also says that « it would be a mistake to over-react and declare the whole undertaking of ethics to be out of date » (1991, p. 89). Morally conditioned communication does exist and ethics thus has a task: the second-order observation of distinctions made by « moralizing observers » (1993: 1008). Luhmann states: « At the very least we ought to be able to expect that ethics does not simply declare its solidarity with the good side of morality and forget the bad side, but that it thematizes morality as a distinction, i.e. the distinction between good and bad or good and evil. » (1991: 90-91)

Since they are heavily reliant on the binary distinction between good and bad, and since the translation into digital of some of their analogue content might well be the way for them to maintain relevance in a digitally transformed society, ethics and moral philosophy cannot ignore the new challenges brought about by the « transition from an analogue to a digital age » (Roth, 2023: 452). As a test case to bring them into this arena, we ask the question « Is ethics a utopia? ». By putting together guiding distinctions found in digital (Luhmann) and analogue (French philosopher Paul Ricoeur) theorizing on ethics, we arrive at a yes answer. This answer is not a verdict. It rather brings into focus two priorities for further joint research: to question the reliance on binary logic in moral philosophy and to entice systems theory to enrich its analysis of how meaning is constituted in psychic and social systems.

Our examination of Luhmann's and Ricoeur's writings on ethics and utopia focuses on guiding distinction, but it is not an attempt to translate pseudo distinctions into « true binary distinctions », as suggested by Roth (2019: 90). Our approach is grounded in the analysis of meaningful intentionality. With this concept, derived from Husserl phenomenology, we can try to find common ground between the two scholars. Intention is viewed as « the drawing of a distinction » (Luhmann, 2002: 45), and drawing a distinction is the way meaning is constituted. Ethics is presented as « ethical intention » and defined as what is « aimed at » (Ricoeur: 1992: 170-172).

According to Luhmann, meaning is « sociology's basic concept » (1990, Chap. 2). It is the medium for « distinction-dependent observation » (2012: 26). The specific form of meaning is « the distinction between actuality and potentiality » (2012: 27). Social systems are meaning-constituting systems (1990: 23-28; 1995: 69). They have communication as their basic operation. In social systems, ethics and morality are realized as communication (1996: 32). With its binary conditioning of communication, morality is « symmetrized meaning » (2012: 145). In this theoretical programme, where meaning is centrally positioned, Luhmann then proposes that ethics should confront its traditional reliance on the binary logic underlying the moral code and its reluctance to unfold paradoxes: The question is, though, whether ethics can be induced to reflect the problem of coding the moral. […] That would mean seeing the task as the unfolding of paradox in the moral code instead of as the application of principles and maxims the reason (who's reason?) identifies as indubitable. (1993, p. 1008) Ethic is presented with this challenge in the conclusion of the same article where Luhmann states « that which is called ethics today is nothing other than a utopia » (1993: 1002).

We draw from Ricoeur's writings in order to gain more insights on ethics and utopia. The two concepts are considered phenomenologically, that is with a descriptive approach that « takes into account the meaningfulness of what is presented » (1986: 15).

"Ethical intention is defined by Ricoeur as aiming at an accomplished life, with and for others, in just institutions (1992: 170-172). Three levels of meaning-constitution are thus involved: self-evaluation (or self-esteem), close social interactions and participation in the institutions of a larger society. The ethical aim cannot be assimilated to the teleological perspective of Aristotelian ethics and it does not fit the ends-means model (Ricoeur, 1992: 170-177). Because of its inscription in a meaning horizon, it is never completely achieved and only reachable in « a momentary and provisional approximation » (1992:180).
Utopia is viewed as an expression of social imagination, operating in both constructive and destructive ways. Ricoeur sees in the « nowhere » implied by the word utopia, « a kernel idea », and he emphasizes « the benefit of this special extraterritoriality ». With the « no place » of utopia, « the field of the possible is now open beyond that of the actual; it is a field, therefore, for alternative ways of living » (1986: 16) Utopia constructive function is to contest what is and offer alternative perspectives: This development of new, alternative perspectives defines Utopia's most basic function. May we not say then that imagination itself – through its Utopian function – has a constitutive role in helping us rethink the nature of our social life? Is not Utopia – this leap outside – the way in which we radically rethink what is family, what is consumption, what is authority, what is religion, and so on? Does not the fantasy of an alternative society and its exteriorization « nowhere » work as one of the most formidable contestations of what is? » (Ricoeur, 1986: 16)
Drawing from Ricoeur's perspective on ethical intention and utopia, we can understand how Luhmann can rightly observe that, in our present societies, ethics is nowhere to be found and « performs the function of a utopia » (2012: 245). Without being named as such, the guiding distinction « actuality/potentiality » allows both Ricoeur and Luhmann to recognize how ethics, though it is never fully actualized, could nevertheless inspire sweeping social changes. Luhmann states that « in the name of ethics, society can rebel against itself. » (1993, p. 1002). Ricoeur's analysis of ethical intention concludes with a call for « reawakening » (1992: 240) and for « inventing just behavior suited to the singular nature of the case (1992: 269).
Through fundamentally different operational modes of theorizing, Luhmann and Ricoeur guide us towards a better understanding of the meaningful intentionality underlying the concept of ethics. We can then proceed to show how the task of ethics is impaired when binary moral distinctions go unchecked. In so doing, we hope to make a convincing case that analogue and digital theorizing can join their efforts to foster advances in humanities research.

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A Calculus for Post-Digital Society

by: Dirk Baecker, Zeppelin University

Next society will be different from modern society. A new structure and a new culture will have to deal -- and already start to deal -- with a new surplus meaning (Luhmann) stemming from the participation of machines in communication. This surplus meaning is that of control, machines controlling humamn behavior, but also human behavior controlling machines. As far as is visible right now functional differentiation will give way to networks as the primary structural differentiation of society, and ›reason‹ or ›restless equilibrium‹ will give way to ›complexity‹ as the new culture form of society. The paper will focus on the question of how to conceive of ›digitization‹ and pick up on Luhmann's idea to develop a general idea of digitization as a form of structural couplings of systems to their environments and other systems within that environment. The ›form‹ of structural coupling is a digital distinction coding analog events and producing analog events. Any social system is doing that which means that digitization by technological digital media is just a special case. The paper will ask which ›guiding distinctions‹ are dominant in post-digital or next society.

The Influence of Entrepreneurial Ecosystems on the Functions of Universities

by: Dong-hyu Kim, University of Glasgow

"The regional development literature, which focuses on the geographical boundaries of an ecosystem, has a long-standing tradition of examining regional ecosystems to explain differences in overall regional performance. This body of work includes related concepts such as regional innovation systems (RIS) (Cooke et al., 1997). Universities play a crucial role in regional innovation systems by not only generating knowledge but also by creating an 'epistemic community' (cf. Hass, 1992). This epistemic community redefines cognitive regional boundaries, enabling the exchange of knowledge across geographical distances (Coenen et al., 2012). Nowadays, entrepreneur-driven ecosystems have emerged as new drivers of regional development, reshaping the boundaries of local and global interactions. This emergence pressures regional universities to take on new functions, such as fostering entrepreneurship. In this context, this research aims to draw on Luhmann’s concepts (e.g.,

functional differentiation, and self-referential systems) to elaborate on the emerging phenomenon.

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Social theory by counterfactual benchmarking: (dis)equilibrium, (ir)rationality, and (im)perfection as constitutive distinctions in economic thought

by: Eduardo C. Ferraciolli*,* ISEG - University of Lisbon
Co: authors: Felipe R. Sousa, Henrique P. Coelho

"Three core conceptual distinctions underlie the way neoclassical economics conceives the economic system: a difference between equilibrium and disequilibrium, one between rationality and irrationality, and, encompassing both of the above, a more abstract contrast between notions of perfection and imperfection. Taken together, these constitute a peculiar approach to understanding the economy: abstract constructs with no clear referent in the socioeconomic world are proposed, and reality is then interpreted in terms of correspondence or deviations from these constructs. This method of analysis has few counterparts in other social sciences, and carries major consequences for decision-making in economic policy. While these are not system-constituting differences in the sense proposed by Niklas Luhmann, they are arguably indispensable to the way economists observe, analyze and represent the economy.

This paper examines the role played by these distinctions in the epistemology of mainstream economics, evaluating them in light of social systems theory and contrasting each with alternatives proposed by different strands of heterodox economics. We begin by retracing the development of the concept of general equilibrium in Arrow and Hahn's landmark 1970s work, paying attention not only to the formalizations but also to the authors' personal reflections on the purpose and applicability of these abstractions. We then examine how the mainstream of economic theory in the 1990s and early 2000s saw attempts to integrate specific deviations from equilibrium into this framework, particularly in the form of market failures and information asymmetries, all the while maintaining the notion of equilibrium as a benchmark. To contextualize the peculiarity of this approach to analyzing the economic system, we then contrast it with an alternative possible formalization that dispenses with notions of equilibrium: macroeconomic agent-based models developed by heterodox evolutionary economics.

We then move on to the distinction between rationality and irrationality, following a similar path: we outline how the past few decades of theoretical and experimental work in behavioral economics expanded from a concept of utility maximization, originally justified on the grounds of mathematical tractability, to a growing number of qualifications of this idealized reference. Much as was the case with deviations from equilibrium, this can be seen a critique made from within the mainstream of the discipline, somewhat widening its scope, but never displacing the central construct at once being used as a benchmark and an object of critique. We draw another contrast here between theses "deviations from rationality" approaches and extended-cognitive, institutional models of human action - perspectives whose history do not largely overlap with principles of rationality and that lead to markedly different conceptions of goal-oriented behavior.

As a third step in the exposition, we then generalize these observations through an analysis of the perfect/imperfect distinction, which can be seen as a more abstract methodological commitment from which the two previous distinctions are derived: in both cases, two distinct modes of theoretical analysis coexist, one pursuing proofs in an abstract model-space of a referent of mathematical perfection, and another one exploring possible failures in the attainment of this idealized model. This

brings into focus the fact that the economic concept of *friction* conceptually stands in for all of these conceptual distinctions.

We conclude by reflecting on what is gained and lost by the particular epistemological commitment of referencing theory development on counterfactual benchmarks with little possible correspondence to social reality. We argue that, while often presented as an attempt to add realism to the idealized mathematical framework, this method can plausibly be seen as a disingenuous: regardless of how many frictions are added to the original framework, it is the idealization itself that lacks correspondence - or even possible correspondence - with social reality. More pragmatically, this split method also promotes the existence of an often ineffective academic industry of “friction-finding”, both in theoretical and empirical economics. Finally, we trace these problems to the failure to provide a answers to the problem of aggregation, an issue that lies at the core of neoclassical economics: faced with irreducible systemic complexity, this approach provides concepts of equilibrium of rationality that obscure, instead of attempting to come to terms with, the nature of the economy - a problem that is not resolved by enrichment through frictions. As a substitute, we defend instead a qualified use of the micro-macro distinction, which can be formally operationalized through a paradigm of institutional integration of individual action.

System and environment: reconciling the guiding distinction with empirical methodology involving human agency

by: Emer Hunt, University of Zagreb & Next Society Institute, KSU.LT

"The very essence of systems theory is to posit as a guiding distinction the separation of the system from its environment. System and environment are intertwined, and a system is observed in distinction to the environment of that system. This distinction – a border – between the system and the environment is replicated at the level of each sub-system (law, politics, economy, media, art etc.) which, together, constitute a functionally differentiated society (Luhmann, 2012, 2013).
Thus far, the system does not rely upon, or acknowledge the individual, or see society as composed of corporeal agents. Very deliberately, systems theory decries a humanistic influence and is bare of individual agency. This sustains an oft-made criticism of systems theory: it severs the individual from society (Mingers, 2002). Systems theory, so runs the repudiation, is conservative (Sinclair, 1992), fails to challenge the legitimacy of social structures and ignores the normative biases of the researcher (Dahrendorf, 1958, Kincaid, 1996). The guiding distinction, therefore, can never be an agent and so, the identity of the agent is not relevant to systems theory.
These criticisms can be parried at a theoretical level, but perhaps explain the lukewarm reception proffered to systems theory in the hyper-individualistic anglosphere (Philippopoulos-Mihalopoulos, 2009, Borch, 2011).
Leaving this aside momentarily, the excision of agency from systems theory can express itself in methodological difficulties. It can be difficult to square systems theory’s view of society with any empirical methodology which relies on analyzing the discourse of individual agents. Such discourse can be theoretically viewed as de-natured from humanity, a product of an autopoietic system which applies its code to a series of internally constructed questions. It can be labelled as a communication

but, ultimately, all such communications are, to some degree, inevitably the product of human cognition and issued by an agent.

The challenge for any empirical work based on systems theory is to synthesize the sociological dichotomy between "a sociology of social system and a sociology of social action" (Dawe, 1970, p. 214). This involves, first, mapping the gap between the theory and its operationalization, which is quite vast, and difficult to traverse. Luhmann's assurance that systems are empirically observable in the "real world" (Luhmann and Rasch, 2002, p. 136) does not advance practical methodology. Secondly, a methodology based on systems theory must be aligned to common social science methodologies. This is difficult as operationalizing systems theory requires the researcher to address communication, not action (Luhmann, 2012, p. 15).

In carrying out these steps, any synthesis of theory and method must cohere with the basis of systems theory, which is to regard only certain things as knowable. This constructivist orientation inherent (and explicit) in Luhmann's view of the observer dictates that empirical observation does not determine the world 'as it is' (Teubner, 1989).

A further difficulty is presented by the necessary awareness of the contingent nature of systemic communication. The system selects but its selections are contingent (Luhmann, 1995a, Andersen, 2000). Contingency implies that a communication is "neither necessary nor impossible; it is just what it is (or was or will be), though it could also be otherwise" (Luhmann, 1995b, p. 106).

If the system is composed of communications, and the individual agent is divorced from the communication, does this reduce systems theory to a heuristic, true by definition, or so abstract as to mean that empirical work based on systems theory is trivially true (Mingers, 2002, Leydesdorff, 2009, Baghai, 2015)?

"In short, therefore, this paper wants to explore the robustness of empirical methodology conducted on the theoretical basis of Luhmann's system theory (Besio and Pronzini, 2008, 2010). In particular, the absence of the individual in systems theory poses methodological problems for empirical research (Wolf et al., 2010). Can systems theory be validated through empirical evidence or is it merely empirically ineffective (Rottleuthner, 1989) or empirically irrefutable (Münch, 1992)? How does a guiding distinction between system and environment account for the presence of flawed, unpredictable, biased individuals who communicate?

One answer to this question is given by Luhmann (1992) himself, who says that systems theory takes individuals seriously precisely because a human cannot be part of any system. Systems are socially constraining, as they communicate only in their code and regressively build upon previous communications to present a systemic view, distinct from the environment. Yet the individual is an implicit, overwhelming presence in society and in systems theory. Is this merely sophistry? How does it jibe with a methodology which involves empirical research (interviews and surveys) with individuals? Can empirical methodology involving human agents persuasively claim compliance with systems theory?

