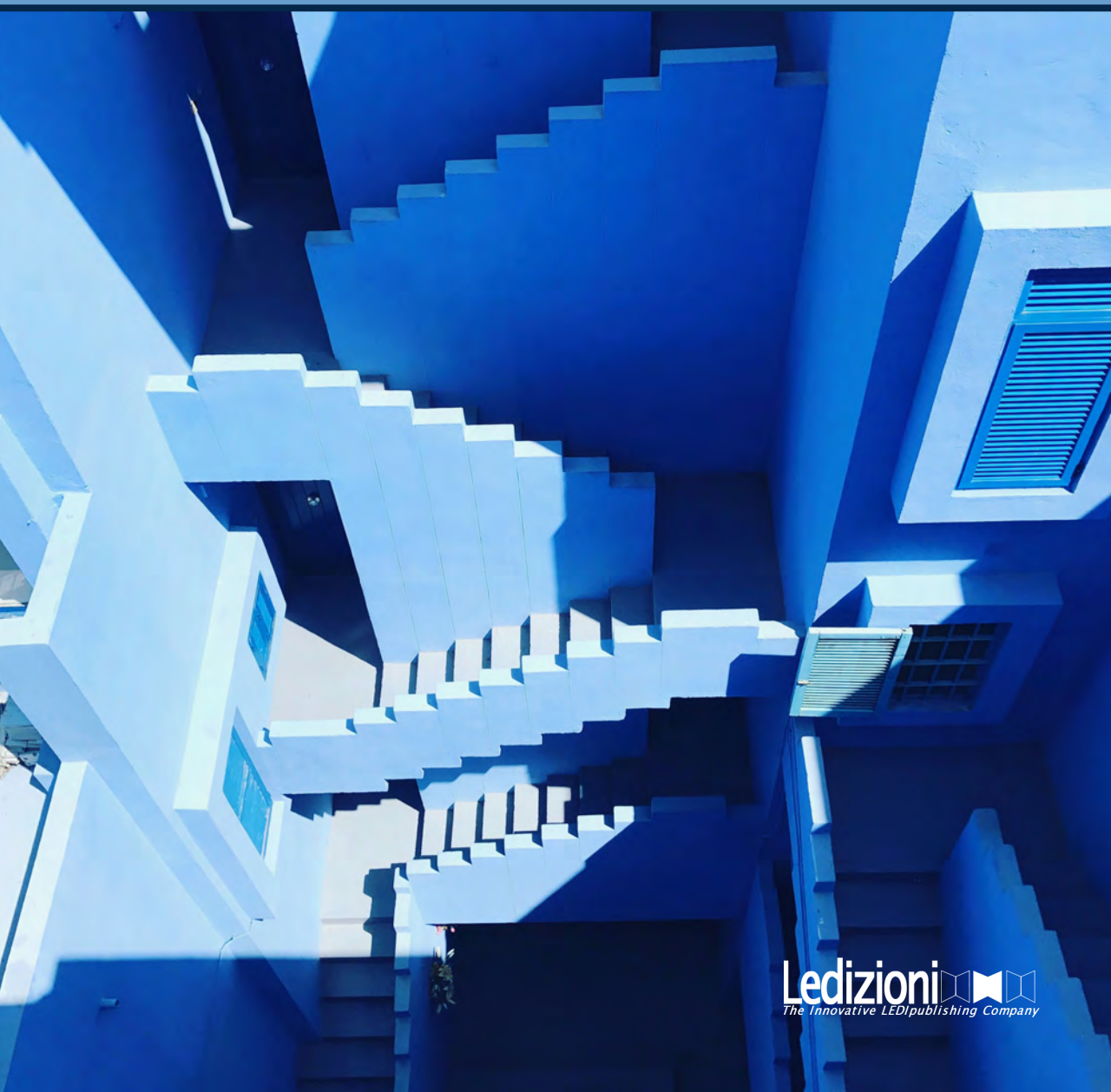
Legal Design Perspectives

Theoretical and Practical Insights from the Field

edited by Rossana Ducato and Alain Strowel



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Legal Design Perspectives: Theoretical and Practical Insights from the Field

Rossana Ducato and Alain Strowel (eds)

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Apolline Le Gall is a PhD researcher, teacher, designer and co-founder of Où sont les Dragons. After completing a PhD dissertation thesis on service design and the role of visual representations in the design process and a post-doctoral study on design pedagogy for non-designers, she co-founded Où sont les Dragons. This design and research agency joins humanities and design to tackle complex public or private sector issues such as access to the law, public services, governance and democracy in the workplace, citizen and worker empowerment, etc. Her current research and practice deal with service design, legal design, public innovation, organisational design, and design pedagogy. She is an associate teacher of design in ENSCI - Les Ateliers (Parisian design school), Sciences Po Paris and Sciences Po Grenoble (political science universities), Université de Grenoble (school of management) and École du Barreau (law graduate studies).

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INTRODUCTION

Rossana Ducato and Alain Strowel

Before the law sits a gatekeeper. A man, coming from the countryside, asks to enter. The law door is open – as always – but the gatekeeper says he cannot enter now. The man asks whether he will be allowed access later on. The gatekeeper responds that it's possible. The law door is open, so the man tries to snoop around, but the gatekeeper admonishes him: he is the lowest of the gatekeepers, and if the man manages to enter, he will face other guardians even more powerful than him. The man from the countryside did not expect all these difficulties, as he genuinely believed that the law should be accessible to anyone. He is intimidated by the severe appearance of the gatekeeper, so he decides to wait for his permission. The waiting lasts days, months, and years. Over that time, the man keeps wearing to get inside and even tries to bribe the gatekeeper, but access is never granted.

Sitting before the law, the man grows older, his eyesight becomes blurred, but the light emanating from the door is still clearly distinguishable to him.

In the end, when he realises he is close to death, he addresses a last question to the gatekeeper: "everyone strives to reach the Law…how does it happen, then, that in all these years no one but me has requested admittance". The gatekeeper responds that no one else could gain admittance because the gate was meant solely for him. He adds he will now shut it down.

This is the famous parable, *Before the law,* that Kafka narrates in *The Trial*.[1] It is a complex story that can be read at many levels, including the metaphysical one. We can see it as a metaphor or a prototypical status of the legal (eco)system. And we use it to open the course 'European IT Law by Design' to introduce Legal Design to students.[2]

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1 Franz Kafka, *The Trial* (David Wyllie tr, 2005) <https://www.gutenberg.org/ebooks/7849> accessed 22 August 2021.

2 This course, part of the elective program of the master degree in law at UCLouvain,

The door of the law is always open, so, in principle, it is accessible to anyone. However, the entrance is guarded by an intermediary, the gatekeeper, who communicates two rules, i.e. the layman cannot enter when he asks for it, and the layman has an 'exclusive right to access'. We understand from the parable that the Law has a structure and organisation beyond what the layman can see from his perspective. It is a path (a process, we might say), with different doors and gatekeepers presiding each of them. The layman tries several strategies to get access, more or less morally acceptable, but he ultimately respects the prohibition. The nature of such a prohibition remains unclear in the story. Does it come from the Law directly? Is it an artificial creation of the gatekeeper? Perhaps, the rule barring access originates from the Law. But, was it misinterpreted by the gatekeeper? Or was there an issue in communicating the rule to the lawperson? Or, perhaps, the prohibition was correctly communicated, but the layperson was not able to comprehend it?

In the end, the ultimate meaning of the Law – in contrast with its light coming from the door – remains obscure to the countryside man, to the gatekeeper (it seems), to K. and the priest who discuss the story in *The Trial*, and, ultimately to the reader of the book.

There is a fundamental tension underlying the whole story: the Law should be open to anyone, but its architecture is designed in a way that does not work well in practice.

We use *Before the Law* as an exemplification of the subject matter of Legal Design. The latter is a growing field of study and practice aimed at making the legal system more accessible, understandable, and usable. To reach this goal, it relies on design methods and design thinking.

Prominent examples of Legal Design are directed toward the 'front-end'[3] of the legal system, i.e. how can we make legal communication better and more understandable, for instance, by restructuring privacy

was funded by the Erasmus+ Jean Monnet grant aimed at supporting highly innovative courses in the field of European Studies. The course run from 2018 to 2021 (<www.eitlab.eu>).

3 Reusing here the catching metaphor by Margaret Hagan regarding the layers of Legal Design interventions. See Margaret D Hagan, *Law By Design* (2016) <www.lawbydesign.co> accessed 22 August 2021.

policies,[4] legislative acts,[5] court rulings[6]; but many others are tackling the 'back-end' of the legal system, e.g. how to improve access to legal aid[7], how to enhance contracting and negotiation[8], how to prototype for adequate policy making[9]. The dividing line between the two layers is not clear-cut as most of the time a Legal Design intervention can address both front- and back-end issues.

These examples are grounded on an understanding of Legal Design as a discipline or an approach to prevent or solve problems in the legal domain.[10] However, another area of growing interest among scholars is

4 Helena Haapio and others, 'Legal design patterns for privacy' in Erich Schweighofer and others (eds), *Data Protection/LegalTech Proceedings of the 21st International Legal Informatics Symposium IRIS* (Editions Weblaw 2018).

5 David Berman, 'Toward a New Format for Canadian Legislation–Using Graphic Design Principles and Methods to Improve Public Access to the Law' (2000) 30 Human Resources Development Canada and Justice Canada Project Paper. As reported in Gerlinde Berger-Walliser, Thomas D Barton and Helena Haapio, 'From Visualization to Legal Design: A Collaborative and Creative Process' (2017) 54 American Business Law Journal 347.

6 Prospected in Colette R Brunschwig, 'Visual Law and Legal Design: Questions and Tentative Answers' in Erich Schweighofer and others (eds), *Proceedings of the 24th International Legal Informatics Symposium IRIS* (Editions Weblaw 2021). Although not labelled as Legal Design, it is interesting to mention to this end an initiative that recognises the importance of using plain language in judicial proceedings. In 2019, the Italian State Council (Administrative jurisdiction) signed an agreement with the 'Accademia della Crusca', the most prestigious institution for the study of the Italian language and philology, to work on the comprehensibility of court rulings. The agreement includes training for judges, staff, practitioners, and dissemination activities such as symposium and conferences on the language of law. See, <https://accademiadellacrusca.it/it/contenuti/accordo-tra-il-consiglio-di-stato-e-laccademia-della-crusca-su-lessico-e-stile-delle-sentenze/6222> accessed 22 August 2021.

7 Margaret Hagan, 'The Justice Is in the Details: Evaluating Different Self-Help Designs for Legal Capability in Traffic Court' (2019) 7 Journal of Open Access to Law 1; Hallie Jay Pope and Ashley Treni, 'Sharing Knowledge, Shifting Power: A Case Study of "Rebellious" Legal Design during COVID-19' (2021) 9 Journal of Open Access to Law 1.

8 Marcelo Corrales Compagnucci, Helena Haapio, Mark Fenwick (eds) *Research Handbook on Contract Design* (Edward Elgar forthcoming).

9 Margaret D Hagan, 'Prototyping for policy' in Marcelo Corrales Compagnucci and others (eds) *Research Handbook on Legal Design* (Edward Elgar forthcoming).

10 LeDA, What is Legal Design (2018) < www.legaldesignalliance.org> accessed 22 August 2021.

the potentiality of applying 'designerly ways of knowing' to law and legal research.[11] By adopting the speculative lenses of designers and learning from other forms of design, such as critical design, discursive design, or fictional design, then lawyers, scholars, practitioners, and students can exercise their imaginative skills, explore critical alternatives and open spaces for discussing and questioning our current relationship with the legal system or its categories.

As this brief overview shows, the relation between law and design holds the potential to change, challenge, and improve the status quo in the legal domain. However, the content, methods, and approaches of Legal Design are still contested.[12] This is always a welcoming sign for a nascent area of research and practice, as it represents a perfect lab to explore the 'paths' rather than the 'boundaries' of a field.

The present edited collection on Legal Design intends to contribute to such a debate. It is the outcome of a long-term and collective reflection beginning three years ago when we started a pioneering course that integrated Legal Design into a Faculty of Law teaching curriculum. Thanks to the support of the Erasmus+ Jean Monnet Module grant, we had the opportunity to launch the course 'European IT Law by Design', adopting an innovative (project-based) teaching methodology. Many of the chapters in this book are authored by the teaching staff and visiting scholars who participated in the course. Their contributions reflect the challenges to combine law and design and thrive to explain such a dynamic interaction to law students.

Another substantive part of the contributions stems from the expanded community of the course yearly gathering around the Legal Design Roundtable, an international forum for discussion of Legal Design research and practice. The book hosts, in particular, contributions building on the papers and projects presented at the 2020 VirtualTable dedicated to 'Legal Design Methodology: A Pre-blueprint' (Brussels/online, 1-2 April 2020).

Hence the book collects works from the different voices of the Legal Design community, reflecting its diversity and richness in approaches and

11 Amanda Perry-Kessaris, *Doing Sociolegal Research in Design Mode* (Routledge 2021).

12 Amanda Perry-Kessaris, 'Legal Design for Practice, Activism, Policy, and Research' (2019) 46 Journal of Law and Society 185.

backgrounds. Lawyers, designers, scholars, practitioners, and researchers offer their theoretical and practical perspectives, tackling a range of issues and areas of legal applications, spanning from the EU IT law context to the civil justice system in the US and Australia, to the legal practice in Mexico.

A book like this is only an intermediate output. It is far from being the full stop at the end of the discourse on Legal Design. This holds particularly true in this sector, where the body of literature and practice is expanding at an impressive pace. With this in mind, the edited volume intends to provide the reader, whether at the beginning of their journey in Legal Design or at an advanced stage, with a handful of sources including theoretical essays and practical examples to provide the pulse of the state of the art in the field and its future directions. It is also an open invitation to continue our collective investigation into the mutual relationship between law and design, exploring not only how design can be applied in the legal domain but also understanding how law can support design. It is a call to do so with scientific rigour and *curiositas*, the intellectual wonder that should animate any effort to advance art and science.

This book is divided in two parts. The first part hosts a series of critical essays that contribute from a variety of perspectives to the ongoing discussion about the foundations and methodologies of Legal Design. The second part includes a series of 'project's outlines', i.e. analytical presentations of a Legal Design project by teams operating in the field, to zoom into the current practice.

In both cases, we challenged our authors with the format of their chapter. The critical essays, which correspond to a traditional scholarly contribution, are introduced by a visual abstract. Here, the authors sketch the structure of their paper, highlighting the central thesis, arguments, and original contribution. The goal of this visual representation is to offer an overview of the main takeaways of each chapter, helping readers to quickly identify the scope and key message of the contribution.

On the contrary, the project's outlines are developed according to a specific structure: summary of the project, research question(s), background and context of the project, research project design (the structure and phases of the research project), methodology, prototype and its results and impact (how the project solved the problem identified, metrics

and evaluation), critical takeaways (limitations and existing challenges of the project, future lines of research). The choice of this structure is meant to facilitate the identification of the key features of a project and allow the contrast and comparison of the different techniques and methodologies adopted in the presented Legal Design interventions.

Part I opens with a seminal work by **Apolline Le Gall**. The author challenges the widespread assumption of design thinking applied to the law as the only manifestation of Legal Design. Building on design theory and the empirical insights from the design studio *Nul n'est censé ignorer la loi* ("Ignorance of law is no excuse") conducted at l'ENSCI-Les Ateliers, she identifies four design practices – design thinking, meaning design, projective design and research design – that could provide a more comprehensive and critical framework for Legal Design interventions. Each of these spaces is characterised by different processes and tools, thus allowing the legal community to be aware of a broader palette of tools to reach more complex goals beyond the modelisation and communication of legal information.

Petra Hietanen-Kunwald, Helena Haapio and Nina Toivonen embark on a challenging methodological inquiry investigating how design methods can be meaningfully transposed into the legal domain. Engaging with Niklas Luhmann's systems theory, they propose a theoretical framework for applying Legal Design to one of the law's most prominent tasks: the prevention and resolution of disputes. This attempt is not merely an "academic" exercise. By creating a bridge between systems theory and legal theory, they pave the way for developing suitable solutions to prevent or solve conflicts in practice.

Following a reflective practice approach in their recent work, **Joaquin Santuber and Lina Krawietz** bring their experience of practitioners and researchers to the conversation. They distil their findings into six practical lessons on how to conduct user research in Legal Design projects. Their key contribution is that user research methodologies should be considered a core component of the nascent discipline of Legal Design.

Another critical methodological point is raised by **Lois R Lupica and Genevieve Grant**. Despite the growing popularity of Legal Design, the authors stress that it remains unclear to what extent Legal Design interventions are bringing a meaningful change to the legal system. There-

fore, they argue for measuring such an impact by building a more rigorous scholarly evaluation of the Legal Design outcomes and processes. To this end, they propose investigating evaluation methods already consolidated in other fields, such as health services methods, and seeing what lessons can be learned for the civil justice sector.

Rae Morgan and Emily Allbon intervene in the debate with a punchy reflection on the state of Legal Design in the legal practice, discussing the (in)opportunity to consider Legal Design as a special niche in design. The two authors present a thoughtful review of the legal culture in the UK (which is valid for other countries as well) and outline, with examples, observations, and practical methods, how lawyers can *really* embrace design's human-centred approach.

Alain Strowel and Laura Somaini explore the potential of Legal Design in the current policy debate about platform regulation, focusing, in particular, on recommender systems and on the need of enhanced transparency. The authors show how the existing EU regulatory framework could be improved with the proposed Digital Services Act, which introduces specific obligations for very large online platforms in relation to recommender systems. They also suggest that more could be done to better distinguish advertising from other content on platforms. The authors plead for future research where Legal Design tools would be harnessed to empower the platform users to modify or influence the recommender system's main parameters.

Rossana Ducato provides a critical reading on how the human-centred approach can be adopted when designing the mandatory disclosures established in the General Data Protection Regulation (GDPR). The chapter outlines the basics of the principle of transparency and the information obligations enshrined in the GDPR, discusses the human-centred 'signs' within the Regulation, and offers a framework to develop modular solutions to enhance the comprehension of information by a diverse audience.

The quest for transparency is also at the core of **Marietjie Botes and Arianna Rossi**'s work. Building on their expertise on standardised icons in the legal domain, the authors argue against the alleged 'universal' communication power of pictures, explaining how the socio-economic context and culture can influence the understanding of the message. To illustrate such a point, they present the controversial aspects and impli-

cations emerging in a case study concerning the genomic consent form developed in 2018 for the San community in South Africa, showing how the involvement of the local population led to a more satisfactory re-design of the consent procedure.

Part I concludes with the research experience of **Chiara Fioravanti and Francesco Romano** within the framework of projects funded by the Asylum, Migration and Integration Fund, to foster the accessibility and comprehensibility of administrative texts for recently settled migrants. The authors present the challenges of developing solutions for such a vulnerable target, sharing their preliminary results and guidelines applicable in a multicultural and multilingual context.

Part II of the book zooms in on three concrete Legal Design examples developed in very different contexts.

The first project in the public sector is presented by **Marie Potel and Elisabeth Talbourdet**. The two authors guide the reader through their recent collaboration with the French Data Protection Authority (the CNIL), showing the method they followed to create interfaces to support children to better understand and exercise their data protection rights in the online environment. Interestingly, they also produced 'methodology kits' that could be reused by other designers.

The second project also focuses on the importance of making legal information understandable and usable, but for another category of vulnerable subjects, namely the person under arrest. **Florence Cols** outlines the journey conducted within a European project 'Access Just' for redrafting the 'Letter of Rights' in a more meaningful way to persons who are – as a matter of fact – in a delicate and stressful condition. The project presents the results of the Belgian node and the proposed new version of the letter.

The third project shows an application of design thinking to enhance or create new legal services in a commercial context. **Angélica Flechas**, **Nicolás Guío**, **Daniela Bretón**, and **Jorge García** illustrate their experience in redesigning the services of the legal department of the Mexican bank Nacional Monte Piedad. By 'choreographing' the actors and components of the service, they identified few key areas of intervention to valorise the legal department's role within the bank and its clients.

Bibliography

Berger-Walliser G, Barton TD, Haapio H, 'From Visualization to Legal Design: A Collaborative and Creative Process' (2017) 54 American Business Law Journal 347

Berman D, 'Toward a New Format for Canadian Legislation–Using Graphic Design Principles and Methods to Improve Public Access to the Law' (2000) 30 Human Resources Development Canada and Justice Canada Project Paper

Brunschwig CR, 'Visual Law and Legal Design: Questions and Tentative Answers' in Schweighofer E and others (eds), *Proceedings of the 24th International Legal Informatics Symposium IRIS* (Editions Weblaw 2021)

Corrales Compagnucci M, Haapio H, Fenwick M (eds) *Research Handbook on Contract Design* (Edward Elgar forthcoming)

Haapio H and others, 'Legal design patterns for privacy' in Schweighofer E and others (eds), *Data Protection/LegalTech Proceedings of the 21st International Legal Informatics Symposium IRIS* (Editions Weblaw 2018)

Hagan MD, *Law By Design* (2016) <www.lawbydesign.co> accessed 22 August 2021

-- 'The Justice Is in the Details: Evaluating Different Self-Help Designs for Legal Capability in Traffic Court' (2019) 7 Journal of Open Access to Law 1

-- 'Prototyping for policy' in Corrales Compagnucci M and others (eds) *Research Handbook on Legal Design* (Edward Elgar forthcoming)

Kafka F, *The Trial* (David Wyllie tr, 2005) <https://www.gutenberg.org/ebooks/7849> accessed 22 August 2021

LeDA, What is Legal Design (2018) < www.legaldesignalliance.org> accessed 22 August 2021

Perry-Kessaris A, 'Legal Design for Practice, Activism, Policy, and Research' (2019) 46 Journal of Law and Society 185

-- *Doing Sociolegal Research in Design Mode* (Routledge 2021)

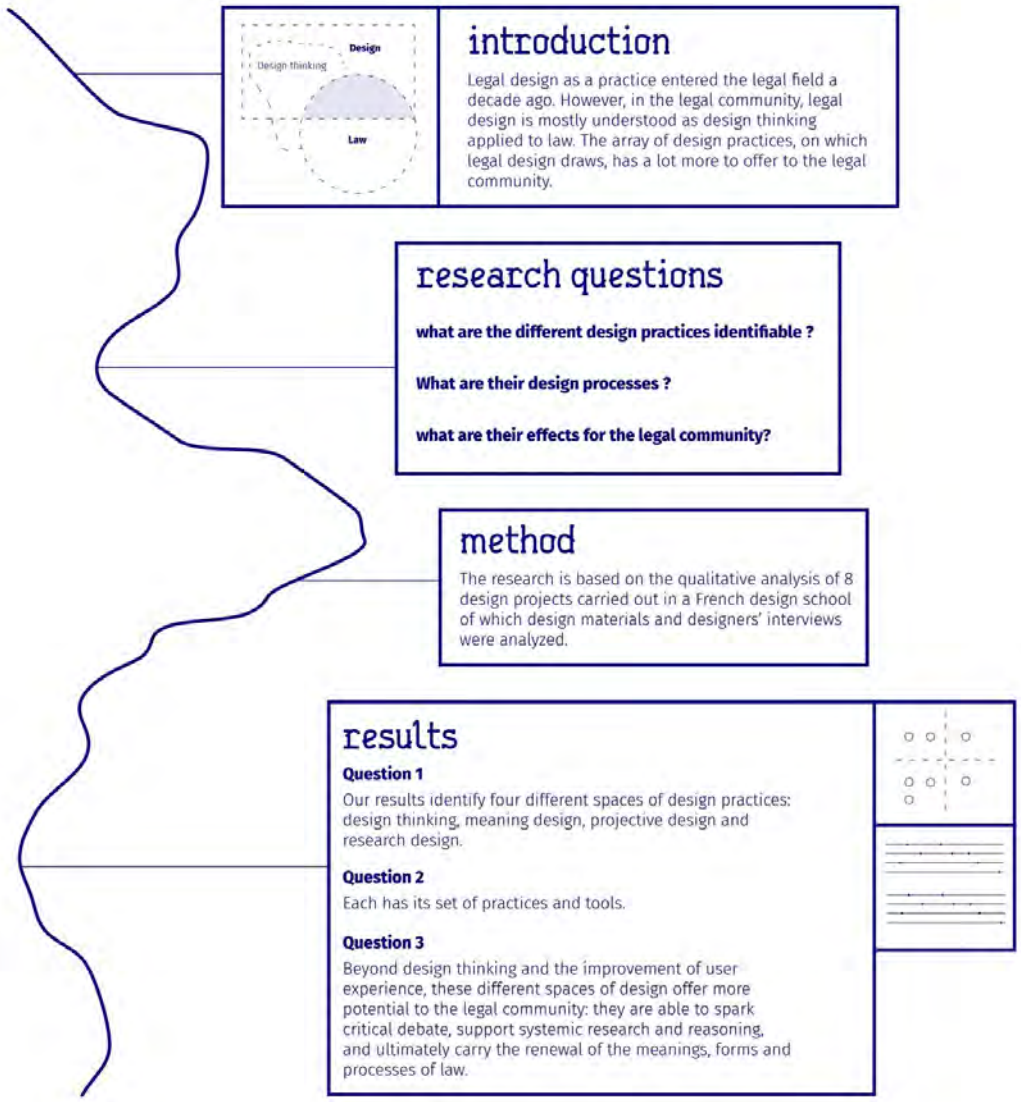
Pope HJ, Treni A, 'Sharing Knowledge, Shifting Power: A Case Study of "Rebellious" Legal Design during COVID-19' (2021) 9 Journal of Open Access to Law

PART I

CRITICAL ESSAYS. FOUNDATIONS, METHODOLOGIES, CRITIQUES, AND APPLICATIONS OF LEGAL DESIGN

1. LEGAL DESIGN BEYOND DESIGN THINKING: PROCESSES AND EFFECTS OF THE FOUR SPACES OF DESIGN PRACTICES FOR THE LEGAL FIELD

Apolline Le Gall



1. Introduction

For a decade, legal practitioners have been experiencing a large transition in the legal industry. The emerging LegalTech ecosystem, which is a large group of actors investing in tech to fuel legal innovation through software solutions and up-to-date UX. Public services follow this trend by 'digitalizing' their processes, including the legal system.[1] These changes imply that legal practitioners and lawyers are being challenged in the traditional value chain, the delivery of legal services and in the vertical relationship that they are used to.[2] To tackle these issues and increase their capacity for innovation, the legal community has begun to rely on an approach based on design, referred to as "Legal Design".[3]

Stemming from the traditional approaches of product or graphic design,[4] in the 1990s design expanded to digital design, service design and public service design, an approach intended to imagine, strategize, and give shape to entire service systems and experiences.[5] Since then,

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* This paper was originally submitted at the "Legal Design Roundtable 2020" as co-authored by Apolline Le Gall and Sumi Saint-Auguste (President of the non-profit "Open Law*Le droit ouvert"). The model of four spaces of design practice was developed in a joint research study financed by Promising, and involving Prof. Valérie Chanal (Université Grenobles-Alpes, Promising – Innovation School) and Prof. Olivier Irrmann (Yncrea – Engineering School, Adicode) in a book to be published "Former par le design: points de repères et retours d'expériences pédagogiques". The author would also like to thank Dr. Lydia Fenner, for her advice and very thorough re-reading of this Chapter.

