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Legal Forms and Reflexive Legal Forms: A New Approach to Reflexive Law

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Abstract: The possibility of steering social change through law has long been a central topic in the socio-legal literature. This article revisits the debate between Luhmann and Teubner on the matter and argues that it is possible to find a contextual and contingent common ground between their views. For this purpose, it proposes a new approach to reflexive law through a combination of Spencer-Brown's "laws of form" and Luhmann's theory of socio-legal evolution. The initial step is to develop the notion of "legal forms", contending that it facilitates the observation of different combinations of normative and cognitive orientations of law thereby increasing our capacity for observing and assessing the interactions between law and society. It argues that the understanding and observation of "legal forms" sheds new light on the possibility and limits of social steering through law. This lays the foundation for introducing the notion of "reflexive legal forms," that is, legal forms that have higher learning dispositions and are, therefore, better prepared to steer social change. Subsequently, the article applies the Luhmannian understanding of socio-legal evolution to explain the possible emergence and operation of reflexive legal forms as mechanisms that increase the probabilities of socio-legal evolution. Finally, it presents a case in which this new approach to reflexive law was applied: the conservation right, a new property right for environmental conservation recently enacted as law in Chile.

Introduction

There is a long-standing socio-legal discussion about whether and to what extent it is possible to steer social change through the law (Teubner 1986a)[1]. The debate

1 In recent decades, this socio-legal discussion has been reflected not only in various theories of regulation but also in various theories of governance. For a broad overview in this regard, see Paul/Mölders/Bora et al. (2017), and particularly Paul/Mölders (2017) and Bora (2017; 2014).

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between Luhmann and Teubner is one of the most significant and representative discussions on the matter (Luhmann 1992b; 1997). Luhmann (1987; 1992b) maintains that the legal system cannot be used as an instrument for social engineering and that it would be under threat if deployed in this manner. Conversely, Teubner (1986b; 1993) applies the same theoretical tradition of social systems and argues that social steering through law is still possible by using a post-instrumental strategic model he refers to as "reflexive law."[2]

This article revisits their debate and through a combination of Spencer-Brown's "laws of form" and Luhmann's theory of socio-legal evolution, it aims to shed new light on the possibility and limits of steering society through law. For this purpose, it presents and develops the notion of legal forms contending that it facilitates the observation of the interaction between law and society and should play a central role in the socio-legal understanding of law.

Though Niklas Luhmann did not develop a detailed account of the notion of 'legal forms', his general application of George Spencer-Brown's laws of form, as well as his general references to the idea of legal forms, will serve as the basis for a more detailed elaboration and development of this notion. This analysis will then be applied to explore the potential and constraints of social steering through law because, as will be explained, legal forms are the specific mechanisms that combine the normative and cognitive orientations of the legal system. Therefore, the observation of specific legal forms will allow us to consider how they operate and perform in specific contexts, with respect to specific normative expectations that originate in other spheres or subsystems of society.[3]

I argue that a proper understanding of legal forms allows us to observe the dynamic and non-linear relationship between the normative and cognitive orientations of law. This analysis shows that, consistent with Luhmann's perspective, the normative and cognitive orientations of law are not necessarily opposing trends

2 Paul/Mölders (2017, 4) emphasize that contemporary views and practices reveal a resilience in the belief in the steering potential of law. They explain that "the state and its formal rule-making have survived, too, despite the widely acknowledged limitations and despite repeated attempts to write them off or to at least ascribe to them with diminished relevance".

3 In the terminology of the contemporary socio-legal discussion on the matter, we could say that this approach will allow us to observe not only legal forms included in different modes of regulation (e. g., risk regulation), but also in different modes of governance (Paul/Mölders 2017). We will also be able to observe their interactions with 'forms' embedded in the communications of other sub-systems of society that can also be part of broader governance models. Moreover, the analysis of legal forms will also facilitate the observation of the global legal trends of autonomous non-state regulations (Teubner 2012; 2013; Walker 2015). See note 39 below. In any case, in this article, in order to properly revisit the Luhmann/Teubner debate, I will mostly use and maintain the original language of their relevant writings.

but rather orientations that could increase in relation to each other. In other words, Luhmann recognizes that through socio-legal evolution it is possible to consider the emergence of legal forms that can combine higher levels of normative redundancy and cognitive variety. This is the basis on which the article introduces the notion of "reflexive legal forms," that is, legal forms that have higher learning dispositions and are, therefore, better prepared to steer social change.

The understanding of legal forms in general, and of reflexive legal forms in particular, is also crucial to the overall understanding of the way in which the legal system processes (or could process) various oppositions and tensions, such as those between autonomy and heteronomy, universality and particularity, legality and law, and so on as discussed below. In addition, a deeper comprehension of legal forms enables us to analyze the performance of specific legal forms in particular social contexts, allowing us to critically assess how they address various forms of regulatory failure (Teubner 1986a; 1987).

After introducing the notion of "reflexive legal forms," this article applies Luhmann's theory on socio-legal evolution to analyze how such "reflexive legal forms" may emerge as a result of socio-legal variation and selection, as well as how these forms may be better prepared to generate and propagate socio-legal variation, increasing the probabilities of socio-legal evolution. Consequently, and in a nutshell, this article contends that the notion of "reflexive legal forms" combined with Luhmann's evolutionary theory, allows us to explore situations of potential compatibility between Luhmann and Teubner's perspectives.

The notion of reflexive legal forms presented in this article implies a new, more nuanced approach to reflexive law in two ways. First, it emphasizes the need for a combination of normative redundancy and cognitive variety. Second, it focuses on the evolutionary learning processes of the legal system. In more general terms, this approach to reflexive law and, particularly, the notion of reflexive legal forms, intends to be a contribution to the socio-legal studies that aim to clarify how legal systems can further evolve to cope with complex contemporary societies that increasingly create unprecedented uncertainties, contingencies, and risks (Ladeur 2004; Luhmann 2005; Teubner 2012).

Luhmann's socio-legal theory of law

Luhmann's social and legal theory is complex and dense. It is impossible to do justice to it in a few pages; therefore, this section focuses on the aspects that are indispensable to explain Luhmann's understanding of legal forms.[4]

General background

Luhmann (2004, 59) proposed a socio-legal theory of law that aimed at bridging the gap between traditional legal theory and sociology by considering the internal and external observations of the legal system. According to Luhmann (2004, 60), external observation enables us to "take full advantage of its being an external description which is not bound … to respect … the premises of the understanding of its object." However, this external description "should not lose sight of its object" and of its self-observing nature, meaning that "to acknowledge the fact that there are self-observations and self-descriptions of the object is the condition for a scientifically appropriate, realistic, and venture to say, empirically adequate description" (2004, 60).[5]

This theoretical approach is based on the understanding that the legal system operates by combining self- and hetero-referential observations that serve "the coordination of this process with the system's environment" (Luhmann 1988a, 20). In other words, self-reference always requires a "concurring" cognitive hetero-referential operation (Luhmann 2004). Moreover, "self-reference can neither be total self-determination nor be total (or even adequate) self-observation" (Luhmann 1988a, 20–21). This excludes the possibility of solipsistic self-determination in the legal system (Ubilla 2016a, Ch.6; Maturana 2006). Therefore, we cannot rely solely on the internal perspective for analyzing legal systems.[6]

4 See King and Thornhill (2003) for a comprehensive introduction to Luhmann's theory.

5 King and Thornhill (2003, 42) also emphasize this point by saying: "Luhmann, therefore, sees both external observation and internal description as complementary and essential elements in any sociological presentation of the legal system."

6 See Tamanaha (1996, 163) for the origin and general application of the internal/external perspective distinction in legal theory. According to Luhmann's theory, the "internal perspective" of traditional legal theory can be understood as a first- or second-order observation of a legal practice conducted by its participants (self-referential observations). In turn, the "external perspective" is a second-order hetero-referential observation of legal practices by other societal subsystems. This is consistent with MacCormick's (2008, 52) interpretation of Hart's hermeneutical perspective as non-extreme and external. From a systemic perspective, the legal practices in question are "communication" (see Nobles/Schiff 2013, 36; see note 30 below regarding other Luhmannian distinctions about "observation").

Closure and openness of the legal system

For Luhmann, the function of the legal system is the stabilization of normative expectations over time. The legal system performs this social function by combining "the closure of recursive self-reproduction and the openness of their relation to the environment" (Luhmann 2004, 19). The legal system performs this function by being simultaneously normatively closed and cognitively open. Luhmann (1986a, 113) explained that "following recent developments in systems theory, we see closure and openness no longer as contradictions but as reciprocal conditions." The closure of the legal system is expressed in that "only the legal system can bestow legally normative quality on its elements and thereby constitute them as elements" (2004, 19). The legal system is also cognitively open, as "in each of its elements and in their constant reproduction it is dependent on being able to determine whether certain conditions have been met or not" (1988a, 20). The openness of the legal system is based on the self-referential closure of the system because it is through such normative self-reference that information is selected.

For Luhmann, closure and openness operate through the combination of the normative and cognitive orientations of the legal system. These orientations of the system are used simultaneously in each operation of the legal system. "The norm quality serves the autopoiesis of the system, its self-continuation in difference to the environment. The cognitive quality serves the coordination of this process with the system's environment" (Luhmann 1988a, 20). Luhmann (1986a, 122) further explained, "All autopoietic systems have to live with an inherent improbability: that of combining closure and openness. Legal systems present a special version of this problem. They solve it by combining normative and cognitive, not-learning and learning dispositions." These normative and cognitive orientations are two different forms of "uncertainty absorption" (1988a, 20) and "reflection" of complexity (2004, 113). Normative expectations are those that "do not need to be changed in the event of being disappointed" (1988a, 19), whereas cognitive expectations relate to a factual reference within legal meanings that are adjusted in the event that the corresponding facts are different. Therefore, the cognitive orientation of law also refers to its "adaptive requirements with respect to its environment" (1986a, 122).

If the operations of the legal system combine normative and cognitive expectations, the system may need to "face up to problems of compatibility of these divergent and perhaps even contradictory attitudes. Such combinatorial constraints may bring about limits to the growth and complexity of the system. Since closure and openness can be combined this is not a hopeless contradiction and not a real impossibility" (Luhmann 1986a, 117). It is through the consideration of these combinatorial constraints that we could eventually observe "symptoms of overstrain in the legal system" that may emerge as a result of an increasing political instrumen-

talization of law (1986a, 117). This "overstrain" could result from "a new primacy of the cognitive over normative considerations" (1986a, 113–14), risking the fulfilment of the societal function of law, that is, stabilizing normative expectations.

