



Introduction: A Special Issue on Niklas Luhmann's Systems Theory and Law

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Abstract

Combating corruption, ordering business practices and regulating the use of artificial intelligence are but some of the challenges of today's society that socio-legal research engages with. These challenges are often transnational in their character, calling for an analytical toolbox fit to examine phenomena that transcend space and time. Niklas Luhmann's systems theory offers such a toolbox to examine complicated communicative practices in today's globalised world. This Special Issue brings together junior and senior socio-legal researchers from the Global South and the Global North who illustrate and exemplify how Luhmann's systems theoretical framework can be applied and theoretically discussed with the purpose of analysing socio-legal issues of relevance for the world of today. This article first introduces the motivation and aim of the Special Issue. Then, the article introduces key concepts of Niklas Luhmann's systems theory and sociology of law, followed by a presentation of the articles that constitute the Special Issue.

Key words

Niklas Luhmann; systems theory; legal system; sociology of law

Resumen

Combatir la corrupción, ordenar las prácticas empresariales y regular el uso de la inteligencia artificial son sólo algunos de los retos de la sociedad actual a los que se enfrenta la investigación sociojurídica. Estos retos son a menudo de carácter transnacional, por lo que requieren un conjunto de herramientas analíticas adecuadas para examinar fenómenos que trascienden el espacio y el tiempo. La teoría de sistemas

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de Niklas Luhmann ofrece una caja de herramientas de este tipo para examinar las complicadas prácticas comunicativas en el mundo globalizado de hoy. Este número especial reúne a investigadores sociojurídicos jóvenes y séniores del Sur Global y del Norte Global que ilustran y ejemplifican cómo el marco teórico de los sistemas de Luhmann puede aplicarse y debatirse teóricamente con el fin de analizar cuestiones sociojurídicas de relevancia para el mundo actual. Este artículo presenta en primer lugar la motivación y el objetivo del número especial. A continuación, el artículo introduce conceptos clave de la teoría de sistemas de Niklas Luhmann y la sociología del derecho, seguido de una presentación de los artículos que constituyen el Número Especial.

Palabras clave

Niklas Luhmann; teoría de sistemas; sistema jurídico; sociología jurídica

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1. Introducing Luhmann's systems theory and law

All collective life is directly or indirectly shaped by law. Law is, like knowledge, an essential and all-pervasive fact of the social condition. No area of life – whether it is the family or the religious community, scientific research or the internal networks of political parties – can find a lasting social order that is not based on law. (Luhmann 2014, p. 1)

So, Luhmann opens the Introduction to his book, *A sociological theory of law*, emphasising law's decisive function for stabilising social life in today's complex society. In this Special Issue, we zoom in on Luhmann's systems theory, particularly his theory on law as a social system, to account for the systems theoretical framework's continuous relevance for contemporary socio-legal research. The background and motivation for this Special Issue is a shared and profound interest in Niklas Luhmann's systems theory on law among the contributors and an eagerness to illustrate and exemplify the potential of the theory for advancing analyses of law's function in society.

With an impressive publication record of more than 500 contributions, Niklas Luhmann wrote extensively on systems theory which he, inspired by Parsons, formulated and advanced (Banakar and Travers 2013). Among the more than 500 publications are numerous contributions which analyse law and law's function in society. In this Special Issue, the authors draw on Luhmann's systems theoretical sociology of law in their theoretical discussions on law's relevance in society and in their analyses of a wide array of contemporary society's challenges. The Special Issue thus consists of both theoretically and empirically based contributions whereby they, from different perspectives, emphasise the relevance of Luhmann's sociology of law to today's socio-legal research. The contribution of this Introductory article is to describe key concepts of Luhmann's systems theoretical sociology of law and outline the diversity of the articles that constitute the Special Issue. Before advancing into an account of Luhmann's sociology of law, a brief introduction to his systems theory, which his theory on law as a social system is part of, is in order.

2. Luhmann's systems theory

Modern society of today is characterised by a high degree of complexity, and to generate social meaning, reduction of complexity is needed. This is Luhmann's systems theoretical starting point: How is it possible to generate meaning in a highly complex modern society? Luhmann was a functionalist, and his theoretical approach implies the division of the world into different systems that each contribute to the generation of meaning through the reduction of complexity. The world, according to Luhmann, consists of different systems that each function based on their internal operations (Luhmann 2000a). Together and by themselves the different systems contribute to the ordering and upholding of society. With his systems theory, Luhmann offers analytical concepts as tools for examining modern society's "complex, fragmented and functionally differentiated nature" (King and Thornhill 2006, p. 41), and his theory provides a framework for empirical observations by "identifying structures and relationships between social events" yet emphasising that this theoretical framework may "have no resonance in the taken-for-granted world of lawyers, politicians and policy-makers" (King and Thornhill 2006, p. 38).

To keep focus on Luhmann's sociology of law, limitation in introducing his extensive and comprehensive theoretical apparatus is needed. This Introduction accounts for the key concepts of communication, meaning, autopoiesis, and observation before moving on to his theory on law as a social system.

