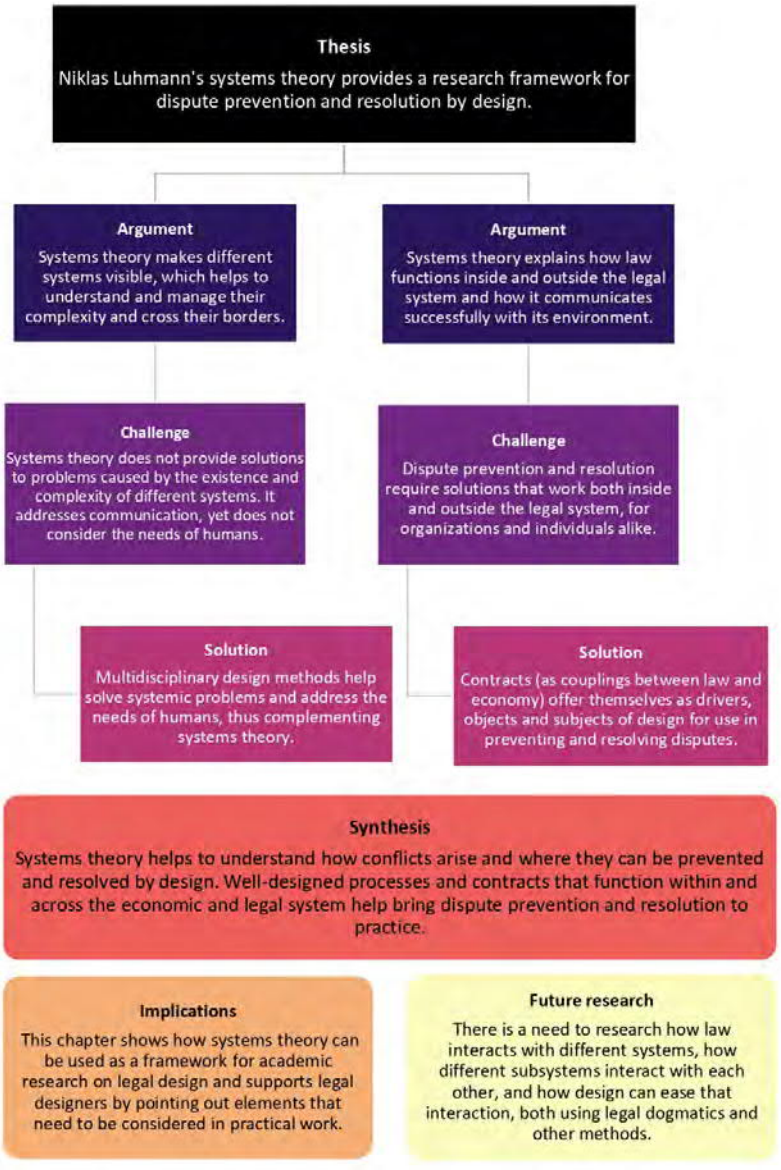
Systems theory as a research framework for dispute prevention and resolution by design

2. SYSTEMS THEORY AS A RESEARCH FRAMEWORK FOR DISPUTE PREVENTION AND RESOLUTION BY DESIGN

Petra Hietanen-Kunwald, Helena Haapio, and Nina Toivonen



1. Systems theory as a research framework in Legal Design

Disputes are an inevitable part of society. They arise in human and business relationships. Some of them will be resolved amicably, while others end up in court. When the parties to a relationship encounter the legal system, their arguments may be framed, and their claims and responses may be expressed in ways that are no longer familiar to them. They may feel that they have entered a different world altogether.

Building on our previous work on civil and commercial mediation[1] and a managerial-legal view on contracts[2] this chapter first introduces Niklas Luhmann's systems theory[3] and then proposes it as a research framework for Legal Design. Luhmanns' systems theory is a comprehensive theory of society. Luhmann perceives society as a complex social system divided into autopoietic subsystems that are not bound together by means of a common framework of rules nor institutions nor a common goal. In his view, social subsystems differentiate according to their own specific function, they are operationally closed and reproduce themselves by means of self-reference. By describing this elaborate differentiation Luhmann's theory provides a tool for studying different social subsystems, the way they are reproduced and how they may be linked together. In this Chapter we will merge Luhmann's systems theory with design thinking to make the different systems and their borders, which need to be crossed to communicate across them, visible and tangible. In this way, we envision a framework which helps us and future legal designers to analyze and integrate methods used in the legal system and non-legal systems and to explain how such a framework can help prevent and resolve legal disputes.