Reflexive law: The Luhmann and Teubner debate

The debate and contrast of opinions between Luhmann and Teubner took place in a historical context of various trends of post-regulatory politics, and especially in the context of the formalist/functionalist narrative of the 20th century.[7] Their distinct approaches regarding 'social steering through law' were even more noteworthy because they both departed from an autopoietic understanding of the legal system, or more properly because Teubner adopted most of Luhmann's theoretical ideas about social systems.[8]

Teubner developed the idea of reflexive law as "a new type of rationality toward which post-modern law may be moving" (Teubner 1983, 272). He originally conceived reflexive law as a response to the challenges posed by Luhmann's understanding of a functionally differentiated society composed of various autopoietic subsystems that have developed a high degree of autonomy due to their self-referential closure. This self-referential closure of different subsystems would entail "insoluble problems" (1983, 272) for centralized social integration, implying that the legal system would not be in a position to conduct such centralized social integration. In simpler terms, this "double-closure" of law and society would prevent a direct or linear external control of society by the legal system. Therefore, Teubner (1983, 272) introduced reflexive law as an alternative that would make possible a "decentralized mode of integration" by building "reflexive structures" both in the legal system and in other subsystems of society.

At the initial stage, Teubner also introduced this notion as a contribution to Weber's account of the evolution of law, which is centered on the distinction between the formal and material orientations of law (Teubner 1983). In this context, Teubner presented reflexive law as a new type of rationality that would succeed

7 For a broader account of different post-regulatory approaches, the historical and political context of the 'reflexive law' discussion, and the importance of the autopoietic approach, see Zumbansen (2008).

8 There were, however, from an early stage, important differences in their basic theoretical approaches. In this regard, it is worth mentioning Teubner's acceptance of the possibility of graduality in the unfolding of autopoiesis (Teubner 1987, 222) and his explanation of inter-systemic 'coupling through interference' (1993, 77, 86), which, as we will see, is directly related to his notion of 'reflexive law.' See also note 12 below.

both the formal rationality of the liberal state and substantive rationality of the welfare state (Weber 1978).[9] Formal legal rationality was expressed in the separation of law and politics, strict rule-orientation, universality of norms, procedural justice, and legal professionalization (1978, 333). In socio-legal terms, it was considered that this rationality presented inadequacies of legal complexity and had not "adapted to the exigencies of a highly differentiated society" (Teubner 1983, 271). The "crisis of formal legal rationality" was tackled through the welfare state law, by which the political system assumed the responsibilities of correcting market deficiencies, developing a "substantive rationality characterized by particularism, result-orientation, an instrumentalist social policy approach, and the increasing legalization of formerly autonomous social processes" (1983, 268). This "rematerialization" of formal law, in turn, was conducive to "a rationality crisis of the political-legal system since the various social subsystems in a functionally differentiated society have developed such a high degree of internal complexity that none of them … could evolve the necessary control capacity" (1983, 271–272).[10]

It was generally considered that this failure or crisis of the welfare state law could not be tackled either through a new formalization of law, that is, deregulation, nor through a further materialization approach (Paterson 2006; Teubner 1983). Consequently, different "third alternatives" were offered including the "procedural paradigm" (Habermas 1996), "responsive law" (Nonet/Selznick 2001), and reflexive law (Teubner 1983). As Paterson (2006, 22) explained, the different proposed alternatives were expressions of the different theoretical understandings from which they departed. In the case of reflexive law, such a theoretical understanding was the aforementioned Luhmannian account of a functionally differentiated modern society, which presented the challenge of the self-referential closure of law and different spheres or subsystems of society (Luhmann 1995c, 332–334).

To distinguish reflexive law from formal rationality, Teubner (1983, 254–255) explained that reflexive law "does not merely adapt to or support "natural social orders …" but searches for "regulated autonomy." Then, to distinguish reflexive law from substantive law, he suggested that the first "shares with substantive law the notion that focused intervention in social processes is within the domain of law, but it retreats from taking full responsibility for substantive outcomes" (1983, 254).[11]

9 Regarding formal rationality, see Weber (1978, 333). Regarding material rationality, see Weber (1978, 392).

10 This regulatory crisis was famously depicted in Habermas (1975) and described by Teubner (1987) as a regulatory trilemma.

11 Teubner (1983, 272) further added that the difference between reflexive law and substantive rationality stems from the understanding that "functional differentiation requires a displacement of integrative mechanisms from the level of the society to the level of the subsystems," so that "to

This is because reflexive law does not pursue the direct or linear regulation of social processes but aims to facilitate the unfolding of self-regulating social systems. In this context, reflexive law "seeks to design self-regulating social systems through norms of organization and procedure" (Teubner 1983, 254). Then, while explaining the "internal rationality" of reflexive law, Teubner (1983, 255) declared that "reflexive law tends to rely on procedural norms that regulate processes, organization, and the distribution of rights and competencies. Under a regime of reflexive law, the legal control of social action is indirect and abstract, for the legal system only determines the organizational and procedural premises of future action."

In a subsequent stage of development of the concept of reflexive law, Teubner (1986b, 309–310) emphasized the idea of self-referentiality, and reflexive law appeared to be a post-regulatory strategy that facilitates the compatibility of "the self-referentiality of various subsystems." Here, Teubner identified two fruitful directions of analysis; one relates to the limits of regulation, whereas the other relates to the social knowledge required for regulation (necessary for acting within its limits). A regulatory action is successful if the self-reproduction of both the regulating and the regulated systems are not trespassed. If this were the case, it would mean that regulatory efforts conform to conditions of structural coupling between law and society. Thus, if regulation does not conform to the self-referentiality of the regulated systems, that is, to the autonomy of the regulated systems, then the legal system faces the regulatory trilemma (Teubner 1986b, 311). At this stage, Teubner (1986b, 319) identified three dimensions of reflexive law: (1) autonomy of the different subsystems, (2) externalization of the observation capacities of the subsystems, and (3) coordination among systems.

Subsequently, Teubner (1992, 1458) focused more intensely on structural coupling, and particularly on the idea that there are institutions called "linkage institutions" that are "responsible for the duration, intensity and quality of structural coupling." Here, Teubner (1992, 1458) indicated that "structural coupling as such leads only to transitory structural changes." Therefore, reflexive law would seek in some sense to enhance the structural coupling of law and other subsystems (Paterson 2006, 24).

In a later statement, Teubner (1993, 65) explained that he intended to analyze "the relationship between legal autopoiesis and social regulation." He stated, "We can … talk of reflexive law if, and only if, the legal system identifies itself as an autopoietic system in a world of autopoietic systems and faces up to the consequences" (1993, 65). In this respect, Teubner (1993, 66) said that reflexive law intends

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achieve integration under conditions of extreme functional differentiation, the different subsystems must, according to Luhmann, be mutually supportive," and "stand in a meaningful relation of compatibility," rather than be subject to a mode of "centralized social integration."

to answer the question, "How does legal rationality respond to a high degree of functional differentiation in society?" and more importantly, "How is it conceivable that the radical closure of legal operations also means its radical openness in relation to social facts, political demands, and human needs?" (Teubner 1993, 66). Teubner stated, "my tentative answer is that social regulation through law is accomplished through the combination of two diverse mechanisms: information and interference. They combine operative closure of the law with cognitive openness to the environment." (1993, 66).[12] In this context, he proposed the following "feasible forms of indirect intervention" (1993, 77): reciprocal observation, coupling through interference, and communication through organization.[13] "[I]t is the combination of the two [information and interference] which makes social regulation through law possible – even if … this takes place in an extremely indirect and rather uncertain way". If law becomes "reflexive … it can increase its regulatory potential to a certain extent" (1993, 40).

For the purpose of the present article, it is important to note that Teubner's (1993, 40) "forms of indirect intervention" or "reflexive mechanisms" refer to the inter-systemic interaction between law and other social spheres; therefore, he did not focus on analyzing how legal forms themselves are adjusted by the implementation of those reflexive mechanisms.[14] He then concluded, "However, despite all 'reflexivity', law is still a closed autopoietic system. It is impossible to break down the barriers that result from this double closure." (1993, 40) Therefore, Teubner concluded with a sobering understanding of the possibilities of reflexive law in light of the double closure of the legal system and society. Any attempts to steer society in a particular direction depends on contingent – not necessary but possible – self-referential observations of the systems involved.[15]

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12 "Information" refers to reciprocal observation between the legal system and other subsystems of society, whereas "interference" refers to the structural coupling between the legal system and other social subsystems. For Teubner, "[I]nterference is a bridging mechanism whereby social systems get beyond self-observation and link up with each other through one and the same communicative event" (Teubner 1993, 86). See also note 38 below.

13 Later, Paterson and Teubner (1998) have referred to four "scenarios" of reflexive law: tangential response, bifurcation and attractors, synchronizing difference reduction, and binding institutions. Attractors and binding institutions fit with the previous tripartite arrangement, whereas tangential response and synchronizing difference reduction were new additions (Paterson 2006, 24).

14 Teubner (1983, 255) presented only passing comments on some specific legal institutions, as when he compared reflexive rationality and formal rationality and said: "Reflexive law, unlike formal law, does not accept 'natural' subjective rights. Rather, it attempts to guide human action by redefining and redistributing property rights." Moreover, he did not make some basic distinctions on legal forms. See note 26 below.

15 At a later stage, Teubner (2012) appeared to focus on global constitutionalism beyond the nation-state, reflecting on the increased relevance of functional differentiation vis-a-vis stratifica-

Despite this somewhat unambitious approach, Teubner's position raised Luhmann's (1986a; 1992b; 1997)[16] concerns regarding the theoretical possibility of the reflexive law model. The main issue at stake is whether reflexive law is consistent with autopoiesis. Luhmann (1992b, 393) believed that attempts at social steering are simply unrealistic, that "reflexive law can only be self-reflexive law. Only in the manner in which it reproduces itself can it take account of the fact (and perhaps, take more account of the fact) that society (and hence, also law itself) reproduces itself autopoietically. This approach can only reinforce the self-sensitivity of law to its actual social conditions – but even this is a great deal." By using the example of the legal concept of action as a means of attributing liability, he proposed that "the reflexivity of 'reflexive law' could, however, bring home to jurists how little their observation system and that which they define as action, coincides with the operations and self-observations of the other autopoietic systems. Then, it would be more normal for a new definition of action to be worked out in the courtroom and taken down in records. But, at the same time, this means that there is no guarantee whatsoever that this new action can then be transferred back into the autopoiesis of the mental and social environment of law" (Luhmann 1992b, 394). Luhmann (1986a) also warned that all attempts at social steering may cause critical overstrain on the legal system, to the extent that it may provoke involution or the de-differentiation of the same. All this means that for Luhmann (1986a), one may only rely on contingent legal evolution – which he appears to present as opposed to the idea of social steering through law.[17]

Therefore, at the heart of the disagreement between Luhmann and Teubner lie two important questions or concerns:[18] first, whether reflexive law is consistent

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tion and territorial differentiation. Here, Teubner observed that the legal system has established direct "partnerships" with other functional systems, through which non-state-centered functionally delineated societal constitutions have emerged. In this process, he observed that the normative expectations of the different functional systems are stabilized through *reflexive processes* in the legal and functional systems. Here, Teubner (2012, 104) referred to "double reflexivity" and stated: "Constitutions emerge when phenomena of double reflexivity arise-the reflexivity of the self-constituting social system and the reflexivity of the law that supports self-foundation."