2.1. *Communication and meaning*

Luhmann's theoretical focus is on *communication* rather than, say, social practice, actors and structures (see e.g. Campilongo *et al.* 2020). This could imply that Luhmann disregards humans in his systems theory – and indeed, Luhmann's systems theory has been criticised for being anti-humanistic though quite the contrary is at stake: In addition to the social systems of society, Luhmann formulates other systems of which humans are part, namely the living systems and psychic systems. From this it follows that humans may be considered a unit of these three systems: The living system as a result of the bodily functions of humans, the psychic system, following human consciousness, and the social systems based on humans' communications (King 2013, Borch 2022). As Luhmann writes: "we are by no means making the absurd claim that law exists without society, without people" (2004, p. 105). The social systems are thus only one part of Luhmann's general theory of autopoietic systems, and the theory in addition includes living systems and psychic systems.

But what does Luhmann mean when arguing that reduction of complexity is needed to generate social meaning? Complexity, Luhmann explains, refers to the fact "that there are always more possibilities than can be actualised" (2014, p. 25). To reduce complexity means to select one possibility and reject others (Luhmann 1997a). In systems theory, society consists of communication (Luhmann 2002, Banakar and Travers 2005) and takes place through information, utterance and understanding, including misunderstanding¹ (Luhmann 2000a). Communication constitutes a horizon of meaning² from which subsequent communication is selected. Meaning concerns the selection of what to communicate, that is, selecting which of the multiple possibilities to actualise, and each selection reduces the complexity as it binds communication in time and between the communicating parties. Therefore, these communicative meaning selections help to reduce temporal,³ factual and social complexity, which is a prerequisite for meaningful communication to take place (Harste 2003). To offer an example, communication between a patient and a physician (the social dimension) about the patient's health

¹ Information refers to what is selected to be communicated, utterance is the form of communication, e.g. oral or written communication, and understanding, including misunderstanding, refers to the communication recipient's understanding of the information being uttered (Luhmann 2000a).

² Luhmann's conceptualisation of meaning is inspired by Edmund Husserl's concept of meaning and articulates meaning as the difference between actuality and possibility/potentiality. Through meaning, complexity is managed by selection: choosing something and leaving something else non-chosen, i.e., making a distinction (Luhmann 1986, Åkerstrøm Andersen 1999, Qvortrup 2006).

³ The concept of time in Luhmann's system theory seems inspired by Reinhart Koselleck's theory of time, where time is considered to be layered: that time occurs in different forms embedded in the same event. Time is seen as a phenomenon that both reaches back and forward, while at the same time being repetitive (Koselleck 2018). This understanding of time is reflected in Luhmann's communication theory, where communications are conditioned by past communications, while at the same time conditioning future communications. In addition, communications are considered a repetitive necessity, as communication perishes as soon as it is communicated, and other communications must then follow as a result of the systems' autopoiesis (Luhmann 2000a).

problem (the factual dimension) enables future communication (the temporal dimension) related to improving the health status. This communication process links what Luhmann refers to as the social systems and the psychic systems. These aspects are elaborated below but his point of departure is that social systems operate autopoietically with communication as their medium, and the psychic system operates autopoietically with consciousness as its medium. From this it follows that the social and psychic systems are different from each other – in Luhmann’s terms: constitute each other’s environment. But in the communication process they are linked to each other and necessary for each other in order for meaningful communication to take place (Seidl and Becker 2006). Without consciousness, the continuation of communication cannot take place as consciousness remembers previous communications (Luhmann 2002). In this way, consciousness binds the communications in their temporal and factual dimensions, structuring what can be communicated, following previous communication (Luhmann 2002, Esposito 2011). Communication is therefore central to systems theory as the object of analysis to unfold how reduction of complexity might take place.

2.2. Autopoietic systems

Luhmann divides the world into the following systems: Living systems, psychic systems and social systems. Though very different, their common feature is their autopoietic⁴ nature as they constantly reproduce and re-create themselves based on their so-called operative closure. The operative closure indicates that the system reproduces itself based only on its internal operations, excluding external elements. For instance, the psychic system reproduces itself through consciousness, the living system reproduces itself through bodily functions and the social systems reproduce themselves through communications (Luhmann 2000a, Seidl and Becker 2006, Borch 2022). To provide an example of a social system: The legal system is a social system, and it reproduces itself through communication that generate meaning based on the distinctive binary code of the legal system, namely legal/illegal.⁵ As the legal system is a social system, its autopoiesis is performed through communication which will be elaborated in a following section.

Zooming in on social systems, there is a further division into societies, organisations and interactions as different forms of social systems. Their common feature is their autopoietic character as they reproduce themselves based on their internal operations. For example, organisations reproduce themselves based on decisions as operations. and interactions are reproduced through presence (Luhmann 2005b, Seidl and Becker 2006). Zooming further in on society as a social system, society is differentiated into subsystems, following society’s complexity. Each subsystem maintains functions in society, whereby they may be referred to as *functionally differentiated* subsystems. The legal system is an example of such a system as well as the economic system and the

⁴ Luhmann adopts the concept “autopoiesis” from the biologists Maturana and Varela to describe and explain how systems re-create themselves based on operations internal to the respective system (Luhmann 2000a).