Systems theory as developed by the German sociologist Niklas Luhmann starts from the fundamental distinction between an autopoietic

1 Petra Hietanen-Kunwald, *Mediation and the Legal System: Extracting the Legal Principles of Civil and Commercial Mediation* (University of Helsinki 2018).

2 Helena Haapio, *Next Generation Contracts: A Paradigm Shift* (Lexpert Ltd 2013).

3 Richard Nobles and David Schiff, *Observing Law Through Systems Theory* (Hart Publishing 2013) 1-25; Niklas Luhmann, *Das Recht der Gesellschaft* (Suhrkamp 1995). In general see Mathias Albert, 'Luhmann and Systems Theory' *Oxford Research Encyclopedia of Politics* (2016) <www.oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-7> accessed 19 July 2021.

system and its environment.[4] In Luhmann's view, a system can exist only in relation to its environment, and therefore the production and maintenance (autopoiesis)[5] of a difference to the environment is essential for the existence of a system. There are various systems, i.e. biological and social, of which, we will focus on the latter. Society is a social system that is functionally differentiated into subsystems, such as law, economy, science, and politics.[6] The distinction between a system and the environment applies to these subsystems as well. For the legal system, the economic system belongs to its environment, and vice versa. Everything that does not belong to the legal system constitutes a part of its environment.

Social systems consist of functional parts that form an entity, but also from elements and their relation to each other.[7] According to Luhmann, the basic element of a social system is not a human being or people who act towards a common goal, but (their) communication.[8] A social system consists of communications that refers to other communications of the same system. These communications are interrelated and self-referential, which leads to inner processes that produce and reproduce the system.[9] Communication happens by the system's own binary code that uses positive and negative attributes. Based on this attribution formula a system determines whether something belongs to it (positive attribute) or not (negative attribute). In Luhmann's words, the legal system operates using the binary code 'legal/illegal' (or 'lawful/unlawful', in German 'Recht/Unrecht').[10] Only communication that refers to the binary code 'legal/illegal' can produce further legal communication and therefore produce and reproduce the legal system. Other subsystems have their own codes. The economic system follows the binary code of 'payment/

4 Niklas Luhmann, *Soziale Systeme: Grundriss einer allgemeinen Theorie* (Suhrkamp 2012) 35.

5 ibid 67.

6 On different subsystems, see Niklas Luhmann, *Ecological Communication* (The University of Chicago Press 1989) 51, 63, 76, 84.

7 Luhmann, *Soziale Systeme* (n 4) 41.

8 In Luhmann's theory people as biological and psychic entities belong to the environment of social systems, Richard Nobles and David Schiff (n 3) 28.

9 Luhmann, *Soziale Systeme* (n 4) 67.

10 Luhmann, *Das Recht der Gesellschaft* (n 3) 67; Nobles and Schiff (n 3) 7.

non-payment' and science the binary code 'true/false'.[11] The legal system does not recognize communication based on the codes of other systems, yet they are not totally insignificant, as they form the environment for the legal system.[12]

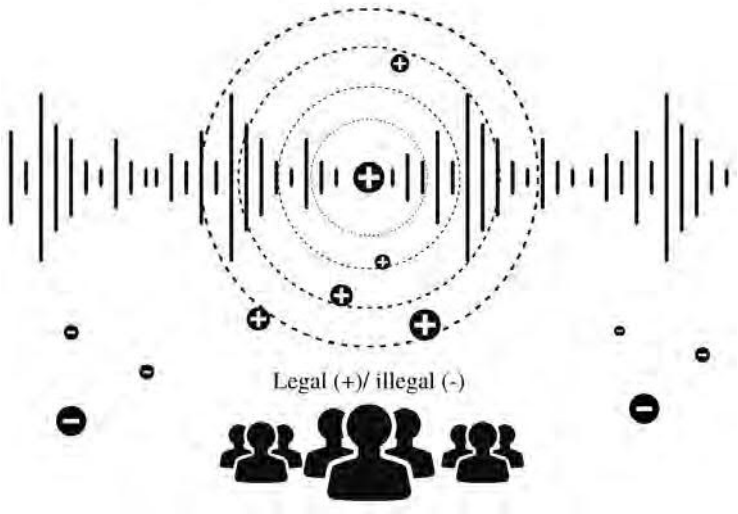


Fig. 1. According to Luhmann's systems theory, the legal system produces and reproduces itself by resonating with communication it recognizes as 'legal' (Nina Toivonen 2021, licensed under CC BY-NC 4.0).