1 Richard Susskind, *The end of lawyers?: rethinking the nature of legal services* (OUP 2008); Michelle M Harner, 'The Value of 'Thinking Like a Lawyer'' (2011) 70 Maryland Law Review 390; Bruno Deffains, 'Le monde du droit face à la transformation numérique' (2019) 170 Pouvoirs 19.

2 Harner (n 1).

3 For an analysis of the emergence and the concept of Legal Design, see Gerlinde Berger-Walliser, Thomas D. Barton and Helena Haapio, 'From Visualization to Legal Design: A Collaborative and Creative Process' (2017) 54 American Business Law Journal 347.

4 Davide Ravasi and Ileana Stigliani, 'Product design: a review and research agenda for management studies' (2012) 14(4) International Journal of Management Reviews 464.

5 Apolline Le Gall, 'Les Épreuves de Valuation Dans Le Design de Services Innovants : Le Rôle Des Représentations Visuelles' (DPhil thesis, Université Grenoble-Alpes 2016).

design has also reached the macro levels of strategic design,[6] design management or organizational design.[7] It has also led to the invention of new methodologies and mindsets such as the collaborative process of joint inquiry and creativity, coined "co-design",[8] or critical approaches aimed at fostering debate.[9] Design has hence proved its ability to renew markets and products but also industries, meanings and even culture and communities.[10] It is now acknowledged as a powerful tool for innovation.

Some authors and consultants have tried to model "How designers think"[11] in a methodology called "Design Thinking"[12] (hereinafter, "DT") intended to help organizations innovate. This approach later entered the

6 Jeanne Liedtka, 'In Defense of Strategy as Design' (2000) 42 California Management Review 8; Deborah L Kellogg and Winter Nie, 'A Framework for Strategic Service Management' (1995) 13 Journal of Operations Management 32.

7 Youngjin Yoo, Richard J Boland Jr and Kalle Lyytinen, 'From Organization Design to Organization Designing' (2006) 17 Organization Science 215; Richard J Boland Jr and others, 'Managing as Designing: Lessons for Organization Leaders from the Design Practice of Frank O. Gehry' (2008) 24 Design issues 10; Kathryn Best, *The Fundamentals of Design Management* (Bloomsbury Publishing 2010); Brigitte Borja de Mozota, 'Quarante Ans de Recherche En Design Management: Une Revue de Littérature et Des Pistes Pour l'avenir' (2018) Sciences Du Design 28.

8 Marc Steen, 'Co-design as a process of joint inquiry and imagination' (2013) 29(2) Design Issues 1.

9 Anthony Dunne and Fiona Raby, *Speculative Everything: Design, Fiction, and Social Dreaming* (MIT Press 2013); Thomas Markussen and Eva Knutz, 'The Poetics of Design Fiction', *Proceedings of the 6th International Conference on Designing Pleasurable Products and Interfaces* (2013) 231. For a comprehensive review of these practices, see Max Mollon, 'Designing for Debate: How to Craft Dissonant Artefacts and Their Communication Situations so as to Open Spaces for Mutual Contestation (Agonism) and the Expression of Marginal Voices (Dissensus)' (DPhil thesis, Ecole Nationale Supérieure des Arts Décoratifs & PSL University 2019).

10 Vicky Lofthouse, 'Ecodesign Tools for Designers: Defining the Requirements' (2006) 14 Journal of Cleaner Production 1386; Ezio Manzini, *Design, When Everybody Designs. An Introduction to Design for Social Innovation* (MIT Press 2015); Terry Irwin, 'Transition Design: A Proposal for a New Area of Design Practice, Study, and Research' (2015) 7 Design and Culture 229.

11 Nigel Cross, *Design Thinking: Understanding How Designers Think and Work* (Berg Publishers 2011).

12 Tim Brown, *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation* (Harper Collins 2009).

legal sphere with pioneers like Margaret Hagan,[13] who is a theorist and practitioner of DT applied to law. In this chapter, the term design thinking will be used to refer to the theory and practice of DT in the legal field, and "Legal Design" to refer to the broad understanding of "design applied to law" (which includes but is not limited to DT). In recent years, DT has, in fact, helped the legal community deliver clearer legal information, create new products and services, improve people's experience of legal processes and transform legal practice and education.[14] Other authors also highlight the potential of DT in different aspects of legal work: Legal Design for legal practice, legal activism, policymaking or legal research.[15] This starting point has resulted in a sort of bias in the legal community: "Legal Design" is currently mostly understood as "design thinking applied to law",[16] which limits its potential for the legal field and practice.

Other approaches, such as design as practiced in "art-based design schools",[17] "transition design",[18] "fiction design",[19] "co-design",[20] "na-

13 For a historical perspective, see Margaret D Hagan, 'Design Comes to the Law School' in Catrina Denvir (ed), *Modernising Legal Education* (CUP 2020).

14 Mark Szabo, 'Design thinking in legal practice management' (2010) 21 Design Management Review 44; David Ball, 'Redesigning sentencing' (2014) 46 McGeorge Law Review 817; Dan Jackson, 'Human-Centered Legal Tech: Integrating Design in Legal Education' (2016) 50 The Law Teacher 82; Margaret D Hagan, 'A Human-Centered Design Approach to Access to Justice: Generating New Prototypes and Hypotheses for Intervention to Make Courts User-Friendly' (2018) 6 Indiana Journal of Law and Social Equality 199.

15 Amanda Perry-Kessaris, 'Legal Design for Practice, Activism, Policy, and Research' (2019) 46 Journal of Law and Society 185. However, her works specifically adopts a broad definition of design, that goes beyond DT and states that "designerly ways (especially experimentation, communication and making things visible and tangible) can enhance lawyerly communication", see Amanda Perry-Kessaris, *Doing Sociolegal Research in Design Mode* (Routledge 2021).

16 See Hagan, 'A Human-Centered Design Approach to Access to Justice: Generating New Prototypes and Hypotheses for Intervention to Make Courts User-Friendly' (n 14); Berger-Walliser, Barton and Haapio (n 3).

17 Lucy Kimbell, 'Rethinking Design Thinking: Part I' (2011) 3 Design and Culture 285.

18 Irwin (n 10).

19 Markussen and Knutz (n 9).

20 Marc Steen, Menno Manschot and Nicole De Koning, 'Benefits of Co-Design in Service Design Projects' (2011) 5 International Journal of Design 53.

ture-inspired design",[21] and many other theories and practices of design suggest that there are other ways of practicing design than DT. Yet, such practices in the legal field have not been explored. Our study seeks to explore the full potential of design for the legal field, in its powerful capacity to question and renew meaning and values.[22] This Chapter aims to investigate the effects of design projects for the legal domain and the process with which designers trained in art-based design schools execute them. In doing so, this work intends to contribute to both legal practice theory in its use of design and to design theory as design expands its territory to law.

2. Research questions

To build a broad perspective of design that goes beyond DT, our contribution is based on design theory. For the purpose of this paper, we use the following definition: design is a professional activity[23] aimed at creating artefacts[24] that have meaning[25] and value[26] for multiple stakeholders.[27]

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21 Karen Jonhson Rossin, 'Biomimicry: Nature's Design Process versus the Designer's Process' (2010) 138 WIT Transactions on Ecology and the Environment 559; Ingrid De Pauw and others, 'Nature Inspired Design: Strategies towards Sustainability' (Paper presented at the Knowledge Collaboration & Learning for Sustainable Innovation ERSCP-EMSU, Delft, Netherlands, October 2010).

22 Roberto Verganti, 'Design, Meanings, and Radical Innovation: A Metamodel and a Research Agenda' (2008) 25 Journal of Product Innovation Management 436.

23 Manzini (n 10).

24 Herbert A Simon, *The Sciences of the Artificial* (3rd edn, MIT Press 1996); Willemien Visser, 'Designing as construction of representations: A dynamic viewpoint in cognitive design research' (2006) 21(1) Human–Computer Interaction 103.

25 Klaus Krippendorff, 'On the essential contexts of artifacts or on the proposition that" design is making sense (of things)' (1989) 5(2) Design Issues 9; Roberto Verganti, *Innovation of Meaning* (MIT Press 2015); Verganti, 'Design, Meanings, and Radical Innovation: A Metamodel and a Research Agenda' (n 22).

26 Le Gall (n 5).

27 Qin Han, 'Practices and Principles in Service Design: Stakeholders, Knowledge and Community of Service' (DPhil thesis, University of Dundee 2010); Fabian Segelström, 'Stakeholder Engagement for Service Design. How Service Designers Identify and Communicate Insights' (DPhil thesis, Linköping University 2013); Robert Farrell and Cliff Hooker, 'Values and Norms between Design and Science' (2014) 30 Design Issues 29.

2.1. Design as formulating and formalizing: From Design Thinking to Design Theory

Klaus Krippendorff underscores that "[d]esign is making sense of things"[28] while Roberto Verganti defines design as an activity based on the renewal of meanings through the renewal of "product languages".[29] Using this definition, design can be understood as involving both the capacity to envision new meanings and to express it through sensory experiences, as stated by Richard Buchanan.[30]

The same idea can be found in Liljenberg Halstrøm's study, in which design articulates the "epidectic" register and the "deliberative" register,[31] or in Armand Hatchuel's work where design is the interaction between value and form.[32]

Hence, we suggest analyzing design as an activity based on two interrelated dynamics:

– Formulating: an activity aimed at elaborating the meaning and values of an artefact;
– Formalizing: the activity of drawing, embodying this meaning in a device, which can be perceived through sensory experience (an object, a service, an interface, a book, etc.).[33]

In this perspective, we understand that DT may constitute one form of design practice, i.e. one way of formulating and formalizing, among others.

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28 Krippendorff (n 25).

29 Verganti 'Design, Meanings, and Radical Innovation: A Metamodel and a Research Agenda' (n 22).

30 Richard Buchanan, 'Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice' (1985) 2 Design Issues 4: "*The skillful practice of design involves a skillful practice of rhetoric, not only in formulating the thought or plan of a product (…) but also in persuasively presenting and declaring that thought in products*".

31 Liljenberg Halstrøm, 'Design as Value Celebration: Rethinking Design Argumentation' (2016) 32 Design Issues 40, 40.

32 Armand Hatchuel, 'Quelle Analytique de La Conception ? Parure et Pointe En Design' in Brigitte Flamand (ed), *Le design : Essais sur des théories et pratiques* (Institut de la Mode 2006).

33 Halstrøm (n 31).

Formulation in DT clearly advocates a "human-centered" or "user-centered" approach. The main goal of the process is to identify a user problem (or pain point) and adopt the point of view of a target user, drawing upon user interviews, cultural probes, and observations.[34] DT applied to law adopts this perspective.[35] Design theory and practice, however, shows other ways of formulating in design. Schematically, we can identify two archetypes that constitute two opposites of a spectrum in formulation practices.

On the one hand, formulating can be grounded in the political, poetic, artistic, etc., singular vision of the designer. It is an "inside-out" movement from the designer to the world.[36] We will refer to this as "intention-led" approaches. It corresponds to what Verganti and Norman[37] identify as "meaning-driven innovation", which is a design approach based on designers' vision and interpretation of the socio-cultural environment.

In service design, Qin Han also identifies different designer roles, among which the "leader designer", who puts forward a strong vision

34 See, Tim Brown and Barry Katz, 'Change by design' (2011) 28 Journal of Product Innovation Management 381. Since this publication, several studies of the approach, methods or outputs of design thinking were carried out in various sectors such as business and business education for example see David Dunne and Roger Martin, 'Design Thinking and How It Will Change Management Education: An Interview and Discussion' (2006) 5 Academy of Management Learning & Education 512. For service industry, see Marc Stickdorn and Jacob Schneider, *This is Service Design Thinking* (BIS Publishers 2010). For legal practice, see Berger-Walliser, Barton and Haapio (n 3); Hagan, 'A Human-Centered Design Approach to Access to Justice: Generating New Prototypes and Hypotheses for Intervention to Make Courts User-Friendly' (n 14).

35 See for instance Hagan, 'A Human-Centered Design Approach to Access to Justice: Generating New Prototypes and Hypotheses for Intervention to Make Courts User-Friendly' (n 14) 203: *"In this article, the term 'human-centered design"'will be used for consistency, but 'user-experience design' and 'design thinking' would be equally relevant terms to refer to the approach"*.

36 Valérie Chanal and Apolline Le Gall, 'Roberto Verganti : Le Design Au Service de l'innovation de Sens' in Thierry Buger-Helmchen, Caroline Hussler and Patrick Cohendet (eds), *Les Grands Auteurs en Management de l'Innovation et de la Créativité* (Editions EMS 2016).

37 Donald Norman and Roberto Verganti, 'Incremental and radical innovation: Design research vs. technology and meaning change' (2014) 30(1) Design Issues 78.

(intention-led design).[38] On the other hand, formulating can be based on a field study. It is an "outside-in" movement from the world to the designer, who bases its project on an understanding of peoples' needs.[39] We will refer to this as "field-centered" approaches. It corresponds to what Verganti and Norman identify as "user-centered" design, and to human-centered or stakeholder-centered approaches, which are design approaches based on the study and observation of users to capture their point of view. In service design, Qin Han also identify the "facilitator designer", who helps users and stakeholders to build their problems and solutions.[40]

As far as formalizing is concerned, DT attempts to formalize products and services that are desirable, feasible, and viable. This goal is achieved through rough prototyping and user testing.[41] However, as far as formalizing is concerned, different authors have discussed the various nature, output, or end of a design process. One can identify two major levels of formalization that also constitute two polarities of the formalization practices.

On the one hand, designers can formalize user experience, through the design of products, services, interfaces, etc. This level is identified by Terry Irwin as design for services or design for social innovation and by Tim Brown and other authors in design thinking.[42] Such a level of formalization follows the "downstream" movement described by Alain Findeli and Rabah Bousbaci or "micro" perspective of design, which moved from designing objects to designing features and interactions with objects.[43]

On the other hand, designers can formalize "systems and processes" through the design of artefacts that support systemic reasoning. This type of formalizing refers to speculative design, critical design or fiction

38 Qin Han (n 27).

39 Chanal and Le Gall (n 36).

40 Segelström (n 27).

41 Brown (n 12).

42 Tim Brown, 'Design Thinking' (2008) 86 Harvard Business Review 84; Mikko Koivisto, 'Frameworks for Structuring Services and Customer Experiences' in Satu Miettinen and Mikko Koivisto (eds), *Designing Services with Innovative Methods* (University of Art and Design Helsinki 2009); Marie-José Avenier, 'Shaping a Constructivist View of Organizational Design Science' (2010) 31 Organization Studies 1229.

43 Alain Findeli and Rabah Bousbaci, 'L'éclipse de l'objet Dans Les Théories Du Projet En Design' (2005) 8 The Design Journal 35.

design, where designers do not create products for the market, but attempt to formalize "provotypes[44] or "uncanny objects"[45] to spark debate. It also refers to what Terry Irwin calls "transition design", which is about questioning the systemic cultural, political and economic paradigms by imagining systems that create radically new paradigms.[46] Such formalization levels follow the "upstream" movement of design described by Alain Findeli and Rabah Bousbaci, or a "macro" perspective of design: designers tend to focus on processes and configurations of actors.[47] In the end, our literature review shows that DT is one way of practicing design among others.

2.2. Three research questions

If the practices, processes, and effects of DT applied to law are well documented, we need to better understand the diverse design practices involved in Legal Design. Such potential was not yet explored and is the aim of this Chapter through its first research question.

RQ1: Can we identify other forms of Legal Design practices than Design Thinking?

DT in law is well documented and theorized, and studies on DT in other sectors provide a comprehensive understanding of its processes and tools. The "Double Diamond",[48] as published by the UK Design Council in 2005, is divided into four phases: Discover, Define, Develop and Deliver.

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44 Laurens Boer, Jared Donovan and Jacob Buur, 'Challenging Industry Conceptions with Provotypes' (2013) 9 CoDesign 73.

45 Max Mollon and Annie Gentès, 'The Rhetoric of Design for Debate: Triggering Conversation with an "Uncanny Enough" Artefact' (Proceedings of the Design Research Society International Consortium, Umeå, 2014).

46 Irwin (n 10).

47 Alain Findeli, 'La Recherche-Projet En Design et La Question de La Question de Recherche : Essai de Clarification Conceptuelle' (2015) Sciences du design 45; Findeli and Bousbaci 'L'éclipse de l'objet Dans Les Théories Du Projet En Design' (n 43).

48 The model was firstly published in 2005. For a history of the model, see Jonathan Ball, 'From humble beginnings to a cornerstone of design language' (*DesignCouncil.org*) <www.designcouncil.org.uk/news-opinion/double-diamond-universally-accepted-depiction-design-process> accessed 9 August 2021.

Currently, this seems to be the best known and the most popular design process visualization. All these processes use standardized tools and techniques, such as personas,[49] customer journeys,[50] blueprints,[51] etc.

However, authors have highlighted the role of other tools and activities in the design process such as inspiration,[52] sociocultural interpretation and theorization,[53] bisociation,[54] imagination,[55] critique,[56] etc. Such activities and their articulation, as well as their tools, are not well known yet and this is the base of the second research question.

RQ2: What processes are Legal Design projects based on?

In her initial book, Margaret Hagan suggests four effects of DT applied to law: (1) Communicate information in a more meaningful way; (2) Improve service offerings & relationships with clients; (3) Develop ideas into new products and services; and (4) Build a culture of innovation in an organization.[57] However, design theory and practice suggest we can

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49 Adrienne Massanari, 'Designing for Imaginary Friends: Information Architecture, Personas and the Politics of User-Centered Design' (2010) 12 New Media & Society 401.

50 Adam Richardson, 'Using Customer Journey Maps to Improve Customer Experience' (2010) 15 Harvard Business Review 2.

51 Lynn G Shostack, 'How to Design a Service' (1982) 16 European Journal of Marketing 49.

52 Claudia Eckert and Martin Stacey, 'Sources of Inspiration: A Language of Design' (2000) 21 Design studies 523.

53 Roberto Verganti, *Design-Driven Innovation: Changing the Rules of Competition by Radically Innovating What Things Mean* (Harvard Business Press 2009).

54 Arthur Koestler and Georges Fradier, 'Le Cri d'Archimède' (1966) 21 Les Etudes Philosophiques; see for example Patrick Cohendet, 'XXXI. Arthur Koestler. Aux Origines de l'acte Créatif : La Bisociation' in Thierry Burger-Helmchen (ed), *Les Grands Auteurs en Management de l'innovation et de la créativité* (Editions EMS 2016).

55 Bela H Banathy, *Designing Social Systems in a Changing World* (Springer 1996). In her model of social change design, she identifies transcendence and envisioning the new system.

56 Dunne and Raby (n 9); Irwin (n 10); Ian Alam, 'Removing the Fuzziness from the Fuzzy Front-End of Service Innovations through Customer Interactions' (2006) 35 Industrial Marketing Management 468.

57 Margaret D Hagan, 'Law by Design' (2016) <www.lawbydesign.co> accessed 9 August 2021. However, Hagan's studies has since expanded from that book, see for instance Margaret D Hagan, 'Legal Design as a Thing: A Theory of Change and a Set of Methods to Craft a Human-Centered Legal System' (2020) 36 Design Issues 3.

expect various other effects by understanding design in a broader way: systemic transformation,[58] meaning and political critique,[59] renewal of aesthetics,[60] designing debate,[61] and allowing co-design, creating new knowledge.[62] That is the base of the third research question:

RQ3: What are the effects of design practice for the legal field?

3. Methodology

Our research is based on an empirical and qualitative case study: a design studio was established in a design school in order to experiment with the potential of design in the legal field.

3.1. Studio expérimental: an exploratory design project

Nul n'est censé ignorer la loi ("Ignorance of law is no excuse") is a design studio[63] which was organized at l'ENSCI-Les Ateliers (design school in Paris) from October to December 2018. The design agency *Où sont les Dragons* and the non-profit association *Open Law* Le droit Ouvert* partnered together to bring this ten-week course to life.

Eight students in their third or fourth year (out of five) were asked to dive into the complex and technical world of law, to identify interesting areas of improvement (formulate) and translate them into concrete artefacts (formalize): objects, books, websites, applications, services, workshops, "prototypes", etc.

58 Banathy (n 55); Irwin (n 10).

59 Manzini (n 10); Verganti, 'Design, Meanings, and Radical Innovation: A Metamodel and a Research Agenda' (n 22); Dunne and Raby (n 9).

60 Roberto Verganti, 'Design as Brokering of Languages: Innovation Strategies in Italian Firms' (2003) 14 Design Management Journal 34; Hatchuel (n 32).

61 Mollon (n 9).

62 Boris Ewenstein and Jennifer Whyte, 'Knowledge Practices in Design: The Role of Visual Representations as "Epistemic Objects"' (2009) 30 Organization Studies 7.

63 A 'design studio' is a signature pedagogy in design schools, as showed by Mike Tovey, *Design Pedagogy: Develoments in Arts and Design Education* (Routledge 2015). It is indeed a "class" since it is a pedagogical activity to train young designers, but it is also a very hands-on, personalized and exploratory design project.

The students' projects were based on three steps. Starting from collective immersions and conferences that were organized in phase 1 "Immersion", all of the students were asked to design their own methodology for phase 2 and 3.

Step 1: Immersion. It aims at immerging the students in the topic. At the end of this phase, the students identify a more precise direction in which they want to further explore.

Step 2: Generating a proposition. It is dedicated to elaborate a design project: identifying a target user, meanings, and the types of device to be designed.

Step 3: Refining: The last step of the project aims at producing the demonstrator, i.e. the final prototype of the device or system of devices that embody the project.

At the end of each step, the students would make a formal presentation in front of the partners and invited experts in order to validate the relevance of the project, obtain new information, contacts or advice for the next steps of the project. Since students were asked to design their own methodology, personalised coaching sessions were provided for each individual project. Design teachers (also design practitioners) and legal experts participated in the coaching sessions.

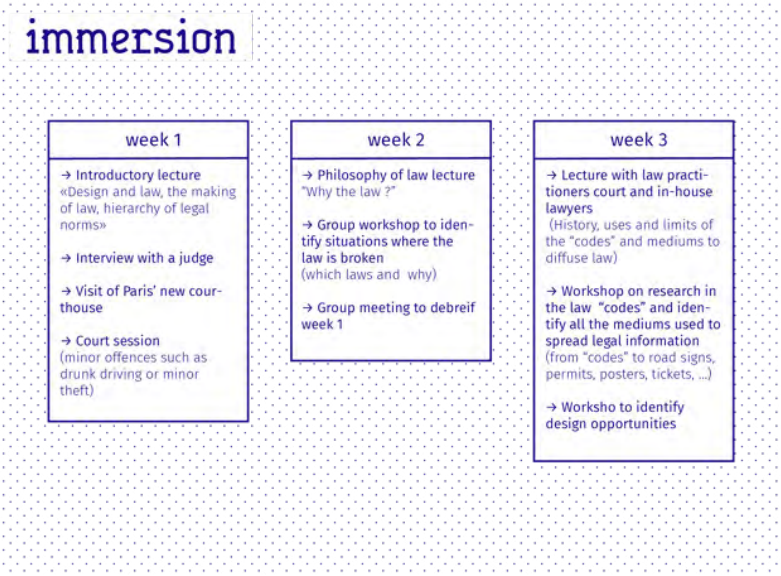


Fig. 1. Step 1 'Immersion' - Program

3.2. Research methodology

Our research is based on the collection of three types of data:
- Participant observations of the coaching sessions and formal presentations;
- Analysis of students' tools and presentations;
- Interviews with the 8 students (on average, the interviews lasted one hour).

The semi-structured interview guide included questions about design, the retrospective description of the project, the methodology implemented, the tools used, the student's intentions, and the potential of design for law. This material was coded to identify the different ways of formulating and formalizing in design for legal practice. The first step led to build a model of four design practices. Then, we analysed each project to categorize it according to this model and their effects for the legal field. The processes were analysed through designers' interviews

and collection of their tools and presentations. They were then coded following Samuel Huron's model[64] according to four dimensions:
– Theory: the level of conceptualization, documentation, analysis, and variable modelization;
– Ideation: the level of creative idea generation, intent, and explicit choices;
– Artefacts: the level of material work, prototyping, refining;
– Observation: the empirical level involving real-world observations, such as observations, interviews, or tests.

4. Results

In this section we first describe our preliminary result: a model of four design spaces of practice. Then we categorize the eight design projects according to these four spaces and provide a detailed analysis of four projects representative of the four spaces.

4.1. Four spaces of Legal Design practices

Our first result is a model of design practice. Based on the two core dimensions of design, Formulating and Formalizing (see above Section 2.1) and their polarities, four different spaces of design practices were identified.