⁵ Some scholars refer to the legal system’s binary code as “lawful/unlawful” (see e.g. King 2013, p. 69). In this article, the binary code is referred to as legal/illegal, based on Luhmann’s Law as a Social System (see e.g. Luhmann 2004, p. 94).

political system, just to mention a few.⁶ Each subsystem contributes to the functioning of society through its binary code and programmes, for example the function of the legal system is to contribute to society's social order by stabilising normative expectations through the binary code of legal/illegal (Luhmann 2004), as is elaborated below.

For the subsystems to reproduce themselves, that is, to uphold their autopoietic character, they communicate based on their distinct binary code. The operations, meaning communications, are thus operationally closed because the operations always revolve around the respective code. Thus: No code = no system. As each subsystem is operationally closed, other systems are defined as the environment. So, for example, for the legal system, the political system and the economic systems constitute the legal system's environment, whereas the legal system and the political system constitute the environment for the economic system and so on. Operative closure thus relates to the concept of distinction between system and environment. The systems are operatively closed as they rely on their own network of operations to produce their own operations whereby each system reproduces itself, stressing each system's autopoietic character. The operative closure does not result in systems being isolated islands (Luhmann 2004, King 2013), rather, the systems are cognitively open, meaning that they are open on a structural level as they are able to structurally couple to each other but always operate closed, based on their distinct binary code. On an everyday basis, structural couplings take place all the time, for example between psychic systems and social subsystems where human consciousness facilitates communication, or between subsystems where, for instance, constitutions are products of structural couplings between the legal system and the political system (Borch 2022). Drawing on the example of an airline company, King and Thornhill (2006) explain structural coupling between the systems of economy and law, arguing that an airline company obeys safety regulation "because failure to do so could result not only in illegality, but also ... in the revocation of its license and serious financial loss" (p. 46), illustrating how the systems are able to observe and understand other systems "within the narrow limits available through their coding" (*ibid.*).

2.3. Observation

The ontological starting point for systems theory is that observation shapes the social world, making observation another key concept to systems theory. Observation, from a systems theoretical starting point, adds to the description of what is observed; "both *how* they are observed and how they are observed *to be*" (Philippopoulos-Mihalopoulos 2010, p. 4, original emphasis). As a radical constructivist theory, systems theory's starting point is that world society is shaped by observations, and that multiple possible observations coexist whereby the theory "excludes any possibility of the ontological existence of reality" (Barros 2020, p. 160). Recognition of the outside world thus depends on the relationship between the observer and the reality being observed (Luhmann 1998, pp. 34, 39). The position of observation is therefore central to the recognition of the social, as it is the observer's observation that constitutes the observer's world (Brier 2006, Thyssen 2006, Esposito 2013). This stresses that observations are arbitrary, or contingent, as other observations could have been made (Luhmann 1997b, 2014, King and Thornhill

⁶ It is relevant to stress that this listing of systems is by no means exhausted and that future systems theory research may establish additional systems.

2006, Seidl and Becker 2006, Thyssen 2006). Observation is shaped through distinction and indication,⁷ which is why observations are always contingent, as other distinctions and indications could have been made (Luhmann 1997b, Thyssen 2006). Each functionally differentiated subsystem interprets their environment from the perspective of the system itself, meaning that the system distinguishes itself from its environment based on its operative closure. As King and Thornhill (2006) explain, “the fact that what passes for reality is only reality *for the system* created *by the system*” (p. 43, original emphasis). For example, the legal system interprets its environment based on its closed operations of communicating in accordance with its binary code whereby it offers legal meaning to events in the environment. In these operations, the systems do not perceive the environment as their own creation – the systems only observe their own operations, not other systems’ operations as these are external to each individual system’s internal operations. These differences are referred to as first-order observations, meaning the system’s distinction and indication which the systems cannot observe themselves but can be observed on a so-called second-order observation level (Luhmann 2005a). An observer is able to perceive the systems as functioning in their environment whereby it is possible for the observer to observe other systems. This is referred to as second-order observation: That the observer can observe what the systems observe and also what the systems cannot observe (Banakar and Travers 2013, King 2013). Thus, from a second-order observation, it is possible to observe how the system observes and how it operationalises its distinctions between self- and external reference (Luhmann 2004). Systems theory distinguishes between different orders of observation that cause the position of observation to shift. First-order observation relates to the system’s marking of a difference which the system itself cannot observe. As King and Thornhill (2006) elaborate, “Each [system] can see only what it can see. It cannot see what it cannot see and, moreover, it has no way of knowing that it cannot see what it cannot see” (p. 51). But the second-order observation can. Second-order observation entails the position of an observer who observes others observing (Philippopoulos-Mihalopoulos 2010, p. 5). On the other hand, it cannot observe the marking it makes itself, i.e., what it chooses not to mark. Third-order observation can observe what second-order observation cannot, and so on (Luhmann 2005a).