Whether a communication is attributed to the legal system based on the 'legal/illegal' code is not decided by the person or entity applying the code, but by the legal system itself. The system draws its own boundaries. In other words, only law can define what law is.[13] The system is operationally closed. It cannot be influenced by external operations. Only legal communication can produce further legal communication, and thus reproduce the legal system.[14] This does not, however, mean that the system's environment would not influence the system in any way. The legal system is cognitively open: it can use information from its environment,

11 Claudio Baraldi, Giancarlo Corsi and Elena Esposito, *GLU: Glossar zu Niklas Luhmanns Theorie Sozialer Systeme* (Suhrkamp 1998) 33, 210.

12 Hietanen-Kunwald (n 1) 32.

13 Luhmann, *Das Recht der Gesellschaft* (n 3) 50.

14 ibid 44.

even though it needs to reduce it by using the binary code to sustain itself separate from the environment.

The legal system can also recognize and exchange information indirectly with other subsystems through structural couplings.[15] A structural coupling develops when systems have constantly encountered each other in the environment and after time learned to rely on certain communications they both recognize. Luhmann calls this phenomenon of recognition "resonance".[16] The formation of a structural coupling is not something that can be mechanically introduced into a system, rather it is an evolutionary blind process, an observation that can only be made with sufficient certainty in hindsight.[17] Examples of well-established structural couplings are the constitution that connects the legal system with the political system, and contract and property that connect law with economy.[18]

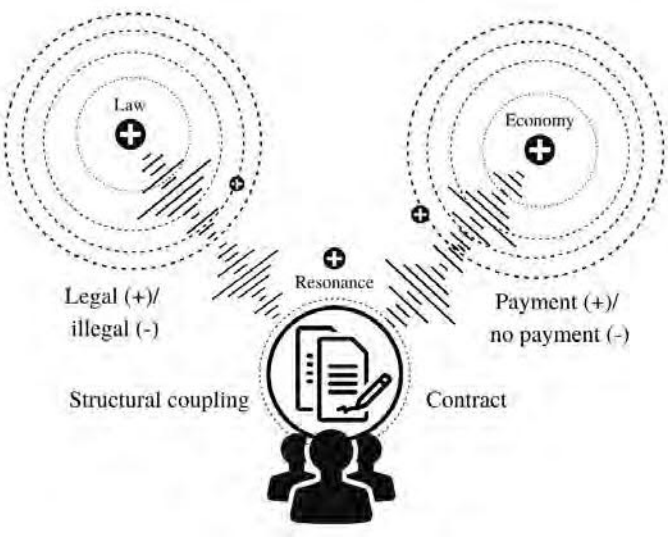


Fig. 2. According to Luhmann's systems theory, contracts can work as structural couplings between the legal system and the economic system (Nina Toivonen 2021, licensed under CC BY-NC 4.0).

15 Nobles and Schiff (n 3) 56.
16 Luhmann, *Ecological Communication* (n 6) 15.
17 Nobles and Schiff (n 3) 226.
18 Niklas Luhmann, *Die Gesellschaft der Gesellschaft* (Suhrkamp 1997) 783.

The legal system and other subsystems of society differentiate themselves from each other through their simultaneous autopoietic processes. These processes accumulate complexity both inside each system and in relation to their environment. In Luhmann's view this is the mechanism that causes the complexity of our modern societies, but also explains why it is necessary to understand the multiple interests of different systems to prevent and resolve systemic problems.[19] The systems theory does not, however, provide solutions on to how to actually reconcile the communication of different systems in practice. As the idea of solving complex challenges is at the core of multidisciplinary, human-centric design, in this Chapter we suggest to search for answers from design theory and various design principles and practices.[20] The application of design thinking and methods into autopoietic systems such as the legal system, however, cannot happen without addressing the operative closure and complex nature of the legal system. As mentioned, only law can define law. We are elaborating this idea further in the following section.