16 In Luhmann (1986a), we do not find an explicit reference to 'reflexive law' but we find extensive arguments against 'social steering through law'. In this sense, it should be considered part of the mentioned debate – or contrast of opinions – between Luhmann and Teubner.

17 However, as we will see in subsequent sections, the distinction 'social steering or evolution' appears to be too simplistic, even under Luhmann's theory of socio-legal evolution.

18 King (2006, 45–46) states that the difference between Luhmann and Teubner "is not so much that one believes in reflexive law and the other does not. It is rather that the one is increasingly interested in finding ways of enhancing the performance of the legal system, while the other had absolutely no ambitions in this direction." The present article argues that focusing on "legal forms"

with or entails an "overstrain" or endangerment of the function of law; second, whether law is capable of identifying "itself as an autopoietic system in a world of autopoietic systems" and handle the corresponding "burdens of reflexion" (Paterson 2006, 30). These concerns are delt with in the following two subsections.[19]

The first concern: the "overstrain" or endangerment of the function of law

Regarding the first concern – whether reflexive law "overstrains" or endangers the function of law, that is, whether it entails throwing the legal system back to cognitive learning, thereby weakening or eliminating the "normative stabilization of expectations" – Luhmann (1992a, 176) noted that attempts to respond to social complexity through legal programs, result in "vagueness, situation dependence and fluctuation." However, Teubner (1983, 271) recognized that "[l]egal doctrine is still bound to the classical model of law as a body of rules enforceable through adjudication." Thus, various reflexive mechanisms would still operate within a system of stabilized normative redundancies. In other words, applying Luhmann's understanding of how the legal system combines its normative and cognitive orientations,

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and "legal evolution" provides a contingent common ground between the theoretical visions of Teubner and Luhmann.

19 Even though the present article refers to the debate or contrasting ideas between Luhmann and Teubner, let's mention here that Luhmann's theory presents the same obstacles or concerns to Helmut Wilke's approach (1986; 1987; 1993; 2016), because Willke and Teubner share the belief that in regulatory processes the relevant social subsystems establish mutual co-ordination, for which the law provides the co-ordinating mechanisms (Teubner/Willke 1984, 7). Willke proposes 'contextual orientation' as an option to both natural evolution or de-differentiation (Willke 2016, 20–21). 'Contextual orientation', he argues, makes possible the intervention into self-referential systems, avoiding the risk of de-differentiation (Willke 2016, 20–21). He says that to achieve 'contextual intervention', systems "need a contact with the environment" or that those contacts must be "incorporated as contextual information" of the recipient system, and so, his focus is on the "intervention into self-referential systems" (Willke 2016, 21). Willke (2016, 22) says that "directed interventions into autonomous systems … can be successful if they respect and re-enforce the autonomy of the intervened system". In general, it is possible to say that Willke's approach does not solve the challenges posed by Luhmann to reflexive law. Even though he says that it is important to respect the autonomy of the regulated systems he does not appear to show how this is done within the legal system. The challenging question is not about the general notions of 'reflexivity' or 'contextual orientation' themselves. It is about how the legal system contingently achieves such reflexivity or contextual orientations without encountering the obstacles or concerns raised by Luhmann. There are also other authors that, though not referring to the Luhmann and Teubner debate, touch on aspects that are relevant to the discussion. For instance, Amstutz and Zamboni focus on legal evolution, and we will refer to their views in note 50 below.

reflexive legal forms would still be able to interact with the existing normative redundancies of the legal system in such a way that the new societal practices or legal communications – that will unfold as a result of the reflexive legal forms – will be understood in the context of those existing redundancies. Therefore, the stabilization of normative expectations will result from the interaction of the different normative elements of the legal system. New reflexive legal forms will be combined with preexisting normative redundancies, thereby producing new social communications and normative redundancies in the legal system. This process would contingently stabilize expectations at a higher level of concurrent normative redundancy and cognitive variety. In any case, this will become an empirical question to be observed.[20]

However, the issue is that Teubner did not focus on the combination of normative redundancy and cognitive variety and even less on how such a combination could unfold. This is an important aspect of what the present article intends to contribute. The first question is whether new legal forms can combine a higher cognitive capacity with normative redundancy. As explained below, Luhmann did accept that such legal forms may unfold as a result of legal evolution. But then, a second question arises: can the development of reflexive legal forms be consistent with Luhmann's understanding of legal evolution? We will focus on these questions in the sections on reflexive legal forms and legal evolution.

The second concern: the burdens of "reflexion" of its own autopoiesis

Regarding the second concern relating to the "burdens of reflexion" that may derive from the legal system identifying itself as an autopoietic system in a world of autopoietic systems, Luhmann (1992b, 393) questioned, "to what extent the theoretical apparatus of the legal system … is capable of perceiving and taking into account autopoietic systems in its environment"; he was unsure whether this is possible: "If [law] must make indications with the aid of this distinction [legal/illegal], then

20 I have also emphasized that in contemporary global society, the legal system must adjust to increased social and ecological complexity, which appears to entail a major shift toward a future-oriented social perspective of an unfolding contingent future (Ubilla 2016a, Ch. 1, 5 and 6). Therefore, the legal system must fulfill its function to stabilize normative expectations while adjusting to the prevailing social and ecological complexity. This requires new legal forms that combine the normative and cognitive orientations of law to achieve what could be called the 'reflexive stabilization of normative expectations'. As Vesting (2004, 268) argued, "modern law can only achieve a limited security of expectations."

what limits are thereby imposed on insight into the autopoiesis of environmental systems?"

However, Luhmann (1986b, 186) also stated that law "as an autopoietic system observing autopoietic systems, it cannot avoid gaining information about itself." Luhmann (1992b, 411–412) was concerned about "how in particular the legal system … will cope with the burdens of reflexion" and how this "reflexion confronts the system with the paradoxicality to which it owes its existence." This is due to the fact that "if an observer … wants to observe the continuous deframing and reframing of frames, the autopoietic operation of observing systems (including himself), it will end up with paradoxical formulations. It would have to say that the different is the same, that the distinction of marked and unmarked is one distinction among others … Observation has to operate unobserved to be able to cut up the world" (Luhmann 1995b, 46). Simply, the "burdens of reflexion" would be the result of the overlapping of the observations of various observing schemas, which may even cause the legal system to operate with distinctions that are different from the legal/illegal code, causing contradicting observations of the same communications.

According to Paterson (2006, 33), although this is a major issue, it is important to remember that all social systems "develop strategies of deparadoxification,"[21] He explained that Luhmann himself (paradoxically!) may provide an answer. Luhmann (1990, 137) stated that "it is not necessary to risk the glance into paradoxicality; rather, it is sufficient to develop thoughtful procedures for observing observation, with the special emphasis on that which, for the other, is a paradox and, therefore, cannot be observed by him." Luhmann (1988b) referred to legal evolution as a historical process that could deparadoxify the paradox of reflexive law and alluded to the possibility of feeding legal sociology into the system through legal training. Therefore, it could be said that Luhmann himself accepted that socio-legal evolution could develop structural complexity to avoid or "unfold" the mentioned paradoxes.

It is possible to say that, in the same way that Luhmann recognizes that second-order observation of the legal system may feed from observations of and from legal sociology (social science), the same second-order observation may gain insight into the autopoietic nature of itself and of other subsystems. I believe this may specially occur through the legislative process, within which recursive observations on previous regulatory failures will be available. In the face of these regulatory failures the legal system may contingently learn about its own failed observations and, moreover, it is in this same legislative process that observations of other subsystems

21 Luhmann (1995b, 52) stated: "if we could develop theoretical frames of sufficient logical and structural complexity to dissolve our paradoxes, we may find that there still is one paradox left – the paradox of observing systems."

(especially politics) will normally transpire, showing how blind and self-referential the failed legal observations have been.

However, I also believe that the legal system as such does not need to identify itself as an autopoietic system to create learning processes that may facilitate the emergence of reflexive legal forms. This resonates with Luhmann's (1990, 137) statement: "It is not necessary to risk the glance into paradoxicality." Therefore, what the legal system needs is exactly to trigger or have in place learning processes. In this regard, Luhmann noted that what is missing is "[a] conceptual system oriented towards social policy which would permit one to compare consequences of different solutions to problems, to accumulate critical experience, to compare experience from different fields, in short: to learn" (Teubner 1983, 264, citing Luhmann 1970, 19).

However, this is not a theoretical objection to reflexive law but rather an empirical question, as Paterson (2006, 32) rightly noted. As mentioned, Luhmann (1988b; 1988c) referred to legal evolution as a historical process that could deparadoxify the paradox of reflexive law and alluded to the possibility of feeding legal sociology into the system through legal training. In simple terms, the feeding of legal sociology into the system could take place through socio-legal training and result in the legislative proposition of what we will call reflexive legal forms, which could operate as evolutionary mechanisms to the extent that the corresponding evolutionary conditions for historical change are present.[22] Under this view, the legislative proposition of reflexive legal forms would be based on a socio-legal assessment of the corresponding regulatory area and serve as a mechanism for the nesting of reflexivity into the legal system,[23] considering the relevant normative redundancies to be combined with elements that facilitate cognitive variety. The relevant normative redundancies of the corresponding legal form could provide the "structural complexity to dissolve our paradoxes" (Luhmann 1995b, 52) while interacting with the elements that facilitate the unfolding of cognitive variety.

Therefore, regarding the two concerns raised by Luhmann, I argue that they can be generally responded to by further elaborating and applying the notions of legal form and reflexive legal forms in a manner consistent with Luhmann's socio-legal theory as follows: Regarding the first concern, the possibility of a reflexive law that

22 It is also interesting to note that the unfolding of these learning processes – and the corresponding socio-legal evolution – will highly depend on the corresponding legal culture. Thus, as Febbrajo (2020, 31) observed, "legal cultures are basically connected to a not only normative but also cognitive approach that concretely suggests different combinations of legal and social norms in different situations."