64 Samuel Huron, 'Constructive Visualization: A Token-Based Paradigm Allowing to Assemble Dynamic Visual Representation for Non-Experts' (DPhil thesis Dissertation, University Paris-Saclay, Paris Sud, Paris XI, INRIA, 2015).

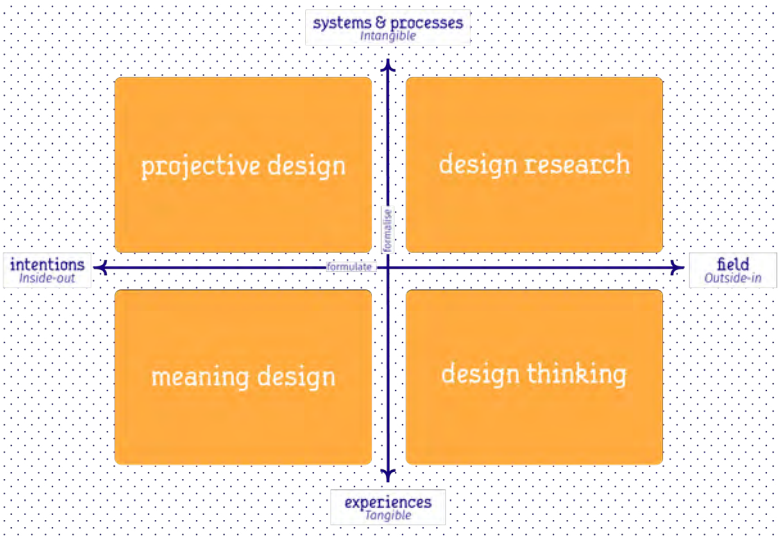


Fig. 2. Four spaces of design practices: Projective Design, Design Research, Meaning Design, Design Thinking.

The four spaces of design practices can be described as follows:

- **Design Thinking** [Field x Experience]: Design Thinking is the current widespread design practice in many economic sectors. This practice formulates a "problem" from a user's point of view and tries to solve it by creating desirable, viable, and feasible experiences. The process is based on field work (for example, user interviews, observations, user tests, etc.) and prototyping.
- **Meaning- Driven Design** [Intent x Experience]: (according to Armand Hatchuel or Roberto Verganti[65]) Meaning- Driven Design is the traditional "art-based" design approach.[66] In this space, designers create new meanings embedded in experiences based on their "intent" (political, aesthetical, artistic, environmental… vision). Designers may test their vision with users in order to check whether it makes sense for

65 Hatchuel (n 32); Verganti, *Design-Driven Innovation: Changing the Rules of Competition by Radically Innovating What Things Mean* (n 53).

66 Kimbell (n 17).

them, but that is not the starting point of the project, they rather rely on their inspiration.

- **Projective Design** [Intent x Systems]: In this space, designers formulate their intention, their point of view (for instance by elaborating a "manifesto") and formalize devices that help question a given topic. It is not about creating an experience that could be implemented in a market, but rather about creating devices and models in order to spark debate. In this space, one could find critical design approaches like Speculative design, Fiction design, or Transition design.[67]
- **Research-design** [Field x Systems]: this space is based on a rigorous Humanities and Social Sciences approach. Designers formulate a new and comprehensive vision of a topic or ecosystem, for example by building a literature review, organizing user research or stakeholders focus groups. The new knowledge generated is formalized in a device that enables complex thinking.

Based on this matrix, the empirical data of the design projects was analyzed to qualify the design practice involved in each of the eight design projects. Figure 3 shows the variety of student projects and provides a short description of each project, while Figure 4 provides a summary of each project.

67 Dunne and Raby (n 9); Markussen and Knutz (n 9); Irwin (n 10).

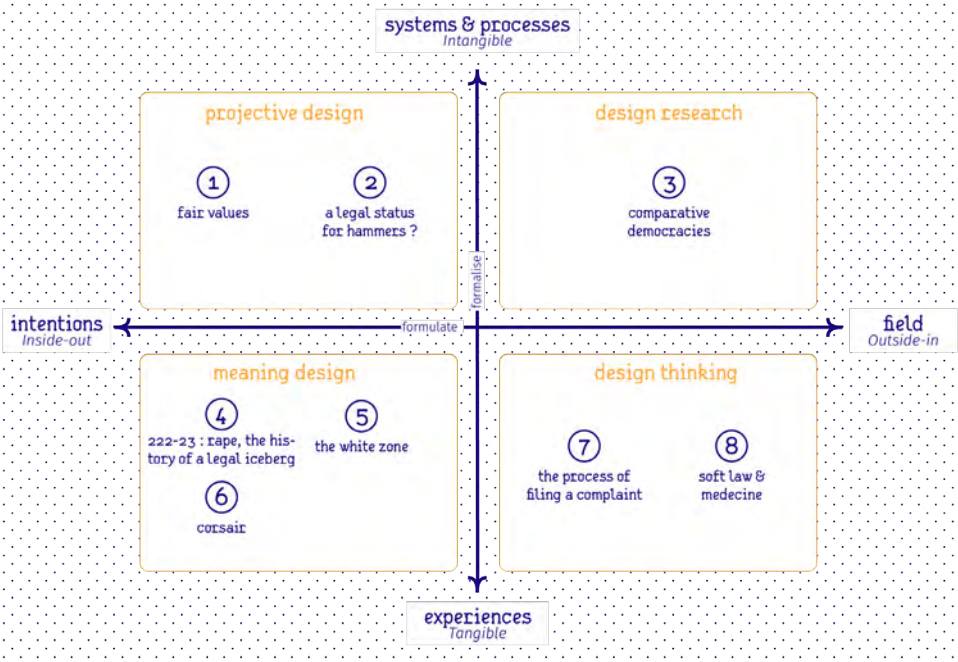


Fig. 3. The eight design projects the studio according to their space of design practice

Fig. 4. The eight design projects produced during the design studio – work licensed under CC-BY-NC-ND

For the purpose of this Chapter, we will provide a detailed focus on four of the eight cases, which are considered particularly representative of each design space.

4.2. Focus on four Legal Design projects

4.2.1. Design Thinking - The process of filing a complaint (Project #7)

In this project, the student redesigned the process of filing a complaint for sexual assault and the resulting criminal procedure. The project could be considered a service design project. For each moment of the procedure, specific solutions were developed:

Before filing a complaint. An online "pre-filing form" intended to help victims in describing the events while safe at home and guidelines describing the criminal procedure.

During the filing. Space design reinforcing visual and sound privacy in police precincts thanks to opaque acoustic panels, signage, and a flyer with guidelines that assist victims in filing complaints.

After filing a complaint. Online follow-up of the different steps of the process.

Figure 5. Le parcours d'une plainte" ("The process of filing a complaint") - Anne-Cécile Cochet 2018, work licensed under CC-BY-NC-ND. Service blueprint identifying the critical moment of filing the complaint, drawings and 3D models of solutions (online "pre-filing" and reception pod, space separations and opaque acoustic panels)

The student's methodology:

Step	Nature	Description
1	Observation	Research on user experience. User research: meeting with victims through non-profit organisations, a collection of online testimonies in dedicated forums, observations in precincts (though she was not able to attend the specific moment when a victim files a complaint), consulting of public reports and press articles, analysis of the documentation and training for the police officers filing the victims' charges.

2	Theory	Data analysis through visual representations - "Map of the actors": a map visualizing the different actors involved in the different aspects, steps and functions of the process - "Service blueprint": a chronological representation of the process that at each step identifies the actors involved, the actions, the status and evolution of the legal process, the physical and material environment, the emotions of the alleged victim.
3	Theory	Identification of pain points: qualifying good and dysfunctioning parts of the process.
4	Ideation	Pain points prioritization: focus on two major critical points, i.e. the fear and discomfort of filing a complaint in a non-secure environment, and the anxiety caused by not knowing the whole process and its day-to-day progress.
5	Ideation	Inspiration: collection of inspirational material on how to help people feel safe, multi-stakeholders platforms, privacy, public spaces
6	Ideation	Idea generation of 3 "objects": online pre-filing form, precinct space design, follow-up procedure
7	Artefact	Quick prototyping
8	Artefact	Realistic prototyping

Table 1. The process of a Design Thinking project - "The process of filing a complaint" (Project #7)

This project is characteristic of a Design Thinking approach.

Design Practice: As far as formulation is concerned, the project clearly adopts a field-centered perspective: the student carried out extensive user research to identify users' problems. These problems were then the source and base of the design project:

> *"I believe that part of the designer's role is to improve people's experience (…) For instance, the police who file the charges don't necessarily realize that there is a strong psychological dimension. The space itself is lacking privacy and that it's problematic for potential victims. The material conditions in which you can file a complaint is critical for the whole process."*

As far as formalization is concerned, the project proposes a new, improved, experience for victims of sexual abuse, through the re-design of the system and its embodiment via website, spaces, and papers.

Process: The process analysis shows that the designer has indeed followed a process similar to the "Double Diamond": she starts with user research ("Explore"), then frames the major focus points ("Define"), generates new ideas ("Design") and prototypes ("Deliver").

Effects: Doing so, the project has a double effect for the law. First, as was observed by Margaret Hagan, it does improve user experience through improving (public) services and delivering better information. Second, it raises awareness on the importance of the material environment, shapes, aesthetics, and pragmatics on how law is embodied, as the student explains:

> *"I actually realised that there were different 'levels of existence' of the legal matter. The first one is, of course, the texts, the words of the law, but the second one, which surrounds it, is the real world, the precincts, the courthouses, the jails… My project is based on raising awareness on the importance of the material aspects and experience of law".*

4.2.2. Meaning Design - "222-23: Rape, story of a legal iceberg" (Project #2)

Based on the idea of an iceberg, this project is a little book that literally dives down into the multiple layers of drafts behind the actual formulation of Article 222-23 of the French *code pénal* ("criminal code"), which legally defines rape. The book gives the context through which the article has been crafted: previous versions of the article, jurisprudence, parliamentary debates, but also social debates. The legal definition is written on the interior cover of the book and, through paper folds and cuts, each page highlights a different aspect of the article and connects it to the different layers of explanation.

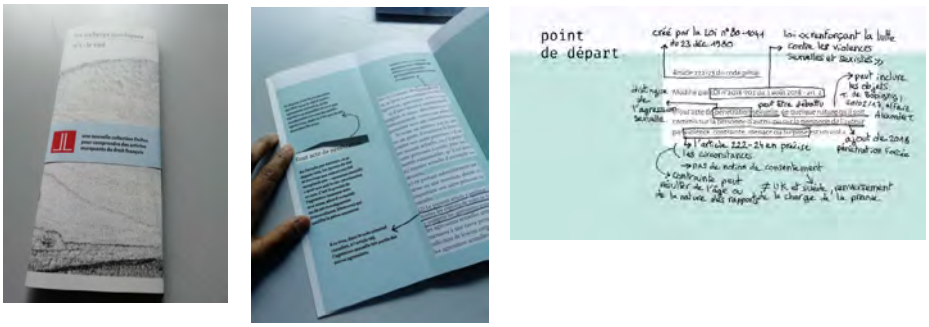


Fig. 6. "222-23: Rape, story of a legal iceberg" ("222-23 : Le viol, histoire d'un iceberg juridique") – Elise Goutagny 2018, work licensed under CC-BY-NC-ND. Two pictures of the final printed version of the book. Collages and annotations of the designer during the process

The student's methodology:

Step	Nature	Description
1	Ideation	A political stand as a starting point: Feminist activism and "outrage" that the article 222-23 of the Criminal Code defining rape is so short and does not include the notion of consent.
2	Theory	Research and gathering of data to investigate why and how the law article was built: institutional communication on sexual abuse, activist documentation on rape and sexual and sexist violence, press articles, history and sociology books, lawyers' blogs, Open Law lawyer experts (non-profit organizations, penal lawyers), previous versions of the law article, parliamentary debates
3	Theory	Analysis and modelization through collages: collages, post-its, printed texts with handwritten annotation, identification of different « layers » of construction: historic and social evolutions, legal evolution, parliamentary debates and jurisprudence.
4	Ideation	The intent to create an object to support reflection: an object to share this understanding with other people, especially ones that do not necessarily identify as feminist activists
5	Ideation	Inspiration: collecting ideas on how to convey multi-faceted content, how to deliver complex information and how to inform laypeople on complex issues (medical, technical, etc.).

6	Artefact	The choice of a book: book that could be edited by one of the major Legal publishing house
7	Artefact	Paper prototyping: experimentations with cuts, folds and collages to deliver bits of information, by hiding and revealing it and by drawing a focus on specific words.
8	Artefact	Printing a limited number of books: after digitally rendering the graphic layout, printing of a few versions of the book.

Table 2. The process of a Meaning Design project – Project #2: "222-23: Rape, story of a legal iceberg".

Design practice: This project is characteristic of the "meaning driven design" approach.

First, the designer formulated her whole project based on her political vision, drawn from feminism:

> *"I was outraged. Not only the section did not mention the idea of 'consent', that I've been defending for years, but the article is surprisingly short. In thirty words, it defines something that is crucial to women! (…) I wanted to understand how we got to this specific legal provision, what it means, why specific words were chosen over others".*

Second, she formalized a device conveying an experience:

> *"I wanted to create something that informs, but also […] to raise the issue, not only for the feminists that are used to discussing it, but for other people too, […] the ones who do not know how to get in this space of conversation but could be concerned".*

Process: The process analysis shows that, unlike the previous project, this one started with the very intent of the designer. This process relied heavily on both ideation and artefact, and very little on direct observation: the designer did not observe users, nor did she test her prototype with them. The book seeks to answer a larger socio-political need that the designer interpreted: the means to understand and debate law. Here, research sequences do not document user experience, but rather

intend to express her own vision. The designer also experimented more with material prototyping than the one in the DT space.

Effects: If the book intends to inform the reader, the essence of the project is not to improve the communication of legal information in a functional perspective, but rather support collective debate on a very important legal and political matter.

To do that, the book disrupts traditional "law books" codes and aesthetics by inventing a new "product language".[68] Her point was to: *"both respect and reinvent the raw material of law that is written text".* Here, design is a useful tool in the critical debate of law and its writing: it fosters the democratic debate about how a law article is written and helps prepare people to intervene in the future re-design of the law article.

4.2.3. Prospective Design – "Fair Values" (Project #1)

This project creates an experience to question the meaning and forms of our judicial system. The student developed "The Fair", a serious game aimed at experimenting with restorative trials (an alternative judiciary approach to repair society rather than punish the culprits).

The kit created by the designer includes:

- A printed leaflet describing the scenario: a middle-aged woman claims she was mugged by a young drunk man and his girlfriend;
- Character cards, describing the different roles, i.e. the accused (a man and a woman), the victim and her family;
- The "community" card: at the beginning of the game, players randomly choose a "type" of community, either composed by the victim's relatives and/or the accused's relatives and/or the neighbourhoods and/or total strangers;

68 Verganti, *Design-Driven Innovation: Changing the Rules of Competition by Radically Innovating What Things Mean* (n 53) and Verganti, 'Design as Brokering of Languages: Innovation Strategies in Italian Firms' (n 60) show that the specificity of design is to 'renew product languages', i.e. the meanings, aesthetics and codes of products. The most famous example is Apple's iMac: computers used to be complex and serious works tools characterized by black and grey angular shapes, but Apple changed this "product language" by making it a 'family' computer that can be used by the whole family and put in the living room. In terms of meanings, the computer is "fun" and "easy to use", in terms of "aesthetics" it uses domes tic codes with round bright colored plastic shapes.

– A device randomly selecting a configuration (who can talk and/or decide at different phases of the game);
– Guidelines for the animator.

1. Each participant is given a character to play throughout the three-step process of the game, animated by a “neutral” participant: Discussion of the facts;
2. Discussion of the potential restorative actions;
3. Decision, based on different conditions.

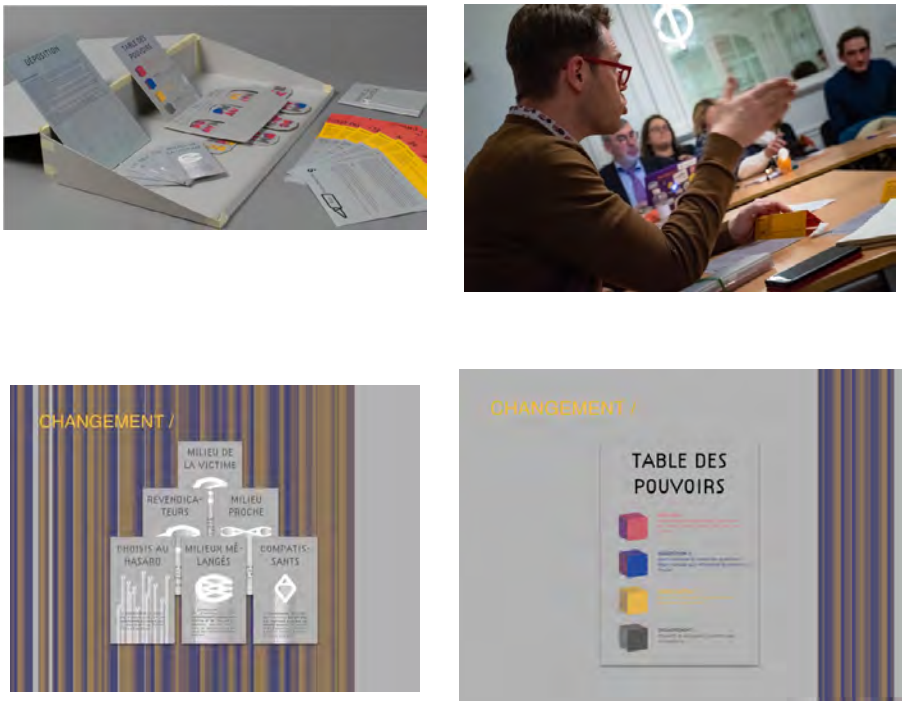


Fig. 7. “Les Justes” (“Fair Values”) – Victor Ecrement 2018, work licensed under CC-BY-NC-ND. The game kit for restorative trials including character cards, roles and configuration selector, scenario and animation guidelines. Picture taken during the final simulation involving lawyers and judges. Cards of the ‘community’. Table of powers describing the different powers of decision (consultation, involvement in the decision-making process, neutral animation of discussion…).

The student's methodology:

Step	Nature	Description
1	Ideation	The symbolic shock on 'the moment of the trial' as a starting point: struck by the theatrical aspects of the court and of the trials, the notion of collective performance and catharsis.
2	Theory	Research on the French judiciary processes through extensive reading of press articles, documentaries, podcasts, and meetings with judges and lawyers.
3	Ideation	Inspiration on the meaning and the forms of trials: investigation of other ways of carrying out justice, such as other forms of trials throughout the world and across time, ancient ways of "serving justice", essays and works of art (literature, theatre, painting, performances, sci-fi, etc.).
4	Ideation	Questioning the desirability of 'restorative justice': discovery of the concept of "restorative justice" as theorized by Lode Walgrave that moved the designer and met with his core values.
5	Theory	Extensive research on restorative justice: examples of experimentations of 'minimalist' restorative justice (for example: victims of sexual abuses meeting with sexual offenders to understand each other's point of view), very few examples of 'maximalist' restorative justice where the trials are based on this approach. Studies of the theoretical propositions on how 'restorative justice' could be carried out.
6	Artefact	Choice of a game to explore how could restorative justice work, to prototype the roles and interactions of different actors, to experiment the collective catharsis of a restorative trial.
7	Ideation	Inspiration: trials in movies and theatre plays, roleplay games (Dungeons and Dragons, Werewolves' Village, etc.).

8	Theory	Variable modelisation mapping out the structuring variables of a restorative trial based on Lode Walgrave's theory, and imagining the variables and conditions that are not treated via diagrams and role plays. Identification of the following elements: - what is discussed: the facts, the 'restorative actions'; - who: the actors (both meaning the stakeholders involved in the process and the individual embodying such role); - modes of discussion: how the speech is distributed, who can talk and when; - modes of decision: who decides what.
9	Artefact	Prototyping the game: rough prototypes with paper cards attributing the roles and the right to speak and other determinants of the game's setup (who can or cannot talk, who can or cannot make decisions…); prototyping the case (scenario in which a woman has been attacked by two people).
10	Observation	Testing. Multiple tests with design students to improve: - the different parts of the scenario; - the sequences of the game for a better playability; - the balance between guided process and the improvisation of the players; - the game's ability to produce significantly different trial scenarios, and making these differences perceptible enough to the players to generate debate between them.
11	Artefact	A game kit and a simulation as the final deliverable: digital layout, printing and crafting of the kit. The carboard box includes a deck of character cards, a set of tools for organizing the turn to speak and the decision power. Game test with lawyers and judges.

Table 3. The process of a Projective design project: "Fair Values" (Project#1)

Design practice: This project is representative of Projective Design approaches.

On one hand, it is based on the student's vision and intent to champion and explore restorative trials and, on the other hand, it is based on a systemic and theoretical modelisation, formalized in a device that sparks debate (the card game). The student based his project on its symbolic

shock on what a trial feels like and an exploration of what a "fairer" legal system would be like.

Process: The process analysis shows a constant dynamic circulation between theory and ideation and two sequences of theory-ideation-artefact. The designer uses tools and creates artefacts that foster systemic reasoning (for example, for the model of variables) through (a) sensory material, such as the box, spaces, cards, etc., and (b) experiential material, i.e. stories, games. The observation sequences show that the project is not just about designing artefacts, but also the debatable topics (variable modelization) and the situation that supports the debate, as Max Mollon had observed in "Designing for debate" practices.[69]

Effects: Here, the project does not really create new legal services but questions, through the fiction of a game the very meaning, values, and form of the judiciary system. This project shows how immersing people in simulation of real-life experiences can spark debate on the desirability of implementing restorative justice, questioning its very meaning and forms:

> *"I realised that in order to know whether a certain type of trial would be preferable, one should experiment. And that was the point of my project [...] the objective was to create, through design, sufficient conditions to simulate all kinds of restorative trials".*

Doing so, it thereby questions the desirability as well as the flaws of our current judiciary system. The game is also a device that creates data for future research on restorative justice and its implementation:

> *"The first version of the game was an application of Lode Walgrave's main article, that-is-to-say that everything Walgrave has specified (such as the different actors) are the constants of the game, they are fixed; while the fuzzy elements (like the division of power; or what and who the "community" stands for) became variable to be tested in the game, either by selecting or by randomly drawing their characteristics".*

69 Mollon (n 9).

In Amanda Kerry-Pessaris's categories, the project contributes to both legal activism and legal research.

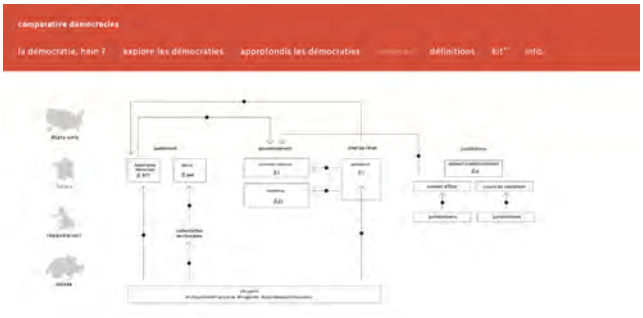
4.2.4. Research Design – "Comparative Democracies" (Project #3)

"Comparative democracies" is an interactive platform helping high school students to better understand the mechanics of the democratic electoral process by manipulating elements such as the profile of law-makers or voters, voting methods, or the law-making process.

The web platform includes 3 different tabs:

– "Democracy, what is it ?!". This provides a brief explanation of the main principles of democracy (constitution, distribution of powers…), and the description of 4 archetypal models of democracy (United-Kingdom, USA, France, and Switzerland);
– "Explore your democracy". This tab is a test in which you can design your own democracy based on various choices, and then compare your model with the 4 main models identified,
– "Definitions". This section contains a glossary explaining the major concepts (such as constitution, legislative authority, selective suffrage...).

The students can navigate between the tabs of the website and the gamified approach in which they can play with different dimensions to build their own model of democracy.



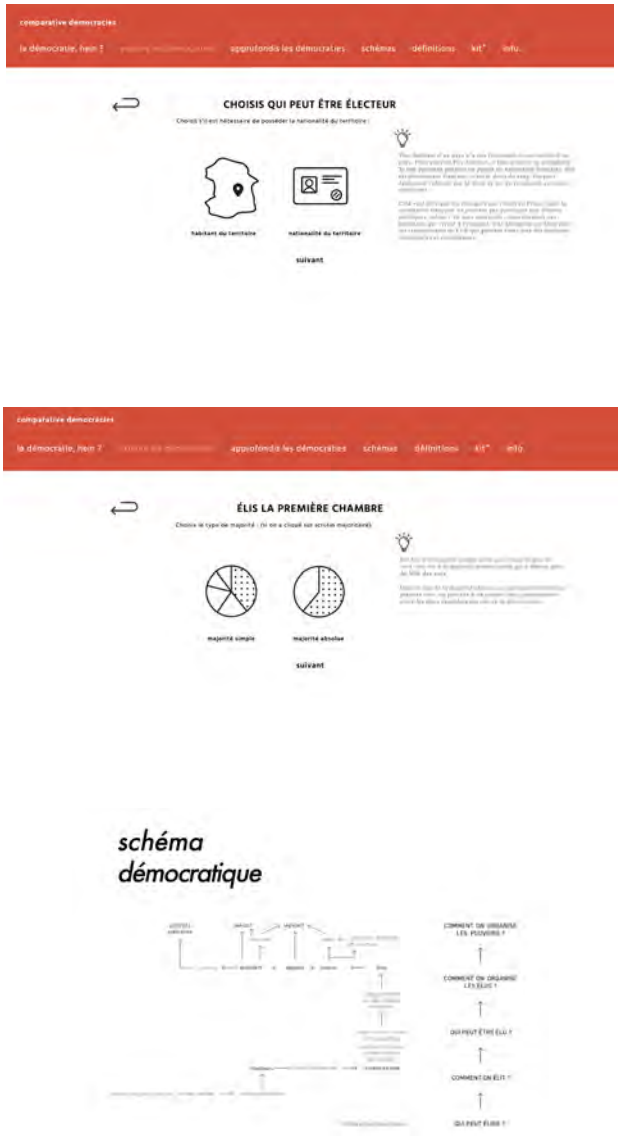


Fig. 8. "Comparative Democracies" (in English in the original title) – Marie-Lorraine Chiriacopol 2018, work licensed under CC-BY-NC-ND. Website screenshots: schematic modelisation of the French democracy, page "explore your democracy" where the user choses who can vote and is the first chamber elected based on a majority or proportional voting method. The five first levels of democracy identified in the website (who can vote, how do we vote, who can be elected, how do we organize the representatives, how do we organize the powers).