2. When the legal system encounters design thinking

The design approach to law, Legal Design, emphasizes the importance of making law accessible, understandable, and usable for its end-users, the human beings. The Legal Design Alliance defines Legal Design as "an interdisciplinary approach to apply human-centered design to prevent or solve legal problems".[21] The Legal Design Manifesto[22] exhibits the clear vision that design has an impact on the legal system, that the legal system can be transformed by means of design, and that it is possible to prevent or solve legal problems by means of design. If one considers this view against the background of systems theory and the assumptions it makes, it becomes evident that there is a need to study the boundaries between design and law, as well the boundaries between law and other

19 Luhmann, *Ecological Communication* (n 6) 11.

20 Richard Buchanan, 'Systems Thinking and Design Thinking: The Search for Principles in the World We Are Making' (2019) 5 She Ji: The Journal of Design, Economics, and Innovation 86.

21 Legal Design Alliance, 'The Legal Design Manifesto' (v2) <www.legaldesignalliance.org/#v2> accessed 4 June 2021.

22 ibid.

systems. In order to apply design thinking into law one must understand where design can operate within the legal system and how it may communicate with it.

One way to understand Legal Design is that design operates from outside the legal system, providing information and improving the comprehension of 'legal', but without entering the legal system. Legal Design would then rather be a method of designing the interaction between law and the individual, that is, the 'user interface of law'. However, for Legal Design to gain applicability within the legal system it would be necessary that the legal system acknowledges Legal Design and codes it as 'legal'. It can be argued that the legal system has already recognized its own communication problems as a threat to its functioning. For example, 'Access to Law' and 'Plain Language' may be regarded as fundamental rule of law principles that are relevant in legal communication.[23]

It can also be argued – and this is the more ambitious vision – that Legal Design is an attempt to shape and simplify legal practices and processes or the legal system itself from within. This vision, however, will have to deal with the complexity and the operative closure of the legal system, as theorized by Luhmann. The legal system needs to react to all outside operations, see whether they belong to the legal system and develop its internal complexity to safeguard its systemic boundaries. The system's inherent complexity and the simplification envisaged by design may appear like irreconcilable opposites.[24] As Michael Doherty has noted,

> *"the drafting and application of general rules to unknown variants of future human behavior, 'doing things with rules', is inherently complex and there are more obvious constraints (deriving from eg clients or in-house legal teams) on the ability to simplify and visualize legal information than there are in product design".*[25]

23 See Michael Doherty, 'Comprehensibility as a Rule of Law Requirement: The Role of Legal Design in Delivering Access to Law' (2020) 8(1) Journal of Open Access to Law 2.

24 See Jukka Linna, 'Legal Design – Mission Impossible' in Jukka Linna, Johanna Aalto and Sanna Niinikoski (eds), *Muotoilimme Oikeutta – Oikeudellisen Erityisosaamisen ja Oikeusmuotoilun Ensimmäinen* (Laurea University of Applied Sciences 2019) 6.

25 Michael Doherty, 'Intentionally Designing "Legal Design" as an Academic Discipline' (JURIX 2018 conference workshop 'Legal Design as Academic Discipline: Foundations, Methods, Applications', Groningen, Netherlands 12 December 2018).

The challenge of applying design thinking to the legal system can be illustrated by an example. Research shows that it is possible to simplify or visualize a legal document, such as a decision taken by an authority or by a court. The official document may be framed in a more accessible way, and several design patterns can be used to make it more understandable.[26] It will be easier for the user to understand the decision and benefit from it or react to it and file a legal complaint. Visual and other design patterns facilitate the user's interface with the legal system, but they do not reduce the complexity of the legal system nor do they alter the legal rules and principles that will be applied within the legal system. Regardless of its design the decision and complaint will be interpreted by reference to other operations of the legal system and the legal system will treat them according to its own premises. A complaint will have to deal with the complexity of the legal system, make submissions and present evidence in accordance with procedural law and refer to the institutions, rules, and principles of the legal system.