23 Luhmann applied this idea while referring to the "nesting" of *purposive programs* into *conditional programs* (see King/Thornhill 2003, 62).

does not endanger the function of law depends on the possibility of legal forms that duly combine normative redundancy and cognitive variety, that is, it depends on the emergence of reflexive legal forms in the legal system. Regarding the "burdens of reflexion" of its own autopoiesis, the possibility of reflexive law rather relates to the unfolding of learning processes, of processes that observe observation. This appears to be an empirical possibility that can be connected to the possibility of having legal sociology fed into the norm creation processes, and especially into the legislative process.

Both responses relate to legal evolution; therefore, they are both contingent and empirical matters. This implies that reflexive legal forms are contingently possible. This is what I meant when I said that it is possible to find a contingent and contextual common ground in the Luhmann-Teubner debate about the possibility of steering social change through law. It is a contingent common ground because it depends on the case-by-case empirical possibility that such reflexive legal forms unfold (that is, unfold and operate as such) in the process of socio-legal evolution. The notion of "steering" involved here, as pursued by Teubner and in this article, is not the traditional, direct, and linear understanding of guaranteed social control through the law; rather, it is an indirect and contingent increase of the probabilities of "coordination with other social systems" (Teubner 1983, 255).

In the following sections, I will present Luhmann's general use and application of George Spencer-Brown's (1994) laws of form to provide a general context for our subsequent elaboration of the notion of legal forms and further introduction of the notion of reflexive legal forms. Thereafter, I will further argue and explain how the understanding of the contingent possibility of the evolutionary emergence of reflexive legal forms provides a contextual common ground in the Luhmann-Teubner debate about the possibility of steering social change through law.

Luhmann's theory and Spencer Brown's 'Laws of form'

This section provides a general overview of how Luhmann uses and applies George Spencer-Brown's (1994) laws of form. It then reviews his distinction between medium and form and, finally, in the realm of law, presents Luhmann's different views of formality in law and some of his general references to legal forms.

General remarks

Luhmann's understanding of the way in which social systems "observe" the social environment is based on George Spencer-Brown's (1994) laws of form.[24] As will be discussed in detail below, George Spencer-Brown's (1994) laws of form explain that any observation begins with the drawing of a distinction, which entails the setting of an internal boundary in a whole. A distinction "indicates" one side of the distinction, leaving the other side as "non-indicated." (Spencer-Brown 1994, 4–5). The "form" is the result of the distinction, that is, it comprises both the indicated and non-indicated sides. Luhmann (1999) associated the functional differentiation of society, which implies a potential infinity of observer positions and perspectives, with Spencer Brown's epistemology of observing and its concept of form. In this sense, in Luhmann's theory there appears to be "multiple relations of adequacy between structural complexity of contemporary societies and the flexibility of a form-concept that is separated from the notion of matter" (Gumbrecht 1996, 580).

According to Roberts (1999, 28), Spencer-Brown's laws of form are an inquiry into the paradox involved in all observation. For the world to see itself, "it must first cut itself into at least one state which sees, and at least one other state which is seen … Whatever it sees is only partially itself. We may take that the world undoubtedly is itself (i. e., indistinct from itself), but in any attempt to see itself as an object, it must, equally undoubtedly, act so as to make itself distinct from, and therefore, false to, itself" (Spencer-Brown 1994, 105). For Luhmann (1995b, 46) this is the foundational paradox of observation: "The world is observable because it is unobservable."

This applies to every social system, as they are all observing systems. They unfold and differentiate in a process that can be seen as the world cutting itself to observe itself. Therefore, according to Luhmann (1999, 20), "[d]ifferent observers cut through the world in different ways, distinguishing differently, use different forms, and thus construct the world not as a universe but as a 'multiverse'".

According to Baecker (1999, 4), there are two reasons why social-systems theory adopted Spencer-Browns laws of form. The first is "the explicit inclusion of the observer in the operations he performs, together with the possibility of observing, by using the indication (i. e., distinction) of the "form" of his distinction". The second is that "both the concatenation of the operations performed by drawing distinctions and observations of these operations performed by drawing other distinctions constitute a perfect example of communication". In other words, as he further explains,

24 Schorr (1999, 74) explains the importance of Spencer-Brown's work saying that while Kant discovered that all concepts are grounded in the use of forms, Spencer-Brown tackled the problem of the unity of form.

"drawing distinctions and thereby creating the space of choice is exactly what communication does" (1999, 4). Further these two reasons are central to social-systems theory because taking 'observation' and the 'observer' seriously means at least three things: first, "the social realm is understood to be a realm of communications performing observations", second, "these observations made via distinctions, if operative inside social systems, are themselves observed. Social systems emerge on the level of second-order observations" (1999, 4), and third, the sociological inquiry is itself carried out through distinctions.

Medium and form: Symbolically generalized media of communication

According to Luhmann (2012, 116), "[c]ommunication systems constitute themselves with the aid of the distinction between medium and form". Then he adds, "when we speak of 'communication media' we always mean the operational use of the difference between medial substratum and form".

This distinction "decomposes the general problem of structured complexity with the help of the distinction between loosely and strictly coupled elements" (2012, 117). Thus, "[a] medium consists of loosely coupled elements, whereas a form joins the same elements in strict coupling" (2012, 118), thereby making communication possible. This is the reason why he states that "it must be noted that it is not the medial substratum but only forms that are operationally connective in the system. The system cannot handle formless, loosely coupled elements" (2012, 120). Luhmann (2012, 117) also reminds us here that "by 'form' we understand the making of a distinction".

It is based on the notion of medial substratum that Luhmann further presents the notion of "symbolically generalized media of communication". He explains that "[s]ocietal communication produces various media/form depending on what problem is to be solved" (2012, 120). Symbolically generalized media of communication "gear communication in a given media area, for example in the money economy or the exercise of power in political office …". Thus, "the differentiation of these media also drives system differentiation, providing occasion for the outdifferentiation of important societal functional systems" (2012, 122).[25]

Symbolically generalized media of communication relate to "the problem of the improbability of communication" as they condition "the likelihood of acceptance or rejection" (Luhmann 2012, 190–1). So Luhmann (2012, 192) says that they are

25 See also this from an evolution-theoretical standpoint at Luhmann 2012, 236.

"symbolic" because "these media bridge the difference and supply communication with opportunities for acceptance", and, therefore, also supply communication with opportunities for 'self-reference' that make possible the emergence of sub-systems (Luhmann 1995c, 453).

Symbolically generalized media of communication "require a uniform code (central code) for the entire media field. A code consists of two opposing values …" (Luhmann 2012, 215). These media of communication "develop to the full only where the system of society is functionally differentiated" (2012, 214), because only then their central binary code is fully developed. Symbolically generalized media of communication "coordinate selections that cannot be linked without difficulty and therefore, initially exist as loosely coupled set of elements … They achieve strict coupling only through the form specific to the given medium …" (2012, 192).

The 'form' of the 'binary code' of the legal system

It is in this sense that we will also understand the general importance of legal forms in the case of the legal system. In the symbolically generalized media of 'legality' connectivity of communications is only achieved when the 'distinction' of a central binary code of the legal system unfolds. That is, when "[t]he system is able to specify the two sides of the form of its code" (Luhmann 2004, 183). So then, the "law uses a binary scheme in order to structure its own operations and to distinguish them from other facts" (2004, 182). All further communications that apply this central legal/illegal code, are legal communications. These communications are also 'communications performing observations', which therefore also entail 'distinctions'. In other words, legal communications are also – always – 'legal forms'.

Luhmann's two versions of formality

Luhmann makes an important distinction between two understandings or versions of formality, which appears to be commonly overlooked.[26] He first referred to forms that are tautologically valid as rituals or restricted codes that contain no external reference (Luhmann 1988a, 23). However, he then referred to modern law and a second understanding of formality, stating, that because of the coexisting closure

26 Teubner (1993, 40) appeared to overlook this distinction when discussing the formalization of legal norms, as he only referred to "rituals or restricted codes." In this sense, the notion of reflexive legal forms introduced in the present article can also be understood as supplementing Teubner's theory from the Luhmannian understanding of formality and Spencer-Brown's laws of form.

and openness of law "no developed legal system can rely entirely on forms" (understood as rituals or restricted codes) (Luhmann 1988a, 23). And he importantly adds that "[s]elf-reference is not only practiced simply as self-reference. Its symbolization through forms is transformed into a simultaneous practice of self-reference and external reference". So here Luhmann is referring to a different idea of form, where he says: "This does not mean that forms become superfluous but they can now be related to the fact that the connection between closure and openness must be guaranteed. This is ultimately why formalism in law is equated with conditioning and logical schematization" (1988a, 23). Therefore, these modern forms, through hetero-reference, are cognitively coupled with the external events, with the social environment.

Then, he connects this idea with the use of 'conditional programmes' which include normative self-reference and cognitive hetero-reference (i. e. references to social – moral, political, etc. – and ecological facts). So Luhmann (1988a, 23) explains: "Our task is to arrive at a more precise idea of how the continuous simultaneous processing of normative and cognitive aspects of meaning is achieved as a system" and then adds "In the legal system such conditionings are deployed with the additional, special function of combining closure and openness, normative and cognitive expectations. […] This is why the structure of the legal system – in so far as it takes de form of decision-making programs – consists of conditional programs, which establish an 'if a/then b' relation between the conditions (which have to be cognitively ascertained) and the conferment of norm quality" (1988a, 24).

The consideration of the "special function of combining closure and openness, normative and cognitive expectations" that Luhmann (1988a, 24) emphasizes (for modern legal forms and for conditional programs as a paradigmatic example of modern legal forms) is a central element of the notion of legal forms presented in this article.

Modern legal forms and legal evolution

In a different context, Luhmann also refers to the evolution legal forms, and to analyse this subject he applies the distinction between redundancy and variety – which will be discussed later. Luhmann interestingly enough explains that different legal forms have a *different potential* to combine variety and redundancy. So, he states: "In the course of the evolution of law it happens from time to time that new legal forms are found which realize a higher potential for combinations" (2004, 321).

If we consider all these Luhmannian ideas, and particularly three of them, that is, first, the idea that 'modern legal forms' involve 'a simultaneous practice of self-reference and external reference'; second, the idea that 'conditional pro-

grammes' exemplify this simultaneous practice by combining normative self-reference with cognitive hetero-reference; and third, the idea that legal forms combine redundancy and variety, the joint consideration of these ideas allows us to come to the general notion that modern legal forms are distinctions that operate as mechanisms that have the function of combining closure and openness, normative redundancy and cognitive variety, on the basis of the legal system's binary code.[27]

This brings us, lastly, to what Luhmann refers to as the "mechanisms" that combine the normative and cognitive orientations of the legal system. He explained that these mechanisms operate on two different levels: general and specific. At the general level, the system uses the fundamental technique of conditioning through which certain events (legal effects) are activated only when other events are realized. This conditional program mechanism is what we generally understand as a norm that defines a generic conditional premise (deviant behavior) and the legal consequences that derive from it (Luhmann 1986a). This notion applies not only to rules but also to other normative standards, such as principles, where the conditional premise and legal consequences may not be fully established descriptively.