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Theory and Methodology in Sociology – Guiding Distinction

By: Erik Brezovec, Faculty for Croatian Studies, University of Zagreb
Co-author(s): Josip Ježovita, Ph.D, Croatian Catholic University

This work addresses the guiding distinction within sociology, specifically its programmatic nature. Niklas Luhmann identified two main programs within the scientific domain: method and theory. While theories externalize the internal results of scientific work, methods apply the code, ensuring that the results can be distributed according to what is true (or false). Theories represent openness, whereas methods represent closure within the system; their distinction has an exclusively internal meaning for the system, referring only to its operations (Luhmann, 1989: 79). The scientific system separates theory and methodology by developing distinct communication patterns for each. Theory is concerned with developing conceptual frameworks that explain social phenomena, providing lenses through which sociological questions are framed and explained. Methodology, on the other hand, focuses on techniques and processes that enable empirical data collection and validation, ensuring that data can systematically validate or reject theoretical assumptions. This separation is necessary due to the functional differentiation that emerges as scientific disciplines grow and specialize.

Both theory and methodology have distinct ways of coding truth: theory relies on logical consistency and conceptual clarity, while methodology emphasizes reproducibility and empirical rigor. Distinctions are vital for organizing research effectively, preventing confusion between the construction of concepts and explanations (theory) and their testing or observation (methodology). Each program contributes to coding truth, being mutually exclusive but operationally inclusive. Methodological work requires an awareness of theoretical frameworks, focusing on methodological rigor. Similarly, theoretical work relies on empirical evidence within the context of theoretical communication. Both contribute to the self-referentiality of the scientific system, making this distinction a guiding one for coding truth.

This guiding distinction has been evident and critically examined throughout sociological argumentation for the past 60 years. For instance, Lazarsfeld discusses empirical zealotry over theoretical engagement, Berger examines methodological fetishism as a problem in sociology, and Mills highlights the opposition between grand theory and abstract empiricism. These critiques underscore theory and methodology as a guiding distinction in the practice of sociology.

However, over this period, methodology appears to have become more effective program then theory. Many sociological projects focus solely on empirical evidence, and numerous sociological papers in respected journals lack a basic theoretical component. This issue may stem from differences in how methodology and theory are communicated. Methodological communication is often more formalized than theoretical communication. For example, the term 'theory' in sociology alone has even seven different meanings (Abend, 2008), whereas methodological guidelines are clearer and leave less room for variation. We hypothesize that the methodological program in sociology is more effective in convergence than the theoretical one.

Therefore, the main goal of our work is to examine how the theoretical and methodological programs manifest within the Croatian sociological community. We investigate how the distinctive communicative forms of methodology and theory are (re)produced and communicated by empirically examining this distinction through an experimental idea involving a hypothetical sociological problem presented to sociologists in the Republic of Croatia. In this scenario, sociologists holding a Ph.D. in sociology and engaged in scientific research suggest theoretical and methodological tools for investigating phenomena. This experimental case (phenomena) includes the following question:

""How does the rise of generative AI impact inequality in employment within creative industries? "What are the best theoretical frameworks and methodological approaches for understanding and addressing this problem? Please outline your theoretical framework and propose a methodological approach to study this problem in a specific industry context.""

The analysis of this data will provide insight into the communicative process of theoretical and methodological inquiry. It will examine whether theoretical knowledge is more dispersed than methodological knowledge in processing certain phenomena and how they relate to each other in this specific experimental case.

Key words: Sociology, Methodology/theory, Autopoiesis, Guiding distinction

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The end-user takes the final decision" - AI and decision-communication in organisations

by: Erik Aal, Corvinus University of Budapest

"While the social sciences are brimming with attention for the transformations brought about by artificial intelligence (AI) and digital technology, the aspect of communication has received little attention. This is remarkable, given the vast presence of AI-based entities in communicative exchanges. Here, Niklas Luhmann's social system theory, which conceives social systems as constituted through ongoing communication, is particularly well equipped to make a relevant contribution. In social system theory, it is communications that communicate with each other, and for that matter, it is not relevant whether the participants are human or AI. Innovative contributions on societal level have already been made (Esposito, 2017, 2022). In social systems theory, organisations are seen as a special form of social systems in that they are based on decision-communications. This paper observes the impact of AI in organisations, through the distinction between decisions and decision-premisses (Luhmann, 2000). Luhmann elaborated on the paradoxical nature of the decision and used this to explain the myth of the decision-maker (Luhmann, 2019). The concept of decision-premisses is a core element in this explanation. I argue that the discussions around AI elevate the myth of the decision-maker, while it is in fact the decision-premise that is elevated. In the decision-making communication that constitutes the organisation, AI functions as a decision-premise rather than an 'artificial member' of the organisation. Evaluating relevant empirical studies (a.o: Ahmad et al., 2023; Cao et al., 2021; Davenport & Miller, 2022; Dörfler, 2022; Langer & Landers, 2021), I conclude on how AI replaces decision-premisses that are used in organisations: decision-programmes, communication channels, and staff allocation. AI appears to have a profound impact on what is conceived as the system memory of the organisation. The so-called platforms, providing the data morphology that is used by the AI algorithms, have a key role in this. While on the one hand the

capacity of the system memory is vastly enlarged, more explicit and unequivocal, on the other hand the process of 'forgetting and learning' seems to elude increasingly the organisational communication, which is often limited to deciding about exceptions or anomalies. This may infringe on the self-descriptions of the organisation and limit the freedom in goal setting. While social systems theory defines organisations as constituted by decision-communications, the communicative reality of organisations also encompasses interactions occurring in interaction systems (meetings, informal discussions, chats, etc.). Although an interaction system is not part of the organisation system, they are mutually influencing each other (Jäger & Coffin, 2011; Kieserling, 1999; Seidl, 2006). The fact that AI will not, or only to a limited degree, be an element of the interaction systems - depending on where and how it is used - will have significant consequences for the development of the organisation. Particularly the transformative potential of the organisation may be negatively affected, as interaction systems are important in the explorative activities of the organisation. Overall, I conclude that social systems theory indicates that the increasing reliance on AI actually introduces elements of conservatism into organisations, which are not to be underestimated, particularly in times where the boundless opportunities that AI offers are predominantly heralded. By the same token, this paper highlights the factors that organisations should and can address in order to avoid such creeping conservatism.

Keywords: artificial intelligence, communication, organisations, decision-making, social systems theory

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Self-Organization of Digital Abilities Among Older Workers

by: Eva Šerá, Faculty of Business and Economics Mendel University in Brno
Co-author(s): Martina Rašticová, Mendel University in Brno, Faculty of Business and Economics
Karel Doubravský, Brno University of Technology, Faculty of Business and Management
David Schüller, contact: Brno University of Technology, Faculty of Business and Management

The paper deals with the self-organization of abilities of workers 50+ in the environment of digitalization. The aim is to formulate a system of abilities, which consists in 1) identifying pairs of abilities, or forms of communications, and 2) deriving unified meanings, or unified distinctions, which reproduce these forms and are simultaneously reproduced by these distinctions.
According to the concept of N. Luhmann, a system self-organizes as a unity of system/ environment distinction and is only able to observe itself as observer if it can copy its guiding distinction and re-enter it into itself, that is, its ability to divide itself by entering the distinction system/ environment into the system itself. Each distinction enters back into itself and in this way the reality of the system is constructed. In terms of research, we can then investigate under what conditions the unity of differentiation or self-organization of the system is reproduced; (Luhmann 1995; 2009). This system was obtained by fuzzy modeling the similarities between abilities according to the data obtained in the questionnaire survey.
The employment of workers 50+ and the development of their digital competences are among the central themes of European policies (Vuorikari, Kluzer, and Punie 2022). Workers are attributed both positive characteristics such as experience, knowledge of the work environment, insight, and

belonging, and negative characteristics such as low willingness to learn new things, less adaptability to change, and lower performance (Henkens 2005). They are also characterised as a group with low digital competences and barriers to digital learning. However, it also appears that workers 50+ are interested in learning to master digital technologies if it satisfies their needs and interests (Pihlainen et al. 2023). But here we see a paradox. Workers 50+ are valued for skills that take time to develop and when they observe new stimuli in the context of these long-term abilities. At the same time, these abilities become barriers and thus negative characteristics, as they do not allow to quickly accept stimuli such as digital technologies, that sign without the context of their experience, knowledge of the work performed or approaches to work. In other words, digital competences must be acquired in the context of the existing abilities of workers 50+, but this takes time.
In contrast to standard approaches that examine the abilities of workers 50+ in a static and fragmented way, here abilities are presented as a system, thus also showing their dynamism and complexity. Abilities were formulated according to the work abilities model (Gould et al. 2008) to relate to health, knowledge, experience and relationships in the organisation. By identifying the highest similarities, pairs of abilities were created, where similarity means that the abilities share some characteristics. These characteristics were used to infer common meanings. Based on this, a self-organization model of the abilities system is reconstructed, showing the forms of abilities expert knowledge - practical skills, technical skills - intuition, intuition - the ability to discuss workflow, physical and emotional well-being and relationships with colleagues. In each of these forms, uniform distinctions of self-reliance, garnering peer recognition of one's skills, development of knowledge are reproduced. These distinctions are how workers differentiate themselves from their surroundings, i.e. from a dynamic, rapidly changing environment, which may be employers' requirements for mastering digital competencies or embracing other changes.
The communication model of forms and uniform meanings may be useful in explaining capabilities i.e. worker potential. Indeed, if the forms of abilities and uniform distinctions are known, it is possible to consider how workers will observe the stimuli coming from the environment and work with its potential such as digital technologies.

The Small Group: Distinguishing social orders

Felix Bathon, University Bielefeld

There are millions of small groups in society, woven into the fabric of human life from birth to death, and people are woven into the fabric of small groups. People are brought into the world by a team of doctors, nurses and midwives and spend their early years in nursery, school and training with their peers. They live with strangers, unrelated people, and later work with others in organisations, meet a partner, possibly through friends, and marry in the presence of the partner and their family. Over time, some groups break up and others form. Self-help groups and social gatherings help to get through difficult periods of life. For the final farewell, survivors gather at the funeral to pay their respects. Some of these groups are viewed critically by society, as in the case of gangs or promotional alliances in organisations. Other small groups, especially cliques of friends, are viewed favourably because they are relevant to personality development. In this sense, they are also carriers of social development as

a whole. This could be exaggerated: Human beings and society are inconceivable without small groups.
Sociological systems theory has surprisingly little to say about these entities. This is alarming not only because the empirical domain is relevant to the lifeworld, but also because the group can be seen as the founding theme of sociology. There seems to be no place for the distinction between interaction, organisation and society. This article addresses this problem. First, it problematises the tripartite distinction between interaction, organisation and society in relation to the phenomenon of the 'small group', especially the durability of relationships, personal trust and the latency of goal orientation.
In a close (critical) examination of sociological systems theory, especially the leading sociology of organisation (Luhmann 1964), the forms of order of social experience and action, namely interaction, organisation and society (Luhmann 1982[1975]), and current proposals for a further, systems-theoretically informed discussion of different social orders (Grothe-Hammer, Berkowitz 2024) and their distinguishing criteria, the article develops in a second step a concept of small groups as slightly differentiated systems. On the basis of three types of small groups, residential communities, groups in organisations, and play and leisure groups such as reading circles, it is shown how small groups can be integrated into systems theory more or less smoothly by discussing their central distinctions.

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Technology and Guiding Distinctions in the Digital Economy: Observant Masters and Servants

by: Florian Maurer, FHV - Vorarlberg University of Applied Sciences
Co-author(s): Prof. Dr. Dr. habil. Albrecht Fritzsche

"In the course of the ongoing digital transformation, service has become a very popular term in information systems research and application (Matzner et al., 2018). Early onwards, software engineering established the notion of service-oriented architectures to denote networks of flexibly interacting data processing units (Papazoglou & Van Den Heuvel, 2007). Later, this idea has been adopted in marketing to develop a new understanding of value creation as a joint effort of producers, consumers and other stakeholders in business operations. For example, Vargo and Lusch (2004, 2008) have established a highly influential distinction between a goods-dominant logic, which focusses on value creation in industry that materializes at the point exchange with the customer – i.e. the moment of purchase – and a service-dominant logic, which focusses on the value that is generated when the purchase takes effect in daily life. Used in this way, the notion of services marks a departure from conventional models of production and consumption mediated by a market. Instead,

producers and consumers are considered as participants in the same activity, with the ultimate goal to improve the life experience of the customers with professional expertise. Services are, in this sense, considered to reflect a deep, ongoing involvement for industry in customer lives, as it can nowadays be observed in the digital economy, where platforms orchestrate a manifold of different value streams between different stakeholders at the same time without any clear beginning or end.

Where this happens, it is not only the distinction between production and consumption that disappears. Distinctions between public and private, payment and non-payment, innovation and imitation, etc. can also not be upheld, as monetary remuneration is replaced by data provision, ideas are openly shared, accumulated and rearranged by algorithms, and much more. Service research in the abovementioned disciplines describes this as a liquefaction of resources that enable individualized bundles of offerings from everything that is accessible on a platform. The idea of boundaries between inside and outside of a system is rejected and replaces by a continuum between centre or periphery in value creation, based on the density in which resources are arranged in bundles (Vargo et al., 2024). At times, one can get the impression that the authors intentionally ignore everything that might be interpreted as a distinction or dialectic, trying to avoid the spectres of Marxism lurking in references to masters and servants or different types of values on the marked and in using a good.

From a Luhmannian perspective, the thought that service design can proceed without guiding distinctions is obviously absurd (cf. Luhmann, 1995, pp.4). With our research, we show that guiding distinctions are indeed ubiquitous in service literature. As a starting point, we use Hegel's original account of distance as precondition for the application of human reason, which seems to be at the heard of most contemporary accounts of guiding distinctions. Hegel's work is particularly interesting in this context, because it suggests that distance emerges from the distinction of means and ends, which is easily associable with instrumental reasoning in the design of technology (Hubig, 2002). We show how the means-end distinction is reflected in the call for an ongoing involvement of industry in customer lives, with a very similar result as described by Hegel, as the service provider becomes the single point of reference for reflection.
"In Luhmannian terms, this would mean that customer value is claimed to be focal point of the digital economy, but that the customer is actually at the outside of its systems structure. While industry claims to collect data to observe the customer, it is eventually industry that becomes observed as the carrier and processor of these data with the aim of service provision. As industry becomes the determinant of the customer, however, criteria upon which the customer could proceed to develop other guiding distinctions to emancipate him- or herself are difficult to find. In many respects, this seems to constitute a false distinction (Roth, 2021), which then causes other distinctions to fail, as they start from the wrong basis. Here, one could see the point of access at which interventions in the ongoing digital transformation shout be aimed.

The empirical part of this paper is augmented with our experiences in the design and development of an Information Systems for recycled products for manufacturing. This Information System, entitled JIDEP platform, enables the digital monitoring of composite materials and their return to the economic cycle as raw materials. The JIDEP platform augments the goods-dominant perspective with the service-dominant perspective.