To efficiently prevent and solve legal problems by "interdisciplinary human-centered design"[27], it is necessary to understand the functions, institutions, and programs of the law, which may be less visible yet in connection to the user experience. From the perspective of systems theory, legal designers also need to know how to communicate both within the legal system and across other systems. If we conceptualize the proposition at the heart of Legal Design the way Amanda Perry-Kessaris does: "designerly ways can enhance lawyerly communications",[28] it becomes natural to look for ways to merge 'designerly' and 'lawyerly' methods and approaches in the prevention and resolution of legal disputes.

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26 See examples of Legal Communication Designs at <www.legaltechdesign.com/communication-design> accessed 4 June 2021. Generally, Margaret Hagan, 'Law by Design' <www.lawbydesign.co> accessed 4 June 2021. See also Legal Design Pattern Libraries at <www.legaltechdesign.com/communication-design/legal-design-pattern-libraries> accessed 4 June 2021.

27 Legal Design Alliance (n 21).

28 Amanda Perry-Kessaris, 'Legal Design for Practice, Activism, Policy, and Research' (2019) 46 Journal of Law and Society 185. See also Joaquín Santuber and others, 'A Framework Theory of Legal Design for the Emergence of Change in the Digital Legal Society' (2019) 50 Rechtstheorie 41.

3. Dispute prevention and resolution inside and outside the legal system

If one seeks to apply Legal Design to the prevention and resolution of disputes, one needs to understand the nature of disputes and how the legal system addresses them. Legal disputes are escalated conflicts that start when one party perceives that his or her interests have been injured.[29] Disputes are not legal by their very nature, but consist of, i.e. economical, psychological, and procedural elements. They become legal only when they are viewed from within the legal system, for example when the legal system needs to solve the dispute by legal means.

The courts use the 'legal/illegal' code of the legal system when applying the law to the claims, facts and evidence submitted by the parties. Lawyers tend to view disputes mainly from within the law according to the binary code of the legal system, losing sight of the conflict.[30] The legal perspective becomes the focus, not only when the case is brought before a court, but already at a much earlier stage, even when commercial contracts are drafted. Instead of ensuring the realization of the expected commercial benefits, negotiators tend to focus on preparing for the consequences of failure and provisions to be applied should a legal dispute arise.[31] The way decisions are taken by the legal system leads to setting aside of the economical, psychological, and procedural interests and needs of the persons or organizations involved.

From the viewpoint of the economic system, the choices made by negotiators and in the courts may seem irrational.[32] A court may, for instance, order one party to pay damages to the other for a breach of contract. Within the legal system the decision is rational if it is the result of a legal interpretation of the contractual obligations and legally relevant facts have been proved in the proceedings. The economic system that

29 William LF Felstiner, Richard L Abel and Austin Sarat, 'The Emergence and Transformation of Disputes: Naming, Blaming, Claiming…' (1980–81) 15 Law & Society Review 631, 636.

30 Hietanen-Kunwald (n 1) 33.

31 World Commerce & Contracting (WorldCC; formerly International Association for Contract and Commercial Management IACCM) survey of most negotiated terms. Tim Cummins, 'Most Negotiated Terms 2018' (*Commitment Matters Blog*, 12 June 2018) <https://blog.iaccm.com/commitment-matters-tim-cummins-blog/most-negotiated-terms-2018> accessed 14 June 2021.

32 Hietanen-Kunwald (n 1) 33.

operates according to its own code ('payment/non-payment'), however, may consider the decision 'wrong' if the party losing the case goes bankrupt, or if the future cooperation necessary for the financial benefit of both parties is destroyed. A party may also feel that the court did not address the real conflict between the parties, nor their individual circumstances or emotions, and is 'wrong' in this sense. While the court's decision is in accordance with the rationality of the legal system and satisfies the normative expectations of the user, it may not constitute a satisfactory solution to the dispute in the particular case, nor address the root cause. The vision of a human-centered, holistic approach to dispute prevention and resolution calls for a broader understanding of the parties' economical, psychological, and other interests.