As mentioned, it may be argued that the key concepts of Luhmann’s systems theory; meaning, communication, autopoiesis and observation, have universal relevance for examining and analysing how social meaning is (not) generated in today’s globalised society as the concepts break with temporal and spatial boundaries and limitations (Luhmann 2000a, 2004). Breaking with these barriers, the theoretical framework offers analytical tools for scholars in the Global South as well as the Global North, as reflected in the contributions constituting this Special Issue.

3. Luhmann’s sociology of law: Law as a social system

The title of this sub-section replicates that of Klaus A. Ziegert’s English translated version published in 2004 by Oxford University Press of Luhmann’s *Das Recht der*

⁷ Luhmann’s description of distinction and indication is inspired by George Spencer-Brown. Spencer-Brown points out that indication presupposes a distinction (Spencer-Brown 1969). In systems theory, the distinction between system and environment means that an indication can be made, and the operation of the system can take place (Luhmann 2016).

Gesellschaft. Nobles and Schiff state in the very opening of the book's Introduction that "This book needs to be accessible to an English-speaking audience. It is a profound work of increasing significance in the twenty-first century" (2004, p. 1). The significance of Luhmann's sociology of law is, too, reflected, in this Special Issue, but before outlining the diverse articles that in each unique contribution exemplifies the analytical and theoretical relevance of systems theory, this section introduces readers to Luhmann's systems theory on law as a social system.

Law is:

one of several function systems, meaning systems that are necessary for the successful operation of modern society, systems of communication that allow society to take on a form which is both meaningful to itself and to those individuals who participate in its operations. (King 2013, p. 66)

Luhmann defines the legal system as a social system that is functionally differentiated through its operative closure. Its operative closure and thereby its autopoiesis is based on the system's communications, and the legal system offers legal meaning to events based on its closed operations of communicating in its binary code, legal/illegal (King 2013). This entails that, from a systems theoretical starting point, the legal system consists of communication based on its binary code, not on physical structures such as legal aid offices, law firms or courts. The legal system is thus classified together with, for example, the political system and the economic system that, too, are operatively closed and generate meaning based on their unique binary coded communications. The task of these social systems is to reduce society's complexity by offering meaning through their communicative operations. As a social system, the legal system performs distinctions between its internal operations and its environment which is characterised by operative closure different from that of the legal system. If the operations of the legal system were to take another form or be taken over by another system, there would be no legal system as it is the binary code that constructs each system's distinct communicative meaning. As the legal system is operationally closed, yet cognitively open, changes in the system's environment may cause change in the legal system. The legal system can take note of external facts but only as internally produced information; "the difference that makes a difference", as Luhmann cites Bateson (2004, p. 112). Thus, "cognitively open" refers to a system's production of relevant information based on its difference from its environment (*ibid.*).

How is it sociologically possible to observe and analyse law? This question is central in socio-legal research and has sparked great debates on potentials and pitfalls of overcoming disciplinary differences between legal studies and sociological studies (see e.g. Banakar 1998, Mathiesen 1998, Hydén 1999, Luhmann 2019a, Nielsen 2023). As Luhmann writes: "Sociologists observe the law from outside and lawyers observe the law from inside... A sociological theory of law would, therefore, lead to an external description of the legal system" (2004, p. 59). To bridge this external/internal divide, Luhmann proposes a sociological theory that contributes to interdisciplinary dialogues by not losing "sight of its object... it has to describe its object in a way in which lawyers will understand it" (Luhmann 2004, p. 60), and he continues: "To acknowledge the fact that there are self-observations and self-descriptions of the object is the condition for a scientifically appropriate, realistic... empirically adequate description" (*ibid.*).

As a functionalist, Luhmann analyses how different tasks are divided and discharged within society to uphold and reproduce its functions. Society is considered a system in which reproduction is maintained by interdependent parts, or subsystems. The legal system is considered as one of these subsystems (Nobles and Schiff 2020). Systems are defined as a context of operations, of communications, and the legal system is defined as a context of legal communication with a distinction between system and environment whereby the system is distinguished from everything else (Luhmann 2004). As an autopoietic subsystem, the legal system reproduces itself, and based on its binary code it distinguishes itself from other subsystems as “only the law itself can say what the law is” (Luhmann 2004, p. 85). The boundary between the legal system and its environment is established through the legal system’s code (Nobles and Schiff 2020), and other systems’ communications are interpreted based on this binary code. It is through the legal system’s internal programmes, that is, legislative sources, court decisions and rules, that law’s interpretation of its environment is reflected, including programmes such as criminal law, family law and commercial law (Baxter 2013, King 2013). Thus, following its observer position, law as a social system can only construct its own version of other systems, however, law can react to others as they can structurally couple, whereby they “reduce and so facilitate influences of the environment on the system” (Luhmann 2004, p. 382).