The student's methodology:

Step	Nature	Description
1	Ideation	The deconstruction of common belief on democracy as a starting point: realization that democracy is a complex notion and can take many forms.
2	Theory	Gathering of constitutional, historical and political material: documentary movies, interviews of experts, web documentation, etc. With time, progression through more expert and specialized data, such as constitutional law, history, comparative law and politics, collection of international constitutions laws.
3	Theory	Grasping the complexity and variety of democratic systems, identifying the limits. New representations of democracy and new questions: democracy is a system with different dimensions and characteristics, that interact together.
4	Ideation	A device to help understand the complexity behind democracy and explore the variety and the subtleties of "democratic systems". Definition of a concept to help people envision the complexity and variety of democratic systems and test the interrelations between dimensions of a democratic system.
5	Theory	Variable modelisation through interdisciplinary collaboration with constitutional lawyers and students: mapping of two different dimension (common markers of democratic systems, elements of distinction between the systems). Identification of four major cases: United-Kingdom, USA, France and Switzerland. Identification of multiple variables: - Who can vote (gender, age, nationality, selective suffrage based on a tax or diplomas); - Who can be elected (gender, age, nationality, selective suffrage based on a tax or diplomas); - Election of the first and second chamber (direct-indirect vote, majority/proportional voting, simple-absolute majority, mandatory vote or not, secret or not); - Government (a group with one leader or a college, chosen-elected among members of the Parliament or not); - Head of the State: (is different from head of government or not, the function is hereditary or elected, is designated by the Parliament or by the people); Judiciary Power (the judges are elected, nominated or pass an exam).

6	Artefact	Choice of website: choice of digital platform for its ability to convey different levels of information (more or less complex), its ability to support different types of interactions with the content (passive reception of information, active "hands-on" work on the concepts) and its ability to test the model and the interaction between different criteria of the system, via computational logic (logical building blocks, "if … then..."; decision trees…).
7	Ideation	Pedagogical devices and websites inspiration: inspirational research on web platform aimed at popularizing complex content, algorithmic and logic modelisation of reasoning (trees of decision, html condition coding, tests "what characters are you", etc.).
8	Artefact	Website mock-ups: Interface simulation mock-ups, drawing trees of information on paper.
9	Observation	Test with teachers and students in constitutional law.
10	Artefact	New website version: graphic chart, design and coding of an interactive clickable platform.

Table 4. The process of a Research Design Project - "Comparative Democracies" (Project #3)

Design Practice: This project belongs to the "Design Research" approach. It is indeed based on a field approach, since it is based on constitutional law theory and the analysis of democratic practices of four major countries. It is then based on the systemic modelisation of the variables of democracies, formalized in a website, that helps understand and explore such a complex and systemic concept.

Process: The process is here based on a huge effort of theoretical modelisation that is embodied in a website. This modelisation was carried out through an intense interdisciplinary collaboration between herself as a designer and constitutional scholar and her students.

Essentially, the modelling and the gamification of the parameters that "make" a democracy allow users to challenge the balance and interdependencies of each individual characteristic. In the observation sequence, the testing of the design was not about improving one's expe-

rience, but about ensuring the relevance of the model, in terms of its ability to accurately describe the variables, and their interdependencies.

Effects: This project is not just about giving better information on democracy, but also challenging the theoretical and practical models of democracy. Here, design allows the creation of a mediation device to help understand a very complex notion. However, it also allows legal training and research to have another perspective on their research object through an "actionable" device:

> *"[Constitutional lawyers] kept telling me how [the project] would change their whole perspective on the theory because the website would show whenever the theory would not work in practice. Since the web platform would connect some "choices" on how to vote etc. to different democratic systems, we had to make sure [the model was properly built. The "playability" would raise new questions on the model].*

Here, designing the website and its architecture actually is the legal research process, as it helps to question democratic practices and their interactions: more than delivering knowledge, the design project also creates knowledge, both through the process and through the use of the artefact (website) and opens new questions and area of research. At the time of writing this paper (2021), the research project is still running and continuously improved by the designer and constitutional scholars.

5. Discussion

Our results show that design has a lot to offer to the legal field. With regards to our first research question about Legal Design practices, our study identified four spaces of design practices in Legal Design and illustrates their application in the legal field. These practices are identifiable by the perspective adopted for the formulation of the artefact (intent-led vs. field-centered) and by the level of formalization of the artefact (systemic reasoning vs. user experience): design thinking, meaning design, projective design, and research design.

Four out of eight projects can be identified as meaning design projects, which is not surprising as meaning driven design is the most widespread approach in art-based Design Schools according to Verganti and Kim-

bell.[70] DT is also practiced by two out of eight designers, which confirms that it is close to some extent to professional designers' practices. Two cases of projective design have been identified as well. Both are inspired by the critical and fiction design tradition, that is currently getting more and more interest in design schools and different sectors (technology, healthcare, environmental transition…). One project can be identified in the research design space, a relatively new and complex design practice.

With regards to our second research question, our results show that designers implement different design processes according to the design space they evolve in. If they share the same global canvas (problematization, idea generation, prototyping), they do not carry out the same activities in the same order or with the same tools.

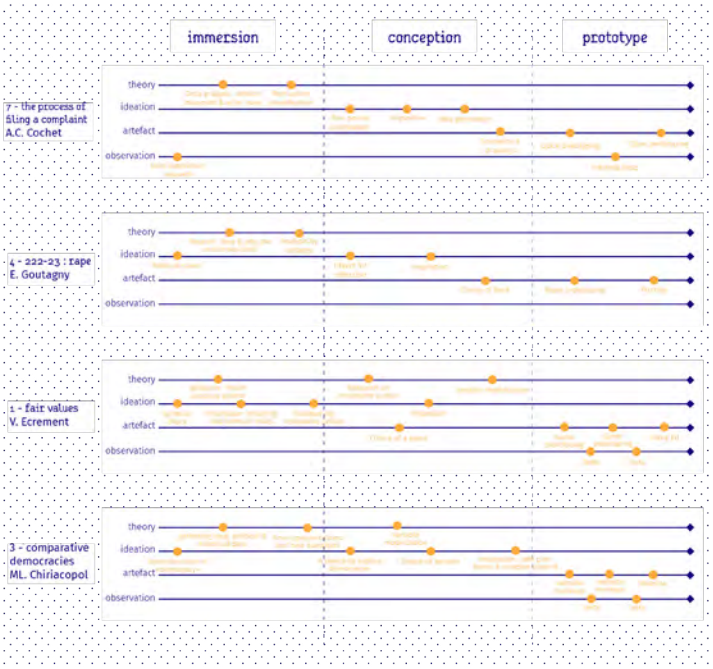


Fig. 9. Comparison of the four design processes (Design Thinking, Meaning Design, Projective Design, Research Design).

70 Verganti, *Design-Driven Innovation: Changing the Rules of Competition by Radically Innovating What Things Mean* (n 53); Kimbell (n 17).

Figure 9 shows a comparison between the four projects and their circulation between the four dimensions of the design process (theory, ideation, artefact, observation). Projects on the "left" side of the model (Meaning Design, Projective Design) are intent-led and require activities and tools that help the designers build and express their own visions, while project on the right side of the model are field-centered (Design Thinking, Design Research) and require activities and tools that help designers explore, analyse and share field data. Projects on the top of the model are oriented towards a systemic level (Research-Design, Projective Design) and their processes are significantly based on the theory level, with visual and conceptual tools that help designers modelise and communicate very complex reasoning. Projects at the bottom of the model are oriented toward user's experience and show the use of tools quite well-known in the DT methodology.

All of them are based on a very important material activity: modelisation and analysis are carried out through visualizations (maps, collages, scenarios, customer journeys), while ideas are embedded in material representations (drawings, prototypes, etc.). All four of these processes share important activities that are not usually put under the light in the Design Thinking methodology: inspiration and modelisation.

With regards to our third research question about the output and the effects of design applied to law, our research shows that design can go beyond better legal communication, service improvement or creation, and implementation of a culture of innovation. The projects presented in this Chapter clearly demonstrate the variety of design disciplines and crafting deployed by the students: graphic design, web design, service design, space design, game design, etc.

Projects "The process of filing a complaint" (project #7, Design Thinking) and "Fair Values" (project #1, Projective Design) show how adopting a design approach to a judiciary process, be it the process of filing a complaint or judging in a restorative perspective, can help explore the way law is "lived" in the concrete experience of actors.

Project "222-23: Rape, story of a legal iceberg" (Project #2, Meaning Design) and "Fair Values (project #1, Projective Design) underline how design encourages to question the very "design" of law, and gives access to laymen in the debate, placing politics at the heart of the legal practice and policy making.

Project “222-23: Rape, story of a legal iceberg” (Project #2, Meaning Design), “Fair Values (project #1, Projective Design), and “Comparative democracies” (Project #3, Research Design) demonstrates how design helps systemic reasoning and supports research through new ways of envisioning and experimenting legal content, legal systems, or legal experience. These results are in line with Amanda Perry-Kessaris’s contribution, that had also highlighted the potential of design for legal practice, design for activism, design for policy making and design for legal research.

However, all these projects share one main characteristic: the ability to question law through and with materiality. Whether it is for modelising, sparking debate, or improving the concrete experience, design is about interrogating and renewing the “livability” of law, its actionability through its material experience. By doing so, all four projects demonstrate how design has the ability to renew the meanings, forms, and processes of law-making justice, and reconfigure the roles and postures of actors.

All in all, this Chapter shows how design as practiced by designers trained in art-based design schools is a much more powerful tool for the legal community than it was previously understood, because it can question the very “design” of the law itself (both as an output and as a process). This work is a first step in the exploration of design practices in the legal field. Further research should be carried out to strengthen the modelisation of such practices.

First, the study presented in this paper is obviously limited by its pedagogical context: the students were free to choose and explore their topics, with the help of enthusiastic experts. Moreover, our study was carried out in the French context, with art-based trained designers, but the results might be different if the projects are done in a country with a different design tradition.

Our modelisation should then be tested in real professional environments with actual designers and legal practitioners, to question whether the potential that we identified in this study can actually be realised in real legal practices. An international comparison could also provide new insights.

Second, our study is based on the analysis of only eight projects. The study of a larger number of design projects should allow us to deepen

our knowledge on the tools and outputs of the four design practices identified. In the end, such a research program may allow us to specify guidelines and tools specific to each design space aimed at legal practitioners.

Finally, our study shows the importance of interdisciplinary collaboration between designers, legal practitioners (be they lawyers, researchers or public servants), and users.

If the legal community wants to see the full potential of design for the legal practice thrive, it should improve the designers' ability to work on legal matters and with legal practitioners, while encouraging and training legal practitioners to enlarge their understanding of design for the legal world and improve their ability to work with designers trained in art-based design schools.

Bibliography

Alam I, 'Removing the Fuzziness from the Fuzzy Front-End of Service Innovations through Customer Interactions' (2006) 35 Industrial Marketing Management 468

Avenier M, 'Shaping a Constructivist View of Organizational Design Science' (2010) 31 Organization Studies 1229

Ball D, 'Redesigning sentencing' (2014) 46 McGeorge Law Review 817

Ball J, 'From humble beginnings to a cornerstone of design language' (*DesignCouncil.org*) <www.designcouncil.org.uk/news-opinion/double-diamond-universally-accepted-depiction-design-process> accessed 9 August 2021

Banathy BH, *Designing Social Systems in a Changing World* (Springer 1996)

Berger-Walliser G, Barton TD, Haapio H, 'From Visualization to Legal Design: A Collaborative and Creative Process' (2017) 54 American Business Law Journal 347

Best K, *The Fundamentals of Design Management* (Bloomsbury Publishing 2010)

Boer L, Donovan J, Buur J, 'Challenging Industry Conceptions with Provotypes' (2013) 9 CoDesign 73

Boland RJ Jr and others, 'Managing as Designing: Lessons for Organization Leaders from the Design Practice of Frank O. Gehry' (2008) 24 Design issues 10

Borja de Mozota B, 'Quarante Ans de Recherche En Design Management: Une Revue de Littérature et Des Pistes Pour l'avenir' (2018) Sciences Du Design 28

Brown T, 'Design Thinking' (2008) 86 Harvard Business Review 84

-- *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation* (Harper Collins 2009)

Brown T, Katz B, 'Change by design' (2011) 28 Journal of Product Innovation Management 381

Buchanan R, 'Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice' (1985) 2 Design Issues 4

Chanal V, Le Gall A, 'Roberto Verganti : Le Design Au Service de l'innovation de Sens' in Buger-Helmchen T, Hussler C, Cohendet P (eds), *Les Grands Auteurs en Management de l'Innovation et de la Créativité* (Editions EMS 2016)

Cross N, *Design Thinking: Understanding How Designers Think and Work* (Berg Publishers 2011)

Deffains B, 'Le monde du droit face à la transformation numérique' (2019) 170 Pouvoirs 19

Dunne A, Raby F, *Speculative Everything: Design, Fiction, and Social Dreaming* (MIT Press 2013)

Dunne D, Martin R, 'Design Thinking and How It Will Change Management Education: An Interview and Discussion', 5 Academy of Management Learning & Education 512

Eckert C, Stacey M, 'Sources of Inspiration: A Language of Design' (2000) 21 Design studies 523.

Ewenstein B, Whyte J, 'Knowledge Practices in Design: The Role of Visual Representations as "Epistemic Objects"' (2009) 30 Organization Studies 7

Farrell R, Hooker C, 'Values and Norms between Design and Science' (2014) 30 Design Issues 29

Findeli A, 'La Recherche-Projet En Design et La Question de La Question de Recherche: Essai de Clarification Conceptuelle' (2015) Sciences du design 45

Findeli A, Bousbaci R, 'L'éclipse de l'objet Dans Les Théories Du Projet En Design' (2005) 8 The Design Journal 35

Hagan MD, 'Law by Design' (2016) <www.lawbydesign.co> accessed 9 August 2021

-- 'A Human-Centered Design Approach to Access to Justice: Generating New Prototypes and Hypotheses for Intervention to Make Courts User-Friendly' (2018) 6 Indiana Journal of Law and Social Equality 199

-- 'Legal Design as a Thing: A Theory of Change and a Set of Methods to Craft a Human-Centered Legal System' (2020) 36 Design Issues 3

-- 'Design Comes to the Law School' in Catrina Denvir (ed), *Modernising Legal Education* (CUP 2020)

Halstrøm L, 'Design as Value Celebration: Rethinking Design Argumentation' (2016) 32 Design Issues 40

Han Q, 'Practices and Principles in Service Design: Stakeholders, Knowledge and Community of Service' (DPhil thesis, University of Dundee 2010)

Harner MM, 'The Value of 'Thinking Like a Lawyer'' (2011) 70 Maryland Law Review 390

Hatchuel A, 'Quelle Analytique de La Conception ? Parure et Pointe En Design' in Flamand B (ed), *Le design : Essais sur des théories et pratiques* (Institut de la Mode 2006)

Huron S, 'Constructive Visualization: A Token-Based Paradigm Allowing to Assemble Dynamic Visual Representation for Non-Experts.' (DPhil thesis Dissertation, University Paris-Saclay, Paris Sud, Paris XI, INRIA, 2015)

Irwin T, 'Transition Design: A Proposal for a New Area of Design Practice, Study, and Research' (2015) 7 Design and Culture 229

Jackson D, 'Human-Centered Legal Tech: Integrating Design in Legal Education' (2016) 50 The Law Teacher 82

Jonhson Rossin K, 'Biomimicry: Nature's Design Process versus the Designer's Process' (2010) 138 WIT Transactions on Ecology and the Environment 559; Ingrid De Pauw and others, 'Nature Inspired Design: Strategies towards Sustainability' (Knowledge Collaboration & Learning for Sustainable Innovation ERSCP-EMSU, Delft, Netherlands, October 2010)

Kellogg DL, Nie W, 'A Framework for Strategic Service Management' (1995) 13 Journal of Operations Management 32

Kimbell L, 'Rethinking Design Thinking: Part I' (2011) 3 Design and Culture 285

Koestler A, Fradier G, 'Le Cri d'Archimède' (1966) 21 Les Etudes Philosophiques

Koestler A, Aux Origines de l'acte Créatif : La Bisociation' in Burger-Helmchen T (ed), *Les Grands Auteurs en Management de l'innovation et de la créativité* (Editions EMS 2016)

Koivisto M, 'Frameworks for Structuring Services and Customer Experiences' in Satu Miettinen and Mikko Koivisto (eds), *Designing Services with Innovative Methods* (University of Art and Design Helsinki 2009)

Krippendorff K, 'On the essential contexts of artifacts or on the proposition that" design is making sense (of things)' (1989) 5(2) Design Issues 9

Le Gall A, 'Les Épreuves de Valuation Dans Le Design de Services Innovants : Le Rôle Des Représentations Visuelles' (DPhil thesis, Université Grenoble-Alpes 2016)

Liedtka J, 'In Defense of Strategy as Design' (2000) 42 California Management Review 8

Lofthouse V, 'Ecodesign Tools for Designers: Defining the Requirements' (2006) 14 Journal of Cleaner Production 1386

Manzini E, *Design, When Everybody Designs. An Introduction to Design for Social Innovation* (MIT Press 2015)

Markussen T, Knutz E, 'The Poetics of Design Fiction', *Proceedings of the 6th International Conference on Designing Pleasurable Products and Interfaces* (2013) 231

Massanari A, 'Designing for Imaginary Friends: Information Architecture, Personas and the Politics of User-Centered Design' (2010) 12 New Media & Society 401

Mollon M, 'Designing for Debate: How to Craft Dissonant Artefacts and Their Communication Situations so as to Open Spaces for Mutual Contestation (Agonism) and the Expression of Marginal Voices (Dissensus)' (DPhil thesis, Ecole Nationale Supérieure des Arts Décoratifs & PSL University 2019)

Mollon M, Gentès A, 'The Rhetoric of Design for Debate: Triggering Conversation with an "Uncanny Enough" Artefact' (Proceedings of the Design Research Society International Consortium, Umeå, 2014)

Norman D, Verganti R, 'Incremental and radical innovation: Design research vs. technology and meaning change' (2014) 30(1) Design Issues 78

Perry-Kessaris A, 'Legal Design for Practice, Activism, Policy, and Research' (2019) 46 Journal of Law and Society 185

-- *Doing Sociolegal Research in Design Mode* (Routledge 2021)

Ravasi D, Stigliani I, 'Product design: a review and research agenda for management studies' (2012) 14(4) International Journal of Management Reviews 464

Richardson A, 'Using Customer Journey Maps to Improve Customer Experience' (2010) 15 Harvard Business Review 2

Segelström F, 'Stakeholder Engagement for Service Design. How Service Designers Identify and Communicate Insights' (DPhil thesis, Linköping University 2013)

Shostack LG, 'How to Design a Service' (1982) 16 European Journal of Marketing 49

Simon HA, *The Sciences of the Artificial* (3rd edn, MIT Press 1996)

Steen M, 'Co-design as a process of joint inquiry and imagination' (2013) 29(2) Design Issues 1

Steen M, Manschot M, De Koning N, 'Benefits of Co-Design in Service Design Projects' (2011) 5 International Journal of Design 53

Stickdorn M, Schneider J, *This is Service Design Thinking* (BIS Publishers 2010)

Susskind R, *The end of lawyers?: rethinking the nature of legal services* (OUP 2008)

Szabo M, 'Design thinking in legal practice management' (2010) 21 Design Management Review 44

Tovey M, *Design Pedagogy: Develoments in Arts and Design Education* (Routledge 2015)

Verganti R, 'Design as Brokering of Languages: Innovation Strategies in Italian Firms' (2003) 14 Design Management Journal 34

-- 'Design, Meanings, and Radical Innovation: A Metamodel and a Research Agenda' (2008) 25 Journal of Product Innovation Management 436

-- *Design-Driven Innovation: Changing the Rules of Competition by Radically Innovating What Things Mean* (Harvard Business Press 2009)

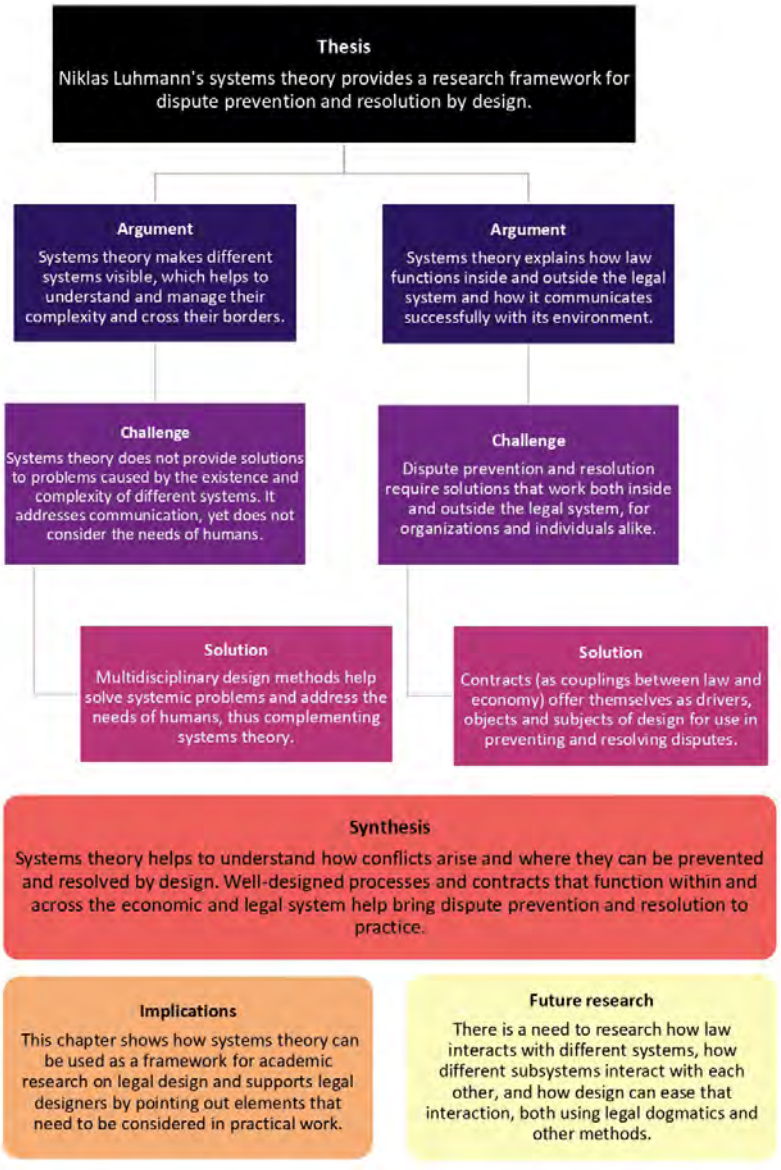
-- *Innovation of Meaning* (MIT Press 2015)

Visser W, 'Designing as construction of representations: A dynamic viewpoint in cognitive design research' (2006) 21(1) Human–Computer Interaction 103

Yoo Y, Boland RJ Jr, Lyytinen K, 'From Organization Design to Organization Designing' (2006) 17 Organization Science 215

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]

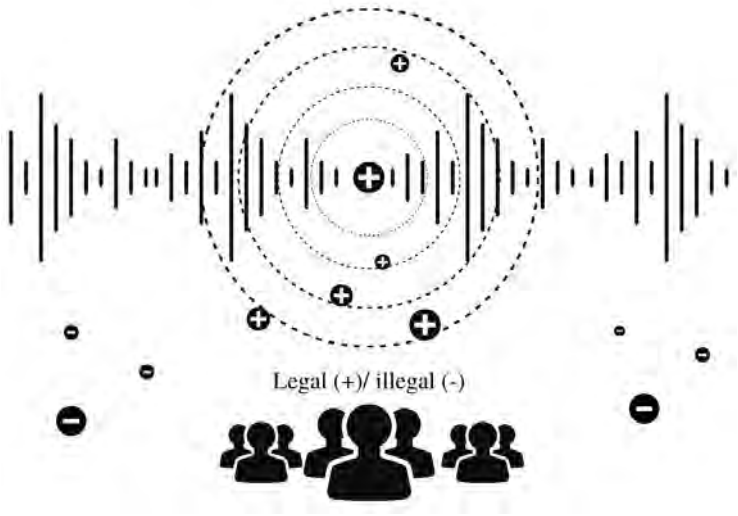


Fig. 1. According to Luhmann's systems theory, the legal system produces and reproduces itself by resonating with communication it recognizes as 'legal' (Nina Toivonen 2021, licensed under CC BY-NC 4.0).

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]

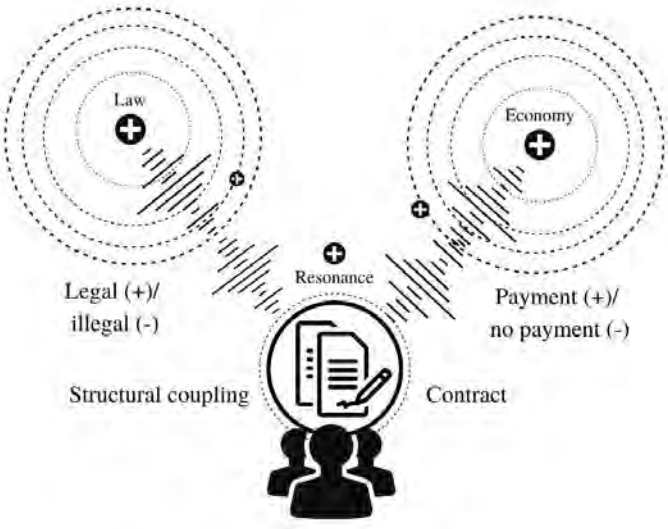


Fig. 2. According to Luhmann's systems theory, contracts can work as structural couplings between the legal system and the economic system (Nina Toivonen 2021, licensed under CC BY-NC 4.0).