Acknowledgements
This work is supported by the Horizon Europe Programme of the European Commission, Cluster 4, through the JIDEP project (Joint Industrial Data Exchange Pipeline; contract No. 101058732).

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Interaction between the theories of Niklas Luhmann and Eliseo Verón

by: Gustavo Markier, Universidad de Buenos Aires

"Interaction between the theories of Niklas Luhmann and Eliseo Verón

A reflection on the interaction between Niklas Luhmann's Theory of Social Systems and Eliseo Verón's Theory of Enunciation and Social Discourses.

Eliseo Verón (1935-2014) was an Argentine semiologist with a long academic and professional career in France, Argentina and Brazil.

Difference plays a fundamental articulating role within Luhmann's theory. He pays homage to Ferdinand de Saussure before stating that “concepts constitute the contact of science with reality, in the form of a differentiated experience. The experience of difference is a condition of possibility of obtaining and processing information.”

I find an articulation with socio-semiotics: the analytical construction from the differences identified by the observer through which marks are delineated whose operations in the text establish traces. From these differences revealed within the corpus, we can draw comparative grids and conclusions about

the findings, which allow us, for example, to outline grammars of production and recognition, in Verón's terms.

(…) By operation we must understand, in the most general way, the production of a difference… the social is an operation of communication, society does not exist as an object. Society is pure communication and therefore it is only possible to approach it through distinctions (…) .

The use of the term “operations” also establishes a relationship between both theoretical frameworks. From Luhmann's point of view, the social is a communicational operation; from the semiotic point of view, the marks operate in the text generating a sense perceived by the observing analyst. In both, it is the differences embodied in operations that construct meaning. The set of multiple operations of meaning identified by the analyst allows him to draw up an analytical scheme, as a previous step to the elaboration of a diagnosis.

As regards system, environment and the self-referential observer, the role of the observer is a key aspect in terms of the operational capacity of Luhmann's theory.

Here too I identify conceptual relations with Eliseo Verón's Theory of Social Discourses. Both also acknowledge their indebtedness to Spencer Brown's “Laws of Form”. Verón refers to the concept of interprenetration and to the compatibility of Luhmann's theoretical framework with social semiosis .

Luhmann supports the existence of self-referential systems. He defines them as “systems that have the capacity to establish relationships with themselves and to differentiate those relationships from those they [maintain with] their environment” .

The operational approach reaches an interesting facet of expression when Luhmann affirms that the General Theory of Social Systems does not intend to comprehensively establish the essential characteristics that are found in all systems without exception. On the contrary, he sees the theoretical corpus as “a language that introduces problems and solutions, which, in turn, makes it understood that there may be different functionally equivalent responses to determined problems” .

The reason for being and the articulating reason for existence is the concept of difference.

The System and its environment maintain relations with each other. Without a doubt, the reciprocal relations and the ways of articulating the information between both parts configure the essence of their sameness: the recognition of an identity. The construction of difference is the basis of identity.

Consequently, differentiation allows, through analysis, that self-referential systems establish information relations with "themselves, recognizing themselves in that dynamic, and enabling their identity.

Luhmann has been valued for his remarkable capacity for vision in placing the communication dynamic as the dimension in which knowledge is put into play. A dimension in which the division organism-machine, human being-software, person-society is extinguished, and the relationship between systems is validated based on their meaning, inaugurating new perspectives of perception, by preparing the ground for the incorporation of new forms of intelligence and their interaction with men.

A perspective of Gregory Bateson mentioned by Verón: “An epistemology becomes possible as a theory of the evolution of knowledge, that is, as a theory of the production of differences.”

My perspective is that socio-semiotics theory contains operational tools that articulate with the Theory of Social Systems.

Algorithmic-Organizational Ideation (AO-I): a guiding distinction of the analog/digital manager

by: Gustavo Rocha Reyes, Universidad Autónoma Metropolitana - Iztapalapa (UAM-I)
Co-author(s): German Dario Martínez Palacios, Mary Darko Plus Enterprise

"From the paradigmatic opening encouraged by Organizational Studies and in view of the need to establish theoretical bridges with reality that allow us a plural understanding of our society, this paper proposes, from a Luhmannian operative constructivist perspective, to outline a reflection on Human Ideation and Algorithmic Ideation from the functional differentiation. From the guiding distinction analog/digital, we propose to investigate specifically in the managerial practice and specify which attributions make possible the systemic differentiation of the executive functions when they are anchored to a set of analog versus digital management tools that are used by the manager for organizational management and involve him both in his skills for the management of the organization and in his possibilities as a subject.

For this, we consider that Human Ideation and Algorithmic Ideation find in the organization sufficient characteristics for the enactment of an organizational reconfiguration that differs substantially in the managerial cadre because of technology. The present paper concentrates only on managerial practice, specifically on the ability to decide, understood as a purely organizational attribution. We are aware that this affects and has repercussions in more than one department and at different levels; to assume this causality as the only one is merely an operational purpose for the research. We intend at least to characterize a limited organizational plot and therefore, in turn, we contract the possible consequences of this approach.

In this sense, the problems involved in the generation of knowledge and therefore, problem solving and decision making in organizations with digital influence, moves towards a category that could be called ""Algorithmic-Organizational Ideation"" (AI-O), since the obsolete human creativity for the generation of wealth is evidenced. Accordingly, the conception of the human for the management of the organization and of the traditional management discourse that linked the worker with execution and the manager with thinking, is renewed in the set of digital management tools and the transformation originates. The management of the contemporary organization that is concerned with increasing efficiency and value generation makes clear the insufficiency of the human and expires its capabilities for the strategic management of organizational behavior. Therefore, the relevance of management tools based on Artificial Intelligence (AI) challenges the human (Espinosa, 2020) and makes process automation and deep learning the new face of many companies today. Value creation,

capture and delivery are digitized. The impact of new management tools - such as Machine Learning - accelerates the way a company delivers value to its users and traditional analog management practice is marginalized.

Management tools based on Artificial Intelligence (AI) affect the scope and scale of production and redefine managerial practice by implying the requirement of new skills for organizational leadership (Langer, M. & Landers, R. N. 2021; Daugherty and Wilson, 2018; Decker, M., Fischer, M., Ott, I., 2017; Giraud et al. 2023; Gentry, et al. 2008). This updated reality, overrides the model of human functional rationality and moves towards a digital-algorithmic rationality enabling the exercise of data-power. In other words, a new type of struggle is promoted, new power relations (algorithmic governmentality), in coexistence and mutual influence with a knowledge (of the digital-algorithmic type central to the generation of knowledge) that brings into play a functional differentiation in the practice of the contemporary managerial subject questioned in his fundamental roles (leader, planner, strategic decision-maker, coordinator, resource allocator).
"We consider then that the Algorithmic Organizational Ideation (AI-O) –which combines Human Ideation on the one hand with Algorithmic Ideation on the other–can be functionally differentiated –through the analog/digital binomial– in its socio-technical capacity of the decisive organizational set. Specifying, the manager as an organizational subject and hereinafter in their respective capabilities as a gear for the management and the scope of their own predominant role. Therefore, it is essential to characterize how the technological alteration in a mutualist constitution, influences and modifies the strategic conduction of the organization and its power relations. In other words, the new role of the manager expresses in a very objective way how technological motivations are socially conditioned without being completely determined (Luhmann, N. 2007).

In fact, the self-constituted duality presumed by Luhmann (2007) is revealed in our study in a transcendental way, for although the subjectivation we presuppose as the ultimate behavioral observation seems evident, what underlies it is a recursive structural determination proper to the organization –chained decisions–. The constellation of organizational attribution presents the necessary characteristics for an Algorithmic-Organizational Ideation (AO-I) to be possible.

This is confirmed in the dissolution or at least the deterioration of the traditional (analogous) managerial function, its multifunction is relegated, and the surplus of information processing opens the way to replace the multifunction by a macrofunction, with macropossibilities making the organizational distinctive characteristic, the decision, the turning point on which we must concentrate. In a more refined way, it can be intuited that the minimum unit on which we can operate would then be the differentiation between analog decision making and digital decision making at the managerial level.

This proposal finds relevance since it contributes from a systemic perspective to the possibility of approaching novel expressions, such as Artificial Intelligence (AI) motivated by algorithms or neural networks. In a fast-paced society that stimulates the reconfiguration of the organizational framework, it is essential to open routes of analysis that involve systems theory in a factual way. We know that it is not a matter of punctually verifying the theory and its ad-hoc adaptation to practice; our intention is more innocent and franker: systems theory represents clarity in the face of social complexity, while it overflows with explanatory forms unexplored in Organizational Studies.

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„ Vom SINN der Un-Möglichkeit“

by: Günter Lierschof, artist

"„Vom Sinn der Un-Möglichkeit “

To “Guiding distinction. Observation with social system theory”
Lecture performance (1)

The german term „Sinn“ (2) refers to sensory perception. The persuasive nature of sensory perception could represent a connection to the evidence that is inherent to the senses.

The possible deception through sensory perception refers to the relationship between appearance and reality, the diversity of which can be traced back to perception.

In the ""a sense of having"" the evolutionary side shows itself. The sense of balance of the string dancer has trained himself, thus becomes comparable to a physiological characteristic. This variation of SINN speaks of circular, systems connecting, new systems forming abilities, skills, competencies.

The evolutionary side of SINN shows itself in ""having a sense"". The physiological property of the sense of balance is trained and optimized during rope dancing. This variation of SINN speaks of circular, systems connecting, new systems forming abilities, skills, competencies.

SINN

The fact that Luhmann attaches such importance to the concept of „SINN" in his reflections (3) is remarkable! „Ist Sinnsuche"one of the core concepts of "old European" thought from which Luhmann sought to distance itself?

SINN is unthinkable without physiology, without psyche, consciousness, without the social, without unifying entities such as self, God, spirit, world, without leading distinctions such as immanent/transcendent, culture/nature, etc.

SINN suggests a telos, a perspective towards which everything meaningful leads. In SINN, the fate of the Earth is linked to the cosmos.

Myths, fairy tales, stories and plays tell about Senns and ist meaning.

SINN is appreciated, sung about, built, danced, cooked, eaten, starved, run, stormed, clothed, promised, expected, bought, consumed, disciplined, sued for, forced, found again.

Ist is heard, chosen, seen,
Is courted, manipulated, loathed, excluded, appropriated, emphasized, exaggerated, ignored, loved and hated.

For SINN, wars are started and peace is made, people are murdered, subjected to torture... Children are loved, praised, tormented, coddled, abused for it.

Difference theory

Luhmann formulates a difference theory of SINN in which distinctions are crucial.

SINN does not differ from nonsense, from nosense, it differs from the world, from truth, from meaning, from knowledge, from essence, from being, etc.

According to Luhmann, SINN has much, indeed everything, to do with the modalities of probability, of possibility, and with tenses such as present, past and future. In addition to the time dimension, SINN also has a factual dimension and a social dimension with various interconnections.

The distinction between experience and action in relation to SINN also has an importance here that should not be underestimated.

Key distinctions

like true / not true, sick / healthy, beautiful / hideous, are revealed through negations.

Digital/analog, manifest/latent, regional/global function across two sides and a border that separates one side from the other. What the two have in common is their difference; a third factor remains excluded:

This inevitably leads to paradoxical connections, since one thing is always contained in the other.

SINN decomposed

Worlds open up between Luhmann's view of SINN and that of the old European school of thought. The difference between Luhmann's understanding of SINN and our everyday understanding of SINN is elementary!

The difference is caused by the fact that SINN is the reservoir in which social evolution becomes diffuse. SINN not only appears at the cutting edge of socially differentiated modernity, forms of SINN compete in many present times, entire areas of SINN are excluded, overlooked, denounced, mocked, laughed at.

Luhmann's theory implies that there are other forms of SINN than his that can be just as justified. He offers his view in addition, there is no claim to exclusivity!
"Separation of morality and SINN

In summary, I would say that Luhmann separates morality and SINN. In "old European thinking", as in everyday consciousness, the two are inseparably glued together, which makes it difficult to isolate morality from SINN when it comes to questions of SINN.

The „Lebenswelt" excludes areas of life - which are not congruent with it - such as work, leisure, family, love life, friendship, neighborhood, region, landscape, mobility, health, school, science, art, architecture, design/clothing, religions , politics, business/money, literature, music, dance, film, social media,
etc., which in turn provide SINN schemas

In the description of SINN, the individual's "meaningful life" inevitably gets mixed up with the differentiated
SINN of the life worlds.

Humans in social systems

The "Luhmann Talk" says: Humans do not appear in Luhmann's system theory!

On the contrary, he indirectly included the "plasticity of humans" (Joseph Beuys). Luhmann indirectly included the incalculably capable human being: the hunger artist, peace preacher, the Mafiosi, the boring person, the fashion icon, the inventor of the atomic bomb and even more variations of the anthropos in his theory.

In Luhmann, humans appear indirectly in the form of unmanageable, unforeseeable possibilities (4).

Luhmann shows himself to be a true realist and, on the other hand, a modern idealist, because he assumes a freedom that is not given.

SENSE of possibility

For Luhmann, "the difference between what is currently given and what is potentially possible" in experience and action means SINN!

In further differentiations of this sentence, "identities" are symbolically generalized into schemas of the time, social and factual dimensions, each with two horizons, which are temporally divided into "before and after", socially into "ego and alter-ego" and objectively into " "inside and outside".

The bipolar horizons and combination variants keep the possibilities of SINN wide open.

With "Experience or Action," Luhmann introduced a key distinction into the question of SINN that is focused on in Christianity: In the death on the cross, passive suffering is assigned a significant, world-constituting role compared to active action. (5)

Luhmann and evil

The question arises: can a theory with such a high degree of abstraction actually be used for questions of SINN that individuals ask themselves?

If you take Luhmann's theoretical approach really seriously, you also have to accept evil, human cruelty as a possibility that can, will lead to good. (6) What is extremely difficult for a morally gifted person to do without falling into malicious sarcasm.

Here Luhmanm appears in the tradition of great thinkers - as a renewing prophet of the apocalypse (7).

methodology

A Lecture Performance (LP) should not be confused with a free lecture on a scientific paper.

LP does not point to an outcome outside the event: "The performance itself is the event!"

Every good scientific lecture is structured like an LP, but the performance character itself is not explicitly reflected. Which - at least in my opinion - should be the case with a lecture performance.

GL

We observe by means of distinctions, thus they guide us. On Luhmann's notion of guiding distinction

by: Jan I. Jönhill, retired - free researcher

According to Heinz von Foerster we may suppose that the injunction "Draw a distinction!" was the very first creative act of the human being. In any case, truth or not it is the first construction in George Spencer Browns operative logics. This basic idea, together with among others Gregory Bateson's difference theoretical assumption, inspired Niklas Luhmann to the development of his sociological systems theory as primarily a theory of distinctions and of communication. In order to put an emphasis on certain distinctions, in a number of works from the early 1980ies onwards Luhmann used the notion of guiding distinction (or guiding difference; German = Leitdifferenz; Leitunterscheidung) to denote "distinctions that steer the theory's possibilities of processing information." (Luhmann 1984). Following the assumption that we basically observe by means of distinctions it can, firstly and in simple terms, be said that these distinctions are guiding distinctions. Secondly, as the theory is claimed to be operational, guiding distinctions themselves are also operation guiding distinctions (Luhmann 1990).