3.1. The function of the legal system

To Luhmann, each social system, has a distinct function which is why they are referred to as functionally differentiated: They differ based on their function, and their function – to offer communicative meaning to the complex world society – is determined by their respective binary code. For the legal system, the function is to reduce complexity by offering communicative meaning to legal events. The legal system’s binary code of legal/illegal enables communicative operations on events as being legal or illegal which makes it possible to address these events in a legal setting. For example, if an event is communicated as illegal, courts may perform decisions on the event (Luhmann 2004). By offering communicative meaning through the binary code, legal/illegal, law may be understood as both a restriction and a support for specific behaviour as it regulates sanctions or encouragement for practice. According to Luhmann, administrative law may be an example of law that both restricts and supports behaviour (Luhmann 2004, p. 151). To offer an example; in a Danish welfare state context, in which this author is based, administrative law restricts behaviour by limiting authority as well as it supports behaviour by emphasising, for instance, public administrative authorities’ obligation to inform citizens on relevant welfare rights.⁸ When a citizen experiences social problems, as, for example, substance abuse and/or homelessness, the Danish municipalities are as public administrative bodies obligated to support processes of addressing such problems, and a central part of that process is to inform citizens about their right to support. Thus, the public administrative authorities are restricted in their behaviour as

⁸ Law’s regulation of public administrative authorities’ obligation to inform and guide is outlined in the Act on Rule of Law (Retssikkerhedsloven) and the Act on Administrative Practices in Public Administration (Forvaltningsloven).

they only have authority to act in certain instances, and they are as well supported in their behaviour as the acts stress their obligation to inform.

Central to Luhmann's sociology of law is the focus on law's function as that of stabilising normative expectations. Normative expectations are expectations that are continuously upheld despite potential disappointment: Though some are speeding or crossing red lights, we still expect persons not to do so. And if they are speeding or crossing red lights, we expect law to sanction such behaviour. Normative expectations are thus stabilised though disappointed whereas cognitive expectations are subject to change, following experiences. Say, we trust someone to behave in a specific way and that person fails to fulfil these expectations, we may choose not to trust this person in the future. The normative expectations are only changed if the law is changed, for example if law introduces new speed limits. The binary code remains the same (speeding is still illegal), only the event (which speed that is the limit) is changed. Thus, the binary code contributes to the stabilisation of normative expectations (Luhmann 1985, p. 33). The legal system may evolve but always based on its binary code as a result of the system's internal operations and on the normative expectations which structure legal communications (Teubner 1983, s. 248).

How are the normative expectations, as mentioned above, expected, one might ask, from the level of second-order observation? The legal system's autopoietic reproduction is achieved by its normative mode of expecting (Luhmann 2004). To Luhmann, expectations contribute to reducing complexity as they absorb uncertainty by structuring options for communication: what we can expect and trust to be communicated (Luhmann 1979) whereby communications contain expectation structures that structure possible communication. The autopoiesis of law recognises itself by the unavoidable normative style of expectations which are the foundation for its processing of legal communications and enables law to bind time: "Law's relation to time... lies in its attempts to anticipate, at least on the level of expectations, a still unknown, genuinely uncertain future" (Luhmann 2004, p. 147). Thus, law deals with the time binding of normative expectations as it concerns the function of stabilising normative expectations by regulating their generalisation in their temporal, factual and social dimensions: Law makes it possible to know which expectations will be met with social approval and which will not (Luhmann 2004).

3.2. The legal system and temporality

Temporality is an integral part of law as law binds time, for example through the assessment of past events to evaluate the present and, based on this, condition the future (Khan 2009, Opitz and Tellmann 2015). To offer an example, a court case is based on past events, takes place in the present, and the ruling structures what is expected to happen in the future. It is these temporal dimensions that form the basis of the functioning of law and allow law to direct social expectations (Luhmann 2004). When situating law in a temporal perspective, time may be considered a structure of law which orders the operations of law and connects the operations to each other. Thus, time binds operations and creates links between them which constrain future operations. It is this mechanism of time binding that makes the past part of the present and the present part of the future: Present operations set the premises for future operations because decisions made in the present condition future operations (Esposito 2011), thereby constructing the future as

conditioned by the past (Luhmann 1985, Febbrajo and Harste 2013). Luhmann defines formal law as conditionally programmed as it conditions the conditions under which an accurate legal decision is made (Luhmann 1987). Relying on law's conditional programmes, persons may be able to anticipate the future: *If this happens, then this will follow*, whereby law, in the present, binds past with future. This stresses the significance of legal texts for stabilising citizens' expectations to possible processes and outcomes resulting from legal communication (Adam 1994). Thus, if law is not conditionally programmed or in other ways offers a binding of time, it may be difficult for law to maintain its function of stabilising normative expectations (Teubner 1985, 1988, Nielsen 2020).