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.

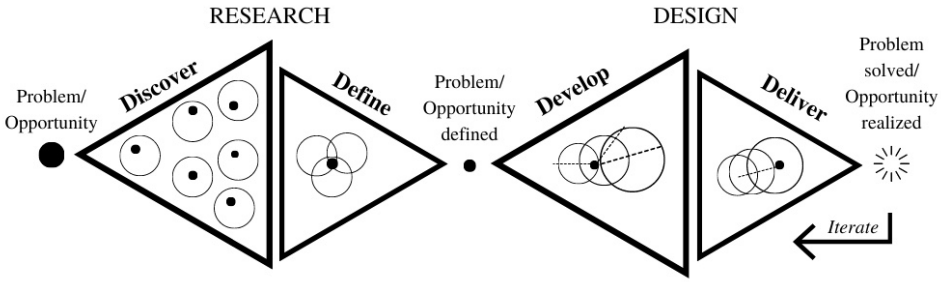


Fig. 3. A design process adapted from the UK Design Council's Double Diamond framework (Nina Toivonen 2021, licensed under CC BY-NC 4.0)

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.

Bibliography

Albert M, '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

Baraldi C, Corsi G and Esposito E, *GLU: Glossar zu Niklas Luhmanns Theorie Sozialer Systeme* (Suhrkamp 1998)

Barton TD and Groton JP, 'Forty Years On, Practitioners, Parties, and Scholars Look Ahead' (2018) 24 Dispute Resolution Magazine 9

Blomgren Amsler L, Martinez JK and Smith SE, *Dispute Systems Design* (Stanford University Press 2020)

Brown LM, *Preventive Law* (Prentice-Hall 1950)

Buchanan R, '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

Coltri L, *Alternative Dispute Resolution: A Conflict Diagnosis Approach* (Prentice Hall 2010)

Cummins T, '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

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

-- '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)

Doherty M, '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

-- '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)

Felstiner WLF, Abel RL and Sarat A, 'The Emergence and Transformation of Disputes: Naming, Blaming, Claiming…' (1980–81) 15 Law & Society Review 631

Haapio H and Groton JP, 'From Reaction to Proactive Action: Dispute Prevention Processes In Business Agreements' (IACCM EMEA Conference, Academic Symposium, London, 9 November 2007)

Haapio H, *Next Generation Contracts: A Paradigm Shift* (Lexpert Ltd 2013)

Hagan M, 'Law by Design' <www.lawbydesign.co> accessed 4 June 2021

Hietanen-Kunwald P and Haapio H, 'Effective Dispute Prevention and Resolution through Proactive Contract Design' (2021) Journal of Strategic Contracting Negotiation <https://doi.org/10.1177/20555636211016878>

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

Hurmerinta-Haanpää A, *The Many Functions of Contracts: How Companies Use Contracts in Interorganizational Exchange Relations* (University of Turku 2021)

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

Kovach K, 'Mediation' in Michael L Moffit and Robert C Bodone (eds), *The Handbook of Dispute Resolution* (Jossey-Bass 2005)

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

Linna J, '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)

Luhmann N, *Ecological Communication* (The University of Chicago Press 1989)

-- *Das Recht der Gesellschaft* (Suhrkamp 1995)

-- *Die Gesellschaft der Gesellschaft* (Suhrkamp 1997)

-- *Soziale Systeme: Grundriss einer allgemeinen Theorie* (Suhrkamp 2012)

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

Nobles R and Schiff D, *Observing Law Through Systems Theory* (Hart Publishing 2013)

Perry-Kessaris A, 'Legal Design for Practice, Activism, Policy, and Research' (2019) 46 Journal of Law and Society 185

Pohjonen S, '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

Santuber J, Krawietz L, Owoyele B & Edelman JA, 'A Framework Theory of Legal Design for the Emergence of Change in the Digital Legal Society' (2019) 50 Rechtstheorie 41

Smits JS, '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)

Solarte-Vasquez M and Hietanen-Kunwald P, 'Responsibility and Responsiveness in the Design of Automated Dispute Resolution Processes' in Erich Schweighofer, Walter Hötzendorfer, Franz Kummer & Ahti Saarenpää (eds),

Responsible Digitalization. Proceedings of the 23rd International Legal Informatics Symposium IRIS 2020 (Editions Weblaw 2020)

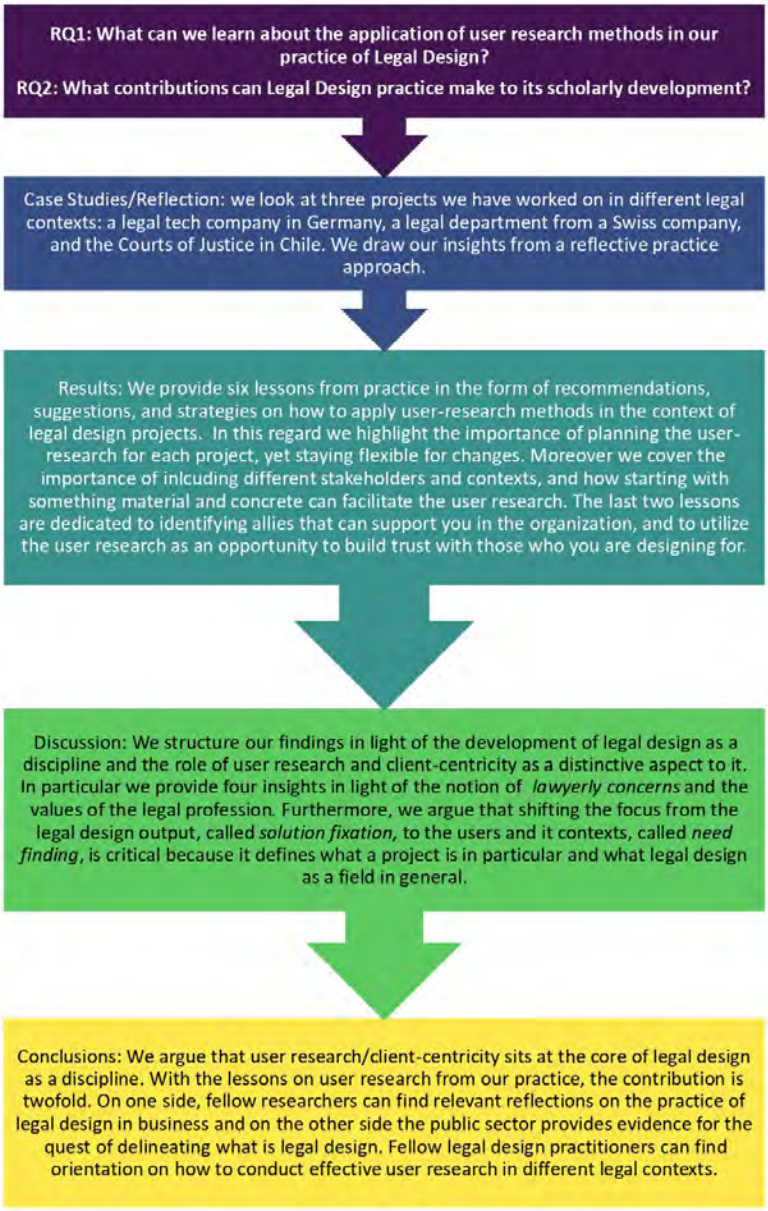
UK Design Council, 'Beyond Net Zero, A Systemic Design Approach' <https://www.designcouncil.org.uk/resources/guide/beyond-net-zero-systemic-design-approach> accessed 21 July 2021

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

Ury WL, Brett JM and Goldberg SB, *Getting Disputes Resolved: Designing Systems to Cut the Costs of Conflict* (PON Books 1993)

3. USER RESEARCH METHODOLOGIES IN LEGAL DESIGN PROJECTS: LESSONS FROM PRACTICE

Joaquin Santuber and Lina Krawietz



1. Introduction

Part of the versatility and recent expansion of Legal Design has come together with the popularity of human-centred design (HCD) and innovation methods such as Design Thinking. These creative approaches to problem-solving have a strong focus on the user needs, the problem space, to develop novel and useful solutions. A key requirement of Legal Design and HCD is that practitioners gain a deep understanding of the user's activity, interactions, emotions and the underlying human needs to frame a problem. In other words, how does the user experience, understand and feel about an existing solution or given status quo. Despite the wide application of user research methods coming from HCD, their methodological aspects are often considered fuzzy and lack rigorous theoretical foundations.[1] Legal Design, as a human-centred approach to design, faces the same challenge as HCD.

Lawyers often desire to follow a winning recipe. However, the worth of a recipe tends to stand or fall with the quality of the ingredients used. User research is an important ingredient to the success of any Legal Design project. Yet, it will only then contribute to a solution that hits the taste of users if conducted thoroughly and correctly.

Acknowledging the need for in-depth user research requires accepting that your own perception of given circumstances might be wrong or incomplete. Understanding and serving client needs is an integral part of a lawyer's job. Therefore, the notion of further research being necessary to better understand clients' needs, has the potential to contradict the self-image of being a great lawyer. Nevertheless, we see the world only through our eyes and we must apply strategies to understand it from a different point of view.

In this Chapter we provide reflections from practice, based on empirical evidence from 3 case studies. We will look at three projects that we have worked on in different legal contexts: a Legal Tech company in Germany, a legal department from a Swiss company, and Courts of Justice in Chile. We formulate our research questions as follows:

1 Jon Kolko, *Exposing the Magic of Design: A Practitioner's Guide to the Methods and Theory of Synthesis* (Illustrated edition, OUP 2011).

– RQ1: What can we learn about the application of user research methods in our practice of Legal Design?
– RQ2: What contributions can Legal Design practice make to its scholarly development?

We put our findings in light of the development of Legal Design as a discipline and the role of user research and user-centricity (client-centricity?) as distinctive aspects to it. Furthermore, we argue that shifting the focus from the Legal Design output, or solution fixation, to the users and their contexts, or need finding, is critical because it defines what specifically a project is and what generally Legal Design is as a field.

We argue that user research/client-centricity sits at the core of Legal Design as a discipline. With the lessons on user research from our practice, the contribution is twofold. On one side, fellow researchers can find relevant reflections on the practice of Legal Design in business and on the other side, the public sector provides evidence for the quest of delineating what Legal Design is. Fellow Legal Design practitioners can find orientation on how to conduct effective user research in different legal contexts. In this regard, four insights are discussed considering the particularities of the intersecting practices of designing and 'lawyering'.

2. Related work

Legal Design is a growing and emergent field with increasing adoption in the legal industry, social sector and academia. To foster the discussion in our community about what Legal Design is, could and/or should be, we refer to the following definition:

> *"Legal Design refers to multiple practices and studies concerned with the creation of novel — or the redesign of existing — legal related socio-technical systems (people, processes and technology) with a purpose driven by a public service bounded by agreed upon values such as access to justice, and the rule of law".*

This definition is grounded in systems theory and considers the output of the Legal Design practice to be an emergent property of the relation between people, process, and technology as outlined in the paper "A

Framework Theory of Legal Design for the Emergence of Change in the Digital Legal Society"[2]. A systems perspective provides Legal Design with enough flexibility to address changes in micro legal user-service interactions as well as a more macro scope, for example when thinking of redesigning the legal system as a whole. A similar systems-approach to Legal Design has been explored in depth by Hietanen-Kunwald, Haapio, and Toivonen.[3] From a different perspective, yet consistent with the previous conceptualization of Legal Design Perry-Kessaris opts for a broad notion, combining elements from "designerly ways of knowing" (doing)[4] and the "lawyerly concerns"[5]. Furthermore, from the designerly ways we emphasize the relation to materiality and making things tangible. From the lawyerly concerns, we highlight the notion of "juristic"[6] from Cotterrell applied to Legal Design by Perry-Kessaris. A juristic practice is one characterized by a:

> *"commitment firstly, to the 'well-being' of law, and specifically to its 'enrich[ment] and sustain[ment]' rather than its mere exploitation, 'unmasking or debunking'; and secondly, to 'law as a practical idea' rather than merely an abstract phenomenon, and specifically to its 'meaningfulness as a social institution.'"*[7]

The reference to the commitments of the juristic practice, are aligned with the agreed upon values that drive the Legal Design practice, such as, the rule of law, access to justice, and ultimately social peace.[8]

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2 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 Petra Hietanen-Kunwald, Helena Haapio and Nina Toivonen, 'Systems theory as a research framework for dispute prevention and resolution by design', in this Volume.

4 Nigel Cross, 'Designerly Ways of Knowing' (1982) 3 Design Studies 221.

5 Amanda Perry-Kessaris, 'Legal Design for Practice, Activism, Policy, and Research' (2019) 46 Journal of Law and Society 185.

6 Roger Cotterrell, *Sociological Jurisprudence: Juristic Thought and Social Inquiry* (Routledge 2017).

7 Perry-Kessaris (n 5) 188.

8 Joaquin Santuber and others, 'Feasible and Accessible Psycho-Physiological Methods for Legal Design' (Legal Design VIRTUALtable, April 2020); Lisa Webley and others, 'The Profession (s)'Engagements with LawTech: Narratives and Archetypes of Future Law' (2019) Law, Technology and Humans 6.

Furthermore, the legal framework in Germany is currently undergoing drastic changes in order to provide lawyers a broader scope of options of how to design and deliver legal services. In June 2021, a law was passed in Germany to promote consumer-oriented offerings in the legal services market (in short: Legal Tech Act). This law, coming into force on October 1st 2021, expands the Rules of Professional Conduct for lawyers, among other things, to give lawyers more opportunities to provide their services in the form of digital and innovative business models. Until now, German lawyers had been extremely restricted in providing legal services via (partially) automated legal tech solutions, unlike experts from other industries. One of the reasons for this was the concern that the core values of the legal profession - independence, confidentiality, competence and loyalty - would be threatened if lawyers performed their work based on digital business models. However, with the increasing relevance of legal tech in the B2C space, it has become clear that consumers benefit precisely when the core values of the legal profession are incorporated into the development of innovative legal solutions. When lawyers are given more opportunities to actively shape the legal market alongside the numerous other non-legal players.[9]

The public duty of taking care of the legal system is not an end on its own, instead a means towards a legal system that serves people. Furthermore, Legal Design theorizing has been connected to the human needs design approach proposed by McKim[10], which states that the ultimate purpose of design is to promote the well-being of people by helping to gratify their basic needs.[11]

9 Von Viktoria Kraetzig and Lina Krawietz, 'Wer nicht mit der Zeit geht, geht mit der Zeit' *Frankfurter Allgemeine Zeitung* (Frankfurt, 1 July 2021) <www.faz.net/einspruch/anwaltschaft-und-legal-tech-anpassen-oder-aussterben-17405494.html> accessed 23 August 2021.

10 Julia PA von Thienen, William J Clancey and Christoph Meinel, 'Theoretical Foundations of Design Thinking: Part II: Robert H. McKim's Need-Based Design Theory' in Christoph Meinel and Larry Leifer (eds), *Design Thinking Research* (Springer International Publishing 2019).

11 Santuber and others, 'A Framework Theory of Legal Design for the Emergence of Change in the Digital Legal Society' (n 2).

Previous work on Legal Design, has highlighted the user centred aspect of this emergent discipline.[12] Furthermore, Brunschwig in her complete comparative analysis of visual law and Legal Design, considers one pillar of Legal Design to be the "Actors", which includes users, clients, customers, and consumers[13], and more specifically its ability to address client's needs and preferences in the framing of the problem to be solved.[14]

Moreover, the user focus has also been discussed in detail on the topic of the common legal platform[15] and related to the notion of "wicked problems"[16]. These are a type of complex problems, which have multiple possible solutions depending on the framing of the problem.

From a methodological perspective, the user focus of Legal Design has been recently highlighted by Hagan and provided a set of tools and methods to conduct human-centred user research to uncover needs and opportunities.[17] Among the methods listed by Hagan, those specifically intended for user research are legal needs surveys, research using Internet services (also referred to as desktop research), applied ethnography, grounded theory[18], and the Delphi method.[19] Previous research has also

12 Perry-Kessaris (n 5); Margaret Hagan, 'Legal Design as a Thing: A Theory of Change and a Set of Methods to Craft a Human-Centered Legal System' (2020) 36 Design Issues 3; Santuber and others, 'Feasible and Accessible Psycho-Physiological Methods for Legal Design' (n 8).

13 Colette R Brunschwig, 'Visual Law and Legal Design: Questions and Tentative Answers', *In Proceedings of the 24th International Legal Informatics Symposium IRIS* (2021) 208.

14 ibid 214.

15 Astrid Kohlmeier and Joaquin Santuber, 'Is the Common Legal Platform a Wicked Problem?' in Kai Jacob, Dierk Schindler and Roger Strathausen (eds), *Liquid Legal: Towards a Common Legal Platform* (Springer International Publishing 2020).

16 Horst WJ Rittel and Melvin M Webber, 'Dilemmas in a General Theory of Planning' (1973) 4 Policy Sciences 155.

17 Hagan (n 12).

18 Anselm Strauss and Juliet M Corbin, *Basics of Qualitative Research: Grounded Theory Procedures and Techniques* (Sage Publications, Inc 1990).

19 Felicity Hasson and Sinead Keeney, 'Enhancing Rigour in the Delphi Technique Research' (2011) 78 Technological Forecasting and Social Change 1695; Hagan (n 11); Teemu Santonen, J Kaivo-oja and Yrjö Myllylä, 'The Crowdsourcing Delphi: Combining the Delphi Methodology and Crowdsourcing Techniques' (XXIV ISPIM Conference, Finland, June 2013).

pointed to methods from human-computer interaction design, as well as psychology to conduct user research in Legal Design projects.[20]

3. Case Study Contexts

In this section we present three case studies of designing in legal contexts. From these projects, we can better understand how user-centredness is applied in the practice.

Context 1: Legal Tech Company

In this project, which was carried out by This is Legal Design, the client was a Legal Tech company that had developed a digital whistleblowing solution for small and medium sized enterprises (SMEs). By installing this tool, SMEs can easily prepare for and fulfil the requirements of the new EU Whistleblowing Directive 2019/1937. To ensure the actual use and effectiveness of the tool, our client wanted to provide his customers with written material for effectively communicating the Directive and the tool instructions to their employees.

The company wanted to move away from the familiar formats of corporate integration of directives. They asked us to make their "legalese" version of the EU Directive more accessible, comprehensible, and overall user-friendly for a broad variety of potential users – from construction workers to white-collar business people. Within 6 weeks, we created a visually appealing one-pager that represents an intuitively consumable, user-friendly version of what employees need (and want) to know about the process of using the tool in the context of the EU Directive. We based our design and iterations on insights from 30 user interviews and tests. Employees can now easily grasp the process and feel encouraged to act accordingly. The user insights we gained throughout the project and the language we developed for the one-pager are now also being implemented in the tool itself for a consistently accessible and user-friendly experience that goes far beyond the communication part.

20 Santuber and others, 'Feasible and Accessible Psycho-Physiological Methods for Legal Design' (n 8).

Context 2: Legal department

In a second project, we were asked to re-design a Swiss company's legal department's table of responsibilities and to design from scratch a legal department's management directive. The core of this project consisted of a comprehensive user research. First, we engaged with the individuals in charge of improving the work of the legal department, who had also initiated the Legal Design project. This allowed us to gain a better understanding of the company's structure and dynamics, the role of the legal department and its relationship to other functions, the available resources and technical infrastructure, and most importantly: a first impression of the challenges they have been experiencing with regards to communicating responsibilities. This failure in communication was a result of not having one legal department management directive, but rather scattered fragments of related information. This provided us a basis for developing a more focused and detailed user research strategy and detailed interview guidelines.

We went on to interview a wide range of users from the legal department (including the general counsel), other departments who interact with legal functions on a regular basis, as well as external stakeholders. The insights we gained, helped us identify different sources of rules and norms that users were living by, such as national laws, written directives, cultural influences, common sense, learned habits, and so forth. We uncovered not only dysfunctionalities, misperceptions, and pain points, but also, the behaviours, beliefs, and conditions that so far have contributed to making things work out in favour of the company. The knowledge we acquired along the way helped us to make informed design decisions, while creating one holistic, digitally enhanced solution by merging both design challenges and we were able to fit it all neatly into the given technical infrastructure and processes. Thus, the accumulation of all these factors allowed us to provide the necessary information in the right moment in an accessible and impactful manner.

Context 3: Courts of Justice

We conducted an in-depth study of the Chilean courts in a collaboration between This is Legal Design, the Hasso-Plattner-Institute (University of

Potsdam), and the Chilean judiciary. In the context of this research cooperation, we studied the role of digital technology in the emergency responses from the courts during COVID-19 in Chile. The research question addressed was on the characteristics of the emergent digitalised practices in Chilean criminal and civil courts. This was approached from three perspectives: the user, the organization, and the legal framework. The Chilean judiciary system - the Poder Judicial de Chile - is a unitary organization that operates across the country, in contrast to the federal courts system. It is one body that serves a population of 18 million citizens, this means a high territorial distribution. Chile's length equals the US's width from NY to Seattle, or the distance from north Norway to Libya. It is composed of the Supreme Court, 17 Courts of Appeals, and 448 courts of first instance, with a total of 1490 judges plus more than 11.000 employees. Specifically, we conducted an in-depth case study of the two focal types of courts (i.e., criminal and civil courts) in the Chilean judiciary system in Santiago. We chose the case of the Chilean judiciary system in Santiago de Chile for two main reasons. The first reason was the access to key stakeholders of judiciary systems and the second was the ability to get respective interviews, which is typically a difficult endeavour but was feasible in the case of the Chilean judiciary system, with a promising number of interviews (n=30) that provided rich insights. The interviews were analysed and the insights were distilled following a grounded theory approach.[21] In this project we looked at organizational, procedural, and individual factors that influenced the adoption of digital technology and could explain new needs and opportunities for the court system.

Research Methodology

Due to the practice-oriented type of research presented in this Chapter, we build on the influential notion of reflexivity in practice formulated originally by Donald Schön.[22] His aim was for professionals to uncover the theoretical formulations coming from scholars in the workplace. In this sense, bridging one and the other through reflection in action, Schön distinguishes between "reflection in-action", which happens while the

21 Strauss and Corbin (n 18).

22 Donald A Schon, *Reflective Practitioner* (Basic Books 1983).

activity and situation is carried out, and "reflection-on-action", which is a post event analysis of the doing and situation.[23] Later on, a reflective approach has developed as a research methodology, in which practitioners become aware of their positions and relations to the subject of academic inquiry, which is in turn their practice.[24] Since we are involved in both the doing and the reflecting, and the writing of the chapter, the reflection is both in-action and on-action.

First, **reflection in-action** occurs during the project and the constant reviewing of the materials and strategies in order to quickly adjust, tune, and sometimes even replace parts of the planned Legal Design project which does not fit the way the project unfolds. In this sense, changes are adopted rapidly based on short feedback cycles among the project coordinators. It is important to note the situated nature of such reflection which results from being sensitive to the cues and particularities of the context. Thus, open and fluid communication among the project coordinator and facilitators is critical, as is trust and confidence, to enact the changes needed.

Second, **reflection on-action** happens after the project, or a phase of the project is over. It usually starts with a debrief, in which the project coordinator and facilitator share, orally or written, their impressions and what worked well, and what could be improved. Again, this reflection is a situated doing, which requires going back to the whiteboards or virtual boards, notes, prototypes, interviews, and the different kinds of traces left by the project. In this regard, the reflection is aided and grounded on a materiality of what happened instead of mere thoughts. The output of these reflections is usually documented in more or less formal ways, i.e. project documentation handed over to the client or internal notes used by the team.

Following a reflective practice approach, we reflected and analysed our legal design experiences, specifically conducting user research in the projects introduced earlier in this chapter. This took place in three rounds of discussion among us that were held online. We took notes

23 ibid.

24 Jan Fook, *The Reflective Researcher: Social Workers' Theories of Practice Research* (Allen & Unwin 1996); Jan Fook, 'Reflexivity as Method' (1999) 9 Annual Review of Health Social Science 11.

from our discussions in a shared document. Those served as the basis to formulate our reflections.

Project	Material	Material	Material
Legal Tech Project	Documentation from the project	Virtual collaboration board from working sessions.	Prototypes delivered to the client.
Legal department	Scoping workshops documentation	Virtual collaboration board from Kick-off session.	User research planning
Courts of Justice	Interview audio-video recordings and transcriptions	Video Analysis of online hearings uploaded to YouTube.	Public legal documents and court's regulation

Table 1. Overview of the three case studies and the materials used during our reflection and data analysis (documents, virtual boards, interview transcripts, video recordings).

5. Lessons from Practice

Based on the analysis outlined in the previous section, we distilled the following lessons:

5.1. User research needs to be designed to meet the specific particularities of a project and client.

Great user research does not follow a one-size-fits-all instruction manual. There are many factors that influence decisions regarding the design of and which methods to employ for your user research. For instance, access to data sources. It is advisable to start with the data sources that are easy to acquire and gradually build on this knowledge base along the way. In this sense, starting out with desktop research on the organization or group of people that you are designing for can be of great help. A common place to start is their website, yet it is important to be wary of

the intention of the information displayed on the client's website. Thus, it is also convenient to run a quick search to get a 360-degree view of what others, such as online newspaper, blogposts, partners, etc., have said about the target organization or group of people. Another avenue is to analyse a client's presence and interactions on social media platforms. This way, one might stumble upon past instances that had a lasting impact on the way employees or customers feel about an organization and need to be addressed in upcoming interviews.