If we insist that the thesis of drawing distinctions are basic both for our knowledge acquisition and for the understanding of how systems primarily operate, it should be "self-evident" for us as social scientists that this line of thinking must be widespread in the social sciences and humanities. And although many argues that "[s]ocial scientists constantly need to draw distinctions" (Abend 2023:xiii) and the like, this is not the case. Most current theories in the social sciences and in the humanities do not argue that their theories should be observed as operative, and consensus-oriented and normative theories often reject already the basic thesis on drawing distinctions.

In an earlier article (Jönhill 2012), I argued (with reference to Stichweh and others) for the use of the notion guiding distinction in the two aforementioned meanings. Firstly, I showed how inclusion and exclusion can function as a guiding distinction for the very analysis of social affiliation in general and on issues of ethnic and national background in particular. Secondly, I showed how form analysis can be used as a tool to indicate how guiding distinctions operate.

The aim of this paper is to discuss how Luhmann partly used the notion of guiding distinction to emphasize and distinguish certain distinctions from others, and partly to point out how systems theory in this sense is an operative theory. A further implication is, as I show, that Luhmann's strong focusing on distinctions points to the fact that systems theory in this sense, theoretically and methodologically, has little to do with (conventional) theories of systems. The use of the term "guiding", however, turned out not to be simple. In several works Luhmann used the term synonymous with code, binary code, preference code etc. as related to a given context. Synonyms for "guiding" are here "primary" or also

“steering” in a cognitive sense, but of course not as action because autopoietic systems primarily are self-steering. Related to steering theory (mainly as part of organization theory) Luhmann argued that external steering can only affect secondary differences, i.e. not the primary binary codes or guiding differences in systems. On the other hand in a few articles he discussed the assumption that inclusion and exclusion could conceivably become a kind of basic guiding distinction “in the next century” (Luhmann 1995). Overall, then, the question of which distinctions are guiding and which are not is a matter of context. The term guiding was downplayed by Luhmann himself in his foremost later works on the theory of society.

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Calculus of Design

by: Kim Albrecht, Filmuniversity Babelsberg, metaLAB (at) Harvard & Berlin

"On the logical operations of designing with the computer

Within the following account, I will suggest a way to connect the basics of writing computer code, philosophical discussions on logic and structuralism, systems theory, and—most importantly—a theory of design. The project maps out a computational design approach. Thinking and making—theory and praxis—are not separated but conceptualized together. To do so, I will describe the fundamentals of creating web-based data visualization and simultaneously introduce parts of a theoretical approach I call the calculus of design. This chapter will propose a way to conceptualize the process of designing a bar chart as one of drawing distinctions and re-entering these distinctions within a space. Design becomes a pre-binary process of an operation: Draw a distinction. On a larger scale, this undertaking ponders together aesthetics and epistemology through three terms: distinction, space, and re-entry. [1]

To understand how insight and data visualization relate, I will analyze a tutorial on designing one of the most ubiquitous and well-known kinds of visualization: the bar chart. This chart type is one of the most universal and widely used. William Playfair (1759-1824) already utilized this graphing technique in his book The Commercial and Political Atlas from 1786.[2] The method of plotting data in two dimensions is much older than the invention of the computer screen and graphical user interfaces.

However, the computer has turned data and visualization into something ubiquitous. While manually re-drawing a bar chart with a new dataset would take hours, days, or even months, the computer re-calculates and displays these changes within a split second.

I will explain the process of designing a bar chart through an already-existing tutorial from an established author, “Making a bar chart” from the book Interactive Data Visualization by Scott Murray.[3] This allows me to step back, observe, and analyze. The main reason for this tutorial over alternatives is that Murray goes through the process of creating graphics in great detail. Many tutorials make great leaps and skip entire parts of the design process. This slow pace is essential for understanding what designers do while creating a data visualization. Before Murray draws anything visual, the tutorial operates in several invisible spaces. The full title of the book is Interactive Data Visualization for the Web, which furthermore defines the space. The Web or World Wide Web (WWW) consists of three cornerstone technologies: the Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), and JavaScript (JS), which are all distributed through the Hypertext Transfer Protocol, short HTTP. HTML is the language in which static web-based documents are written, CSS is the description of the presentation of these documents, and JS enables interactivity within the system.

This paper will conceptualize the process of designing a bar chart as one of drawing distinctions and re-entering these distinctions within a space. Design becomes a pre-binary process of an operation: Draw a distinction. The space predefines the possibility of drawing distinctions. The re-entry loops through forms and, as showcased, is the fundamental method of constructing visualizations by re-entering data.

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De-differentiation Tendencies and the Human Rights Erosion in the Criminal Justice System: The Case of Russia’s Withdrawal from the European Convention on Human Rights

by: Konstantin Skoblik, The Institute of Criminology and Legal Policy (Krimo), Doctoral Programme in Law, the University of Helsinki, Finland / The Next Society Institute, Kazimieras Simonavicius University, Lithuania

"On February 28, 2023 the bill of the European Convention on Human Rights (ECHR) denunciation was signed by the Russian President. Since that moment, resembling the 1969 “Greek Case”, Russia has conclusively withdrawn from human rights protection mechanisms based on decisions of the European Court of Human Rights (ECtHR). Drawing upon Luhmann’s systems theory and Packer’s Crime Control Model, my research project aims at fathoming how the Russian Criminal Justice System’s capacity for the resonance is activated within a guiding distinction “redundancy/variety” and against the background of categorical indication “individual rights”. Research examines irritations, changes, and reconfigurations in the Russian Criminal Justice System due to the ECHR’s

denunciation. The system in question is conceptualized as a predictable, determinable, and trivial machine whose the most frequent "output" is the conviction of defendant.
To explicate the research problem, each function system per se – including criminal justice – is a historical, socio-technical, autopoietic machine which develops its boundaries, structures, operations, decisions, and texts temporally. For more than 20 years the semantics, concepts of the ECHR and ECtHR's reasoning have been irritating or "socializing" the Russian Criminal Justice. Some of these irritations and anomalies have been internalized and transformed into commonly used reasons and references within legal argumentation, forming a particular culture of legal terminology. Decisions of the Russian Supreme Court, Constitutional Court, and even middle-level courts have had references to the ECHR and judgements of ECtHR – let alone argumentation of defense lawyers and human rights activists. They have mobilized the ECHR to protect due process rights (e.g., a right to a fair trial) and receive just satisfaction for the use of illegal methods (e.g., tortures).
Seen from the system-theoretical perspective, for more than 20 years the influx of indeterminacy and surprises provided by the ECHR's mechanism have been influencing the system's redundancy. In turn, an achieved level of redundancy has allowed for repetitiveness, consistency, and coordination in the organized decision-making. This decision-making has precisely meant invoking the experience stored in the ECHR's concepts and principles as reusable artefacts.
Repetitive communication within the Russian Criminal Justice has been affected by the exit from the ECHR. Russian citizens have been deprived of their ability to apply to the ECtHR and have its decisions enforced. Russia has stopped enforcing all the ECtHR's judgements delivered after March 15, 2022. All in all, these drastic reconfigurations re-shape, inter alia, mobilization of rights-based semantics during legal argumentation and organized decision-making. The Russian Criminal Justice re-structures its modus operandi at the level of redundancy – at the level of routinized communication and argumentation.
Drawing upon analysis of Russian courts' judgements and interviews conducted with lawyers mobilizing rights-based semantics in the Russian setting, I intend to recount preliminary research findings. In a nutshell, these show that although there are clear signs of "differential" backsliding, strengthening the crime control programme, such as an inability to make a complaint before the ECtHR and to mobilize corresponding protection mechanisms, removal of appeals to the ECHR from oral/written argumentation (speeches, defence counsels' documents, judges' rulings, etc.), these are combined with an initial structural resilience to reconfigurations. Due to structures of repetitive communication (system's redundancy) established at the level of organized decision-making there are defence lawyers (and judges) who still directly use the ECtHR's judgments to enhance their argumentation or pursue the ECHR's standards as a "basis for legal work" in a more indirect way.

Given the fact that the ECHR is not an element of the Russian valid law anymore – and its concepts are still utilized during official legal argumentation –, the Russian case may serve as an example of old distinctions' inability (e.g., law in books/law in action) to make out complexities of the function legal system. Complexities and intricacies that can be more aptly and coherently explained by the apparatus of Luhmann's theory, and by a guiding distinction "redundancy/variety" in particular.

Dichotomies Reconsidered – Towards More Reliable Conceptual Tools of the Social Science in the Digital Age

by Krešimir Žažar, University of Zagreb, Faculty of Humanities and Social Sciences, Department of Sociology; Zagreb (Croatia) // Next Society Institute, Kazimieras Simonavičius University; Vilnius (Lithuania)

"There is perhaps internal inclination of human cognition to comprehend the world in terms of binary oppositions, dualisms, distinctions, and dichotomies. This disposition is drawn from the salient experiences of observing phenomena from immediate environment: day/night, light/dark, warm/cold, etc. Already ancient Greek philosopher Heraclitus (6-5 century B.C.) claimed that cosmos could be interpreted in terms of tension, but also unity of opposites and that the permanent conflict of opposites represents inherent cosmological principle. In this line, there were some religious systems, like Manichaeism, grounded on a belief of existence of the positive God but also negative God, representing confronted ontological principles of Good and Evil.
When summarizing diverse types of distinctions, for the taxonomic purposes they might be subsumed into the two categories: 1) ontological – often appearing in the form of dualism, anchored in assumption that structure of the entire Being is divided into two opposite poles. Regarding this position, probably the most famous is Cartesian ontological dualism comprising distinction between 'res cogitans' and 'res extense', presuming the gap between mind and matter, mind/body, culture/nature and series of further distinctions deriving from the fundamental one. The second type of distinctions are 2) epistemological, which do not imply immanent dualistic structure of entities, but rather presume dualistic view on diverse type of things. In this case, dichotomies serve as cognitive categories owing to whom knowing of the environment is even possible. A bulk of different variants of neo-kantian and constructivist epistemologies are comprised within this type of distinction. The general idea is that knowing of the world requires developing of conceptual categories which enable such cognition. 20th century's structuralism is an example of theoretical position claiming important role to binary oppositions as universal structural principle of human mind ranging across different cultures. There is a myriad of such epistemological dichotomies in the sociological tradition. It might be even stated that series several binary oppositions represent core ideas, a main conceptual framework of sociological heritage, as for instance, suggested by Nisbet (2017[1966]). Certainly, dichotomies like community/society, sacred/profane, alienation/progress and so forth to greatest extent delineated all intellectual debates of the 19th century's sociology and many of these categories are frequently used in social sciences nowadays. Albeit not being focused in conveying dichotomies only, Weber's ideal types approach also aimed in the development of several conceptual categories, which would enable navigating through endless sea of specific socio-cultural events and phenomena. Though not being without the flaws, such conceptual tools enabled knowing of the socio-cultural order also in its transformative dimension. Luhmann's social system theory (Luhmann, 1995a, 1995b, 2016) also represents a constructivist epistemology within which major function is given to drawing distinctions as process necessary for an autopoietic reproduction of a system, but also as generating binary codes is a feature making observation of other systems possible.
for binary codes starting from the basic distinction between system and its environment, but then stating that defining feature of any subsystem through its process are binary codes.

Though being indispensable part of social sciences, usage of dichotomies was not without critical remarks. For instance, some recent critics (like, Roth, 2019) pointed out that majority of distinctions in the tradition of social though is false, because not meeting criteria of two completely mutually exclusive elements of binary poles and thus advocating for converting false into true distinctions. Alongside underlining such primarily 1) logical fallacies, there are objections addressing 2) substantive features of distinctions, as conceptual instruments not grasping social reality properly and hence deploy biased worldview. In our view, this is severe fallacy of epistemological dichotomies as they offer over simplistic and so distorted depiction of social reality. One example for corroborating such state of affair is frequent usage of Global South / Global North, Imperialist / Other, Centre / Periphery binary codes. Portrayal of relations in a global scale only in such binary mode conceals much for complex relations where there are entire territories (like, central or south-eastern Europe) which cannot be grasped by these dichotomies. In such cases, introduction of at least third element (as trichotomy) would be of a more convenient heuristic value. Dichotomies always reduce complexity, it is their inherent attribute, but if they end up in too simplistic generalisation or even if they generate epistemic injustice (Fricker, 2007), then their usage is highly contentious.
In the final section, the question how to overcome denoted flaws of epistemological distinctions, in particular dichotomies, and adapt them to the current digital technological environment is tackled. In the line of recent attempts to digitalise the social theory and theorising process, if thinking analogically, probably the right answer would be in converting dichotomies into – octochotomies. In that regard, parallel to digital binary code within the basic unit – bit – is defined with combination of 8 zeros and ones is meant. Octochotomy would provide more nuanced, detailed, conceptual account of a matter into consideration covering its full range without omitting some important details often neglected by dichotomies. Attempts in denoted direction are worthy in order to elevate heuristic power of social sciences, as well as diminish epistemic injustice implied by usage of unrefined conceptual dualities.

Knowledge production before, during and after the twin (digital and sustainable) transition” – some critical reflections

by: Margit Neisig, Department of Social Sciences and Business, Roskilde University, Denmark

"The European Union has decided new directives (the ESRS, CSRD and CDDD directives) on how organizations need to report and take responsibility about their actions towards sustainability. However, research notes a tension between sustainability and well-being, especially regarding responsible consumption, production, and climate action. This tension arises from the journey and policy actions toward sustainability (the process rather than the end goal), emphasizing the need to address these tensions in working with these measurements, reporting, and policies for a smooth green and just transition.

A blind spot also is identified in the new shared semantics, particularly regarding sustainability as ""do no more harm"" rather than a regenerative approach. Thus, despite improvements in the European semantics, there's room for future enhancements in developing a truly multifunctional shared semantic reservoir.

Many SMEs face challenges in the twin (digital and sustainable) transition due to limited skills, time, and resources for digitalization and sustainability transformation, even though SMEs are only indirectly affected by the legislation and can voluntarily report and use simplified standards. How not to exclude and to avoid overburdening the SMEs, in the strive to reach “a twin transition”, are highly important in peripheral regions already lagging on several dimensions (income, education, jobs etc). Thus, how not to deepen the tension between sustainability and well-being, is of importance for what can be perceived as a “just” transformation.

This paper accounts for a South Baltic Interreg Project's intervention strategy. This region is mainly rural, without major cities, and with many SMEs. The project involves an engaged scholar approach, including developing and pilot-testing the solution, plus “training the trainers” and “training the SMEs” as well as developing a sustainable, viable organization after the project's end.

From a social systems theoretical perspective, this intervention represents an ongoing learning process in a broad polycentric network linked by digital technology and an evolving shared semantic reservoir.