Conventional legal research has almost exclusively focused on litigation and taken a retrospective view on reality. There are a few exceptions, however. Preventive law, proactive law, collaborative law, and similar approaches[33] differ from conventional legal research and practice. They do not merely look back to resolve problems that have already occurred. Instead, they look forward to desirable outcomes and preventing problems from arising. They look beyond legal rules, rights, and obligations and focus on goals, needs, and relationships, seeking to increase awareness, engagement, and clarity as to rights and obligations.[34]

The idea of prevention was first introduced by Louis M. Brown, a US attorney and law professor. One of his fundamental premises was that in curative law it is essential for the lawyer to predict what a court will do, while in Preventive Law it is essential to predict what people will do.[35] In his ground-breaking treatise Preventive Law, he notes a simple, but profound and enduring truth: "It usually costs less to avoid getting into trouble than to pay for getting out of trouble".[36] With the development of what is now known as the Proactive Law approach, a new dimension was added to Preventive Law. In addition to minimizing problems and

33 Susan Daicoff, 'Law as a Healing Profession: The "Comprehensive Law Movement"' (2005) 6 Pepperdine Dispute Resolution Law Journal 1.

34 ibid. Susan Daicoff, 'The Comprehensive Law Movement: An Emerging Approach to Legal Problems' in Peter Wahlgren (ed), *A Proactive Approach* (Scandinavian Studies in Law, Vol 49, Stockholm Institute for Scandinavian Law 2006).

35 Louis M Brown, *Preventive Law* (Prentice-Hall 1950).

36 ibid 3.

risk, the approach focuses on enabling success and enhancing opportunities. Using the medical analogy, in the proactive approach, the focus is not just on preventing problems or 'legal ill-health'. The goal is to promote 'legal well-being': embedding legal knowledge and skills in corporate culture, strategy, and everyday actions to actively promote success, ensure desired outcomes, balance risk with reward, and prevent problems.[37] The purpose of Proactive Contracting, according to Soile Pohjonen, is that "the contracting parties achieve the goal of their collaboration in accordance with their will". "This requires", Pohjonen continues, "above all, a careful investigation of their goal and will, and the skill to create a clear and legally robust framework for their implementation".[38]

Alternative methods of dispute resolution (ADR), on the other hand, provide mechanisms to resolve the legal and non-legal elements of a dispute once it has arisen. There are various forms of ADR that may be used at different stages of conflict escalation. Mediation, for instance, is a process in which an impartial third party facilitates negotiations between the parties to enable better communication, encourage problem solving and develop an agreement.[39] The process addresses the parties' economical, procedural, and psychological interests to find a solution to the conflict beyond the (legal) positions that have been asserted. The shift away from the adversarial right-based communication towards a collaborative interest-based communication allows the parties to design a more satisfactory and holistic solution to their dispute.[40] In contrast to litigation, mediation does not use the 'legal/illegal' code to rationalize the parties' decision-making, but the process is used as a tool to expand the bases for decision-making and rationalize it in accordance with the parties' interests and needs.[41]

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37 Haapio (n 2) 39.

38 Soile Pohjonen, 'Johdanto' ['Introduction'] in Soile Pohjonen (ed), *Ennakoiva sopiminen – liiketoimien suunnittelu, toteuttaminen ja riskien hallinta* [*Proactive Contracting – Planning, Implementing and Managing Risk in Business Transactions*] WSOY Lakitieto 2002, v.

39 See e.g., Kimberley Kovach, 'Mediation' in Michael L Moffit and Robert C Bodone (eds), *The Handbook of Dispute Resolution* (Jossey-Bass 2005) 304.

40 Carrie Menkel-Medow, 'The Trouble with the Adversary System in a Postmodern, Multicultural World' (1996) 38 William and Mary Law Review 5.

41 Hietanen-Kunwald (n 1) 54.

Despite this change in focus, the holistic approach does not mean that the rationality of the legal system can be overridden. Questions of law will re-emerge whenever an issue is considered 'legal'. Legal viewpoints are necessary in preventing and resolving disputes, yet they need to be optimized with other interests, such as the parties' willingness to sustain their economic interests. The use of ADR does not suppress the need to take the legal system into account either. Also, mediation needs to rely on legal instruments to design and implement a solution that is legally valid and solves the dispute within the legal system.

4. The Double Diamond design framework in dispute prevention and resolution

When observing the systemic nature of communication obstacles between the legal system and other systems, it becomes clear that design methods have a lot to offer in solving them. However, design methods alone do not sufficiently sketch the elements that are reproduced by the legal system according to a legal rationality. Design methods, in order to produce results that are recognizable within the legal system, need to interact with the rules, instruments, and institutions of the law. An optimal human-centered design approach to dispute prevention and resolution must apply a variety of methods to identify the legal and non-legal elements of disputes, understand how the legal and other subsystems operate, communicate across borders, and connect the legal system with its environment.