It is often the case that project partners, clients, or sponsors provide us with seemingly objective information and documents. Studying these documents before engaging with users is very important. Yet, they should not be taken as "the one and only truth". The user research goal is to uncover hidden needs and opportunities to work on during your Legal Design project. Thus, limiting oneself to the official narrative provided by the client can hinder the rest of your project. In one of our reflections, one of us said "If we had stuck with what they initially told us and not dug any further, the story of this project would be completely different". This emphasizes how in the first conversations and sessions with a client, the project may seem to have a rather clear direction. Yet in the encounter with the user's context, blind spots become visible that require a change of direction, provided that a Legal Design team is open to look for and recognize them, this aspect will be discussed further in the following subsection.

Furthermore, preparing a user research before diving in, can help you identify some needs and opportunities that are easily addressed by quick solutions that do not require going through a Legal Design process. Spotting them beforehand, can help to focus the user research on the underlying pressing needs.

5.2. User research should start with a plan— yet expect this plan to change in the first contact with users and clients

Following on the previous reflection, starting with a plan specifically designed for the project ahead is considered good practice. However, a Legal Design team should always remain open to sudden changes. A user research plan is likely to need adjustment based on new evidence collected through continuously engaging with users and stakeholders.

The real value of user research is the change in perspective of the project itself. The original challenge approached in a Legal Design project needs to be treated as an assumption of its own. It might be validated throughout a user research phase, or it might turn out to be nothing more than a symptom of another underlying problem that then needs to become the new focus of the project.

Often the project sponsor, whether client or partner, has a rather straight-forward idea for the project. After all, if they are sponsoring the project, they may have an idea of what they want out of it. This circumstance needs to be met with clear expectation management. It has proven to be helpful to provide real-life examples of how crucial it has been to shift the scope of Legal Design projects based on certain user research findings in the past.

In addition to this insight-driven need to pivot, user research often faces unexpected organizational challenges that require a change of plans. It starts with, e.g., having trouble convincing users to sacrifice their time to take part in workshops or interviews, especially those whose success is measured in billable hours. In this case it would be important to communicate the personal value they get out of participating; may it be learning something relevant or being rewarded a gift certificate. If there is no obvious incentive for participation yet, you need to create one. This can make it necessary to change the way that user research is being conducted.

In general, Legal Design teams need to be open to new possibilities that appear while interacting with users. Being resourceful and flexible, may require looking for alternative sources to conduct the user research. In this regard, one could look for different media sources, such as documents, websites, videos, and social media channels.

5.3. "We never look only at the end user": User research is not just about the "user", instead it is about the relationships between the different stakeholders, services, and their contexts

When designing for legal contexts, who is considered a "user" needs to be determined in a broader sense, i.e., looking beyond the end user of a legal service or product. This is not about putting everyone in the same category, but about understanding that in complex offerings a broad va-

riety of stakeholders are all involved in a way that impacts the success of the outcome. Therefore, understanding the perspective of each of these stakeholders is indispensable for designing and implementing successful solutions.

In the case of the aforementioned Legal Tech company, as well as, the case of the legal department, we took on a 360 degree perspective by interviewing both: the employees addressed by the EU directive respective to the internal directive, as well as, the ones in charge of supplying the information it contains, i.e., legal counsels, general counsels, compliance officers, and CEOs. By looking at where these perspectives did not match, it became visible to us what core issue had to be addressed: Up to this point, the directives had been communicated with the needs of the companies in mind, while no thought had been put into what intrinsic motivation employees might have to comply with certain rules.

It became clear that we needed to raise awareness for this clash of perspectives with those in charge of the implementation of the directives. Otherwise, we might design the perfect, user-friendly solution, that still does not have the intended effect on people's behaviour due to contradicting messages being sent by superiors in the context of, e.g., trainings or overall communication.

If we hadn't extended our research beyond the scope of merely talking to (potential) end users, the chances of our solutions being a success might have been minimized drastically. In general, user research revolves around bridging the gaps between the different perspectives. This does not only promote finding a solution to the given Legal Design challenge but building new relationships that make an organization more resourceful overall.

For example, when a legal department has some kind of technical infrastructure at its disposal, it can be very fruitful to involve the perspective of the IT department that is providing it. Understanding the relationship between these functions can offer valuable insights on how to foster their collaboration efforts towards developing digitally enhanced legal solutions together. This can start with something very simple, such as what someone from the IT department explicitly wished for when we interviewed him: "I really want to have a beer with people from legal some time. We need to develop a deeper understanding for each other. Isn't that what this is all about?"

In the case study of the court, we started by interviewing staff members, then moved on to more high-level positions. The interesting part lies where there's a gap between what managers are planning and what is happening on the ground. Sometimes you need to make room for design. But sometimes you can identify gaps through this kind of research that one can use for designing.

For the court's social media team, any social media success is a success. From an institutional perspective, it is not yet clear whether these successes are beneficial for the institution in the long run. While being a valuable innovation within the courts, in the long run the social media strategy might hinder the channels that courts could own to communicate with citizens. Thus, it is important to listen to the different interests that come together on this issue. There is a gap now regarding how the court could create channels to communicate, which they own, that achieve a similar success. The multiplicity of users and stakeholders is often more challenging for the public sector. Thus, the complexity and the impact of such projects demand a plurality of perspectives to ensure that 'all sides have been inspected'.

5.4. User research engagement ideally starts with something (a document, an internal diagram, a video recording, a software architecture etc.) to engage users in working out the status quo

Every action of our users is possible because of a social and material context in which they are situated. This means that our user's behaviour and routines happen because of social aspects such as norms, language, hierarchies, roles, rules and material aspects such as tools, documents, offices, buildings, furniture, software architecture, etc. that are present in their particular contexts. In this regard, it is good to start your user research with artefacts, documents, diagrams, visualizations that can ground your research.

In the project for the legal department, we started our user research with a session to which we invited key stakeholders for the project. To ground our work, we began with a directive's table of contents which they provided for us in a PDF format. Instead of using the same PDF document they provided, we prepared the material by breaking down the long and complex document into smaller chunks using "virtual sticky

notes". This way, our users could start out the session by easily sorting the contents based on their perceived importance and by using colours to mark different characteristics

Another example was a table of responsibilities of the legal department. We made our research not just about looking at the table itself but started with the media through which the document could be accessed by users. In this regard, the document was available via a website interface, thus looking closely into the technical infrastructure of the organization, in which the document is embedded, was as important as the document itself.

User research requires us to identify what there is to start out with. Beyond the "we have nothing yet on that", there is always something to start from. In the case of the directive, that we were to design from scratch, we came across a keynote that contained almost everything we needed to include in a specific section of the directive. It had been created for training purposes yet wasn't naturally considered an existing fragment of what we were asked to create.

Identifying what is relevant and what needs to be considered as part of the status quo, is only possible to achieve by actively engaging with the client and understanding what is internally relevant to them. Sometimes the character traits of a company are reflected in their legal documents. Thus, bringing in the documents and working on them will shed light on many cultural and organizational aspects that are often hidden.

This is not just about the content. Paying close attention to how an organization presents the status quo, is just as revealing. The legal department showed us an internal platform, containing a database through which one could access all kinds of documents. Only after several hours of working with end users, we learned that this data base was also partially accessible via a web-based interface. In this situation, we learned just as much from what they had shown us, as we did from what they hadn't initially shown us. Such insights can only be uncovered by engaging with the materiality of our user's practice —in the example above this was the web-based interface to access internal documents.

In the case of the Chilean judiciary, we started our research on online courts by looking at the YouTube channel where they uploaded video recordings of hearings. Before March 2020, a reference date for the start of the pandemic in Chile, all uploaded videos are from hearings that took

place in the courtroom. Usually, those hearings were highly relevant and also covered in the traditional media. From March 2020 on, the situation changed. Now video recordings of multiple hearings were uploaded, with varying degree of importance. From observing the video recording, initial patterns were uncovered, and potential needs identified for further inquiry via interviews.

5.5. Identifying people who could be involved and could be the best fit for the user research

Who? When? How? When planning or conducting user research it is important to look for diversity in perspectives, positions, geography, and gender. The Legal Design team comes into the project with assumptions pertaining to the context in which users work and live. Thus, complementing their point of view with an array of perspectives can help them understand in detail the needs and opportunities that lay ahead of them.

In the project with the Legal Tech company, interviewing a variety of actual clients, was complemented by interviewing other potential users in a similar position. Additionally, we talked to potential end users from all kinds of industries, roles and backgrounds. In the case of the legal department, we were aware that the company operated in many countries throughout Europe. Thus, the geographical factor was specifically relevant here for us to be able to addresses needs across the entire organization. As was interviewing anyone internal or external who has touch points with the legal department on a regular basis.

In both projects, we noticed how narrow the answers were that we got from interviewing people who already knew too much about the ongoing Legal Design project. We had to make sure to bring in additional, unbiased perspectives from each stakeholder group and did not settle for the interviews that had originally been planned out. Relying on the initial interviews would have limited the scope of insights we were eventually able to derive from our user research.

In a project that involves organizations, access to stakeholders might be troublesome or they may not be responsive to invitations to take part in user research. In these situations, it is important to resort to the sponsor of the project or a contact point within the organization. It is also useful to provide him/her with the right information or material to

explain to people within the organization what the project is about and encourage them to participate in the user research and the project.

In the case of the courts, our target group were staff members. However due to the many references to social media, we conducted several interviews with the communications department and the group in charge of social media to better understand the communication dynamics. It turned out that some of the richest insights came from these interviews. The insights gathered from the social media function turned out to be relevant to the entire court system and had an impact way beyond the communications department.

When access to a list of potential interviewees is not possible before starting the user research, following a snowball sampling strategy might be convenient.[25] In this approach potential interviewees are referred/recruited by previous interviewees. The design team starts with one interviewee and ask to refer two or three colleagues to be eventually interviewed. After a couple of rounds, you have a fair number of potential interviewees. This approach was used in the courts research.

On the other side of the user research, the design team needs to be aware of the diversity limitation of the team members. These limitations can come from many sides and can be addressed by combining a team rich in diversity. Some diversity aspects to consider are related to professional background, gender, seniority, and language.

5.6. User research is a great opportunity to build a relationship and trust with those you are designing for

Sometimes, the role of user research is emphasized to gain a new perspective and collect data on the user's needs and potential design opportunities. However, the role of user research in a Legal Design project goes beyond that, providing a great opportunity to build trust towards the Legal Design team and between all users, stakeholders, and project partners involved. This early "social investment" will largely pay-off in the execution of the rest of the project.

25 Patrick Biernacki and Dan Waldorf, 'Snowball Sampling: Problems and Techniques of Chain Referral Sampling' (1981) 10 Sociological Methods & Research 141.

Taking the time to develop a good relationship with project partners or users is important, yet time is always scarce. Thus, using the time that is spent on getting to know a user should always be used to build a trustworthy relationship. This will drastically increase the value created within a given timeframe. User research provides an opportunity for the client to create bonding and rapport among the internal team, consisting of employees and company, which can have positive effects that last longer than the project itself.

It is critical to provide resources that help the client or sponsor within the organization hold up the spirit of the Legal Design mindset. Unfortunately, it may happen that the Legal Design fundamentals are not well transferred to the organization and some members of the organization involved in the project are left disappointed and with the impression that nothing ever really changes.

In this sense, it is important to be considerate of the circumstances of each individual involved in user research. It is helpful to keep in mind that this is a sensitive person, willing to share a part of their professional and very often private life with a group of strangers, the Legal Design team. Since user research includes talking or observing situations of vulnerability, whether work related or not, it is also relevant to transmit that the experiences collected will remain anonymous and will be used only for the purpose of the project. This is important to comply not only with the ethical and data protection requirements, but to create a safe space in which the user would be willing to share his or her experience beyond surface-level. In business contexts, often the data confidentiality is protected under an NDA (non-disclosure agreement), yet it is convenient to clarify to the user research participants how the data will be used internally and externally. In the case of the Chilean courts, the data handling was already regulated in the cooperation agreement, however before every interview the participant was reminded that the interviews were being audio and video recorded, to then be transcribed and anonymized, whilst removing references that could potentially help identify the interviewee, such as personal names, positions, units, etc.

6. Discussion & Implications

Following a reflection in-action and reflection on-action approach, we have brought lessons from practice into an academic discussion of what is Legal Design. We analyse them in light of the "lawyerly concerns"[26] when engaging in Legal Design practice.

Insight 1, being flexible and responsive to changes in circumstances can be related with the 'lawyerly concerns' and the need of being at once practical, critical, and imaginative.[27] These adjectives capture the attitude needed during user research from the Legal Design practitioner. A successful user research requires plenty of practicality, in the sense that interviews need to be scheduled, participatory sessions need to be coordinated, and nevertheless, if circumstances change the user research needs to be executed to move the project forward. At the same time, the team must be critical and reflective on what they are doing to be able to steer the project in a more appropriate direction if the experiences revel that this is necessary. Lastly, it is important to be imaginative when the research plan changes. In this regard, we highlight resourcefulness and the ability to see possibilities on how to counteract the limitations that appear.

Insight 2, the sociomateriality of Legal Design. As stated by Perry-Kessaris, bringing in designerly ways to Legal Design implies that our practice operates on a sociomaterial plane.[28] This sociomaterial practice of designing has to do with making things tangible. This is relevant because every legal service always shows a materiality in which it is instantiated. It could be a form to be filled out, a document, counter desk, a courtroom, a signature. In this sense, the juristic practice notion also relates to this reflection as taking law in a practical sense and not as mere abstract phenomenon.

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26 Perry-Kessaris (n 5).
27 ibid.
28 ibid.

Insight 3, Legal Design is applied to broad topics and challenges from many perspectives.[29] This is in part due to the multiplicity of areas of our social and professional life that legal services touch. In this regard, involving a balanced and diverse group of user perspectives is central to the success of the solution to be developed. When designing for large groups of potential users, including in the user research, those groups who are less favoured can be highly rewarding in terms of meeting the purpose and values of Legal Design.

Insight 4, this reflection relates to the purpose or values of Legal Design as expressed in previous research in the "juristic practice"[30] or the agreed upon values of the rule of law, access to justice and social peace.[31] Building trustworthy relationships with our project partners, clients, and users is a fundamental piece of achieving those values and purpose of Legal Design. In this regard, user research offers a unique opportunity to nurture these kinds of relationships at the beginning of the project.

We argue that user research is at the core of the Legal Design practice because it allows a search for needs and opportunities that may deviate us from the previously "intended solution". The focus on framing a problem from different perspectives, is probably one of the biggest values of Legal Design. Anyone can design a solution, but to design solutions that meet the real needs of people requires time and effort dedicated to engaging with them. This issue has implications for innovation in general, since often organizations start a challenge already knowing what their solution will be. This phenomenon has been referred to in design thinking literature as "solution fixation"[32]. Solution fixation is characterized by a seamless and straightforward plan, a destiny to arrive. User research, instead, has Legal Design teams embark on a journey of surprises, con-

29 Santuber and others, 'A Framework Theory of Legal Design for the Emergence of Change in the Digital Legal Society' (n 2); Perry-Kessaris (n 5); Brunschwig (n 13).

30 Perry-Kessaris (n 5).

31 Santuber and others, 'Feasible and Accessible Psycho-Physiological Methods for Legal Design' (n 8).

32 Larry Leifer and Christoph Meinel, 'Looking Further: Design Thinking Beyond Solution-Fixation' in Christoph Meinel and Larry Leifer (eds), *Design Thinking Research: Looking Further: Design Thinking Beyond Solution-Fixation* (Springer International Publishing 2019).

tradictions, and deep questioning. A form of wayfinding instead of simply navigating towards path determination.[33] The first one is associated with significant changes, while the latter produces only incremental changes.[34] Hence the power of user research is to fill projects with countless possibilities for meaningful impact. Furthermore, user research is also relevant in the 'post-creation' phase to evaluate the impact of a Legal Design project in the short/medium/long term. Going back to the notion of juristic practice, user research brings into Legal Design the meaningfulness of law as a social institution, enrichment, and sustainment of the law.[35]

7. Conclusion, Limitations & Future Research

In this Chapter we have presented six lessons on user research from Legal Design practice. In the form of reflection, we have made available to the reader distilled insights complemented with rich descriptions of situations and experiences made in the planning, execution, evaluation, and reflection on the cases offered above. Furthermore, we emphasized the central role of user research in Legal Design projects and connected to the human needs and opportunities as a source, means and end for designing better legal offerings. In summary, we pointed out six lessons that can help fellow practitioners to conduct their research. At the same our insights from practice will help fellow researchers to have a glimpse into a practice often hidden. With this, we aim to ground and provide concrete examples of the multiplicity of ways and reasons to doing user research in Legal Design projects.

Taking the time to conduct rigorous scientific work, while being a practitioner has both advantages and disadvantages. On one side, we have direct contact with the phenomenon of Legal Design, which provides an immediate access to the practice itself. On the other, the perspective of a researcher is broader in terms of methodological possibilities and

33 Jonathan Antonio Edelman and Larry Leifer, 'Qualitative Methods and Metrics for Assessing Wayfinding and Navigation in Engineering Design' in Hasso Plattner, Christoph Meinel and Larry Leifer (eds) *Design Thinking Research* (Springer 2012).

34 ibid.

35 Cotterrell (n 6); Perry-Kessaris (n 5).

the ability to position the insights in the context of related literature or different Legal Design practices. In this chapter, we have tried to provide the best of both, yet this potential limitation should be highlighted. Regarding the representativity of the cases provided in this chapter, we have tried to bring in experiences from the private and public sector, from two different continents, at three organizations of differing size; a Legal Tech company, a multinational legal department, and the Chilean judiciary. Yet, some big potential target groups for Legal Design are missing, i.e., law firms, civil society, activist communities, legal education, etc. Due to the high diversity of topics, challenges, and opportunities addressed by Legal Design the full picture might not be feasible. Yet, we should continue looking at how practice-based research can contribute to shaping what Legal Design is and the impact it has.

In this chapter, we have not discussed the ethical implications of conducting user research. Some of the questions worth addressing are related to reward/payment of people that engage in user research. Moreover, is it ethical to use a particular person's good or bad legal experiences, sometimes even suffering, in order to design a solution that creates general value. Also, yet to be discussed: the ethical implications of user research that is kept to a minimum, disregarded or skipped altogether, in projects that are more about creating a solution that looks good rather than having an actual impact.

In this sense, future research should continue to illuminate how Legal Design is carried out in practice. We look forward to the days when legal innovation scholars come to observe our practice and study how Legal Design projects are done, relating different approaches employed by different groups of practitioners.

Legal Design is happening, and it is happening in many forms. In this chapter we have provided several reasons, in the form of six lessons and four insights, to consider user research as a defining part of Legal Design. Only by understanding the needs of the users of legal offerings that are driven by values such as the rule of law, access to justice, and social peace we can design better legal systems that serve people better.

Bibliography

Biernacki P, Waldorf D, 'Snowball Sampling: Problems and Techniques of Chain Referral Sampling' (1981) 10 Sociological Methods & Research 141

Brunschwig CR, 'Visual Law and Legal Design: Questions and Tentative Answers', *In Proceedings of the 24th International Legal Informatics Symposium IRIS* (2021)

Cotterrell R, *Sociological Jurisprudence: Juristic Thought and Social Inquiry* (Routledge 2017)

Cross N, 'Designerly Ways of Knowing' (1982) 3 Design Studies 221

Edelman JA, Leifer L, 'Qualitative Methods and Metrics for Assessing Wayfinding and Navigation in Engineering Design' in Hasso Plattner, Christoph Meinel and Larry Leifer (eds) *Design Thinking Research* (Springer 2012)

Fook J, *The Reflective Researcher: Social Workers' Theories of Practice Research* (Allen & Unwin 1996)

-- 'Reflexivity as Method' (1999) 9 Annual Review of Health Social Science 11

Hagan M, 'Legal Design as a Thing: A Theory of Change and a Set of Methods to Craft a Human-Centered Legal System' (2020) 36 Design Issues 3

Hasson F, Keeney S, 'Enhancing Rigour in the Delphi Technique Research' (2011) 78 Technological Forecasting and Social Change 1695

Kolko J, *Exposing the Magic of Design: A Practitioner's Guide to the Methods and Theory of Synthesis* (Illustrated edition, OUP 2011)

Kohlmeier A, Santuber J, 'Is the Common Legal Platform a Wicked Problem?' in Kai Jacob, Dierk Schindler and Roger Strathausen (eds), *Liquid Legal: Towards a Common Legal Platform* (Springer International Publishing 2020)

Kraetzig VV, Krawietz L, 'Wer nicht mit der Zeit geht, geht mit der Zeit' *Frankfurter Allgemeine Zeitung* (Frankfurt, 1 July 2021) <www.faz.net/einspruch/anwaltschaft-und-legal-tech-anpassen-oder-aussterben-17405494.html> accessed 23 August 2021

Leifer L, Meinel C, 'Looking Further: Design Thinking Beyond Solution-Fixation' in Christoph Meinel and Larry Leifer (eds), *Design Thinking Research: Looking Further: Design Thinking Beyond Solution-Fixation* (Springer International Publishing 2019)

Perry-Kessaris A, 'Legal Design for Practice, Activism, Policy, and Research' (2019) 46 Journal of Law and Society 185

Rittel HWJ, Webber MM, 'Dilemmas in a General Theory of Planning' (1973) 4 Policy Sciences 155

Santonen T, Kaivo-oja J, Myllylä Y, 'The Crowdsourcing Delphi: Combining the Delphi Methodology and Crowdsourcing Techniques' (XXIV ISPIM Conference, Finland, June 2013)

Santuber J and others, 'A Framework Theory of Legal Design for the Emergence of Change in the Digital Legal Society' (2019) 50 Rechtstheorie 41

-- 'Feasible and Accessible Psycho-Physiological Methods for Legal Design' (Legal Design VIRTUALtable, April 2020)

Schon DA, *Reflective Practitioner* (Basic Books 1983)

Strauss A, Corbin JM, *Basics of Qualitative Research: Grounded Theory Procedures and Techniques* (Sage Publications, Inc 1990)

von Thienen JPA, Clancey WJ, Meinel C, 'Theoretical Foundations of Design Thinking: Part II: Robert H. McKim's Need-Based Design Theory' in Christoph Meinel and Larry Leifer (eds), *Design Thinking Research* (Springer International Publishing 2019)

Webley L and others, 'The Profession (s)'Engagements with LawTech: Narratives and Archetypes of Future Law' (2019) Law, Technology and Humans 6

4. WILL HUMAN-CENTRED LEGAL DESIGN IMPROVE CIVIL JUSTICE SYSTEMS? AND HOW WILL WE EVER KNOW?

Lois R. Lupica and Genevieve Grant

1. Introduction

The user-centred design process applied to the development of legal interventions has caught fire. Despite its current popularity as a method for developing innovative processes and products to address the challenges faced by justice-system users, the application of user-centred design in civil justice contexts has been subject to very little critical evaluation and scholarly analysis. In this Chapter, we argue that given the significant need for improvements to the legal system, and the considerable investments being made in the development of solutions through the user-centred design process, it is essential that rigorous scholarly evaluation of both the design process and outcomes be employed. By employing evaluation methodology used in other disciplines, we can better understand the research and design processes that work best to develop effective legal interventions.

2. A brief history of Design Thinking

Legal Design is a new-ish application of a concept that has been around for decades: user-(or human-) centred design, or "design thinking". Dating back to the 1960s, human-centred design grew out of the work of Nobel Prize laureate Herbert Simon. In his classic book, *The Sciences of the Artificial* published in 1996, Simon defined 'design' as "changing existing circumstances into preferred ones."[1] He noted the importance of rapid prototyping and user testing of products, systems, and ideas, establishing the foundation of what is known as today's design thinking process.[2]

Over decades, engineers, scientists, and indeed, designers have advanced innovative ways of understanding and addressing problems using design-thinking methodology. The insight of putting user-engagement at the centre of the development process in order to see problems from a different perspective resulted in the expansive and empathetic development of solutions to a variety of complex problems.

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1 Herbert Simon, *The Sciences of the Artificial* (3rd edn, MIT Press 2019) 111.

2 ibid. ("To understand them, the systems had to be constructed, and their behaviour observed").

The classic design thinking process involves a series of steps, calculated to provide a framework for the development of innovative solutions. Typically, the process begins with a thoughtful and expansive definition of the problem. Once the problem or issue is identified, end-users and other stakeholders brainstorm a range of possible solutions. The idea at this point is to think as expansively and creatively as possible. Then prototypes of the range of solutions are developed and tested.

Legal Design emerged as a way of re-thinking law-related problems and corresponding solutions. Legal design thinking allows for the questioning of assumptions and long-established processes, putting the ultimate user of the product or the system at the centre. Legal designers' work embraces the radical notion that the legal system ought to work for its users.

3. Why has Legal Design caught fire?

Legal Design as an enterprise has grown in response to the access to justice crisis. It is now well-established that justice systems are not working for the people they are purportedly intended to serve. Substantive laws and procedures, written by lawyers for an audience of lawyers and judges, are text-dense and difficult to understand and apply. Court processes assume parties are represented by counsel and have the resources to navigate a complex and long-winded system.

Indeed, the reality is that 86% of the civil legal problems reported by low-income Americans in the past year received inadequate or no legal help.[3] Legal services and community law centres are underfunded in the U.S. and around the world, with the private bar filling some (but not even close to all) of the gaps.[4] When individual lawyers and law firms offer free representation and advice, "demand does not drive [the] market … the interest and priorities of those providing the resources do so."[5]

3 Legal Services Corporation, *The Justice Gap: Measuring the Unmet Civil Legal Needs of Low Income Americans* (LSC 2017).

4 ibid.

5 Rebecca Sandefur, 'Access to Justice: Classical Approaches and New Directions' (2009) 6 Access to Justice ix, xii.

Accordingly, the civil legal aid system largely reflects the interests of the provider, "rather than the consumer."[6]

Moreover, the problem of barriers to access to justice is even greater than it appears on its face. Legal needs surveys reveal that many people who experience problems aside from those that can be resolved in courts and other tribunals, such as public benefits denial and access to shelter and income, are not aware that there may be law-related solutions to their problems.[7] As such, many people, including society's most vulnerable, are oblivious to their legal rights, and the potential resources available to help them. It is increasingly clear that there is a profound mismatch between our aspirations for our justice systems and the reality.