The application of a conditional program requires cognitive hetero-referential operations, as the program "relies on the capacity to handle information and to learn whether certain facts are given or not" (Luhmann 1986a, 118). The cognitive orientation of law refers to hetero-referential observations performed by the law with respect to social events or observations from various social spheres that relate to the meanings included in the conditional premise, which may also relate to normative expectations from different societal spheres. The normative orientation of law refers to the self-referential observation of the legal system's prior legal communications (1986a; 2004).

The general mechanisms of conditional programs are accompanied with specific mechanisms that combine the cognitive and normative orientations of the legal system. These are "more subtle, subcutaneous ways to infuse cognitive controls into normative structures" (1986a, 118). In this regard, Luhmann referred to the judicial application of norms to specific cases: "Judges are supposed to have particular skills and contextual sensitivities in handling cases. They apply norms according to circumstances, and, if necessary, generate exceptions to confirm the rule." Subsequently, Luhmann (1986a, 119) argued that "other learning processes take place at the dogmatic level of legal concepts" because "the conceptual framework of legal doctrine adapts to changing conditions and changing plausibilities, and it may reflect and control its own change because concepts are not yet nor-

27 A fourth relevant idea – that derives from the previously cited texts – is that through legal evolution, legal forms can achieve higher combinations of redundancy and variety, which will be further discussed in the section on reflexive legal forms.

matively binding decisions." In summary, the combination of the normative and cognitive orientations of the legal system occurs through the operation of these "mechanisms": rules, principles, decisions, and legal concepts.

If we again connect this Luhmannian understanding about the 'mechanisms' with the previously proposed general notion of modern legal forms, we can conclude that each of these 'mechanisms' is constituted by one or more distinctions or legal forms, which in turn are the smallest units of selection that combine the normative and cognitive orientations of the legal system on the basis of its binary code. In fact, as will be explained, a form can be subject to a re-entry, and further distinctions may unfold. For instance, an original distinction between personal right/property right gives rise to other distinctions like ownership property right/limited property rights, and this one gives rise to other distinctions for specific kinds of property rights related to specific 'standard incidents' (Honoré 1961, 109), attributed to or included in each kind or type (e. g., use/non-use, enjoyment/non-enjoyment, disposal/non-disposal, servitude/non-servitude, encumbrance/non-encumbrance, affirmative/restrictive right, and so forth) (Ubilla 2016a, Ch.7 and 8). Strictly speaking, each distinction is a form, a legal form, that can be expressed as – or be part of – a rule, a principle, a decision or a concept.

Therefore, in order for us to be able to observe the specific interactions between law and society, we should observe how specific legal forms – included in communication[28] – combine closure and openness, normative redundancy and cognitive variety. This will also open the way to the observation of what we will call 'networks of redundancy' – networks of legal forms – and the potential variation that takes place through or in connection with them. In general, and in simpler terms, I argue that if we want to observe the interactions between law and society – including the reflexive evolutionary processes of the legal system – our observations should be directed to the operation of the corresponding legal forms and their interactions with other legal forms, and with forms of other systems of society.

On legal forms

I will now further elaborate this understanding of legal forms in three stages: first, by generally explaining how legal forms are constituted by "distinctions" in application of Spencer-Brown's laws of form; second, by considering legal forms at the level of observation, that is, by analyzing legal forms from different observational perspectives: self- and hetero-referential; and third, by considering legal forms at

28 See below the section 'Legal forms at the level of communication'.

the level of communication to observe how they process social complexity through "legal communication."

Legal forms and the laws of form

As explained, according to Spencer-Brown (1994, 76) the world makes itself distinct from itself by means of a distinction. So, he states that: "We take as given the idea of distinction and the idea of indication and that we cannot make an indication without drawing a distinction." In other words, observation entails the distinction between – and operative unity of – distinction and indication (the "distinction/indication" distinction).

Spencer-Brown (1994) explains how any "cognitive" act begins with the drawing of a distinction, which entails the setting of an internal boundary in a whole. A distinction indicates a state distinguished from the "non-indicated." The unmarked or non-indicated side remains indeterminate (Luhmann 2000, 65; Spencer-Brown 1994, 4–5). The form is the result of the distinction; it comprises both the indicated and non-indicated sides. A distinction can be a simple setting of a boundary between an object and an indeterminate "other" (x/other than x), between an object and its opposite (x/contrary to x), or between the terms of a binary coding (legal/illegal, private/public). Once the world, as an "unmarked state," is severed by a distinction, a boundary is drawn between the marked and unmarked (Spencer-Brown 1994, 29). Only then can further distinctions be drawn within the space of either the marked or unmarked. The latter distinctions reproduce the original differences between marked and unmarked spaces. The latter operation is also called the "re-entry," meaning that the original distinction is re-introduced into the indicated side (1994, 65).[29]

Moreover, the distinction establishes or presupposes an observer, which can only be observed by a second-order observation.[30] First-order observation uses a distinction; however, it cannot observe (it conceals) the second distinction it uses between observer and observed. "Whoever observes forms observes other observ-

29 Luhmann (1995b, 42) explained that the fact that social systems are based on a re-entry has several consequences. A fundamental one being that "[i]f we observe a re-entry, we see a paradox. The re-entering distinction is the same and it is not the same."

30 According to the basic epistemological understanding that, "everything that is said, is said by an observer" (Luhmann 2004, 58), systems theory allows us to distinguish the *reference* (self-reference or hetero-reference), *perspective* (by a particular observing system, such as legal, economic, political, moral, or scientific), and *level* of observations of the observing and observed systems, that is, first- and second-order observations (Luhmann 1984; 2000; 2013).

ers" (Luhmann 2000, 57). Here, we must distinguish between the observer who draws the distinction and one who observes the form used by the first observer. This is the basic distinction between first- and second-order observations mentioned above. Regarding first-order observations that draw the distinction, Luhmann (2000, 57) said that "the act of observing, along with the difference of the observation that constitutes it, escapes observation." The first-order observer only sees the indicated side. Therefore, only the observer of the form – second-order observer – can see how the observer is observing.

We must distinguish the distinction/indication distinction as an "operation" from the "object" to which such operation is referred, that is, from what is indicated/distinguished. "Every operation distinguishes something to which it refers, yet at the same time generates the distinction between the operating system and that to which the system refers" (Esposito 1999, 78–79). In other words, the fact that any distinction presupposes an observer can be described as a complex structure that includes two distinctions: between distinction and indication and between self-and hetero-reference. The first distinction allows us to consider the distinction as an "operation," whereas the second distinction allows us to consider the distinction as an "observation." The first distinction is focused on "connectivity," that is, on the connection of indication with further distinctions within the indicated side, whereas the second distinction is focused on the issue of "reference," that is, self- and external (or hetero)-reference (1999, 83). The two distinctions are directly related to two fundamental principles of the autopoiesis of observing systems: connectivity of operations (distinction/indication) and autonomy or differentiation of a given system (self-/hetero-reference). Both distinctions are circularly connected, as "operations can only be connected with other operations of the same system if the required distinction between inside and outside is maintained" (1999, 83).

For legal systems, the fundamental distinction that allows differentiation and connectivity is the law/non-law distinction, in which law is marked space and non-law is unmarked space, with the latter referring to any communications from other spheres or subsystems of society. Any matter related to the law by that sole fact immediately selects that marked space. For instance, a decision that makes a distinction between private and public law selects the marked space of the law and reproduces the difference between law and non-law (Luhmann 2000). This understanding applies to the various legal forms that integrate the legal system, namely conditional programs, judicial decisions, and dogmatic legal concepts.[31]

31 The present article refers to legal forms in general. Among various legal forms, *judicial decisions* deserve a special analysis due to Luhmann's (2004) differentiation of interpretation and application. Due to space constraints, we cannot address this here; however, part of the study is already included in Ubilla 2016a, Ch. 7.

The understanding of the laws of form is essential to the understanding of legal forms, as it allows us to consider the distinction(s) that constitute those forms and, consequently, the interconnections that are made possible between different forms and the observational references that are implied. Therefore, to understand specific forms, we need to observe them, which means that we need to consider legal forms at the level of observation. Moreover, under this approach, to understand legal forms and analyze how they process social complexity, it is also necessary to consider how they are produced and reproduced through "communication."

Legal forms at the level of observation

As we find the self-/hetero-reference distinction in every form, it can be said that the operation of a form is always simultaneous observation (Luhmann 2012, 22–26). Therefore, to understand a legal form, we need to consider the different manners in which observation occurs through – or is facilitated by – legal forms. As such, we need to observe forms, that is, observe observation. As mentioned, observing forms implies observing observers (Luhmann 2000). In the case of legal forms, we must observe how the legal system and other social spheres observe legal forms. The observation of forms is important because it is through self- and hetero-reference that the corresponding legal form – and the legal system – combine normative closure and cognitive openness.

Self-referential observations of the legal system

The first step should be to consider the self-referential observations of the legal system in relation to the corresponding legal form to grasp the distinction(s) being used by the corresponding form. In other words, we should first consider how the legal system observes its own observations – its own forms; and, for this purpose, we may observe the distinctions that are recursively and redundantly applied by the legal system through the legal form. To do this, we should observe the widely used concepts and paradigmatic cases that are considered in relation to a given legal form.

Moreover, it is important to note that the legal system's self-referential observations may apply traditional distinctions to observe its own legal forms – and their elements – such as the form/substance or form/function distinctions (Summers 2005).[32]

32 In the sociological tradition, the distinction between form and substance is generally traced back to Weber's (1954; 1978) well-known distinction between formal and material rationality.

This may well be the first step to grasp the distinctions that are relevant to the operation of the corresponding legal form. These self-referential observations of the legal system, however, do not focus on observing the dynamic and complex (non-linear) interactions between the legal system and other spheres of society.[33] Consequently, to properly grasp legal forms as operations of observation, it is also necessary to consider the hetero-referential observations of the legal system and of other spheres of society.

Hereto-referential observations of the legal system

Thus, the following step is to consider the first and second order hetero-referential observations of the legal system, and particularly the second order observations of the observations of other social spheres, such as political, moral, aesthetic, and scientific spheres, in relation to the corresponding legal form (Luhmann 1989; 1992a, 2000). In this way, we may observe the interactions between the legal form and the operations of other spheres. To conduct this broader socio-legal assessment and observe how specific legal forms "operate in society," we must be able to observe how other spheres or sub-systems of society observe the distinctions deployed by the corresponding legal forms. This means that we must observe the basic distinctions used by other spheres of society, starting with their binary codes, to observe the legal system and the corresponding legal forms.