While acknowledging the project's early stage, the paper underscores the importance of future research in understanding the complex interactions between semantics, structural changes, and evaluating the intervention method. Future research should explore SMEs' perceptions and contributions to the emerging semantic reservoir, as well as how they engage (are being included/excluded) in the “twin transition”. Especially it is needed to be aware how the semantics are addressing the tension between sustainability and well-being provided by the SMEs in these mainly rural regions, as the SMEs are providing for job, income, and competency developments of their employees.

As the intervention is also about making the SMEs aware of their own business data, and how to utilize these data in their transition process, this project also needs considerations not only about the pace, scale, and scope of methodological innovation in management and organization research, but also about how SMEs are going to generate their future self-observations. Not only are big data, new data analytics and AI disruptive innovations which are reconfiguring in many instances how research is conducted (Kitchen 2014), it is also disruptive innovations by which organizations’ self and other observations are conducted. This unfolding data, analytics and AI revolution are rapidly transforming, not only science, but the knowledge production in the society. It is, therefore, a relevant question, not only how SMEs can become included by the twin transition (how to avoid excluding, or overburden them), or how digital transformation of management and organization research and theory is impacted, but to reflect critically and theorize on how the twin transition is changing the knowledge production in the society in general.

This paper will:

- Adress the tensions between sustainability and wellbeing
- Adress the distinction between a “do no more harm” and a “regenerative” approach to sustainability
- Outline how a South Baltic Interreg project is approaching the inclusion of SMEs in the twin (digital and sustainable) transformation in a mainly rural region.
- Discuss how the twin transition and the use of business data, analytics and AI may transform SMEs self- and other-observation, and how this point to a changing knowledge production in the society in general

- Reflect on how this new knowledge production may avoid alienating SMEs in peripheral regions and become perceived as a way forward for a just and regenerative transition in which confidence rather than mistrust can be attached.

Guiding Distinctions of Social Inequality - From Capital/Labour to Privilege/Discrimination

by: Marlene Müller-Brandeck, Berlin-Brandenburg Academy of Sciences and Humanities

"My paper at the Luhmann Conference will explore how the concept of 'guiding distinctions' can inform the theorisation of social inequality. The concept of 'guiding distinctions' was one of the main theoretical tools of my dissertation, entitled ‘The Sacralisation of Identity - A Sociology of Identity-Political Semantics of Inequality’.
In my dissertation I examined how social inequality is constructed in contemporary auto(socio)biographies that describe experiences of racism, sexism, classism or other forms of discrimination. In order to explore the specificity of the inequality semantics of current identity politics, I compared them with literature from the women's movement of the 1970s and 1980s and with autobiographies from the labour movement of the early 20th Century . My research concep-tualises social inequality as a contingent object and investigates how social inequality was constructed differently at these periods.
The first step of my paper will be to offer theoretical criteria for 'guiding distinctions' that distinguish them from ‘ordinary’ distinctions. A 'guiding distinction' suggests that it “grasps the facts [...] at a glance and at the same time suggests that nothing has been forgotten” (Luhmann 1994: 151, translation MMB). Drawing on Niklas Luhmann, I have identified four main criteria of a 'guiding distinction':

a) It must be constitutive for the phenomena described (only that which corresponds to the scheme of differentiation is taken as information).
b) It must capture a phenomenon by assigning all possible observations to one side of the distinction.
c) It must incorporate previous 'guiding distinctions' related to the phenomenon.
d) An entire “realm of knowledge” (“Reich des Wissens” (Luhmann 1994: 151)) is formed that is related to the distinction.

Looking at social inequality with this theoretical instrument today, we can see that the ‘guiding distinction’ capital/labour was replaced by the ‘guiding distinction’ of privilege/discrimination, forming a discourse about social inequality that is commonly known as ‘identity politics’. This ‘guiding distinction’ is used in discourses about social inequality, but so far it hasn’t been theorised as a ‘guiding distinction’.
My paper will explore the consequences of this change in the ‘guiding distinction’ of social inequality. In the discourse, only that which is recognised by the distinction becomes visible as social inequality and thus social inequality becomes a synonym for discrimination. Privilege – the other side of the distinction - is then simply the absence of discrimination.

The ‘realm of knowledge’ about social inequality created by these two ‘guiding distinction’ is completely different in each case: while the labour movement saw the abolition of capitalism as the only way to liberate the working class, the semantics of identity politics focus on the protection against and prevention of discrimination. The ‘guiding distinction’ privilege/discrimination no longer indicates two groups that are in opposition to each other, but merely the mode of inequality production.
This shift has several consequences. One consequence is that the complexity that can be cap-tured by the distinction increases. There are multiple forms of discrimination (sexism, racism, classism, transphobia, antisemitism, etc.) and this number is not logically limited by the distinction itself. On the contrary: the mode of observation this semantic develops encour-ages to constantly observe and mark new phenomena as discrimination.
Another consequence of this shift is that there is no longer a clear social opposition, the overcoming of which would also lead to the abolition of social inequality itself. Whereas the 'guiding distinction' of capital/labour was still a semantics of struggle ('Kampfsemantik'), calling for rebellion against capitalists and capitalism alike, the guiding distinction of privilege/discrimination informs a semantics of enlightenment ('Aufklärungssemantik').
"This is because of the complexity that the distinction can carry, which completely changes the conceptualisation of the social structure in this semantic. No person can be located on one side of the distinction (one is no longer either a capitalist or a worker) - a person is al-ways a mosaic of different dimensions in which he or she is discriminated against or privi-leged (again, infinite combinations are conceivable, e.g. one can be discriminated against as a black person but at the same time privileged as a European citizen, discriminated against as a Jew but at the same time privileged as a man). Hence, 'the' privileged are no longer a clearly identifiable social group. This means that the fight against social inequality is not aimed at the privileged as a group, but at making each individual responsible for learning non-discriminatory behaviour.
Even this brief empirical insight shows how fruitful the instrument of 'guiding distinctions' is for grasping and theorizing discourses about social inequality. The concept makes it possible to sort discourses about social inequality, to trace historical continuities and ruptures and to understand the consequences for the conceptualization of society in each period.

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Luhmann as a philosopher

by: Martin Galla, Hochschule für Philosophie München

"Jürgen Habermas once referred to Luhmann as a ""philosopher in sheep's clothing"". I would like to understand this not just as a polemical gesture in a dispute between intellectuals, but as a serious expression of appreciation for the claim of systems theory, which it shares with philosophy.

Luhmann's theory of social systems concerns all questions of modern philosophy: What can I know? What should I do? What can I hope for? What is the human being?

Of course, this does not mean that Luhmann sees himself in the tradition of philosophy, let alone that he himself participated in answering these questions. The opposite is true. Nevertheless, Luhmann's systems theory proves to be surprisingly productive when confronted with the distinctions of modern philosophy.
In my lecture, I would like to focus primarily on the question of epistemology. In contrast to Parson, Luhmann never tires of emphasizing that the claim of his analyses, the scope of the concepts, is not of a purely analytical-descriptive nature. In other words, systems theory not only claims to adequately describe systems, it also makes the description of systems themselves the criterion by which they must be measured. Luhmann calls this a 'naturalistic epistemology'. In short, the concepts of systems theory are not only those with which systems theory observes (other) systems, the systems also observe themselves in this way.

In my lecture, I would like to show that it is beneficial to understand Luhmann and the project of his systems theory within the problem horizon of German Idealism (Kant, Fichte, Hegel, Schelling). Kant's project, which essentially co-founded modern philosophy, is characterized by the fact that it sees its achievement in a radical limitation of what we can know. This is intended to reconcile the other epistemological traditions that have dominated up to this point, namely empiricism and dogmatism. Kant attempts to reconcile both traditions. Empiricism, to the extent that Kant assumes that sensory perception is necessarily a source of knowledge. Dogmatism, insofar as Kant attempts to examine the formulation of 'synthetic propositions a priori', i.e. the possibility of obtaining information that is not dependent on empirical science and at the same time more than an analysis of concepts, which redundantly only represents a dissection of conceptual intension and extension. In this attempt, which Kant undertook in the 'Critique of Pure Reason', paradoxes arise that are formative for the entire history of philosophy in the 19th and 20th centuries. The title under which this story was treated is that of the 'thing-in-itself'.

The problem of the ""thing-in-itself"" reappears in Luhmann's theory. What Luhmann negotiates under the concept of ""self-reference"" was understood in German Idealism under the problem of the 'thing-in-itself'. Luhmann built his conceptual system so as not to run into similar difficulties. But did he succeed? By putting Luhmann's systems theory into perspective through the question ""What can we know?"", the aim is to show the extent to which Luhmann continues the Enlightenment against the traditions of the Enlightenment itself.

Crisis-ready Scientific Organisations

by: Maurício Vieira Kritz, LNCC/MCTI, BR and FBMH/University of Manchester, UK

"Organisation as used here is a technical term with a very definite meaning [3] that is, nevertheless, slightly enlarged in this text to encompass enacted or embodied organisation (synexions). In the latter sense organisations can represent any living entity. Organisms are autopoietic organisations — e.g., cells and individuals.

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In Michael Crichton's masterpiece "The Andromeda Strain" (1969), American society was able to react speedily and softly to an alien organism. Among the factors that contributed to its success, the following are of relevance here. The whole situation, treated as a hypothetical possibility was considered and investigated ahead of necessity, just-in-case and out of the blue, a proactive move. Consequently, a sophisticated scientific facility, months-long to build, was ready to enter into operation and be populated. The people that ideally should populate it were already preselected, and the necessary expertises pre-evaluated. Wisely, choices were loose, retaining flexibility, and the disruptive odd-person added integrative and transversal perspective, beyond flexibility. In this selection, personality along expertise were accounted for. The character of the forerunner group was sketched in advance and ready to use. Fiction or not, military-like or not, this reflects closely how Americans used to think. How this compares to the world and countries reaction to the appearance of SARS-CoV-2?

Crises are abrupt changes in a state of affairs that challenge the associated social organisations into change and adaptation. Whenever change and state of affairs relate to natural phenomena, science and the scientific milieu are, or should be, the first social-organisations to be called and challenged. Science, as a living social organisation, has lately become kind of dead-frozen while facing threatens to humankind; and are being accused of failing humankind. Can it be otherwise? How can the scientific milieu, borrowing Crichton inspiration, react swiftly to a new crisis, and to criticisms of many sorts? Considering science as a social enterprise that changes the unknown into known things, facts, or processes [2], a general answer or solution method to this quest is not feasible, due to the imponderability of the unknown, and of individual and collective behaviour under stress. Certainly, the possibilities of crisis now go far beyond that was described by Crichton along several directions; thanks to the denser inter-connectivity of everything and greater complexity everywhere. Identifying relevant groups, their personality, and possible reactions to crisis became utterly complicated, particularly if the threatening agency comes from humanity itself.

Living collectivities integrate into wholes by exchanging in-formation [3] — signals of several sorts that become interpreted. Inside cells there are many signal-pathways from one organelle to another and a signalling network for the whole cell. In tissues, the cellular matrix provides a texture that supports signalling. In organs and other organised collectivities, there is often a sub-organisation that manages the flow and interpretation of signals. However, there is a qualitative change in signal-exchanging, along Miller's complexity line (Figure 1), whenever organisations become organisms. The appearance of selves induces changes in the complexity of signals, in the characteristics of messages, in the messages-set, and in their relations with their surroundings, or semantics [8]. It provokes substantial jumps in the potential number of sender-receiver pairs. Initially, it is possible for every individual to interact with any other individual before starting to organise again. These jumps rise the complexity of signals, noise and silence, hampering and eventually preventing communication. It also drives the reconstruction of Shannon's messages set, often ab initio.

"Communication is a cornerstone of collective biological individuals, from tissues to nation-conglomerates, and extend into cells if, as above, we consider them as collections of organelles. Communication relies in the exchange of signals between biological entities. It is clear that speedy answer to abrupt, catastrophic changes require swift communication and high synergy among the components of organisations. The purpose of this talk is to discuss these issues and eventual couplings and resonances around the integrative (selves-building) complexity-fences, a mutual influence that is often disregarded or not easily perceived at the next high-complexity level.

This discussion shall use a model under development, a modelling framework indeed, that represents the scientific milieu organically, integrating most of its factors and facets, while acknowledging brains and homologous organisations. This text addresses distinctions that occur when moving from inside to outside of wholes (Figure 1). It is a brain-aware model [5,6] of the scientific milieu as a living organisation, able to focus on how our brains agonise or antagonise communication, comprehension, group understanding and collective creativity, as well as, collaborative work at or above the human level [4]. It contains both individuals and collective entities, like groups, labs, and boards, as phenomenological components, whose parts and elements interact exchanging also in-formation [3] over enlarged Shannon-Weaver communication channels [7].

This model is being constructed by pushing further JG Miller's ideas [1] in several directions, while employing enhanced intellectual tools provided by our present understanding of systems and modelling. As a starting point, Miller's functions shall be enriched with new knowledge about cognition, physiological behaviour, and their intertwining; while his living systems shall be rewritten as living organisations. Moreover, interactions occur by exchanging in-formation over intra- and inter-individual communication channels, that allow for representing regulatory influences of psychological nature that intervene in moods and dialogues, affecting understanding positively or not.

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Guiding next society's distinctions. Literature as addressing of "eigenforms".

by: Maximilian Kaenders, University of Freiburg

"According to Maren Lehmann the next society can be observed as an environmental problem. Unlike the structural forms of segmentarity, stratification and functional differentiation, next society's mode of autopoietic reproduction can be seen as less founded in the operation of formal distinctions but in the arrangement of neighbouring forms in certain media (Lehmann 2011). Thus, society on the one hand gains operational resources through its own organizational (Baecker 1999) and semantic uncertainty (Lehmann 2022), that help to cope with environmental complexity via connectivity. On the other hand, society loses stable expectations of communicative forms (Baecker 2005: 85-98, 2014) to address its own inclusions and exclusions, which results in new boundary conflicts. By drawing on classic Luhmannian methods like functional analysis and conceptual history and observing them through the lens of Dirk Baeckers adaptation of Spencer-Browns formal calculus, my paper aims to explore how the literature of the next society functions as a guidance of societal distinctions by addressing systems' formal inclusions and exclusions (i.e. their "eigenforms"), after the concept and operational mode of societal distinctions itself became problematic.