As a result of this systemic dysfunction, access to justice scholars and others who see the connection between the access to justice crisis and society's well-being have begun to question a host of their assumptions and think through how the future of law might be reimagined. From legal services organizations to legal tech entrepreneurs, think tanks, foundations, courts and tribunals and law school labs, a great deal of time and energy in recent years has been devoted to the question of "how can the legal system better serve its users?" Out of this question has emerged the application of human-centred design to the development of legal tools and the re-thinking of legal processes.

In applying the process of human-centred "design thinking" to the law, users' interests and perspectives can be probed in order for their specific "pain points" to be accurately identified. These are likely not to be the pain points of the law-trained professional attempting to craft a legal process or product.[8] The infusion of empathy with product, program or

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6 ibid.

7 See generally OECD/Open Society Foundations, *Legal Needs Surveys and Access to Justice* (OECD Publishing 2019) 33-34 and 86-87, <https://doi.org/10.1787/g2g9a36c-en> accessed 16 August 2021.

8 If for example, one asked a person to identify the "pain points" in the U.S. judicial debt collection system, the answer would vary depending upon the background and experiences of that person. To illustrate, if you asked Person X with a graduate level education, familiarity with the judicial system and resources to hire counsel, the answer would be very different than the answer from Person Y, of less education, limited knowledge about court proceedings, and possessing the experience of vulnerability when faced with institutions and authority figures. Factors such as the ease of use of the public transportation system, the courthouse hours, avail-

process development is designed to result in a greater understanding of the range of user needs, and allows for the cultivation of tailored solutions.[9]

4. The Design Thinking process

User participation is at the heart of the design thinking process. In the fields of marketing and product development, designers initially theorized that users of a program or product are in a unique position to identify the key stumbling blocks in their interactions. Such central stakeholders can both provide context and identify key problem areas. Through their participation in brainstorming sessions, users can contribute to the production of a range of "solutions" to the identified problems. The solutions can be rapidly prototyped and tested in the short-term. The theory is that this quick, participatory process allows for agile thinking and the opportunity to learn and respond to failure. Advocates of the design-thinking process assert that these quick brainstorming sessions, or design sprints, allow for a deep study of a problem's context, the consideration of a variety of perspectives, a rapid compilation of ideas and solutions, and down and dirty prototyping[10] and testing of solutions.[11]

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able vacation or personal time, and the accessibility of child-care can significantly impact the users' experience. If the subjective experience of the users of a program or product are captured and considered, any developed 'solution' can reflect the actual challenges faced by the users, not just those that are a result of 'expert' conjecture.

9 Charlotte Baker, 'Legal Design Explained - Part I: What is Legal Design?' (*SCL*, 2019) <www.scl.org/articles/10490-legal-design-explained-part-1-what-is-legal-design> accessed 8 February 2020.

10 Danish Design Centre, 'Value system mapping', <https://danskdesigncenter.dk/en/value-system-mapping> accessed 16 August 2021.

11 The Hasso-Plattner Institute of Design at Stanford (also known as the Stanford 'd.school') has outlined the five steps of design thinking: (i) empathize with your users, (ii) define your users' needs and their problems, (iii) ideate, by challenging assumptions and developing a range of possible solutions, (iv) prototype the best proposed solutions, and (v) and test these prototypes. See, <https://dschool.stanford.edu/> accessed 16 August 2021.

5. Legal Design and civil justice improvement

There are myriad examples of products and processes that have grown out of the Legal Design movement. From activities of legal services agencies and organizations to law school Legal Design labs, the human-centred design process has increasingly been used to develop products and processes intended to address the civil justice crisis in a range of jurisdictions.[12] In fact, 2021 marked the fifth birthday of the Civil Resolution Tribunal in British Columbia, Canada, widely regarded as the leading example of legal institutional application of human-centred design principles.[13]

The Australian state of Victoria provides a useful example of the reach and influence of Legal Design in the civil justice arena, and its fledgling institutionalization. In 2019, the Legal Services Board of Victoria orientated its annual major grant program to the topic of "Designing Justice Differently: Using Human-Centred Design and Technology" and invited grant applicants to participate in a design sprint in order to further develop their project ideas.[14] That same year, the Victorian Civil and Administrative Tribunal (VCAT), which handles a range of matters including small civil claims, launched its updated online application form.[15] Consistent with VCAT's approach,[16] the form's development drew on design principles, with VCAT later heralding its achievement of halved applica-

12 For example, Justice Connect in Melbourne Australia employed a design sprint process where seekers and providers of pro-bono legal help worked together to develop a product that connects those who need legal assistance with those who can provide it. See, <https://justiceconnect.org.au/about/digital-innovation/gateway-project/> accessed 16 August 2021.

13 Shannon Salter and Darin Thompson, 'Public-centered civil justice redesign: a case study of the British Columbia civil resolution tribunal' (2016) 3 McGill Journal of Dispute Resolution 113.

14 Conversation with Sue Bell, Grant Coordinator, Legal Services Board of Victoria, March 2019 (notes on file with Author). See also Lisa Toohey and others, 'Meeting the Access to Civil Justice Challenge: Digital Inclusion, Algorithmic Justice, and Human-Centred Design' (2019) 19 Macquarie Law Journal 133, 136-137.

15 Victorian Civil and Administrative Tribunal, online civil claims application form, available at <https://apply.vcat.vic.gov.au/#/> accessed 16 August 2021.

16 Victorian Civil and Administrative Tribunal, *VCAT for the Future: VCAT Strategic Plan 2018-22* (2018) 7 and 9, <https://www.vcat.vic.gov.au/sites/default/files/resources/VCAT-Strategic-Plan.PDF> accessed 16 August 2021.

tion completion time (from '1.5 hours to 47 minutes') and completion rates increasing from 10 per cent to 50 per cent.[17] The Children's Court of Victoria also reported embarking on a Service Reform Project to "improve the experience of court users and efficacy of court operations" using human-centered design,[18] with 'user-centric design' identified as a strategic priority.[19] Victoria Legal Aid – a key state-funded provider of legal assistance services to the Victorian community – launched its 'Client First Strategy', emphasizing the use of human-centred design and other mechanisms to include client perspectives and insights in the design and delivery of services.[20]

In the U.S., hundreds of chat bots, expert systems, document assembly tools and triage systems have been developed by myriad individuals and institutions with public and private resources over the past decade. Moreover, law schools across the world have launched human-centred design labs with the objective of developing products and programs that are user-responsive and effective.[21]

Despite the ubiquity of the human-centred design process and its resulting (largely) technology-based products, the extent to which these tools are used, and if they result in meaningful change, remains unclear. The attention to Legal Design approaches in the legal assistance sector and by major institutions (such as courts and tribunals) is far outpacing

17 Victorian Civil and Administrative Tribunal, 'VCAT's new consumer application, VCAT Annual Report 2019-20, 19 <https://www.vcat.vic.gov.au> accessed 16 August 2021.

18 Children's Court of Victoria, *Annual Report 2018-19* (2019) 13.

19 Children's Court of Victoria, *Annual Report 2019-20* (2020) 10.

20 See, Victoria Legal Aid <www.legalaid.vic.gov.au/about-us/our-organisation/how-we-are-improving-our-services/client-first-strategy> accessed 16 August 2021.

21 Marta Milkowska, 'Design Thinking for Better Government Services' (*Government Innovators Network*, 24 July 2018) <www.innovations.harvard.edu/blog/design-thinking-better-government-services-human-centered> accessed 16 August 2021. VCAT Online Dispute Resolution Pilot (2017-18); Children's Court of Victoria Human Centered Design Project (2019). Legal Design labs have been developed at dozens of law schools across the world, including University of Melbourne, RMIT, Georgetown University, Vanderbilt University, Stanford University and the University of Denver Sturm College of Law. In these labs, law students learn about the significance of technology to the delivery of legal services, as well as how new methods and tools are changing the structures of legal organizations and methods of process improvement.

the production of scholarly analysis and evaluation of their impacts and lasting benefits. The risk created is that "as the hype cycle of design is starting to wane" in civil justice settings, and "as with any other hyped framework […] there is a lot of overuse of the notion of human centred design and thinned out versions of what that means."[22] As Hagan as observed, evaluation is critical "to proving that design work is not hype, but that it feeds into a larger ecosystem and that it can demonstrate its ability to improve outcomes." [23] Some commentators optimistically suggest that the "movement for evaluation of interventions is slowly gaining traction",[24] but progress is slow and the published research evidence is thin. In their recent analysis, Bernal and Hagan made a compelling case for a 'standardized methodology' for justice innovation research, and demarcated a difference between what they characterise as an 'expert-centred' and 'client-centred' approach to evaluation of design interventions in civil justice contexts.[25] Here, we argue that it is of benefit to all justice system users for high-quality evaluation to occur to best enable local and international audiences to learn from investments in these interventions. In our short contribution, we articulate some of the ways organisations and researchers engaging with human-centred design in civil justice contexts might learn from long-established principles of evaluation research from other disciplines.

6. What is program and product evaluation?

Program or product evaluation involves a

> *"systematic and objective assessment of an ongoing or completed project, programme or policy, its design, implementation and results.*

22 Margaret D Hagan, 'Can Design Really Make Better Government' (*Medium*, 12 August 2019) <https://medium.com/legal-design-and-innovation/can-design-really-make-better-government-33d01b58f303> accessed 16 August 2021.

23 ibid.

24 Daniel W Bernal and Margaret D Hagan, 'Redesigning Justice Innovation: A Standardized Methodology' (2020) 16 Stanford Journal of Civil Rights & Civil Liberties 335, 337.

25 ibid 338.

> *The aim is to determine the relevance and fulfilment of objectives, efficiency, effectiveness, impact and sustainability."*[26]

More broadly, evaluations can be used to set policy agendas and determine whether scarce resources are being deployed in the most effective and efficient manner.

Evaluation is a transdisciplinary and applied field of academic research, spanning policy areas as varied as health services, education and public administration. It relies on long-standing social science methods of research – both qualitative and quantitative – rather than the *ad hoc* judgements of observers, users or staff.[27] For example, social scientists have been evaluating programs to house the homeless, care for elderly patients, reduce drug use and dependency, and lower the cost of healthcare so that questions pertaining to usage, outcomes, value and replication potential can be answered by the data. This evaluation is not of a "quick and dirty" nature; it is a rigorous and systematic process requiring a deep understanding of the problem and its context. It requires planning, research design, data collection and data analysis, reporting of findings, dissemination and application of conclusions.

In the realm of legal and law-related research, the evaluation process, known as empirical methods, has not historically been used to evaluate legal programs and products to the same degree – and indeed empirical research in the field of law has only taken hold in the U.S. in the past decades.[28] While lawyers and judges are more than familiar with the col-

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26 Expert Group on Aid Evaluation, *OECD's Development Assistance Committee* (1992) 132, cited in Susanne Neubert, *Social Impact Analysis of Poverty Alleviation Programmes and Projects* (Routledge, 2013) 21.

27 "Program evaluation is the use of social research procedures to systematically investigate the effectiveness of social intervention programs […] Evaluation researchers (evaluators) use social research methods to study, appraise, and help improve social programs in all the important aspects, including the diagnosis of the social problems they address, their conceptualization and design, their implementation and administration, their outcomes, and their efficiency. Earl R Babbie, *The Practice of Social Research* (15th edn, Cengage 2020) 357.

28 In the U.S., scholars studying the bankruptcy system were pioneers in the field of empirical legal research. See Marianne B Culhane and Michaela M White, 'Debt after Discharge: An Empirical Study of Reaffirmation' (1999) 73 American Bankruptcy Law Journal 709; Elizabeth Warren, 'The Market for Data: The Changing Role of Social Sciences in Shaping the Law' (2002) Wisconsin Law Review 1; Lois R

lection and use of evidence, validation of law-related products and processes' utility, outcomes and cost has taken a back seat to conclusions based on "gut and intuition."[29] In other words, lawyers (and judges) are skilled at convincing others (and themselves) that their instincts alone are enough.

And yet, the reasons to formally evaluate legal programs and products are just as compelling as they are in the non-legal realm – and arguably more so, given the implications of the vast investment in a legal system that does not meet the needs of a society that is required to interact with it. For example, private and public investments in legal interventions are costly and typically require substantial expenditures to maintain them.[30] The people who invest in and develop these interventions likely care whether the original objectives of the program are being met, including whether they meet the actual needs of the users, whether they are being properly used by the target population, whether they are doing what they are designed to do, and whether they are getting the expected results in a cost efficient manner. Evaluation of these processes and programs can not only tell us whether these interventions make a long-term difference in well-being and future decision-making, but also whether and where there are opportunities to improve; whether a program or process is the best use of scarce resources; whether a particular intervention ought to be replicated; and where the points of future advocacy should be.

Lupica and Jay L Zagorsky, 'A Study of Consumers' Post-Discharge Finances: Struggle, Stasis or Fresh Start?' (2008) 16 American Bankruptcy Institute Law Review 283; Lois R Lupica, 'The Consumer Bankruptcy Fee Study: The Final Report' (2012) 20 American Bankruptcy Institute Law Review 17. "The increase in scholars interested in the subject, the ease of obtaining relevant data from court files, and new technological developments have contributed to this expansion." Jay L Westbrook, 'Empirical Research in Consumer Bankruptcy' (2001) 80 Texas Law Review 2123.

29 D James Greiner, 'The New Legal Empiricism and its Application to Access to Justice Inquiries' (2019) 148 Daedalus 64 (noting that policy decisions are regularly made in the absence of rigorous evaluation and empirical data).

30 In this framework, any one of the myriad of new tools, processes or approaches generated using Legal Design methodologies can be regarded as an intervention.

6.1. Program and product evaluation: processes and outcomes

As investments in Legal Design and civil justice improvement programs and products have proliferated, it is increasingly important to know not only if these interventions are being used, but also if they result in positive outcomes in a cost-effective way.[31] The only way to answer these questions is to use a spectrum of methodological tools to develop a reliable and informative evidence base about the efficacy of these interventions. As has been noted by scholars, "[p]rogram evaluation is not some dreary laboratory-type of research; it is research involving real people, real programs, and real life experiences".[32] It can focus on the program or product from a process perspective as well as an evaluation of outcomes.

6.2. Process evaluation

Process evaluation investigates how a program or product is delivered, describing its operating conditions, and identifying aspects of the program or product that may be hindering success. The methodology for process evaluation may include document reviews, observation of relevant events, surveys, structured individual interviews, focus groups, analysis of administrative or other data as well as the development of predictive models which can reveal "whether and how well precursor variables predict the value of ultimate variables."[33]

Typically, a process evaluation seeks to answer questions, such as: (i) have the program activities been implemented as intended?; (ii) are there barriers to program delivery?; (iii) was the program implemented within the expected timeframe?; (iv) was the program implemented at a reasonable cost, taking opportunity costs into account; (v) to what extent is the program reaching intended recipients?; and (vi) to what extent is the program meeting the needs of participants and other key

31 'Evaluations need to be prioritised, coordinated and made public.' Productivity Commission 2014, *Access to Justice Arrangements, Inquiry Report No 72* (2014) 879.

32 Smith (n 26) 6.

33 Greiner (n 29).

stakeholders?[34] In addition, a process evaluation can address a broader range of issues, including whether the development of a product, process or procedure results in restorative justice, informational justice, interpersonal justice, as well as procedural justice.[35] In order to draw conclusions about whether a program or product is successful, evaluators have to understand how the program or product actually operates from the perspective of all stakeholders.

6.3. Outcome evaluation

Outcome evaluation investigates links between specific program activities and outcomes of interest. This descriptive or observational approach might examine changes in program participants and events before or after an intervention, including using administrative data and surveys, and use qualitative data, including interviews and focus groups with stakeholders. Such an evaluation seeks to answer questions, such as: (i) have the outcomes changed?; (ii) has the program or product contributed to the change as expected?; (iii) who has benefited from the program or product, how, and under what circumstances?; and (iv) are there any unintended consequences for participants or stakeholders?[36] Both short- and long-term outcome measures can aid in outcome assessment.

An alternative method of evaluation, albeit one with a long history and credibility in the field of medicine, is randomized controlled trials (or RCTs) in which the "empiricist randomly assigns cases, people, judges, or units of some kind to one condition or another and then measures which condition produces a more desirable set of outcomes."[37] For example,

34 NSW, *Government Program Evaluation Guidelines* (2016) 8-9. The same questions can be asked about product development.

35 Restorative justice focuses on the reparation of harm, the promotion of reconciliation and the rebuilding of relationships. Informational justice refers to how effectively the process or product was designed to inform people about their rights. Interpersonal justice addresses the way people are treated during the process, with a focus on respect for all parties. Procedural justice focuses on fairness of the process, including its accuracy and consistency. Martin Granatikov and others, *A Handbook for Measuring the Costs and Quality of Access to Justice* (Maklu Uitgevers 2010) 34-36.

36 NSW (n 34) 8-9.

37 Greiner (n 29).

if one were measuring the effectiveness of self-help materials as compared to professional attorney representation, the only way to conclude, with statistical certainty, that any observed differences with respect to outcomes are due to the difference in intervention offered (self-help v. attorney) as opposed to differences in the individuals' unobservable characteristics, including individual circumstances, literacy, motivation or type of case is through an RCT.[38] Data that is revealed through an RCT has the potential to explode a lot of myths at the foundation of the legal system that have been perpetuated, albeit in good faith, by policy and law-makers' intuition and instinct.

7. Does the Legal Design process demand another type of evaluation?

A rigorous evaluation of the program or product that emerges from a design process is essential, but it does not obviate the need for an assessment of the process itself. Despite the increased use of the specific and stylised human-centred design process in developing legal programs and processes, the process itself has not received much critical attention in civil justice settings. While on its face, the "design sprint" model of idea and product development appears to result in user-friendly and inclusive products and programs, there is little, if any, empirical data supporting this observation.[39] Indeed, the recent ubiquity of the use of the human-centred design approach by legal designers might suggest that our discipline has found a panacea to address and fix our dysfunctional legal system.

There are myriad questions about the user-centred design process that if answered, would allow us to assess when, how and under what

38 The Financial Distress Research Study of the Harvard A2J Lab (L Lupica, D James Greiner and D Jimenez, Principal Investigators) is studying this very question.

39 'Neither model making nor any other designerly way is likely to suffice as a stand-alone sociolegal tool. The usual conceptual and empirical research methods will also need to be deployed. From a critical perspective the important question in each instance will be whether designerly ways help researchers to avoid, expose and remedy biases and inequalities, both in their substantive field of research and in their community of practice.' Amanda Perry-Kessaris, 'Legal Design for Practice, Activism, Policy, and Research' (2019) 46 Journal of Law and Society 185.

circumstances the design process does what it purports to.[40] The threshold question is whether legal design thinking generates different (and more valuable) insights into user experience than other modes of generating that insight? There are thousands of existing tools and methods that can be used to deliver innovative processes that can perhaps more effectively meet users' conscious (or unconscious) needs. While the IDEO/Stanford d.school five step process may be useful in one context, in others, a broader methodological framework might yield more compelling results. The population you are designing for and the complexity of the systems you are operating in may dictate an alternative methodology that achieves the same goal of designing with empathy.

Starting with the three primary steps of *looking*, *understanding* and *making* (or discovering, synthesizing and building), there are myriad tools a researcher can employ within each of these steps.[41] For example, in the discovery (or research or looking) stage, one can go beyond the "post-it centred" design sprint, and conduct user interviews,[42] focus groups,[43] observations and contextual inquiries.[44] Moreover, even in a design sprint or focus group setting, a broader array of exercises can

40 Our critique of the design thinking process is that it has not been critically evaluated in light of established research methods. This critique is different from the debate launched by Natasha Jen in her presentation entitled, "Design Thinking Is Bull-###it." Presentation available at: <https://99u.adobe.com/videos/55967/natasha-jen-design-thinking-is-bullshit> accessed 16 August 2021. "Natasha calls Design Thinking a "buzzword," accuses it of being obsessed with a single tool (Post-It Notes), and claims that it lacks the rigor of expert "crit" (critique) and proof." As stated by Ieesean, 'Yes, Design Thinking Is Bullshit…And We Should Promote It Anyway' (*Medium*, 24 August 2017) <https://medium.com/foossa-files/yes-design-thinking-is-bullshit-and-we-should-promote-it-anyway-64e1d90ccc91> accessed 16 August 2021.

41 Luma Institute, 'A Taxonomy of Innovation' (*Hbr.org*, January-February, 2014) <https://hbr.org/2014/01/a-taxonomy-of-innovation#> accessed 16 August 2021.

42 Mirjam Knapik, 'The Qualitative Research Interview: Participants' Responsive Participation in Knowledge Making' (2006) 5(3) International Journal of Qualitative Methods 77.

43 Lekshmi Santhosh, Juan C Rojas, Patrick G Lyons, 'Zooming into Focus Groups: Strategies for Qualitative Research in the Era of Social Distancing' (2020) 2(2) ATS Scholar Metrics 176.

44 Kim Salazar, 'Contextual Inquiry: Inspire Design by Observing and Interviewing Users in their Context' (*Nielsen Norman Group*, 6 December 2020) <www.nngroup.com/articles/contextual-inquiry> accessed 16 August 2021.

be conducted to elicit determinations such as the values users hold and users' perceptions of the costs and benefits of a particular innovation.

It would be useful to explore how effectively the human-centred design process works, and particularly in contrast to other modes of qualitative inquiry. What are the differences between more traditional modes of eliciting qualitative data (*e.g.,* structured interviews, focus groups) and the insight generated in prototyping? How is this qualitative data analysed in the design setting? By using qualitative research methods, or by expert and user observations and impressions?

Another question to be explored is whether participation in the process of Legal Design delivers benefits (or harms) aside from the actual outcomes of any implemented innovation? Does engaging in co-design generate benefits at a person level beyond the intervention? We have observed how much some participants enjoy and find meaning in the process. Does it also result in stakeholder empowerment, self-reflection, or any other positive or negative outcomes? At an institutional level, does the fact that an intervention has been generated through a design process delivers benefits in terms of the way interventions are implemented, and their success? That is, does the process itself establish local, internal advocates for interventions?

In terms of both individual stakeholders and organisations, what are the characteristics of those who willingly engage with Legal Design? What are the factors that make that engagement fruitful? Are participants a representative sample of actual stakeholders? Or should we factor self-selection bias into the evaluation of programs and products developed via a design sprint process?

Finally, what is the role of self-evaluation? This question provides a realist perspective, due to the reality that sometimes resources are not able to stretch to independent evaluation and trials. What weight should be accorded to self-evaluations and grey literature (especially while we wait for the evaluation evidence base to develop)?

This series of questions illustrates the kind of comprehensive attention to the design process itself that is required in order to best evaluate the nature and sustainability of interventions in civil justice settings and beyond. In the next part of our Chapter, we turn to considering learnings for Legal Design research from Health Services Research. Given that, as Hall and Wright have identified, legal scholars are "the mockingbirds of

the academy",[45] it makes sense to review the progress made in disciplines who are further advanced in their engagement with design-based approaches and borrow what we can.

8. Lessons from health services research

The use of human-centred design methods in the health care field has a longer track record than the use of this design methodology in the law.[46] A recent article acknowledged that design methods can be useful to promote social innovation in the health field as long as they "complement existing knowledge and [research] practice …."[47] As noted by Bazzano and others,

> *"[d]esign for health necessitates including participants (and others who will use the design outcomes) explicitly in the research process, iterates on proposed solutions quickly and directly with participants, and makes the results more immediately actionable than is typical in theoretically driven social and behavioural, or qualitative, research."*[48]

The record of evaluation of the design method of innovations in Health Services Research, however, has been criticized due to a dearth of uniformity and transparency in the reporting of research. As noted,

> *"few articles in the health care field [describing the use of design methodology] included detailed methods and results, information on*

45 Mark A Hall and Ronal F Wright, 'Systematic Content Analysis of Judicial Opinions' (2008) 96 California Law Review 63, 63.

46 Health Services Research 'examines how people get access to health care, how much care costs, and what happens to patients as a result of this care. The main goals […] are to identify the most effective ways to organize, manage, finance, and deliver high quality care; reduce medical errors; and improve patient safety.' Jose J Escarce and Ann Barry Flood, 'Introduction to Special Section: Causality in Health Services Research' (2011) 46(2) Health Services Research 394. Health Services Research is an established field dedicated to generating evidence about the development, implementation and effectiveness of health care interventions.

47 Alessandra N Bazzano and others, 'Improving the reporting of health research involving design: a proposed guideline' (2020) 5 BMJ Global Health e002248.

48 ibid 1.

> *design expertise within teams, reflexivity/positionality or socioinstitutional dynamics."*[49]

Moreover, "much of the literature neglect[s] to describe stakeholder engagement processes related to the use of design…"[50]. This same criticism can be levelled at the academic reporting on the use of design methodologies in the field of law. There is little literature on the Legal Design process, and some of that which exists also falls prey to inconsistent and opaque reporting.

Bazzano proposes a useful framework for reporting of health research using design methodology.[51] Much of this framework is drawn from conventions developed using other scientific research methods. While likely familiar to most social science researchers, these standards and elements are ground-breaking when considered in the context of a critical evaluation of human-centred design methods. They include a description of the problem and a rationale for the use of design methodology; specific reporting of the approach, tools, setting and participants involved in the process; a description of how data were reviewed, analysed and synthesised; a reporting of results, including the product or process designed, and any associated secondary or ancillary results; a critical reflection on how the design process contributed to this research topic, including its strengths, limitations and contributions; and finally, a discussion of the implications of the work on the broader discipline and design.[52] As we have seen with respect to reporting of other research methodologies, "[r]eporting guidelines are useful in improving the quality and quantity of dissemination of work in peer-reviewed literature."[53] These observations are consistent with Bernal and Hagan's calls for "making explicit a justice innovation creation process that is standard, accountable and reproducible"[54], through "adopting similar language and methodolo-

49 ibid.
50 ibid.
51 ibid 2.
52 ibid.
53 Bernal and Hagan (n 24).
54 ibid 378.

gies"[55]. Such steps can only increase the benefit generated by undertaking and reporting on design-based civil justice interventions.