This enables the observation of how the distinctions used by other social spheres interact with the internal distinctions of the legal system. In other words, this entails at least two levels of observation: first, observing how the hetero-referential observations of other social spheres observe the internal distinctions of the legal system; and second, observing how the legal system hetero-referentially

33 In the dynamic interaction between the legal system and society it is hardly possible to distinguish between "form" and "substance". Soper (2007) raised a similar point concerning Summers' (2006) ideas regarding the form/function distinction. Luhmann transcends the distinction between form and substance by applying Spencer-Brown's laws of form (Schorr 1999; also see supra note 27). Moreover, in a functionally differentiated society the application of such distinction appears to be highly problematic because an element that may seem "formal" from an internal perspective can be understood as "substantive" from an external perspective. Additionally, this distinction restricts the observation of various complex dynamics between law and society, as it traditionally presents the form/substance contrast as an "insoluble" and "inevitable conflict," which entails a linear contradiction between opposites (Weber 1978). In contrast, as discussed below, Luhmann considers different potential combinations between the normative and the cognitive orientations of law, including those that involve a concurrent increase of both.

observes the hetero-referential observations of other social spheres in relation to the legal system.

Moreover, it is important to note that the observations of other social spheres differ not only in their social perspective but also in their time dimension (Luhmann 1995c, 78–79). Traditional discourses and legal forms may not be well placed to adapt to high-speed economic, scientific, technological, or ecological processes. Thus, certain legal institutions that apply distinctions that appear to be justified by a purported legal, moral, or political social function may turn out to be ineffective or even counterproductive with respect to the corresponding regulatory objective (Ubilla 2016a, Ch.4). Therefore, we must consider not only the hetero-referential observations of other social spheres but also how a given legal form dynamically performs through time in such interactions.

Legal forms at the level of communication. Application of the redundancy and variety distinction

To further understand – and observe – the dynamic operation of legal forms, it is necessary to analyze how their corresponding "distinctions" are produced and reproduced through "communication," that is, through "legal communication." Moreover, in this way we can also observe how legal forms process social complexity through communication.

Luhmann drew from information and communication theory to observe how a given system processes social complexity, that is, to observe the interactions between a system and its social environment. In the case of the legal system, he focused on observing how the system combined the normative and cognitive orientations of law through communication (Luhmann 1986a; 1995c; 2004). In order to observe communication, Luhmann (1995a; 2004) first applied the redundancy and information distinction. Redundancy refers to a meaning that repeats or remains unchanged, while information refers to a meaning that is new or previously unknown to the system. As redundancy is the necessary background from which information emerges, the two sides are closely linked. According to Luhmann (1995a, 292), "[w]ithout redundancy, no information would be recognizable, since it would not be distinguishable from other information."

Luhmann (1995a, 292) explained that when applying these ideas to systems theory, it is necessary to replace the overly general concept of information with the concept of variety,[34] as "variety provides a measure of complexity, namely

34 Luhmann referred to Atlan (1972; 1974) and others.

the number and multifariousness of events which set off information within the system." The redundancy/variety distinction was originally developed to explain how communication and communication systems process complexity – how order unfolds from noise (Atlan 1972). Consequently, the redundancy/variety distinction can be applied to analyze how legal forms process social complexity through communication. In simple terms, this distinction can be used to observe the meaning(s) "indicated" in various legal forms, allowing us to grasp meanings that have stabilized and those that vary or allow for variation and adjustment.[35]

For Luhmann, the redundancy/variety distinction is directly related to the internal structure of communication, which includes information, utterance, and understanding.[36] Redundant information can generate variety in terms of utterance and understanding.[37] Redundancy or variety of a given communication can be observed from a self- or hetero-referential perspective (Stichweh 2000). From the self-referential perspective, this distinction makes it possible to observe not only specific legal forms but also different ways in which different stabilized meanings of different legal forms – the indicated side of the applied distinctions – are combined and linked, which can be understood as networks of redundancy. By further observing these networks of redundancy, we can observe ways in which various redundancies interact and, eventually produce new variety.

From the hetero-referential perspective, this distinction facilitates the observation of how redundancies in the legal system interact with observations from other social spheres.[38] All these remarks help us understand how this approach allows

35 *Redundancies* are the informational correlate of structures and refer to what is already established as information within the system, whereas *variety* refers to what appears as information that is new or still unknown (Luhmann 1984).

36 See Stichweh (2000, 13) regarding the importance of this structure.

37 Luhmann (1995c, 138–139) altered the traditional information-transfer model by attributing a constitutive role to the processing of information by the "receiver" (Rasch 2000, 52). As such, Luhmann (2004, 75) considered "speech act theory" as insufficient.

38 This distinction allows us to observe how the legal and other systems *rely* on each other's *structures* on an *ongoing basis*. This relates to the idea of "structural coupling," which exists "if a system presupposes certain features of its environment on an ongoing basis and relies on them structurally" (Luhmann 2004, 382). According to Stichweh (2007, 530), one of Luhmann's most well-known disciples, "Structural coupling even in Luhmann remains too much a vague metaphor." Regarding this notion I have provided a critical assessment by referring to the foundational writings of Maturana (Ubilla, 2016a, Ch. 8). It is important to note that the understanding of reflexive legal forms presented in this article is valid and relevant no matter how the interaction between the legal system and the social environment is conceived, whether as "interpenetration" (Luhmann 1995c, 210–213), "interference" (Teubner 1993, 89), or giving rise to a "social domain" as I have argued elsewhere (Ubilla, 2016a, Ch. 8). For other discussions about law, intersystemic communication, and structural coupling see Febbrajo and Harste (2013).

for a multi-perspective observation of meaning and the observation of the dynamic interplay between law and society.[39] This dynamic interplay is expressed in the fact that redundancy can enter processes of variation, and variation can become stabilized, giving raise to redundancy.[40]

Moreover, as mentioned, the redundancy/variety distinction allows us to clearly see the non-linear relationship between the normative and cognitive orientations of law, as it makes possible the observation of not only situations of possible binary contrast, in which the increase of normative redundancy entails the reduction of cognitive variety, but also potential situations of concurrent higher combination, in which greater normative redundancy can co-exist with greater cognitive variety – greater capacity to process new information (Luhmann 2004).

On reflexive legal forms

As Luhmann explained, through the evolution of the legal system, new forms can unfold that can have a higher capacity to combine a concurrent increase of redundancy and variety. According to Luhmann, "[i]n the course of the evolution of law it happens from time to time that new legal forms are found which realize a higher potential for combinations," which means that "variety and redundancy are matters that can both increase in relation to each other" (2004, 321).[41] Based on

39 Moreover, this approach will also be particularly relevant to the observation and understanding of the new phenomena of global law, because these notions facilitate the observation of the normative redundancies – and variations – across different national, transnational or global sites. In other words, these notions may facilitate the observation of the normative and cognitive aspects of jurisdictionally unrestricted normative structures and their different interconnections and networks of meaning locally, regionally and globally. In this sense, this understanding facilitates the observation of those aspects of global law that Neil Walker describes as "the emergence of a trans-systemic and often explicitly inter-systemically engaged common sense and practice of recognition and development of jurisdictionally unrestricted common ground on particular rules, case precedents, doctrines and principles …" (Walker 2015, 20).

40 This also allows for a comparison of legal forms, whether in one jurisdiction or in a comparative law approach, as different regulatory frameworks that seem directed towards similar goals may apply different distinctions and may attempt to preserve different normative redundancies and increase different learning/adaptation capabilities. In this regard, for instance, regarding risk regulation, Paul/Mölders (2017, 9) indicate that "the case of risk also neatly demonstrates that what exactly is considered malleable and what becomes the target of intentional change varies greatly across institutional backgrounds and is based on diverse normative assumptions about what state interventions should be about."

41 Atlan (1974, 296) stated: "Optimum organization would correspond to a compromise between maximum information content (i. e., maximum variety) and maximum redundancy."

this, I refer to "concurrent higher combinations" and "reflexive legal forms," which combine greater normative redundancy with greater cognitive variety. These legal forms are able to combine the normative closure of the law with a higher potential of cognitive openness to the environment (e. g., through distinctions that are embedded in rules that contain procedural mechanisms).

Reflexive legal forms are "reflexive" in the same sense as used by Teubner (1993, 65–66), that is, the reference is to an increased cognitive openness to the social environment. The specific contention of this article is that reflexive legal forms may indirectly facilitate – or increase the probabilities of – the unfolding of societal processes of "coordination with other social systems" (Teubner 1983, 255). However, the notion of reflexive legal forms presented in this article implies a nuanced approach to reflexive law in two senses: first, it emphasizes the need for a combination of normative redundancy and cognitive variety; and second, it focuses on the legal mechanisms that facilitate the learning processes of the legal system. These learning processes, in turn, may facilitate the unfolding of societal processes of 'coordination with other social systems' which may further facilitate the unfolding of "regulated autonomy" in the regulated social subsystems (Teubner 1983, 254)[42]. These processes are more indirect than the process that Teubner sometimes described, such as when he referred to the "shaping" of "procedures of internal discourse" of different regulated subsystems of society (1983, 255).[43] [44]

42 It is interesting to refer to Mölders' (2021) concept of 'irritation design'. He asks: "In terms of steering, there seems to be a crucial question: Can this transformation of irritations into information be triggered?" (Mölders 2021, 394) I believe that the approach introduced in this article can provide an answer. First of all, the observation of legal forms through the redundancy/variety distinction indicates the meaning that a given external irritation is being attributed by the system. In other words, it is a way to observe how the system transforms irritations into information. Secondly, the notion of 'reflexive legal forms' refers to the increase in the learning capabilities of the legal system. In other words, the higher level of variety (in combination with redundancy) can be understood as the "self-referential trigger" that transforms irritations into information within the legal system. Then, in the case of other sub-systems of society, a similar sociological observation effort should be conducted in light of "different irritation designs, e. g., along different societal contexts (science, arts, economy, religion, etc.)" (Mölders 2021, 400).

43 Most applications by other authors of Teubner's ideas on reflexive law do not consider or deal with Luhmann's concerns about reflexive law; see, for instance, in environmental law (Orts 1995; Gaines 2002; Ross/Almeida 2024), in labor law (Rogowski 2013), and cryptocurrency regulation (Motsi-Omoijiade 2022), among others.