I will start my paper with the observation that the mode of modern differentiation (identity/difference) was based on the increasing technization (sequentialization) of selective processes through media, which ultimately resulted in the operationalization of culture as memory of society (Esposito 2002, Luhmann 1997a). In this process, the social dimension of selective processes (i.e. reference) became observable (Luhmann 1993). I want to argue that for society the multiplication of modern organisations functioned as structural coupling of psychic and social systems, which from then on could be observed as separate. Communication gained the ability to reflect on its own inclusions and exclusions on a thematic level, establishing addresses as forms of communication (Fuchs 1993, 2004: 129-135, 2005a). This means that with functional differentiation not only communication, but also societal environments became more complex. During the social transformation of the 19th century, persons could be addressed by the state, politics and other social systems within multiple and varying communicative forms, resulting in the differentiation of addresses of mind, body and communication. At the same time, politics gained the function to handle environmental problems of society without knowing which of its environments (social, organic, psychic etc.) to address and which communicative forms to use for that operation. Society could then observe that problems arose on its outer side (organic and psychic environments) and used technology to address their material and functional dimension which came with the danger of overly including or excluding their own forms. While the evolution of communicative media solved infrastructural problems for social systems, it was art that arranged forms of perception for communication (Luhmann 1997, Baecker 2007) but could not fully synchronize communication and consciousnesses (as the inner side of psychic systems). As I see it,

art has the function to inform society and consciousnesses about actual and possible forms, but it does not fully reflect on its own and society's formal inclusions and exclusions. If the culture of the next society has the form of a game in which society tests out possible connections and separations (Baecker 2014: 141f.), literature, as I want to propose, has the form of communicative reflections on society's inclusive and exclusive operations (i.e. addresses). One could say that it oscillates between distribution and symbolic generalization, because in its texts information and message (Fuchs 1993: 87), the formal and medial dimension of communication, are strictly coupled, that means indistinguishable (i.e. a text produces indifferences).

"Because next society's communication has the structural form of a network and is centred around problems of value indifferences, its form cannot decide whether a contribution concerns the network itself or its environment. This is next society's core problem. However, due to its strict coupling of information and message, observing systems of a literary text can freely decide if understanding is a result of self- reference or environmental reference. They can take the text for their own problem or a problem of societal communication and thus associate with the text without being absorbed by the network of communicative operations. Observers can reject either the information, the message or both, but nevertheless participate on an operational level. Thus, literature not only reflects but also includes excluded forms. Some of these functions of literature may be shared by other media, but its main function for the next society, which has to do with the management of formal selections in meaning dimensions (social, factual, temporal) cannot be substituted. In literature, not only the social and factual selections become intertwined with the observing system, but they also become (in-)distinguishable as selections of selections at the same time. This is due to the temporal dimension of reading and writing, which allows a system to synchronize its own distinctive operations with the forms of communication. Thereby, literature can address an observing systems' formal selections and the latent structural form of society in communication itself.

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How to recognise a person?

by: Michal J. Gajda, Well.co, Migamake.com

"Many human collectives are awarded personhood as legal persons,
and many non-human animals are also indeniable signs of personhood as well.
To assure coherent legal and social interpretation, we need a key
distinction of person vs non-person that will allow clear
distinction between an effective person and a legal fiction.

When should non-incorporated collectives be treated as persons?
Which collectives are clearly showing signs of personhood,
and which animals don't?

We address the problem by drawing from legal practice,
recent progress in biology, and by enhancing cybernetic theory
in order to propose comprehensive and well-motivated
definition and distinction between a
social group capable of collective action
and a person whether it is incorporated or not.

Legal perspective on a person is that of agency: having a legal
standing in the court,
and being able to take a collective action. Recently courts have recognized
legal personhood of not only human organizations but also ecosystems,
justified by not only the custom, but also need for protection
of the ecosystem. Since protection requires legal standing, and
independent action,
the agency naturally follows.
Likewise organs of the government that may often need attempt actions
conflicting with other organs of the government are often granted independent
legal personhood to assure that a different interest is protected,

and thus independent agency is assured.

Biological view on the person is that of a mind that has not just a theory of mind,
or visual consciousness but also self-recognition of one's own actions, and ability
to place sensory stimuli within the image of the world that contains ""self"" as an essential component.

We propose to combine these concept into cybernetic theory of persistent model of the world
as ""permanent awareness"" that is capable to recognize one's own actions within this image,
and manipulate both direct experience, and the world according to its own imagination.

This cybernetic concept should be directly applied as a distinction in social theory
to differentiate collectives apparently capable of intelligent actions, but not keeping
a permanent model of the world shared with other members of the collective.

This distinction also distinguishes modern knowledge-based organizations that keep their
bureaucratic archives, and knowledge bases, from those organizations that may have
legal personhood and standing, but have no persistent organizational memory.
In absence of decentralized organizational memory of their members, such organizations
have decreased continuity in their functioning and policy making.

This is often visible during company ownership transitions when sometimes the organizational
persistent memory is lost, and thus the organizational continuity broken.

Requirement of keeping their own image of the world also explains why persons within
the society seem to universally use marketing to manage their own standing.
Ability to keep persistent image of the society logically causes the persons to desire management of such an image.

This is also visible among persons who are members of existing personified organizations:
while managing the image of the organization, they also desire to market their own relationship
with the organization as part of marketing of their own self.

This perspective distinguishes social constructs that have

decision-making capability,
as usually recognized not only among government organs, but also free markets and collective opinions
to those that have also clear persistent image of themselves and independent agency
that allows to shape this image."

The Sublimation of Social Non-Existence

by: Michal Kaczmarczyk, University of Gdansk

"One of Niklas Luhmann's pivotal insights in the sociology of social systems is his focus on the role of binary codes in constructing the meaning of communication. This meaning arises from contemplating alternatives, facilitated by codes and dichotomies that enable the ""testing of possibilities and consequences of reversals"" (Luhmann 1993: 311; Luhmann 1986: 78). Such codes allow for the observation of the world through opposing or alternative states, creating a space of possibilities. Firstly, binary codes endow society with significantly greater operational potential than analog forms of experience and communication. Secondly, binary codes do not inherently favor the positive side; instead, they leverage numerous beneficial functions of the negative side, a process increasingly crucial in the evolution of social systems (Luhmann 1986: 90). Thirdly, under certain conditions, the negative side of the code can generate contradictions that enable social systems to develop an immune system, as the negative side generally exerts a motivating influence on interaction partners (Luhmann 1995: 369-370). These three aspects of leading social distinctions are vital for understanding the phenomenon of the sublimation of negativity, the central idea of the proposed paper.
The sublimation of negativity indicates that the negative side of the code allows for significant modification, revaluation, or enhancement of the positive side. Examples highlighted in this context include civil disobedience within the legal system, opposition within the political system, and falsifying hypotheses within the scientific system. In each case, the system focuses on the negative side, using it as a test or measure for the positive side. For instance, civil disobedience often tests the constitutionality or rationality of the laws violated by disobedient citizens. Political opposition systematically critiques the government, aggregating unnoticed or marginalized social interests. Incorrect hypotheses refine dominant theories, research tools, or assumptions, ultimately leading to the development of entirely new, alternative scientific theories.
A crucial role in the sublimation of negativity is played by the phenomenon of re-entry of the code on its negative side, as described by Luhmann (1995: 451). This involves the emergence of internal mechanisms for testing and refining negativity by socially focused groups, roles, and institutions. In the final section of this paper, the discussed issue of sublimation of negativity is related to a topic addressed by Luhmann in his last book, Die Gesellschaft der Gesellschaft—namely, the self-description of society as a whole. Due to reduced communication distances, the globalization of functional systems and risks, questions about the future of global society, its forms of differentiation, and adaptive capacities are becoming increasingly important (Luhmann 1998: 1088-1096).

"There is a growing trend, especially among the youth, to question whether this society can survive, or even if it should exist (Cattell 2021; Wildman J. M. et al. 2022). This question's significance is heightened by social reflexivity, increasingly linking individual fates with humanity's fate, and by ethical awareness, which considers human society a threat to other forms of life on Earth. These doubts, resonating especially among the youth, who face bleak life chances and developmental prospects, prompt a rejection of the absolute value of society's existence as such. This negation seems to strike at the system's autoimmune mechanism, but as this paper demonstrates, it often assumes refined forms.
Non-existence of society can mean various things. Primarily, the concept may refer to the ontological status of society, as in some strands of constructivism. It may also refer more to the form rather than

the fact of social existence and functional differentiation. Historically, numerous utopias, and more recently, social dystopias, exemplify the development of this kind of semantics. They either depict alternative forms of social order or, as in dystopias, outline potentially dangerous developmental scenarios. In either case, it concerns society in a form that does not exist. However, this refined non-existence allows for the re-entry of the code, pointing to various possibilities that, at the very least, can be conceived to potentially change course. That is why utopia transforms into anti-utopia, which in turn becomes dystopia, potentially leading either to retreat or apocalypse, and subsequently to new forms of differentiation.

Contrary to some critics of Luhmann, this paper argues that the theory of the author of Social Systems not only enables the assessment and alteration of forms of social differentiation but also identifies the semantic mechanisms for consciously choosing these forms.

In conclusion, the analysis of binary codes and the sublimation of negativity within social systems offers a comprehensive framework for understanding the complex dynamics of modernity and the emergence of dystopian narratives. By highlighting the constructive potential of negative sides within social codes, this paper contributes to ongoing discussions about the adaptability and ethical dimensions of contemporary social structures. Through this lens, the research underscores the importance of reflexive self-description in navigating the challenges and uncertainties of global society.

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Transforming the production of official Statistics through Social System Theory and Generative AI: Applying the Distinctions of first-order and second-order observations, generic and emergent knowledge, and decision premises and decisions

by: Mogens Grosen Nielsen, Nielsen Statistics Consulting

"Statistical organisations can benefit from using Generative AI, not merely as tools automating or replacing what humans do today, but as communication partners, helping statistical organisations remain one of the few places to go if you want impartial, independent and trustworthy information in society.

To do so, an organisation must customize Generative AI, so it has a solid and relevant knowledge base and so it is used in such a way that this knowledge is integrated into the actual communication. This includes both communication inside the organisation and communication in society using statistical information. This requires a solid understanding on how communication works and the role of knowledge in the production of official statistics.

Looking at the production of official statistics there is a widespread belief that the production of official statistics in most statistical organisations is rationally organised, following common guidelines. However, as the author has observed, this view discards how cultural, organisational and technological dependencies often play a dominating role in actual communication in an organisation. E.g., power positions, corruption, neglecting of trust, IT dominance, neglecting independence and impartiality.

This kind of complexity implies that there is no 'rational' solution (including AI) to be deduced from the vast amount of theories, manuals and guidelines, as there are simply too many factors that cannot be observed from the outside, e.g., by a consultant, a university or a donor organisation. Consequently, successful changes can only be reached from within the systems themselves—both psychic and social systems—as only they can adequately address the intricate complexities they face.

So, what role should theory play? The paper argues that we can benefit from social system theory. This is not to advocate for more theory, but instead advocating a kind of 'abstract theoretical detour', in order to get a new mindset helping to build better statistical organisations, providing trustworthy information in our society.

Thus, this paper addresses the research question: ""How can Luhmann's social systems theory be applied to statistical organisations a) by focusing on communication and self-observation as the main elements in changes, and b) by using Generative AI as communication partners to support communication and self-observations?"

The paper argues that:
a) Social system theory can provide a conceptual framework for better understanding of the dynamics of an organisations, including improved communication by distinguishing between first order and second observations and thereby improve the ability to observe and reflect about itself.
b) Social systems theory can be applied to statistical organizations by distinguishing between generic and emergent knowledge. Statistical quality frameworks and standards represent generic knowledge. When integrated into communication, they are transformed becoming emergent contextual knowledge. This knowledge is used in change and decision processes. In decision-making, emergent knowledge helps prepare decision premises, which involve second-order observations distinguishing the current from the future situation to create decision options.
c) Generative AI as communication partners can help organisations by improving the self-observation and communication. This is done by customising Generative AI, so the knowledge mentioned in item b is loaded into GPTs and used in such a way that this knowledge is integrated and

amplified in the actual communication being used in the organisation and in the communication with users.

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The derailment of social in service-dominant logic

by: Otto Rosendahl, Turku School of Economics, Finland
Co-author(s): Steffen Roth, Excelia Business School

"Service-dominant logic (SDL), an emerging paradigm in marketing science, has defined social in humanist and interpretivist terms, in contrast to its paradigmatic pursuit towards general theories of markets and value cocreation encompassing non-human agency, e.g. biotic actors and artificial intelligence (Helkkula & Arnould, 2022; Storbacka et al., 2016; Vargo & Lusch, 2017). The humanist tradition seeks to establish the exceptionality of humans (Wolfe, 2010) and, accordingly, SDL delimits social as human interaction (Lusch & Vargo, 2014) and a humanist practice theory, in which it is ""doings and sayings" (Schatzki, 1996)—that constitute the "social."" (Vargo & Lusch, 2017, p. 55). The interpretivist tradition accounts for social mainly through human experiences e.g. roles and positions in human interaction (Edvardsson et al., 2011). Hence, SDL's extant view of social and society amounts to an artificial theoretical boundary, which yields some local-level insights into human behavior but occludes non-human agency and its irreplaceability for the possibility of human agency.

This article offers a clear description of the consequences of the discrepancy between SDL's humanist and interpretivist notion of social and its broader ecosystems approach. It suggests that redefining society as a broader non-human sphere of attributing 'doings' and consisting of 'sayings' enables a neo-functionalist, i.e. 'problem-solution' oriented, general theorizing on society (e.g. Luhmann, 1995) that aligns to SDL's idea of markets as solving classes of problems (Akaka et al., 2021); and promotes SDL's general theorizing by bringing forth the globally spanning and pivotal role of non-human social structures and social systems in value cocreation. Alas, even the non-human society draws its boundaries differently than any ecosystem, so this article provides only an alternative derailment to the already derailed discussion of society. The alternative derailment is projected e.g. to strengthen SDL's paradigmatic compatibility with marketing domains that theorize the relation between markets and society, e.g. macro-marketing and critical marketing. Notably, the neo-functionalist approach differs not only from humanist ideas of society but also from extant non-mainstream understandings of society within marketing domains; it challenges Marxist criticizing of society from utopic/dystopic fantasies of society (Luhmann & Rasch, 2002) and post-modernist/structuralist distastes to develop globally spanning narratives of society (Luhmann, 1998).

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Trust in and to public authorities

by: Pernille Almlund, Roskilde University

"For many years, trust has been an important concept for public authorities. Typically measured with trust barometers, where populations both in Denmark and internationally are asked to indicate their degree of trust in civil service, politicians, administrations etc. And Denmark usually has a high score in terms of the population's trust in public authorities (Johansson et al. 2023).

During Corona, the frequency of both measurements of trust and the use of the term reached new heights in media-borne public communication. Small fluctuations were measured and commented on as significant for the population's trust in the authorities and whether or not they would follow the authorities' recommendations.

The question is, however, what it is we measure with the various trust barometers, because the concept of trust is far from clear-cut. Internationally, sociologists analyze trust between citizens and authorities in various contexts, such as by digital interaction (Lee & Kim 2021, Rosenberg 2021, Zavestoski et al. 2006) and the importance of street workers (Raaphorst 2018) and much more. In several contexts, these use Robert Putnam's concept of social capital as essential for the understanding of and the background for trust (Andrews 2012, Andrews & Brewer 2010). Sociologists such as Giddens and Luhmann have worked to define the concept of trust. In Giddens work it is launched and used more diagnostically (Giddens 1994, 1996), while Luhmann is probably the sociologist who has worked most specifically with a conceptual clarification of the concept of trust (Luhmann 1999).