3.3. *Internal differentiations to the legal system*

The legal system is differentiated from other social systems, and internally in the system differentiation also takes place. The legal system is internally differentiated which is reflected in the elements of jurisdiction, legislation and courts. Courts perform decisions within the distinction between legislation and jurisdiction, and they communicate also outside the legal system, for example, as Barros illustrates, by preventing "the political system from applying public force illegally, mainly by exerting control of the legality of administrative acts or interpreting the rule of jurisdiction to decide an impeachment case" (Barros 2020, p. 146). On courts, Luhmann writes: "the organization of courts as a sub-system is at the centre of the legal system. Only here can one use the special feature of organization systems – to decide about the inclusion and exclusion of members – in order to create specialties for judges" (Luhmann 2004, p. 293). From a systems theory perspective, courts may be categorised as an organisation. As mentioned, organisations reproduce themselves as social systems based on their internal operations of decision-making (Luhmann 2000b, 2003). The members of the courts as organisations are judges who "are institutionally empowered to institutionalise expectations by their decision" (Luhmann 2004, p. 136). Courts are an important organisation in the operation of modern society, Barros argues, as they, from a functionalist perspective, operate within a double pressure, namely "to decide each case and to guarantee the decision beyond the particularity of the case" (Barros 2020 p. 141).

4. Challenges to law from a systems theoretical perspective

Law's function reflects a temporality related to the contingent character of the future which is sought reduced through conditional programming. Yet, when so-called purposive programmes, as we find in reflexive law,⁹ dominate, that is, when purposes rather than conditions regulate, the contingency of the future appears to increase as normative expectations cannot to the same extent be stabilised. Purposive programmes are not conditionally programmed, meaning that the *if... then...* formulation characterising conditional programmes is substituted by an emphasis on a goal to be realised. This creates instability on an expectational level. Thus, if law is not conditionally programmed or in other ways offers a binding of time, law may be

⁹ In his article, *Substantive and Reflexive Element*, from 1983, Teubner identifies "an emerging kind of legal structure, 'reflexive law'" (p. 245), referring to a law which role is "to structure and restructure semi-autonomous social systems by shaping both their procedures of internal discourse and their methods of coordination with other social systems" (p. 255).

challenged in maintaining its function of stabilising normative expectations (Teubner 1985, 1988, Nielsen 2020). In this way, reflexive law and purposive programming pose challenges to the legal system, and, as King and Thornhill (2006) outline, “Luhmann never once mentioned the possibility that the legal system could operate in a reflexive way” (p. 44), rather he argued that it could not (Luhmann 2019b). Systems theoretical scholars in the field of law (see e.g. Teubner 1983, Sand 2012) have, however, argued for the relevance of examining the legal system as a reflexive form of regulation.

From a temporal perspective, the introduction of purposive programmes indicates a tendency of applying especially welfare law “as an instrument for purposive, goal-oriented intervention” to absorb risks and uncertainties of the future (Teubner 1983, p. 240). This goal-oriented legal practice, which follows from the application of welfare law as a means of state intervention, may however cause an increased complexity as it invites for multiple semantic couplings, thereby blurring systemic limits (Åkerstrøm Andersen and Pors 2014). Sand (2012) draws on the concept of hybrid law and hybridisation of law to analyse this complexity of welfare law as a form of law which must both consider its context as well as its function of stabilising normative expectations. Hybridity as concept, Sand (2012) argues, may be applied to:

describe the degree of specialization in communication and in semantic patterns which also implies that contradictory values and semantics are driven more closely together. Instead of the binary distinction legal/non-legal there are oscillations between different legalities. Law becomes increasingly undecidable, and its primary function of normative predictability is challenged. (p. 190)

Hybrid law invites different observations of the problem that law is applied to address, thereby resulting in varying communicative meanings related to the problem (Schirmer and Michailakis 2019, p. 100). The varying communicative meanings call for contingent continuous communicative operations, stressing the unpredictability following hybrid law. In this author’s previous work, law’s hybridisation and the significance of purposive programmes for the (de)stabilisation of normative expectations were focal points (Nielsen 2020). To offer illustrations of challenges to the legal system caused by law’s hybridisation, the following includes empirical data from this previous work based on semi-structured interviews with long-term unemployed citizens who receive social security. The interviews focused on the citizens’ experiences of their case handling related to their status as unemployed. The empirical data offers an analytical basis for understanding the destabilisation of normative expectations which hybrid law may result in. In the interviews, citizens typically expressed experiences of frustration or confusion when engaging with the welfare system and its regulatory mechanisms. Their frustration was generally caused by their inability to predict future practice as a result of the case handling’s goal-oriented focus on purpose and process rather than on conditions that would bind time. To offer an example, one of the respondents, a woman in her early-40s who had received social security for almost ten years, had been enrolled in several internships as a means to assess and determine her work ability with the purpose of supporting her re-integration into the labour market:

It’s so frustrating, for instance, when I began this internship period, I was told that ‘when this period comes to an end, we will refer you to another internship because we need to know as much as possible about your ability to work’. Now, I’ve been receiving

social security since 2010 and it's an everlasting struggle. I am sick and tired of thinking 'it will soon be over', and then it's not over. Not at all. (Nielsen 2020, p. 167)¹⁰

In the legislative act that regulates Danish case handling related to unemployment there is no limit to the number of internships that unemployed citizens may be referred to. Rather, the act states that internships may be applied as means to assess and improve work ability and thereby focus the case handling on unemployed citizens' labour market (re)integration. The lack of conditional programmes related to the use of internships in case handling processes appears to be total, making it extremely challenging to stabilise normative expectations. As written in the Employment Act's section 58, 1:

internship is a means to clarify and develop a person's educational, social, and linguistic qualification and thereby supporting them in mapping out their goal for employment as the person takes part in different assignments and socialise with colleagues.

Thus, internships are instrumentalised to realise the purpose in accordance with which the Employment Act regulates. This section is an example of law's hybridisation (Sand 2012) as other social system's communications "take over" the generating of legal meaning. In the Employment Act's section there is no legal/illegal coded communication to offer legal meaning though the very character of the Employment Act, namely, that it is a legal act, offers it dogmatic legitimacy. Yet *what* the act regulates and rules on is determined by other social systems' communicative practices. As the conditional programming of law is replaced by goal-oriented regulation, purposive law challenges law's function of stabilising normative expectations (Westerman 2018, p. 127). The communicative structures pertaining to the legal regulation of the employment case handling invite the semantic coupling with other functionally differentiated subsystems. Thus, communicative structures potentially conflict, depending on the semantic coupling performed by the observer. The hybridity of law allows for this oscillation between the legal form and its social context which further destabilises normative expectations (Nielsen 2020, p. 174).

Reaching an end of this Introductory article, the following accounts for the other articles that constitute the Special Issue. As mentioned, the articles are characterised by a diversity; some apply a strong theoretical focus, others draw on systems theoretical key concepts to analyse empirical data. To us, the authors appearing in the Special Issue, the diversity of the articles illustrates that Luhmann's systems theory continues to be relevant to academic research.

5. Contemporary systems theoretical socio-legal research

This Special Issue brings together contributions from junior and senior researchers from the global North and Global South who have in common a strong research interest in Niklas Luhmann's systems theory and sociology of law. The contributions are diverse in both their theoretical and thematical scope where corruption, technology and unions' role in addressing in-work poverty are but some of the themes addressed in the Special Issue. The common thread to weave the contributions together is their conceptual focus on Luhmann's systems theory. Readers of this Special Issue are thus introduced to a socio-legal systems theoretical perspective on challenges of contemporary society with the

¹⁰ The empirical data presented in this article has been subjected to own translation from Danish into English.

purpose of exemplifying and illustrating the significance of Luhmann's sociology of law for today's socio-legal research. The following offers a brief introduction to each of this Special Issue's contributions.

Karin Buhmann's article, *The evolution of transnational sustainability governance through a systems theory lens: From rejection to acceptance of business responsibilities for human rights*, applies Luhmann's systems theory to analyse the argumentative dynamics of the processes and outcomes of key UN and EU initiatives during the decade 2002–2011 in regard to the development and acceptance of human rights responsibilities for business enterprises. That decade saw a change from rejection to welcoming of ideas on such responsibilities as a key social sustainability issue. Demonstrating the use of systems theory to empirical cases, the article shows how the systems theory perspective generates important insights on communicative aspects of a regulatory process towards a normative change in contexts with multiple and diverse interests at play in today's legal order where the transnational character of many sustainability problems exceeds the nation state. The article fills a knowledge gap concerning processes for governing transnational sustainability issues where the territorial limits of national public law and the weak private-actor coverage of international law pose challenges to conventional regulation.

Ann-Christine Hartzén's article, *Swedish trade unions and in-work poverty: A critical approach to industrial relations using Luhmann's systems theory as framework of analysis*, exemplifies how Swedish social partners, especially trade unions, have addressed the issue of in-work poverty in relation to recent and influential changes of the Swedish Employment Protection Act (EPA). Empirically, the article draws on written communication from these social partners, and Hartzén applies Luhmann's systems theory as framework for the analysis of how the social partners communicate in the processes of influencing and adapting to the reformed EPA legislation. The article zooms in on the social partners' communication related to in-work poverty, and it suggests that the issue of in-work poverty is largely indirectly addressed as other structural factors, such as regulation of short fixed-term contracts, are emphasised in the social partners' written communications. In the article, Hartzén introduces a methodology that may serve as inspiration for research on, as in this case, communicative processes related to legislative changes.