44 It is also worth mentioning Christodoulidis's (1998) approach, that contends that only politics but not law can be reflexive. He simply denies that law can be reflexive by arguing that the Luhmannian normative closure of the legal system can be equated to the Razian understanding of the exclusionary nature of rules – and law (Raz 1999). So, he states: "what can be expected legally depends on reductions to role and rule, the exclusionary language of law. In this sense law is a reduction achievement that is facilitative of action to the extent that it succeeds in ordering interac-

Additionally, I argue that the understanding of the possibility of this concurrent interplay between normative redundancy and cognitive variety allows us to explore not only indirect forms of social steering through law, but also ways in which legal forms could modulate various oppositions or tensions within the legal system, such as those between autonomy and heteronomy, universality and particularity, rationality and contingency, and legality and law (Ubilla 2016a, Ch. 9; 2016b).[45] We may see these tensions as manifestations of the most basic tension between the normative expectations of various spheres of society and the legal system's function of stabilizing expectations. Therefore, these tensions may be understood as an interplay between a cognitive hetero-referential observation of social expectations and the normative self-referential stabilization of such expectations. More concretely, these tensions can be understood as manifestations of the basic tension between the mentioned expectations and the legal forms selected or established to process those expectations. This begins at the constitutional level with the tension between people's sovereignty and the constitutional forms selected to operationalize this sovereignty (Loughlin/Walker 2007).

Luhmann's socio-legal theory is based on the recognition of the different observing perspectives; therefore, it allows for the observation and recognition of the "difference" between the mentioned opposing perspectives. As such, by applying the redundancy/variety distinction, his theory allows us to observe such differences and unfolding tensions in different ways in specific legal forms. In other words, the theory of legal forms presented in this article allows us to analyze and consider new legal forms that could modulate the corresponding tensions in different ways in a reflexive continuum, eventually increasing the probability of the aforementioned concurrent higher combinations.

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tion and providing us with some security of expectations. And to order it must reduce contingency, it must provide exclusionary reasons, it must simplify, it must suppress" (Christodoulidis 1999, 234). He adds that "conceding any reduction at the same time is a concession away from the reflexive, of thinking things through, only in terms of which is appropriateness" (Christodoulidis 1998, 236). Therefore, in my view, Christodoulidis seems to understand that the evolutionary achievement of law is solely related to its systemic closure. In other words, he seems to overemphasize the idea of the closure of the legal system – and of reduction of complexity –, and overlooks the manners in which, according to Luhmann, the legal system interacts with society through the combination of normative and cognitive orientations, and in particular how this combination takes place through the differentiation between norms (and their interpretation) and their judicial application (see also Ubilla, 2016a, Ch. 7).

45 Bankowski (2001, 27–34) explained that these tensions have traditionally been tackled in two ways: first, through the forcing of choice "always oscillating" between sides and, second, through dialectic synthesis or reconciliation of sides, which is the Hegelian *Aufhebung*. He argued that these positions are incorrect and proposed the idea of "*living with the tensions*" by recognizing the need for both sides.

The search for such concurrent higher combinations can be understood as the search for a "reflexive middle," which may be viewed as a higher level of irritation, interaction, or recognition of opposing perspectives. Through such reflexive irritation, opposing perspectives are not transcended or sublated, but new possibilities of interaction between them may unfold, giving rise to new observations, distinctions, or forms, thereby making more probable variation and adjustment to social complexity.[46]

On reflexive legal forms and socio-legal evolution

Throughout this article, I have argued that the notion of reflexive legal forms allows us to observe and explore situations of potential compatibility – situations representing a contextual and contingent common ground – between Luhmann's understanding of the limits of steering and Teubner's understanding of the possibility of reflexive law. I have argued that in a situation of concurrent higher combination of normative redundancy and cognitive variety, a higher level of redundancy would prevent both an "overstrain" of the function of law as well as the "burden of reflexion" – that would derive from the legal system identifying itself as an autopoietic system in a world of autopoietic systems.

I have already introduced the notion of reflexive legal forms. It is now necessary to analyze how could these legal forms emerge within the legal system. Specifically, we should consider whether the introduction or development of reflexive legal forms is theoretically consistent with Luhmann's evolutionary theory, or if it is theoretically possible in light of this theory. This is because at times, Luhmann appeared to oppose 'social steering' and 'legal evolution' as when he stated that "[e]volution is all that is needed for survival" (Luhmann 1995c, 477) where 'evolution' is normally understood as 'natural evolution' (Willke 2016, 20).

In different terms, it is necessary to analyze whether, under Luhmann's own theory, the introduction or development of legal forms that combine higher levels of normative redundancy and cognitive variety may facilitate and propagate socio-legal evolution.

Let's start by remembering that Luhmann placed the evolutionary perspective at the center of his sociological theory (Razetto-Barry 2011). An analysis of his theory

46 Refer to the last section of this article (The conservation right: a reflexive legal form) where a specific case is discussed. It involves the application of the notion of reflexive legal forms in relation to the establishment of a new property right called the 'conservation right.' This right was enacted as law in Chile in 2016 (Law 20.930). See note 52 below.

reveals that he embraced a neo-Darwinian approach to evolutionary theory, with an emphasis on adaptive differences and selection processes (Luhmann 2004; 2012). For Luhmann (2012, 252, 286), evolution theory tackles the paradox of the "probability of the improbable," or the normalization of this probability. In other words, for Luhmann evolution explains how some structures loaded with improbable premises emerge and operate as normal. Luhmann (2012, 253) stated: "The basic proposition is that evolution transforms low probability of origination into high probability of maintenance," that is, evolution concerns the "morphogenesis of complexity" or the "the number of preconditions on which an order can depend increases." Evolution unfolds over transitory conditions and useful chances. Luhmann (2004) understood evolution as a combination of variation, selection, and stabilization, that is, a combination of two distinctions: variation and selection, and selection and stabilization. These distinctions facilitate the observation of the process through which the improbable becomes probable, the process through which "passing constellations" become the base of selection (Luhmann 2012, 258) through specific operations that select specific forms or distinctions.

"Evolution is not gradual, continuous, seamless increase in complexity but a mode for structural change that is altogether compatible with erratic radical changes ('catastrophes') and with long periods of stagnation ('stasis')" (Luhmann 2004, 233), which may also relate to environmental irritation or disturbances (2004, 2012). These irritations or disturbances may be coupled with "cases of disappointment" (2004, 245) or regulatory failures, which may trigger internal processes within the legal system through legal disputes and legislative procedures. Therefore, Luhmann (2004, 259) argued that "law itself produces the situations, which trigger off conflicts, by regulatory manipulation of everyday life. Law promotes itself."

In this sense, the introduction or development of reflexive legal forms can be understood as an evolutionary response to relevant social irritations and disturbances that call for further legal complexity and trigger internal processes in the legal system that provoke further second-order observations in the system. Under these evolutionary conditions of political irritation and societal disturbances, we see that the second-order observation of the legal system may feed from legal sociology and its observations to promote the emergence of these new legal forms.[47]

As such, legal evolution should not be understood to exclude new indirect regulatory strategies that consider second-order observations of the legal system to promote new reflexive legal forms[48]. Luhmann stated that the theory of evolution

47 Such feeding from legal sociology also existed in the case of the new 'conservation right' enacted as law in Chile. See below the section 'The conservation right. A reflexive legal form'.

48 It is important to note, using Teubner's (1988, 226) words, that this is not an 'evolutionist' approach but an 'evolutionary' approach, as it is not focused "on the direction of development but

also applies to systems that plan themselves. "There is no disputing that planning or, more generally, intentional anticipation of the future, play a role in sociocultural evolution" (Luhmann 2012, 360). Therefore, I argue that even purposefully introduced reflexive legal forms can operate as mechanisms of legal evolution to the extent that the corresponding – contingent – evolutionary conditions for historical change are present. In any case, it is important to note that, the reflexive potential and social steering effects of a given legal form are a contingent matter that needs to be confirmed by empirical studies.[49]

In summary, reflexive legal forms – by considering not only cognitive variety but also normative redundancies – can provide a response to Luhmann's concerns regarding both a potential "overstrain(s)" deriving from imbalances between normative redundancies and cognitive variety as well as regarding the "burdens of reflexion" of reflexive law. I believe that, in this sense, the notion of reflexive legal forms provides a new insight into a potential common ground between Luhmann's understanding of the limits of social steering through law and Teubner's understanding of the possibility of reflexive law.[50] Moreover, it also provides the meth-

on the *mechanisms* of development". The reference here is "to filter mechanisms and trial and error mechanisms". Still, it must be emphasized that "the emergence of autopoiesis signifies for the legal system a dynamic shift of the function of evolution inwards; an internalization of the mechanisms for variation, selection and retention" so that "external mechanisms can only have a 'modulating effect' on legal developments while the evolutionary primacy passes over to internal structural determination" (Teubner 1988, 232).

49 On the need and challenges of empirical confirmation of the social effects of reflexive law see Paterson and Teubner (1998). On a recent consideration of the matter, see Paul/Mölders (2017).

50 Since we have focused on the contrast of opinions between Luhmann and Teubner – in order to find a common ground between their views –, we have applied here Luhmann's understanding of socio-legal evolution. However, in a broader context, other approaches could also provide important insights on the matter. For instance, Amstutz (2008, 472) explains that "[t]he homeostatic stability of a system depends on a very specific, extremely flexible linkage of its elements (so-called "low connectivity"), which protects the system from either "freezing" or drifting into chaos. Only if this kind of flexible order is set up in the system, can it become an object of selection. Thus, evolution flows from two sources: spontaneous self-organization on the one hand, and selection on the other." Then he adds: "What this means is that with respect to environmental influences they are endowed with a special type of dynamic: by operating within an ordered regime while bordering on chaotic regimes, they have an enhanced capacity to absorb perturbations from the environment" (Amstutz, 2008, 473). All this appears to be consistent with Luhmann's application of the normative closure and cognitive openness distinction. Moreover, the mentioned capacity to absorb perturbations can certainly be observed through the redundancy/variety distinction. However, Amstutz (2008, 473) adds: "Only the existence of systems organized internally on the 'low connectivity' pattern can initiate a durable evolutionary process. Moreover, because selection can operate only on systems that have this internal order, and remains unhelpful for other entities, this 'low connectivity network' itself then functions as a kind of 'unit of selection'". In this latter regard, I would say that Amstutz's

odological tools to assess specific legal forms, allowing the evaluation and selection of the proper combinatorial possibilities that increase the probabilities of social steering through law.[51]

The conservation right: a reflexive legal form

General background

In this section I present a specific case in which the understanding on "legal forms" and "reflexive legal forms" developed in the present article was applied: the case of the conservation property right or "conservation right" which was enacted as law in Chile in 2016.[52] The conservation right is a property interest in the environmental patrimony of a certain property or real estate. The law defines it as a right to

approach, that focuses on "low connectivity networks," is not enough if we are to observe how different legal forms interact in a network. For this purpose, we need a smaller unit of selection, that is, we need to observe 'legal forms'. In turn, Zamboni (2008, 522) says that "evolutionary theory applies neither to a single statute, a single judicial decision nor more generally to a single legal rule. That actually under the spotlight of an evolutionary approach in general is more 'legal concepts'. The law-making cannot be identified by one single process leading to one single legal decision. It is more a question of several and usually chronologically asymmetrical processes leading to the production, often through several statutes and/or judicial law-making decisions, to a legal concept". However, in our view, to observe those processes of variation – as well as what we have called 'networks of redundancy' –, we need to be able to observe the operation of specific 'legal forms' (which are also included in legal concepts). Zamboni (2008, 521) also appears to argue that Luhmann's approach focuses only on the external perspective, and disregards how Luhmann explains that he intends to bridge legal theory and sociology as he understands that the legal system operates by combining self- and hetero-referential observations. In this regard, Luhmann's approach seems consistent with the approach of Deakin and Wilkinson (2005, 28) who express that "an evolutionary study of the law requires us to take a dual approach," i. e. "internal understanding of internal juridical modes of thought" and "external perspective on the law as a social institution or mechanism".