The ambition of this paper is to create a stronger understanding of what trust can be said to be, when it has become an important concept in and for public communication and the public sector's interaction with citizens. And not least when that importance rests on trust barometers and research's primarily quantitative input, where trust is designated as a resource for public authorities (Petersen 2024). With the operationalization and use of Luhmann's concept of trust, the paper will analyze how

the concept of trust is produced and defined via trust barometers and other quantitative inputs. Here the operationalization of Luhmann's concept of trust is essential and it will be done with a focus on the guiding distinction ‘elementary trust as opposed to intentional trust’. The paper will seek to answers the following research questions:

How can Niklas Luhmann’s concept of trust be operationalized with the guiding distinction ‘elementary trust versus intentional trust’, and hence contribute to a stronger clarification and understanding of the use of trust in public authorities?

To operationalize and in an attempt to bring the concept of trust up to par with the modern or later theorizing of Luhmann, the guiding distinction in this context will be’ elementary trust as opposed to intentional trust’ because that distinction is present in Luhmann's presentation of trust as the difference between system trust and personal trust (Luhmann 1999, and likewise in philosophical discussions and expositions of trust (Pedersen 2011).

In the distinction between ‘elementary trust and intentional trust’ lies a difference between a form of general and fundamentally present form of trust as distinct from a subject-centered trust. In Luhmann's formulation of an actual system theory, and thus in his later works, he works with a decentered subject and thus without the focus on the subject that is partly inherent in the early formulated concept of trust. In addition, in his later works he links intentionality with action and distances himself from focusing on action when we want to understand development in the society. He writes: ”Finally, it should be remembered that the theory of system differentiation I have outlined […] deals eith communications and not with actions. Whoever observes actions will typically be able to attribute them to a number of systems, not least because the "actor himself functions physically and mentally as the point of attribution and because an action can, depending on motives and effects, participate in several functional systems. Whoever takes action as their point of departure will therefore have difficulty understanding the theory of system differentiation at all, and, like Richard Münch, see only “interpenetrations”.” (Luhmann 2013:9).

Instead, he puts communication as precisely what constitutes the development of society, which is why it is communication that must be the center of observation. He writes in continuation of the above ”Only if we switch from action to communications does it become necessary to define the elementary entities of system formation recursively with reference to other operations of the same system. An action theoretician can be satisfied to establish an intention, a ”meant meaning” of action” (Luhmann 2013:9).

This means that with the formulation of the system theory in his later works, Luhmann distanced himself from the importance of intentional actions as important for the analysis and understanding of what happens in society and thus also for the understanding of trust. Instead, he places communication as the central thing to observe when we must understand and analyze what is happening in society. With the understanding of communication as constitutive, it is situated and constitutes, in a research sense, precisely the empirical evidence, so here it also makes sense to operationalize the concept rooted in the practitioner of trust in public authorities.

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Guided by Inquiry: Distinction-Based Questions as a Tool for Navigating Complexity

by: Philipp Belcredi, Belcredi Consulting
Co-author(s): Tilia Stingl, FHWien der WKW

This paper explores the contribution of social systems theory to the development of comparative-systemic questioning methods for leaders within organizations. It aims to design a conceptual framework that bridges social systems theory with applied comparative-systemic practices.

Systemic Impedance in Luhmannian Systems Theory

by: Richard Pretorius, Eindhoven University of Technology

"Luhmann’s modern society is characterized by its communication belonging to an array of functionally differentiated subsystems. As argued for by Kneer (2001), Knudsen (2007), Sales et al. (2022), and others, organizations participate with society’s functionally differentiated subsystems when making decisions. Furthermore, as argued for by Pretorius (2024), these functionally differentiated subsystems are structurally coupled with one another through their participation with

other societal systems like innovation systems (Roth et al., 2020) and planning systems (Van Assche, 2007). In these settings, organizations and structurally coupling systems like innovation systems must balance the competing logics that each of these functionally differentiated subsystems brings to the party when making decisions.

While an array of logics may be present, they may contradict one another when suggesting solutions to problems. In the event that these logics clash with one another, the question becomes “how to proceed?” Consider, for example, the case of innovative photovoltaic cells described by Dewald & Truffer (2011), where the development of more efficient solar panels attracted greater investment, only for residents to reject development of a new solar farm, saying it would detract from the region’s natural beauty. In this setting, economic, technological and environmental considerations seemed to encourage further photovoltaic farm development, and indeed developers did expand their offerings for some time, until those developers were stopped in their tracks by a consideration emerging from the aesthetic system.

This question is particularly pertinent in settings where coordination between systems is necessary. Distinct organizations can cooperate with one another in an innovation ecosystem, but these organizations will each have their own goals and meaning making systems – so how should they proceed when conflict arises as a result of interaction between different logics engaging with the same problem?

To address this issue, I suggest the introduction of the concept of systemic impedance. In electical systems, impedance is a measure of the opposition that a circuit presents to the flow of alternating current – it is the resistance and reactance that exists within a system, like you would find between a speaker and an amplifier (Slurzberg & Osterheld, 1950). Applying this concept to Luhmannian systems theory, I consider how systemic impedance may account for the ease with which systems can interface with one another, thereby allowing for coordination. I conceive of reactance as being a system’s ability to reimagine itself in the light of a new irritation – that system’s capacity to react to new input (Luhmann, 1983; Thornhill, 2006). I conceive of resistance as being the shared generalized media between two systems that allows for the establishment of a semantic resivour between systems - so that resistance accounts for how two autopoietic systems with individual meanings can meaningfully engage with one another (Luhmann, 1995, 2002).

In this paper, I will explain how systemic impedance accounts for the outworking of the legitimation process between social systems – and will show how this is something that alllows for coordination between organizations that are participating in an array of societal subsystems. In this way, systemic impedance accounts for why some social systems are better equipped to interact with one another than others.

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Parts without wholes - the distinction Luhmann failed to make

by: Roar Hagen, UiT

"Luhmann infamously claimed to replace the distinction between part and whole with the distinction between system and environment. But there cannot be parts without a whole. His theoretical edifice is based on a self-contradiction most evidently expressed in Luhmann's definition of the concept of function. Function is the relation between a subsystem and the whole/overall system to which is a part. One mistake leads to another. Luhmann makes the surprising observation that Germany and Brazil are not societies. A statement which is difficult to accept when world society is segmented in about two hundred nation states.
The paper explains why Luhmann made his mistake, but also demonstrates how systems theory provides the means to overcome it. The failure to distinguish between part and whole follows from lack of clarity in another distinction, namely that between theoretical and empirical research.
Luhmann's work is nicely organized in two main parts. ""Social systems"" deals with the construction of concepts and his ""Theory of society"" applies the concepts to the empirical analysis. Luhmann, however, readily admits he has no fully developed method to connect the two projects. Lack of method leads to lack of clarity in the construction of the basic concepts. Sometimes Luhmann claims society consists only of communications, and not of individuals, and not even of actions. In other places action is the fourth element concluding communication as a threefold process distinguishing between information, utterance and understanding. At least two concepts of action are at play.
Even if Luhmann in his theory of science develops a constructivist epistemology, it is not consequently applied. Sometimes the concepts are constructed not as more or less fruitful means to the empirical analysis but takes on an unmistakenly allure of metaphysical truth. This leads to a misunderstanding of the problem of complexity. Individuals with their limited cognitive capacity, of course cannot grasp the consequences of their actions, and is in no position to act rationally in the world. Due to the fortunes of societal evolution, social systems emerge that intervene between individual human beings and the world, reduce complexity and make human action possible. Good point. However, Luhmann follows up with an illogical extension of his argument. A system that supposedly were to integrate the operations of all these systems, and this supersystem which would be society, to which the other systems are subsystems, would according to Luhmann be overwhelmed by complexity, and is therefore impossible. But human beings need not know everything to act rationally. Just enough to solve problems. Luhmann thinks about complexity in terms of totalities.

When the epistemic obstacle is located, we might abduct a more fruitful concept of action that enables a new understanding of the relations between systems, actions and individual human beings. The distinction between part and whole is one particular distinction between system and environment. This distinction is society. Society is the most comprehensive system with the capacity for self-observation and self-production. With this conceptual apparatus in hand, we might address the problem empirically and acknowledge Luhmann's critique of the old-European semantics of part and whole based on a concept of totality, but also that the task of sociology is to provide modern society with the concepts and empirical methods to address its own problems. Societal differentiation as functional differentiation implies the concept of a society that observes its parts with respect to how they solve problems for the system taken as a whole; science should produce new knowledge for society, the system of education people with the necessary qualifications and so on. Society always is as double. It is the interdependencies created by the societal division of labor, and the observation of and action on these dependencies.

Guiding distinctions of social theory: results from two online brainstormings and one quantitative analysis of the ISA Books of the XX Century corpus.

by: *Steffen Roth, Excelia Business School, France*
Co-author(s): *Steve Watson, University of Cambridge, United Kingdom*
Sören Möller, University of Southern Denmark, Denmark
Krešimir Žažar, University of Zagreb, Croatia
Lars Clausen, UCL University College, Denmark
Harry Dahms, University of Tennessee-Knoxville, United States of America
Augusto Sales, Brazilian School of Public and Business Administration (FGV-EBAPE), Brazil.
Vincent Lien, University of Cambridge, United Kingdom.

In this paper, we report on the results of two online brainstormings that have collected over 480 and about 300 guiding distinctions of social theory, respectively. We draw on the results of these brainstormings as well as on a quantitative analysis of the Top 100 sociological groundworks as listed in the ISA Books of the XX Century ranking to identify the most influential distinctions of social theory and show that the bulk of these guiding distinctions consists of "false" or analogue distinctions. We further demonstrate how systematic explorations of these distinction may facilitate a still pending digital transformation of social theory, defined as a) the translation of analogue into digital social theories, b) the design of new digital social theories, and c) the design of digital theory platforms useful for quality checks and the debugging of existing and future social theories. The paper concludes that such a digital transformation of social theory is needed as the digital transformation of society and the relentlessly growing amount of digital data are revolutionising the processes of research and knowledge production in the social sciences, whereas social theory development still follows rather conservative, analogue patterns, thus lagging behind the social phenomena and methodological innovations it aims to reflect upon.

Guiding distinctions as phenomenological systems

by: Steve Watson, Faculty of Education, University of Cambridge
Co-author(s): Erik Brezovec, Faculty for Croatian Studies, University of Zagreb

"Guiding distinctions serve as ontologised and essentialised conceptual tools used to differentiate and represent complex ideas or phenomena. They serve as frameworks for organising for understanding and organizing knowledge. For example, the binary guiding distinction 0 and 1 represents the simplest form of information, where 0 and 1 are used to encode data, perform computations, and represent logical states (false/true, off/on).

The ontologization of the binary distinction means treating 0 and 1 as fundamental components of reality in the context of digital information and computation. Rather than seeing 0 and 1 as merely convenient symbols or practical tools for coding and processing information, ontologization involves recognizing them as essential elements that define the very nature of digital existence. In this view, digital reality itself is constructed upon the binary distinction, making it a foundational aspect of how information is structured and understood. In the digital world, all forms of data—text, images, sound, and video—are ultimately reduced to sequences of 0s and 1s. This reduction is not seen as a mere abstraction but as a fundamental way in which digital information exists. The ontological status of 0 and 1 in this context means that they are seen as the basic building blocks of all digital phenomena.

The ontologization of distinctions has roots in ancient and medieval weatern philosophy. Plato (c. 428-348 BCE), for example introduced the distinction between the world of appearances (sensible world) and the world of forms (intelligible world). This ontological distinction was central to his philosophy, positing that true reality lies in abstract forms or ideas, which are immutable and eternal, while the physical world is transient and imperfect. Thomas Aquinas (1225-1274 CE) worked extensively to reconcile faith and reason, distinguishing but also harmonizing these two sources of knowledge. His ontological distinction between essence and existence in beings developed Aristotelian metaphysics within a Christian framework.

However, the Renaissance marked a significant shift in the emphasis and application of these distinctions. Renaissance humanism emphasized a shift from divine-centred to human-centred thinking. Humanists argued that it was possible to pursue knowledge and truth through human reason and empirical observation, rather than relying solely on divine revelation. The essentialisation and ontologization of distinctions means they are seen as essential categories that define the very nature of existence and human experience, for example, reason/ emotion, individual/ society, and nature/ artifice, reflect a belief in human potential and the centrality of human experience and rationality.

The purpose of this paper is to examine the concept of guiding distinctions theoretically using the principle of autopoiesis. The starting point for this is to consider guiding distinctions as an autopoietic phenomena. This approach elaborates and clarifies Luhmann's approach but begins not from the perspective of observation but from a perspective that reflects Luhmann's generalised perspective on autopoiesis following Maturana and Varela, Spencer Brown's Laws of Form and phenomenology.

Thus, guiding distinctions are considered here as an autopoietic phenomena. That is as a medium that can take form materially, socially and cognitively. As a phenomenon, guiding distinctions provide a structural coupling between observable physical reality, the sociality of communication and action, and thought and cognition.

The self-reference of the form of the guiding distinction provides continuity, allowing a distinction to endure while being open to variation in what is observed and how meaning is made. Or that allows further internal distinctions within the guiding distinction. In, the nature/ artifice distinction, this allows for different kinds of distinctions within what is natural or artificial.

With digital representation and processing that is facilitated by the binary distinction of 0 and 1, providing a means of representing and the processing of observations of reality symbolically in patterns of 0 and 1s. This contrasts with the noisy analogue, which relies on representation and processing by analogy.
For example, the guiding distinction individual/ society, as an autopoietic phenomena, can be understood as a selection from indeterminate and infinite possibility as well as being in unity with such indeterminate possibility. The form of this inherent guiding distinction is stabilised through its own-entry or recursion. In other words, the repetition of the form into the form. It takes form cognitively within the autopoietic psychic system as a means of ordering thought, communicatively it takes form symbolically in communication as a means of structuring communication. It also has a material objective form as an observable material reality with the observation of the individual and their sociality.
A non-essential systems approach based on autopoiesis as outlined above permits a critique of the binarization of guiding distinctions and the ontological assumption of the law of the excluded middle – where distinction is negation. While guiding distinctions continue to be an important 'device' for human rationality, their ontological limits must be examined also. For the conference, we will outline this radically constructivist materialist approach based on a strict non-essentialist ontology based on the autopoiesis of system-environment distinctions.