Conflict management literature proposes several diagnosis models to analyze individual conflicts, but also ideas how to design dispute resolution systems in organizations. Laurie Coltri has suggested a conflict diagnosis process to develop strategies for addressing conflicts and for selecting and designing the most appropriate dispute resolution process.[42] The goal of the model proposed by Ury and others is to design an interests-oriented dispute resolution system in an organization.[43] Amsler and others

42 Laurie Coltri, *Alternative Dispute Resolution: A Conflict Diagnosis Approach* (Prentice Hall 2010) 50.

43 William L Ury, Jeanne M Brett and Stephen B Goldberg, *Getting Disputes Resolved: Designing Systems to Cut the Costs of Conflict* (PON Books 1993) xv.

offer an analytic framework to structure the elements to be analyzed in the design of dispute systems. These include the goals, stakeholders, context/culture, processes/structure, resources, and success/accountability/learning. They further introduce conflict stream assessment (CSA) as a methodological tool to gather information on these elements.[44]

These conflict diagnosis and dispute design frameworks can be merged with human-centric design processes, principles and methods as encompassed in the Double Diamond design framework.[45] The design process of the Double Diamond framework, embracing the four elements of *discover*, *define*, *develop* and *deliver*, can excel in the process of designing a dispute resolution strategy within an organization. The first diamond (research phase) can be used to discover and identify the disputes that have arisen along with their causes, the costs involved and the way they have been handled. It can also be used to identify the various legal and non-legal interests that may arise on the individual and organizational level and on this basis seek to discern dispute patterns. The second diamond (design phase) can be used to develop strategies for designing appropriate dispute prevention and resolution processes, to test the practice and to reiterate and evaluate the success of the changes made.

The Double Diamond[46] process and framework are also well worth being used to discover the interests and rationality of the different subsystems and to develop an understanding for the changes that need to be made and the couplings that need to be designed. When successfully implemented, they can act as an agent of positive change.[47] However, the Double Diamond framework has its limits. Its principles and methods need to be supplemented with instruments and communication

44 Lisa Blomgren Amsler, Janet K Martinez and Stephanie E Smith, *Dispute Systems Design* (Stanford University Press 2020) 24, 62.

45 As popularized by the UK Design Council, 'What Is the Framework for Innovation? Design Council's Evolved Double Diamond' <www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond> accessed 23 June 2020.

46 Updated version of the Double Diamond process model for systemic design see UK Design Council, 'Beyond Net Zero, A Systemic Design Approach' <https://www.designcouncil.org.uk/resources/guide/beyond-net-zero-systemic-design-approach> accessed 21 July 2021.

47 Daicoff, 'Law as a Healing Profession: The "Comprehensive Law Movement"' (n 33).

that produce meaning within the different subsystems. While it can be used to discover, design, test, and evaluate with different stakeholders, it needs to work with content, procedures, and practices that come from within the autopoietic social systems.

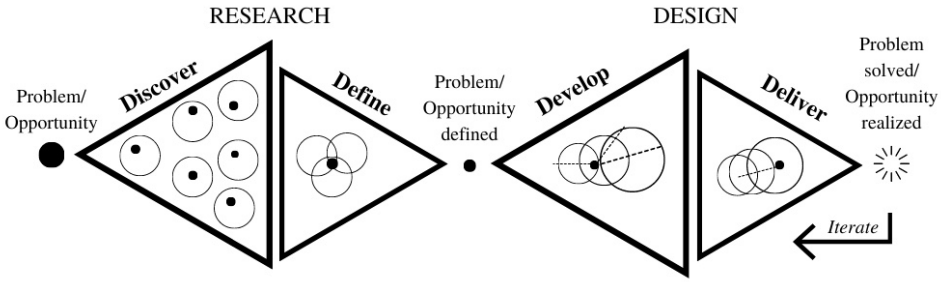

Fig. 3. A design process adapted from the UK Design Council's Double Diamond framework (Nina Toivonen 2021, licensed under CC BY-NC 4.0)

When it comes to the legal system, the Double Diamond framework needs to rely on the legal system and legal methods, such as legal dogmatics[48], to analyze and discover the legal interests and institutions that must be considered. The legal dogmatic method serves to recognize, systematize, and interpret legal rules and principles that may apply to a set of facts. It helps determine the legal element of the dispute and the default system that will be used in dispute resolution. Civil and commercial matters will have to be distinguished from public law matters, where an authority exercises power, such as disputes regarding building permits. It can be used to analyze what legal issues need to be resolved and who has the competence to resolve the issues inside the legal system.