51 The relevance of this evolutionary approach to reflexive law can be expressed in the words of Zamboni (2008, 529) when he says: "evolutionary theory as a possible legal theoretical first-aid kit fails, focusing on explaining what and why the change has happened instead of how to 'remedy' it", adding then: "A major adjustment is therefore required in order to transform the 'evolutionary approach to law' into a 'legal evolutionary approach to the law' and, in this way, into a complete and legitimized member of the legal family under the forms of a possible legal theory for law-making."

52 This new property right was enacted in Chile by Law 20.930 on June 10, 2016. It was originally proposed in 2003 (Ubilla 2003), and further developed in various proposals of adjustments to the legislative draft (Ubilla 2014). On the detailed history of the law see (Ubilla 2023).

conserve the environmental patrimony of a certain real estate – or the attributes or functions of said patrimony. In contrast to traditional notions of easements or covenants, which by definition represent restrictions on property, the conservation right is an affirmative right over the "environmental patrimony" – or the "attributes" and "functions" of such patrimony – of a particular real estate.

The legislative vision that led to the enactment of this new legal institution was not simply the creation of a property right that would facilitate the creation of private protected areas. The challenge was to develop a new "type" of property right that would tackle the regulatory trilemma of biodiversity conservation by facilitating the emergence of new social practices or social communications in all areas and spheres of society concerning biodiversity (Ubilla 2016a, Ch. 4). The following subsections contain a summary of the central aspects of the research that applied Luhmann's theory for the proposal and final drafting of the legislation that enacted this new property right (Ubilla 2023).

The regulatory trilemma of ecosystems conservation

The first step of the research was to analyze the regulatory strategy applied in Chile to implement the principles, objectives, and measures of the Convention on Biological Diversity (CBD). This regulatory strategy focused on the creation of protected areas through a combination of traditional property rights (i. e., ownership and easements) and administrative rules. This traditional strategy caused various regulatory failures which were analyzed under the three forms of the regulatory trilemma, as developed by Teubner (1987).

Regarding the first form of the trilemma, the research showed that the traditional approach was *"indifferent" to broader social complexity*. The basic consideration was that traditional property rights separate land from the surrounding ecosystems and social communities, blocking cooperation and communication, in direct contradiction to the "ecosystems approach" of the CBD.

Regarding the second form of the trilemma, it was observed that the use of traditional property rights could also be considered a case of *juridification of social spheres – or a mechanism of social disintegration through law* – in the sense that in many occasions, they appeared to cause the relocation or displacement of people from their original habitat as well as a dislocation of the corresponding social web of relations and knowledge.

Regarding the third form of the trilemma, it was observed that the use of traditional property rights could trigger *legal disintegration through society* in the sense that they could orient or change the "selectivity process of law" solely toward traditional economic rationality. This would prevent the unfolding of social prac-

tices required to generate cooperation, communication, and knowledge sharing around – and in connection with – the corresponding ecosystems (Ubilla 2016a, Ch. 4).

An analysis of the legal form of traditional property rights

As a second step, the legal form of traditional property rights was analyzed. The main conclusion was that, from the internal perspective of the legal system, and regardless of the different conceptions of private property, the basic distinction that appeared to constitute the modern form of ownership was between *exclusive/non-exclusive access, use, and control of material resources* (Ubilla 2016a, Ch. 9). Under this distinction, the form of ownership indicated the affirmative side of the distinction and, consequently, the limitations and obligations imposed on ownership – whether deriving from restrictive property rights or from the "social function" of property in the civil law tradition – indicated the negative side of the distinction.

This constitutive distinction was also observed from a hetero-referential perspective of different social spheres, and it was deemed that it implied – and applied – the distinction between *affirmative rights/restrictive rights*, particularly when considering the relationship between ownership and other property rights that constituted burdens or encumbrances over it. It was also noted that traditional property rights were most directly influenced and determined by the observations of the economic system (that traditionally attributed economic value to the tangible aspects of assets; Luhmann 2015). It was further noted that the observations and normative expectations of ethics, science, aesthetics, and other spheres could only have operational contact with certain peripheral and restrictive elements of the right of ownership, such as the limitations and obligations deriving from the "social function" of property.

Finally, traditional property rights, including "restrictive property rights," were analysed as communication operations through the redundancy/variety distinction. It was concluded that the normative redundancy of the form of ownership was expressed – in the civil law tradition – through the normative elements known as *facultas* or *potestas* (i. e., *ius utendi*, *ius fruendi*, *ius abutendi*), which presented high stability. These *facultas* or *potestas* were only subject to negative restrictions either through the notion of social function or through restrictive property rights. In turn, the potential for cognitive variety of the form of ownership was limited, as the elements that presented some capacity to generate social variation were structured as negative or restrictive elements. These negative or restrictive elements distorted the original normative expectations coming from society with respect to nature,

because it transformed the corresponding affirmative attributions of value of nature (from science, ethics, aesthetics, etc) into negative or restrictive representations within the system of property rights (i. e., reductions of value).

The proposal and creation of a new property right

In order to tackle the regulatory trilemma of ecosystems conservation that derived from the limited reflexivity of the traditional property rights system, the research proposed the creation of a new "reflexive" property right. Thus, the conservation right was structured as an *affirmative right* by applying the *affirmative right/restrictive right* distinction and by indicating the affirmative side of it. This was achieved by proposing the creation and combination of two innovative elements. The first one was the creation of a new affirmative or permissive normative element, the "right to conserve," which in continental law was expressed as a new *facultas* or *potestas* to be known as the "faculty to conserve" or "ius conservandi." The second one was the creation of a new legal object – the 'object' of this new right –, which includes the overall "environmental patrimony," as well as specific "attributes" and "functions", so that the conservation right could be general or particular depending on the case (i. e., conservation right over the whole environmental patrimony of a real estate or conservation right over the carbon sequestration function of a forest).

The indication of the affirmative side – of the aforementioned distinction – facilitated an increase in the reflexivity of this legal form with respect to the observations of other sub-systems of society – such as ethics, science, aesthetics, education, and others –, because these sub-systems accord an affirmative value to nature. In other words, the affirmative form of the conservation right allowed for various "value observations" from different social spheres to be considered/internalized by the legal system in their original affirmative form. Likewise, the reference to new legal object(s) made it possible for the various discourses to further recognize the affirmative value of the conservation of the environmental patrimony and its corresponding *attributes or functions* (i. e., ecosystem functions, that also encompass socio-cultural functions).

The "conservation right" combined a high potential for *normative redundancy* expressed in the "*right to conserve*" that takes the form of a traditional proprietary *facultas* or *ius* – which brings with it the well-established understanding of such traditional normative structures – with a high potential for *cognitive variety*, expressed mainly in the intangible *attributes or functions of the environment*, that can be the *object* of the right (Ubilla 2023). These *attributes or functions* provide a high reflexive potential of the observations coming from different spheres of society that recognize the value of those diverse attributes and functions. The

design of the conservation right entailed a search for a "reflexive middle" between the opposing perspectives of private and public interest, autonomy, and heteronomy, as it involves an understanding of private interest that takes into consideration normative orientations and expectations traditionally related to social heteronomy (Ubilla 2016a, Ch. 9; 2016b; 2023).

Since its inception, the conservation right has been applied to the most diverse situations and circumstances, for conservation initiatives led by the private sector and by state agencies, for the conservation of specific ecosystem functions (e. g., water basin regulation function, carbon sequestration function or CO2 projects, landscape function), for the conservation of Indigenous sites, for the recovery of contaminated sites, for sustainable rural settlements (i. e. eco-villages), for the conservation of green urban areas, among others. It is also being considered for unique applications, such as the conservation of darkness for astronomical observation and the conservation of silence in areas or spaces dedicated to spiritual practices (Ubilla 2023).

These developments in the few years since enactment appear to demonstrate that this property right is adapting to a great variety of social and ecological circumstances. This may indicate that the property rights system is internalizing a broader range of social interests and observations, increasing the probability of unfolding further legal evolution in the form of new social practices with respect to land and the corresponding environmental patrimony. Even though the long-term social consequences and steering effects of this new legal form would need to be confirmed by proper empirical studies, the practical applications of the conservation right also indicate that it can facilitate the reflexive encounter between the opposing perspectives of private and public interest, autonomy and heteronomy, as it seems capable of creatively coordinating private interests with normative orientations and expectations traditionally related to social heteronomy or public interest regulation (Ubilla 2016a, Ch. 9; 2016b; 2023).

Final remarks

The socio-legal understanding of legal forms developed in this article supplements Luhmann's socio-legal theory, increasing our capacity for observing the dynamic and non-linear relationship between the normative and cognitive orientations of the legal system.

This understanding has further allowed us to consider the possibility of "reflexive legal forms" that have higher learning capabilities and are, therefore, better prepared to steer social change.

The application of Luhmann's theory on socio-legal evolution has confirmed the possibility of the emergence of these "reflexive legal forms" and their potential to generate and propagate variation and socio-legal evolution.

These ideas have shown that the notion of "reflexive legal forms" entails a new approach to reflexive law that focuses on the legal mechanisms that may facilitate the evolutionary learning processes of the legal system. This appears to be critical for considering and assessing new legal forms that may increase our chances of successfully tackling the unprecedented uncertainties and risks that our postmodern societies confront today, locally, regionally, and globally.

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