Guiding distintions in literature: "high" and "low" literature

by: Stijepo Stjepović, University of Zadar

"What is called high literature is usually considered literature par excellence. Novels, bestsellers and so on would be production for popular consumption. Low literature.
I agree. Shakespeare, Kafka, Camus and Plath are great writers who speak primarily about human suffering. Few things are bigger and more widespread, so it is perfectly understandable that great authors take it as the center of their attention.
But only those who enjoy a certain respite in their existence can fully enjoy works that show something as unpleasant as suffering; Only they can praise that art is made with such bitter material. Those who are not suffocated by pain—even though it naturally squeezes them like everyone else—can value these works in their proper measure, they can consecrate them; They keep enough distance from the pain to be able to exalt themselves with the suffering endured by the aesthetic genius without being dragged into the vortex of despair.
Kafka, for example, puts his finger on all the sores. But there are a large number of people with bodies full of sores, with all the sores open, people who truly suffer, who savor the suffering to the point of anguish every minute. That they are poor, that they are unhappy, and that they don't know how to stop being poor and unhappy. They don't want Kafka or anyone else to tell them what it's like to suffer. They know it perfectly.
They don't want anyone to show it to them or remind them, they could tell it better than anyone else. They see no point in anyone doing anything playful with their pain. If the great writers do it, fine, but then they do not accept that it is imposed on them as a canonical obligation to have to recreate themselves with the details of the cesspool of circumstances and their consequences, the unlivable, unbreathable life. They don't see the fun in the joke. They need what is called low literature to alleviate their pain; exactly that: fairy tales, unlikely adventures, happy endings that belie reality and make life bearable. Stop suffering for a while, at times. Cheap literature has largely replaced religion,

which Marx said was the heart of a heartless world. We already know that there is no heart, so we cling to invented hearts, to fables where everything fits, where everything is goodness, value, beauty, even if it is made of papier-mâché painted with bright colors, the brighter the better: yellows, reds, greens , blue, that contrast as much as possible with the gray and black of the tunnel in which we travel. Low literature undoubtedly has less quality but is more saving than, say, The Trial. The process is a masterpiece, but when life is unbreathable - which is all too common - when you look into the abyss held by the tips of your toes, reading The Name of the Rose or The Prisoner of Zenda Castle may be helps you not fall better than The Metamorphosis.
Of course I don't make absolute evaluations. I think that high literature is better than low, it seems obvious. It is deeper, its styles are more refined and innovative, it is full of positive values, knowledge, introspection and genius. But there is nothing strange that a starving person enjoys a cheap hamburger more than an incomprehensible experimental dish from avant-garde cuisine. A person with a numb palate, delayed hunger, who barely has any teeth left; one of those that swell the ranks of the vast majority of people who inhabit the planet.
There are no absolute evaluations, especially in something as debatable as literature. To each his own. Let each one write what he can; Everyone reads what they want. The day human suffering is eradicated—avoidable suffering—I suppose we will become more demanding when it comes to lyrics. I hope that day comes as soon as possible.

Guided by Inquiry: Distinction-Based Questions as a Tool for Navigating Complexity

by: Tilia Stingl de Vasconcelos Guedes, FHWien der WKW
Co-Author(s): Philipp Belcredi, Belcredi Consulting

This paper explores the contribution of social systems theory to the development of comparative-systemic questioning methods for leaders within organizations. It aims to design a conceptual framework that bridges social systems theory with applied comparative-systemic practices.

Exclusion and Inclusion

by: Vibeke Klitgaard, University of Lund, Sweden

They will be the guiding distinctions for my presentation (Luhmann, 1994; Joenhill, 2012). Psychiatric institutions exclude people by giving them a diagnosis and a stigma, which can follow them for the rest of their lives. The literature on stereotypes against psychiatric patients describes how stigmatization and discrimination influence their chances in all areas of life: income, education, employment, psychological well-being, housing status, medical treatment, health and satisfactory relations (Goffman, 1963a; Joergensen & Ulff-Moeller, 1972; Joergensen, 1993; Link & Phelan, 2001; 2013; Luhmann, 1978a; 1987b).
An inclusive approach would be that of Finnish “Model of Lapland”. Based on very positive results it was gradually developed into a book by Finnish psychologist J. Seikkula (2008), which describes the method as “Open Dialogue and Tasks in Networks”. The main point of the book is that individually

based approaches – like psychiatric “mental illness” – do not work, whereas if you call on the significant persons in the clients’ network to a number of meetings, progress can be palpable, as it allows clients to work through the overall situation connected with their problem or loss.

Differentiation: A Guiding Distinction in Special Educational Needs and Disabilities as a Social System

by: Vincent Lien, University of Cambridge, UK

"There exists a span of one hundred or so years between the concepts of “special needs” and “special educational needs” for individuals with various physical and mental disabilities in Great Britain (Warnock, 1978). This shift reflects a guiding binary distinction of “need” versus “do not need” in the socio-educational attitude since the late 18th century. The nature of those needs was also contingent to the wider societal changes. It is suggested that the middle of the 19th century witnessed “a stirring of social conscience over the plight of the disabled . . . but it was primarily concerned to relieve their stress, not to educate them” (Warnock, 1978, p. 10). The shift from being a social support provision to one with an educational emphasis marked the genesis of the formation of Special Educational Needs and Disabilities as a social system paralleling the evolution of the educational system in the United Kingdom. Functional differentiation underscores the many twists and turns of the evolutionary paths of both systems.

This paper aims to achieve the following primary objectives. Firstly, it conceptualises Special Educational Needs and Disabilities (SEND) as a functionally differentiated subsystem of communication within the educational system. Secondly, it scrutinises the guiding distinction of ""differentiation"" in SEND, questioning the assumptions underlying its philosophical foundations as a transformative model for educational equity.

The challenge of differentiation in SEND is twofold. On the one hand, differentiation has been person-centred. On the other hand, differentiation has been treated as a solution to perceived educational and social issues. The prevailing assumption is that differentiated treatments can change individuals, leading to broader educational and societal improvements. All subsequent pedagogical thinking has revolved around the intrumentalisation of differentiation based on the assumed causal chain consisted of individuals, education and society. Educational theorists, medical professionals, psychologists, sociologists, policy makers and technological developers have devoted decades to design interventional programmes and to formulate theoretical frameworks to facilitate differentiation in education. These endeavours are framed as pedagogical innovations that emphasise a shared moral imperative. Despite its progressive pedagogical commitments, SEND is rooted in a conservative tradition stemming from European Enlightenment beliefs in the transformative power of reason and rationality.

In this paper, I propose a radical departure from the conservative tradition of SEND research to formulate a systems theoretical framework. I argue that through internal differentiation, SEND has evolved as a subsystem to the educational system to cope with its increasing systemic complexity. As a self- and other-referential system, SEND organises its observational operations autonomously to delineate what communications fall inside the system boundaries and what remain external, in the

environment. Such operational closure implies systemic autopoiesis, a concept borrowed from Humberto Maturana and Francisco Varela (Luhmann, 2013, p. xi - xii), that underlines a systemic capability in generating new meanings through each recursion of communicative operations.
"This understanding of SEND places greater emphasis on the recursive and discursive nature of distinction making that guides the operations of self- and hetero-observations, in other words, multidirectional communications between SEND and other functional social systems such as education, politics, law, economy, medical science and technology. When SEND is re-entered into systemic communications, distinctions such as diagnostic labels become blurred and dissolve, allowing new distinctions to form by the act of boundary crossing to allow new distinctions to form, actualising the possibilities in “the horizons of potentialities” (Luhmann, 2003, p. 75). In this co-constructivist reframing, SEND is positioned in partnership with other co-evolving systems, not an “addition”, a “footnote”, an outside observer.

Theoretically speaking, re-entering the system / environment guiding distinction in the systems theoretical modelling of SEND as a social system facilitates boundary crossing to allow potentialities to be actualised. This can mean an inevitable paradigm shift. SEND research moves from the preoccupation with what it means to be an individual and the study of the interactions between individuals and society to description of the recursiveness of social phenomena. The question of SEND must be approached as an “interactional process or a circular system” (Ghesquière & Van der Aalsvoort, 2004, p. 218). Practically speaking, these actualisations (not necessarily solutions) can have pedagogical implications, influencing policymaking, and guide future research through interdisciplinary and multinational collaborations towards a more equitable SEND system.

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Structural Coupling in Biosemiotics and Social Systems Theory

by: Yogi Hendlin, esphil.eur.nl

"Applying Niklas Luhmann’s notions to biosemiotics should not be surprising or too much of a stretch given the common moorings of their approaches: autopoiesis, cybernetics, and other varieties of systems theory, which contribute to their making distinctions and frame their respective fields. Social systems or organisms and their environments both have a contrapuntal (structural coupling) relationship between ‘self’ and other, and the definition of environment changes according to relevance of the system/organism in question. It is this dual question of the Umwelt (environment) / Umgebung (reality) distinction, as well as the system (or organism)/Umwelt distinction which occupies this paper.

The similarities between organisms and social subsystems follow closely from their operational closure and cognitive openness. Organisms are semiotically open to those stimuli (structural couplings) in their Umwelt, and yet the operate on limited principles according to their senses. Thus, there are limits to what can show up as relevant or even perceptible aspects of the world – what shows up qua environment.

Likewise, the role of Umwelt in Luhmann's work figures centrally as the defining feature against which systems define themselves, analogically to how organisms self-define vis-à-vis their respective Umwelten. The self-other distinction is the basic feature of systems and organisms, but with social subsystems their elasticity is not a function of evolution, but of the niche construction in the social system they have carved out (and continue to carve out) for themselves. In many ways, social subsystems are in evolutionary arms races with each other to grab as much of reality as possible as pertaining to its particular subsystem, which creates agonism (or antagonism) between other social subsystems. Because in principle social subsystems can both retool for newfound salience and because of their constant competition with each other for meaning and ownership over domains of salience, they are fundamentally different than organisms (besides other more obvious reasons).

And yet, there is a historical continuum uniting biosemiotics and social systems theory à la Luhmann. George Canguilhem (1952, 129) wrote in La connaisance de la vie "The notion of the milieu is in the process of becoming a universal and obligatory mode to capture the experience and existence of living beings. We can almost even say that it forms a necessary category of contemporary thought." This term, revived and developed from the German Umwelt by Uexküll's early as well as late work, impacted the work of Heidegger, Merleau-Ponty, Deleuze, and others. However, less studies thus far has been Uexküll's influence on Luhmann, and how the Uexküllian and biosemiotic use of Umwelt different from Luhmann's development of the term. Likewise in the introduction to A Foray into the Worlds of Animals (p.35), the translator writes "the language of the system/environment distinction in systems theory, of which Uexkull's theory is a forerunner and of which Niklas Luhmann's social systems theory is the culmination," highlights the centrality of the concept of Umwelt.

While both biosemiotics and Luhmann's social systems theory both make use of how one social subsystem is part of the environment for the other social subsystems, that we are part of the Umwelt of others and vice-versa, the salience and weighting of various structural couplings can change according to circumstances.

Thus, the distinction between system and environment turns on the distinction between what qualifies as environment, and how much of reality, or what facets of it, it includes. This Uexküllian insight can help us understand social systems and their flaws better in a Luhmannian framework. Luhmann's notion of structural coupling between subsystems, and their cognitive openness despite (or because of) their functional closure also offers biosemiotics a way of thinking about organisms. "

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Participants

Preferred title	Name and Surname	E-mail address for communication (will be visible to other participants)	Affiliation
Prof. Dr.	Albert Scherr		University of Education Freiburg/Germany, Institute of Sociology
Prof. Dr.	Albrecht Fritzsche		IEDC Bled School of Management
Ms.	Anahit Hakobyan		University of Bremen
Prof. Dr.	Angela Valeo		Associate Professor
PhD student	Anrieta Karapetyan		Yerevan state university
Prof. Dr.	Augusto Sales		Next Society Institute (NSI)
PhD student	Constantijn-Alexander Kusters		Erasmus University Rotterdam, Erasmus School of Philosophy
Ms.	Diane Laflamme		Université du Québec à Montréal
Prof. Dr.	Dirk Baecker		Zeppelin University
Mr.	Djagbletey Kenneth Kwasi		Kick Management
Dr.	Dong-hyu Kim		University of Glasgow
Mr.	Eduardo C. Ferraciolli		ISEG - University of Lisbon
Dr.	Emer Hunt		University College Dublin, Ireland
Dr.	Erik Brezovec		Faculty for Croatian Studies, University of Zagreb
Mr.	Erik Aal		Corvinus University of Budapest
Ms.	Eva Šerá		Faculty of Business and Economics Mendel University in Brno
Dr.	Felix Bathon		University Bielefeld
Dr.	Florian Maurer		FHV - Vorarlberg University of Applied Sciences
Dr.	Gustavo Markier		Universidad de Buenos Aires
PhD student	Gustavo Rocha Reyes		Universidad Autónoma Metropolitana - Iztapalapa (UAM-I)

Mr.	Günter Lierschof		Mag.art
Mr.	Jan I. Jönhill		retired - free researcher
Dr.	Josip Ježovita		Croatian Catholic University
Prof. Dr.	Kim Albrecht		Filmuniversity Babelsberg, metaLAB (at) Harvard & Berlin
PhD student	Konstantin Skoblik		The Institute of Criminology and Legal Policy (Krimo), Doctoral Programme in Law, the University of Helsinki, Finland / The Next Society Institute, Kazimieras Simonavicius University, Lithuania
Dr.	Krešimir Žažar		University of Zagreb, Faculty of Humanities and Social Sciences, Department of Sociology; Zagreb (Croatia) // Next Society Institute, Kazimieras Simonavičius University; Vilnius (Lithuania)
Dr.	Margit Neisig		Department of Social Sciences and Business, Roskilde University, Denmark
Ms.	Marlene Müller-Brandeck		Berlin-Brandenburg Academy of Sciences and Humanities
PhD student	Martin Galla		Hochschule für Philosophie München
Ms.	Mary Darko		Mary Darko Plus Enterprise
Mr.	Maurício Vieira Kritz		LNCC/MCTI, BR and FBMH/University of Manchester, UK
PhD student	Maximilian Kaenders		University of Freiburg
Dr.	Michal J. Gajda		Well.co, Migamake.com
Prof. Dr.	Michal Kaczmarczyk		University of Gdansk
Mr.	Mogens Grosen Nielsen		Nielsen Statistics Consulting
Mr.	Nooke, Günter		private
Mr.	Otto Rosendahl		Turku School of Economics, Finland
Ms.	Pernille Almlund		Roskilde University
Mr.	Philipp Belcredi		Belcredi Consulting
Ms.	Reda		Kazimieras Simonavicius university

Dr.	Richard Pretorius		Eindhoven University of Technology
Prof. Dr.	Roar Hagen		Professor emeritus
Prof. Dr.	Roar Hagen		Professor emeritus ISV, UiT The Arctic University of Norway
Ms.	Salomey Asabea Damesi		Grayfields Global Consulting Ltd
Prof. Dr.	Steffen Roth		Excelia Business School
Prof. Dr.	Steve Watson		Faculty of Education, University of Cambridge
Dr.	Stijepo Stjepović		University of Zadar
Dr.	Tilia Stingl de Vasconcelos Guedes		FHWien der WKW
Mr.	Tonoyire Joseph Raymonod		Ghana Institute of Business Practitioners
Ms.	Vibeke Klitgaard		University of Lund, Sweden
Dr.	Vincent Lien		University of Cambridge, UK
Dr.	Yogi Hendlin		hendlin@esphil.eur.nl