In addition, Legal Design needs to rely on mechanisms recognized by the legal system to implement its outcomes and communicate across systems. Structural couplings, such as contracts between the legal and economic system, offer such bridging mechanisms.[49] While contracts can be interpreted within the legal system, in accordance with legal rules

48 Jan M Smits, 'What Is Legal Doctrine? On the Aims and Methods of Legal-Dogmatic Research' in Rob van Gestel, Hans-W Micklitz and Edward L Rubin (eds), *Rethinking Legal Scholarship: A Transatlantic Dialogue* (Cambridge University Press 2017).

49 Hietanen-Kunwald (n 1) 36–38; Luhmann, *Das Recht der Gesellschaft* (n 3) 459-66.

and principles, they also provide business communications that have meaning within economy.[50]

Contracts have a variety of purposes and functions,[51] and their contents and form can vary. This makes them a unique instrument for dispute prevention and resolution by design. For example, contracts are used in civil and commercial mediation to settle disputes and structure the parties' future cooperation in accordance with the parties' substantive, procedural and psychological interests and needs. In this way the parties can agree on a result that not only satisfies the parties' need for legal predictability, but also secures their economic and other interests. Contracts can be designed to help prevent and resolve disputes by adequately addressing the parties' business and legal objectives,[52] but also by using interest-based principles and principles enhancing the trustworthiness and legitimacy[53] in dispute resolution and systems design.

5. Conclusions

Niklas Luhmann's systems theory provides a lens that allows us to view disputes both from inside and outside the legal system. It reveals that there are various autopoietic systems and their elements – such as law,

50 Haapio (n 2).

51 See IACCM, *The Purpose of a Contract: An IACCM Research Report* (2017) <https://www.worldcc.com/Portals/IACCM/resources/files/9876_j18069-iaccm-purpose-of-contract-a4-2017-11-14-v1-webready.pdf> accessed 14 June 2021. Anna Hurmerinta-Haanpää, *The Many Functions of Contracts: How Companies Use Contracts in Interorganizational Exchange Relations* (University of Turku 2021).

52 See e.g., Helena Haapio and James P Groton, 'From Reaction to Proactive Action: Dispute Prevention Processes In Business Agreements' (IACCM EMEA Conference, Academic Symposium, London, 9 November 2007); Thomas D Barton and James P Groton, 'Forty Years On, Practitioners, Parties, and Scholars Look Ahead' (2018) 24 Dispute Resolution Magazine 9. See also Petra Hietanen-Kunwald and Helena Haapio, 'Effective Dispute Prevention and Resolution through Proactive Contract Design' (2021) Journal of Strategic Contracting Negotiation <https://doi.org/10.1177/20555636211016878> accessed 14 June 2021.

53 See Maria Solarte-Vasquez and Petra Hietanen-Kunwald, 'Responsibility and Responsiveness in the Design of Automated Dispute Resolution Processes' in Erich Schweighofer and others (eds), *Responsible Digitalization. Proceedings of the 23rd International Legal Informatics Symposium IRIS 2020* (Editions Weblaw 2020); Hietanen-Kunwald (n 1) 223.

economy and human psyche – that need to be considered both in theory and in practice when seeking to prevent and resolve disputes. A dispute is never just a legal issue, but also a matter of human and economical interests. There is a need to research how law interacts with other systems, both using legal dogmatics and other methods. However, neither systems theory nor legal dogmatics provide answers how to reconcile the interests of law and other systems in practice. This chapter suggests that a multidisciplinary and human-centric design approach is needed to build a framework that merges insights from systems theory and legal dogmatics in order to find practicable solutions to dispute prevention and resolution. Design methods can help identify, produce, and process communication that functions within and across the systems. Contracts, as structural couplings between the legal and economic system, offer themselves as drivers and objects of Legal Design. When properly designed, contracts can bridge the different systems and make a valuable contribution to successful dispute prevention and resolution by design.

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