Karin Hilmer Pedersen's contribution, *Corruption in unlikely places – the case of Denmark seen through Luhmann's systems theory*, examines the rise in corruption cases in Denmark. Corruption is defined as a "misuse of public position for private gain", and the article applies Luhmann's systems theory and Foucault's method of genealogy. Pedersen draws on court cases as empirical data, and in the analysis, she finds that different binary codes, including legal/illegal, obedience/disobedience, and pay/no pay co-exist in the court cases. Since 2000, the number of court cases on corruption has increased in Denmark, and Pedersen points to that public administration reforms may have influenced public employees' assigning of meaning to the phenomenon of corruption. The article finds that public employees draw on the code of the economic system rather than of the legal system in their assigning of meaning to corruption. The article thereby contributes with empirical and analytical insights into how social phenomena, in this case corruption, is assigned different meaning, depending on the binary code applied.

John Paterson's article, *Decentralised finance, regulation, and systems theory*, analyses challenges and potentials related to the regulation of cryptocurrency. Paterson points to that cryptocurrency has sparked expressions of concern from regulators yet also at times coupled with expressions of interest in state-backed alternatives. The article draws on systems theory to conceptualise the phenomenon of decentralised finance, and it offers analytical insights into the following questions: Insofar as a plausible argument can be made for the proposition that finance represents an example of the internal differentiation of the economy, does decentralised finance in some sense constitute an *intensified internal differentiation*? Alternatively, and paradoxically, insofar as what we are concerned with is *decentralised* finance, does it instead in some sense represent an example of *dedifferentiation*? Analysing these questions has relevance for efforts to regulate cryptocurrency, and the article thus sheds light on whether state and central bank experiments produce positive effects or bring their own challenges.

Luisa Hedler's article, *Risk and danger in the introduction of algorithms to courts: A comparative framework between EU and Brazil*, examines the incorporation of algorithms into the legal system which is already underway in many courts across different countries and legal traditions. The promises of this new technology include increased access to justice and efficiency, and potentially diminishing risks associated with trusting in fallible human cognition for decision-making, but their implementation potentially contains some measure of risk of discrimination, unfairness and opacity. Therefore, the concept of "risk" is central for understanding attempts of regulating algorithms. Through document analysis of legislation and policy documents of the Brazilian National Council of Justice and the European Commission for Efficiency in Justice, Hedler compares the different ways in which regulatory attempts conceptualise the difference between risk and danger in the attempts to mitigate the potential harmful effects of the introduction of algorithms within the legal system. The article draws on the distinction between risk/danger used in Niklas Luhmann's "Sociology of risk" to elucidate the different ways that risk is articulated in communications about algorithmic regulation.

In their contribution, *Algonormative expectations*, Germano Schwartz and Renata Almeida da Costa analyse how contemporary society has developed algorithms as a way of reducing its own complexity. The authors argue that algorithms' function is to reduce the complexity of expectations, cognitive as well as normative, and of expectations of expectations, including juridical decisions. The article draws on Luhmann's concept of normative expectations and on Hydén's concept of juridical norms in its aim to analyse how algorithms' artificial communication influence normative expectations (Luhmann) and juridical norms (Hydén). The authors raise the question: is it possible to defend the existence of algonormative expectations? To respond, the article seeks to define in what way the employment of the theories developed by Luhmann and Hydén contribute to the development of the concept of algonormative expectations. Thus, the article advances theoretical approaches to artificial communication, and it examines, inspired by Esposito, the conditions for the observation of algonormative expectations.

Lucas Fucci Amato's article, *The legacy of Luhmann's sociology of law: a dialogue among social theory, jurisprudence and empirical research* maps the possibilities of adopting systems theory in order to couple three usually isolated domains: social theory,

jurisprudence and empirical research. Amato argues that these different uses may be considered the distinctive legacy of Luhmann's work for legal research. The article suggests that investigations interested in adopting a systemic approach for discussions in the three domains should focus on the entanglement among interactional, decisional and functional systems. Yet, as the author points to, this presupposes enhancements in Luhmann's description of law as a social system. The article's primary hypothesis is that a functional system's out-differentiation, that is, its specialisation in face of other communications happening in the societal environment, depends on the inner-differentiation of that system, meaning the operations backed by the very construction of specific functional-systemic institutions and semantics, including decisional programs and self-descriptions.

The contribution by Karin Buhmann and Jingjing Wu, *Global crisis governance in response to scientific information: Comparing and understanding regulatory responses from WHO and IPCC concerning the COVID-19 and climate crises*, examines determinants of effective communication by analysing WHO and IPCC statements on COVID-19 and climate change and responses by the Danish government. Applying a systems theoretical approach, the authors analyse how communications across functional sub-systems may drive relevant change in the event of crises. Based on their analytical findings, the authors argue that, in the COVID-19 crisis, the WHO was effective in getting the Danish government to take action as WHO communications emphasised effective governance and the delivery of health care. Contrary, in regard to the climate crisis, the true/false logic of science deployed by IPCC appeared to fail to activate governmental decision-makers. Addressing public governance and demonstrating the empirical application and relevance of Luhmann's systems theory, the article sets out potential for communication between scientific and governance agencies for crisis responses as its findings illustrate how decision-makers may be prompted into action through other functional sub-systems' deployment of arguments that connects to governments' binary codes.

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