9. Civil justice evaluation challenges

There are many challenges faced by researchers seeking to evaluate legal programs and products. Justice reviews consistently identify inadequate program evaluation due to a range of reasons, including (i) inconsistencies across sectors in definitions and measures; (ii) data not sufficiently detailed to usefully inform policy; (iii) a lack of information around outcomes; (iv) incomplete and patchy data collection and reporting; and (v) a lack of resources among data reporters, and lack of awareness about how data will be used.[56]

Beyond the data deficiencies, other significant challenges face researchers interested in rigorous program evaluation. First, there is far less capacity for empirical research in law schools than is required to meet the demand. Lawyers are not typically trained in empirical methods, although that is beginning to change, at least in the U.S.[57] While this does not preclude evaluations being done outside of the law discipline, social science researchers may be disadvantaged by their lack of knowledge of legal contexts, systems, or processes. Many stakeholders in government, and public and private sector legal organizations also do not have the skills needed to gather and analyse data required to evaluate programs.

Moreover, there is not a consistent appetite for independent evaluation amongst some data-rich stakeholders. In many instances, commercial actors consider their data proprietary, and courts may not have or may not be willing to share the data they gather. In the United Kingdom, work undertaken by Byrom for the Legal Education Foundation highlighted the critical need for "a robust strategy for data collection, analysis and sharing" [58] in order to facilitate evaluation of large-scale court and tribu-

55 ibid.

56 Productivity Commission (n 31); VDJR 2016.

57 Courses in empirical methods are currently being offered at the University of Illinois Law School, Harvard Law School, Columbia Law School, Duke Law School, to name a few. There is even a casebook on empirical methods for law students. See Bob Lawless and others, *Empirical Methods in Law* (Aspen 2016).

58 Natalie Byrom, 'Digital Justice: HMCTS data strategy and delivering access to jus-

nal system reform. Across jurisdictions, civil courts fighting for funding may perceive independent evaluation as creating an unwelcome reputational risk. There is also the issue of the fit of evaluation programs with established ethical standards around research involving human participants. Many private sector consulting firms either do not seek or have access to an Institutional Review Board, or are unaware of their requirements.

Evaluation is also commonly thwarted by the 'snapshot' or 'transactional' view of the civil justice system held by many stakeholders. An emphasis on 'user contacts' rather than on 'systems thinking' can potentially lead to failing to credit the clustered nature of many consumers' legal problems. This adds to the complexity of assessing not only users' needs, but also outcomes. There may also be constraints imposed by funders or other collaborators. There may be a kind of 'Legal Design bargain' operating, such that delivery of the product may be the price of admission to collaboration with an organization, leaving implementation and evaluation as an after-thought. And that after-thought may be unfunded.

10. Conclusion and some implications

As legal researchers concerned about access to justice challenges, we need to turn focus to evaluation of not just programs and products, but the process by which they are developed. We need to consider the myriad opportunities, functions, and performance of Legal Design beyond intervention outcomes. As noted by Hagan and Bernal, "[a]n intentional methodology for design interventions minimizes the likelihood of failed interventions."[59]

Clearly there will be implementation challenges, and the evidence base on Legal Design processes will be needed to help address these challenges. We can begin to build an evidence base evaluating small-scale projects and interventions and fostering reliance on scholarly liter-

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tice. Report and recommendations', (*The Legal Education Foundation*, September 2019) 2, <https://research.thelegaleducationfoundation.org/wp-content/uploads/2019/09/DigitalJusticeFINAL.pdf> accessed 16 August 2021.

59 Bernal and Hagan (n 24) 338.

ature in addition to our access to justice stakeholder network. We should heed the lessons of human-centred design in the health services setting (and wider evaluation research) about reporting on methods, results and practice using a common framework. We can also work to develop capacity for evaluation in law school settings, and elsewhere. Opportunities for contributing to user experience, access to justice, scholarship and graduate outcomes must not end with intervention development.

Bibliography

Babbie ER, *The Practice of Social Research* (15th edn, Cengage 2020)

Baker C, 'Legal Design Explained - Part I: What is Legal Design?' (*SCL*, 2019) <www.scl.org/articles/10490-legal-design-explained-part-1-what-is-legal-design> accessed 8 February 2020

Bazzano AN and others, 'Improving the reporting of health research involving design: a proposed guideline' (2020) 5 BMJ Global Health e002248.

Bernal DW, Hagan MD, 'Redesigning Justice Innovation: A Standardized Methodology' (2020) 16 Stanford Journal of Civil Rights & Civil Liberties 335

Byrom N, 'Digital Justice: HMCTS data strategy and delivering access to justice. Report and recommendations', (*The Legal Education Foundation*, September 2019), 2, <https://research.thelegaleducationfoundation.org/wp-content/uploads/2019/09/DigitalJusticeFINAL.pdf> accessed 16 August 2021

Children's Court of Victoria, *Annual Report 2018-19* (2019)

Children's Court of Victoria, *Annual Report 2019-20* (2020)

Culhane MB, White MM, 'Debt after Discharge: An Empirical Study of Reaffirmation' (1999) 73 American Bankruptcy Law Journal 709

Danish Design Centre, 'Value system mapping', <https://danskdesigncenter.dk/en/value-system-mapping> accessed 16 August 2021

Escarce JJ, Flood AB, 'Introduction to Special Section: Causality in Health Services Research' (2011) 46(2) Health Services Research 394

Expert Group on Aid Evaluation, *OECD's Development Assistance Committee* (1992)

Granatikov M and others, *A Handbook for Measuring the Costs and Quality of Access to Justice* (Maklu Uitgevers 2010)

Greiner DJ, 'The New Legal Empiricism and its Application to Access to Justice Inquiries' (2019) 148 Daedalus 64

Hagan MD, 'Can Design Really Make Better Government' (*Medium*, 12 August 2019) <https://medium.com/legal-design-and-innovation/can-design-really-make-better-government-33d01b58f303> accessed 16 August 2021

Hall MA, Wright RF, 'Systematic Content Analysis of Judicial Opinions' (2008) 96 California Law Review 63

Ieesean, 'Yes, Design Thinking Is Bullshit…And We Should Promote It Anyway' (*Medium*, 24 August 2017) <https://medium.com/foossa-files/yes-design-thinking-is-bullshit-and-we-should-promote-it-anyway-64e1d90ccc91> accessed 16 August 2021

Jen N, 'Design Thinking Is Bull-###it' (video-presentation) <https://99u.adobe.com/videos/55967/natasha-jen-design-thinking-is-bullshit> accessed 16 August 2021

Knapik M, 'The Qualitative Research Interview: Participants' Responsive Participation in Knowledge Making' (2006) 5(3) International Journal of Qualitative Methods 77

Lawless B and others, *Empirical Methods in Law* (Aspen 2016)

Legal Services Corporation, *The Justice Gap: Measuring the Unmet Civil Legal Needs of Low Income Americans* (LSC 2017)

Luma Institute, 'A Taxonomy of Innovation' (*Hbr.org*, January-February, 2014) <https://hbr.org/2014/01/a-taxonomy-of-innovation#> accessed 16 August 2021

Lupica LR, 'The Consumer Bankruptcy Fee Study: The Final Report' (2012) 20 American Bankruptcy Institute Law Review 17

Lupica LR, Zagorsky JL, 'A Study of Consumers' Post-Discharge Finances: Struggle, Stasis or Fresh Start?' (2008) 16 American Bankruptcy Institute Law Review 283

Milkowska M, 'Design Thinking for Better Government Services' (*Government Innovators Network*, 24 July 2018) <www.innovations.harvard.edu/blog/design-thinking-better-government-services-human-centered> accessed 16 August 2021

Neubert S, *Social Impact Analysis of Poverty Alleviation Programmes and Projects* (Routledge 2013)

NSW, *Government Program Evaluation Guidelines* (2016)

OECD/Open Society Foundations, *Legal Needs Surveys and Access to Justice* (OECD Publishing 2019)

Perry-Kessaris A, 'Legal Design for Practice, Activism, Policy, and Research' (2019) 46 Journal of Law and Society 185

Productivity Commission 2014, *Access to Justice Arrangements, Inquiry Report No 72* (2014)

Salazar K, 'Contextual Inquiry: Inspire Design by Observing and Interviewing Users in their Context' (*Nielsen Norman Group*, 6 December 2020) <www.nngroup.com/articles/contextual-inquiry> accessed 16 August 2021

Salter S, Thompson D, 'Public-centered civil justice redesign: a case study of the British Columbia civil resolution tribunal' (2016) 3 McGill Journal of Dispute Resolution 113

Sandefur R, 'Access to Justice: Classical Approaches and New Directions' (2009) 6 Access to Justice ix

Santhosh L, Rojas JC, Lyons PG, 'Zooming into Focus Groups: Strategies for Qualitative Research in the Era of Social Distancing' (2020) 2(2) ATS Scholar Metrics 176

Simon H, *The Sciences of the Artificial* (3rd edn, MIT Press 2019)

Toohey L and others, 'Meeting the Access to Civil Justice Challenge: Digital Inclusion, Algorithmic Justice, and Human-Centred Design' (2019) 19 Macquarie Law Journal 133

Victoria Legal Aid <www.legalaid.vic.gov.au/about-us/our-organisation/how-we-are-improving-our-services/client-first-strategy> accessed 16 August 2021

Victorian Civil and Administrative Tribunal, online civil claims application form <https://apply.vcat.vic.gov.au/#/> accessed 16 August 2021

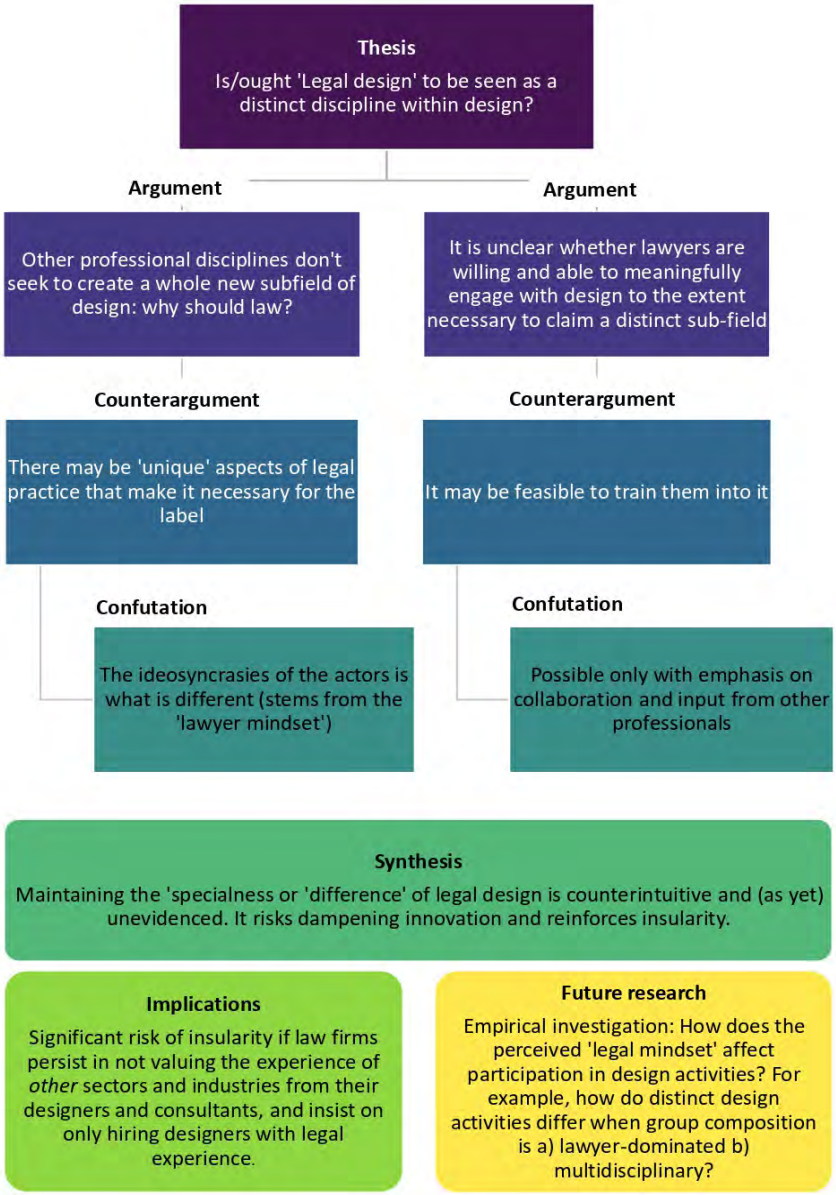
Victorian Civil and Administrative Tribunal, *VCAT for the Future: VCAT Strategic Plan 2018-22* (2018) <https://www.vcat.vic.gov.au/sites/default/files/resources/VCAT-Strategic-Plan.PDF> accessed 16 August 2021

Warren E, 'The Market for Data: The Changing Role of Social Sciences in Shaping the Law' (2002) Wisconsin Law Review 1

Westbrook JL, 'Empirical Research in Consumer Bankruptcy' (2001) 80 Texas Law Review 2123

5. IS LAW REALLY THAT SPECIAL?

Rae Morgan and Emily Allbon



1. Introduction

When the call came out for contributions to the Legal Design Roundtable 2020, it seemed that one question needed exploring urgently: within the design discipline, are there valid reasons for carving out a special niche for design applied to legal practice? This Chapter begins by looking closely at whether the 'lawyer mindset' really exists and if so, might it act as a hurdle to lawyer engagement with design. Next, the contribution probes what unique set of problems lawyers may bring to the human-centred design approach. This is partnered with observations, examples and workarounds. The Chapter argues that despite recognising there are some elements of difference, there are real dangers in perceiving legal as different from other industries, primarily in relation to the dampening effect this has on the opportunities to innovate and diversify. It is posited that the disputed 'specialness' of Legal Design reinforces the insularity already present within the law, resulting in a small pool of talent to draw on. The Chapter concludes with some ideas on which practical methods might prove most successful for helping lawyers to embrace design's human-centred approach.

Despite the rise of Legal Design as a concept in recent years, its popularised image and ubiquitous Insta-shots of post-it adorned walls at sprint events has led to scepticism in certain quarters, particularly where the shared mindset can often feel like large law firms papering over the cracks with glossy new wallpaper, rather than using design-thinking to work towards meaningful solutions. We can see something of this superficiality in this reflection from Sarah Drummond, MD of a design consultancy, Snook:

> *"Larger business consultancies who deliver projects for top tier clients see you as the creative 'folk', and the deliverables you itemised become the actual deliverables for them. Can you do one of those post it sessions and get some ideas out? Can you deliver some of those personas – how many can we get? Can you do the user journey mapping bit…There are examples out there of Government funded projects that explicitly utilised design approaches but ended up with a terrible product because the 'how' became more important than the 'what'".*[1]

1 Yoko Akama, Penny Hagen and Desna Whaanga-Schollum, 'Problematizing replica-

Design-thinking as an approach has been subject to a certain amount of 'sniffiness' in recent years, despite its adoption by so many corporates. Design academics and practitioners have criticised the concept, failing to see its relevance.[2] Nhu Laursen and Moller Haase also note the way it has fallen out of favour with the innovation management scholars for "its lack of both a clear definition and a clear methodology"[3].They go on to say that it is particularly problematic for non-designers, when attempting to select the right tools and techniques.[4]

With few corporate practitioners sharing their final products, (let alone processes…) due to innovation, design and strategy work with law firms being governed by strict NDAs, it is challenging to get a real picture of what design thinking is being done in legal practice. Note the very open way in which academic practitioners like Margaret Hagan share their work[5], in comparison to the posts trumpeting the way Legal Design had been 'embraced' by Linklaters when 'rethinking' their training contract offer letters (final product represented by a blurred-out fuzzy document)[6]. We can see a halfway house approach taken by World Commerce & Contracting in their excellent *Contract Design Pattern Library*[7], where selected content is subscriber-only.

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ble design to practice respectful, reciprocal and relational co-designing with indigenous people' (2019) 11(1) Design & Culture 61.

2 Linda Nhu Laursen and Louise Moller Haase, 'The shortcomings of design thinking when compared to designerly thinking' (2019) 22(6) The Design Journal 814.

3 ibid 814.

4 ibid 829.

5 Margaret Hagan, 'Open Law Lab' <www.openlawlab.com> and Stanford Legal Design Lab <www.legaltechdesign.com> accessed both 10 June 2021.

6 'Linklaters creates digital training contract offer letter in first step to redesign legal documents' (*Linklaters.com*, 4 September 2019) <https://www.linklaters.com/en/about-us/news-and-deals/news/2019/september/linklaters-creates-digital-training-contract-offer-letter-in-first-step-to-redesign-legal-documents> accessed 10 June 2021. Note that Linklaters justify the distortion of the image within that article for 'confidentiality' purposes, and this is common practice for consultancies operating in legal practice.

7 Stefania Passera and Helena Haapio, 'World Commerce & Contracting Contract Design Pattern Library' <https://contract-design.worldcc.com/> accessed 10 June 2021.

In this Chapter the authors have referenced a series of observations in the second and final sections rather than case studies so that no details could identify the firm, project or engagement.

Whilst many would agree design in the legal sector is to be welcomed, there is debate regarding how suited lawyers are to be involved in the design process. Are lawyers capable of taking on more designerly ways of working? Indeed, to what extent can they *meaningfully* be involved? Fiona Phillips, interviewed on the Legal Design podcast, notes that if there is creative input from an external agency

> *"what you really need from internal lawyers are navigators and executors, people who can get stuff done, and you need influencers, people who can help persuade the local country team to take it, or sell it internally…".*[8]

Many commentators have balked at the way law has taken ownership of design – labelling it Legal Design, rather than recognising it as sitting in other long-established disciplines, such as service design. Service design in other contexts has not resulted in this (healthcare and management for example); is there a reason why law pushes for this unique treatment?

There is also unease at the way in which some treat design as a skill that can be 'picked up along the way', rather than a professional discipline requiring years of training and experience (akin to law).[9] Yes, lawyers should gain an understanding of design-thinking, and would certainly be an important part of any interdisciplinary team, but this process cannot be driven entirely by non-designers. IDEO's CEO Tim Brown in *Change by Design* notes what makes such a team significant: "there is collective ownership of ideas and everyone takes responsibility for them"[10]. This is

8 'Legal Designing Financial Services with Fiona Phillips' (Henna Tolvanen and Nina Toivonen, *Legal Design Podcast* (ep.13) 23rd May 2021) <http://legaldesignpodcast.com/13-episode-legal-designing-financial-services-with-fiona-phillips/> accessed 10 June 2021.

9 See useful record of tweet thread on Brian Inkster, ''Legal Design'. Or should we call it something else?' (*The Time Blawg*, 13 May 2019) <http://thetimeblawg.com/2019/05/13/legal-design-or-should-we-call-it-something-else/> accessed 12 May 2021.

10 Tim Brown, *Change by design* (Revised edn, Harper Business 2009) 34.

something lawyers may struggle with given their usual role as the 'expert in the room'. More on this later but let's look more closely at the mythical 'lawyers mindset' to see whether this is where this alleged 'specialness' originates from.

2. Does the lawyer mindset exist or is it merely a narrative?

To address this question, it is worth considering the journey of an individual through education and training, and then the culture and expectation of working in a law firm.

The implication is not that all lawyers are the same, nor employ the same mindset. This Chapter discusses general behavioural archetypes commonly found amongst lawyers, which are arguably concentrated to a higher degree in large scale, global city firms.

Our supposition is that this archetype stems from three main factors – the education and training of future lawyers, the cultural construct of the law firm and the business model.

Much has been written about lawyers and how they are perceived by the outside world. Research done by the UK Legal Services Board in 2012 focused on perceptions of the profession and pinpointed four key areas of negativity from those surveyed: a lack of emotion, lack of transparency, dishonesty and poor service.[11] The report described how lawyers were found to be intimidating, typically described as 'arrogant', 'disinterested' or 'unapproachable'.[12] Marie Potel-Saville, at Legal Design consultancy Amurabi, notes the "disconnect between the needs of businesses and the documents produced by lawyers"[13].

This isn't a Chapter about why design has so much potential for law, although from the content of the previous paragraph alone it sounds as if legal is crying out for a different approach. Clients respect the profession for their knowledge and experience, as well as investment in train-

11 Nicky Spicer and others, 'Consumer Use of Legal Services. Optimisa Research report for the Legal Services Board' (April 2013) <www.legalservicesboard.org.uk/wp-content/media/Understanding-Consumers-Final-Report.pdf> accessed 10 June 2021.

12 ibid 35.

13 Marie Potel-Saville, 'An introduction to legal design', Practical Law UK Practice Note w-020-2432.

ing/education, but don't feel lawyers make any attempt to understand their needs, that they keep details regarding services and costs deliberately opaque and have an aloof and self-important attitude. More recent surveys in the UK have seemed more positive, with a 2019 report into *Individuals' handling of legal issues in England and Wales* showing a satisfaction rate of 85% and 9/10 believing the legal advice they received represented value for money.[14] Here the negative comments pivot around lawyers 'not doing enough', taking too long, making mistakes or failing to keep the client informed of developments.

This Chapter questions whether the 'lawyer mindset' is to blame for some of the bad press. Most law schools still emphasise the importance of 'thinking like a lawyer'; this in itself infers that you must think differently to everyone else who is not a lawyer. Rebecca Huxley-Binns' 2015 Annual Lord Upjohn ALT Lecture[15] explores 'thinking like a lawyer' as a 'threshold concept' (following the work of Meyer and Land);[16] describing a shift in understanding that is transformative and irreversible but also sometimes troublesome. She shares the lightbulb moments of various law teachers (including one of your authors) but her final example concerns someone who had never experienced that in their legal education. Huxley-Binns wonders:

> *"…if 'thinking like a lawyer' is a phrase which can also be damaging and undermine our actual or potential identity. If we build an expectation in our students that they will "think like a lawyer" and they don't (or feel that they don't), have we impaired their sense of self-value?".*[17]

14 YouGov, 'Legal needs of individuals in England and Wales 2019/20: a report jointly commissioned by and undertaken by the Law Society and the Legal Services Board' (2019) <https://www.legalservicesboard.org.uk/online-survey-of-individuals-handling-of-legal-issues-in-england-and-wales-2019> accessed 10 June 2021.

15 Rebecca Huxley-Binns, 'Tripping over thresholds: a reflection on legal andragogy' (2016) 50(1) The Law Teacher 1.

16 Jan Meyer and Ray Land, 'Threshold concepts and troublesome knowledge: linkages to ways of thinking and practising within the disciplines' (2003) <www.etl.tla.ed.ac.uk//docs/ETLreport4.pdf> accessed 10 June 2021.

17 Huxley-Binns (n 15) 13.

The focus on resilience and wellness has drawn similar reflections on the dangers of pushing the 'thinking like a lawyer' agenda. A blog from Marquette University notes that thinking differently to others

> *"is unsettling because the rational, analytical processes one gains while learning to 'think like a lawyer' can make them feel that their core values are being challenged or even changed"*[18].

It quotes a short self-published booklet by a university professor designed to tackle the hidden sources of law school stress, saying that

> *"if you begin to ignore your sense of right and wrong…in order to rationalise any possible outcome, you will dampen the ideals and values that brought you to law school in the first place".*[19]

Putting this in the design context, thinking like a lawyer seems an impenetrable obstacle to the empathy integral to human-centred design.

Other criticisms centre on the mindset as being outdated. Ray Worthy Campbell notes that 'thinking like a lawyer' doesn't seem to include the core areas that 'define successful lawyers today and will increasingly define them tomorrow"[20]. In this he includes

> *"…how to negotiate, how to build teams or work within organisations… how to work with clients. They don't learn project management techniques and wouldn't know how to discuss modern information management technologies".*[21]

Interestingly, he states that institutions should undergo a shift in purpose; designing legal education around what 'best serves the needs of

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18 Lisa A Mazzie, 'Thinking like a lawyer' (*Marquette University Law School Faculty Blog*, 4 September 2009) <https://law.marquette.edu/facultyblog/2009/09/thinking-like-a-lawyer/> accessed 10 June 2021.

19 Lawrence Krieger, *The hidden sources of law school stress: avoiding the mistakes that create unhappy and unprofessional lawyers* (2005) 7-9.

20 Ray Worthy Campbell, 'The end of law school: Legal education in the era of legal service business' (2016) 85 Mississippi Law Journal 1.

21 ibid 5.

today's underserved society'[22]. This emphasises the diversification of legal services (acknowledging not all about the lawyers) and ties in well with the hopes we have for the application of design principles to law – particularly those which seek to improve access to justice for citizens. A recent(ish) Twitter post stated: "Lawyers need to think like MBAs, engineers, entrepreneurs and importantly their clients!"[23].

Anne Marie Slaughter gives us a version which seems to bridge between the expectations of traditional and 21st century 'thinking like a lawyer', describing it as

> *"thinking like a human being, a human being who is tolerant, sophisticated, pragmatic, critical, and engaged. It means combining passion and principle, reason and judgment"*[24].

This view and that put forward by those who celebrate the concept of the T-shaped lawyer, offer far more hope in terms of lawyers being able to bring something meaningful to design. The essence of the T-shaped lawyer is having breadth of knowledge and skills in fields *outside* of law. This allows them to 'identify issues, understand concepts, contribute to teams and connect ideas across disciplines'.[25] The T model includes: Legal knowledge and skills, business tools and technology, project management and analytics and design and e-discovery.

3. The legal mindset in action: Observations working in design with lawyers

The very concept of a 'fee earner' implies a difference, an 'other'. Layering in the rigid hierarchical nature of the partnership model, and the measures of success used to determine those that rise through the ranks and those that don't, and you have all the ingredients needed for a cul-

22 Worthy Campbell (n23) 6.

23 Jeffrey A. Kruse @jeffreyakrusel (*Twitter,* 8 February 2020) <https://twitter.com/jefferyakruse1/status/1226274537370783745> accessed 10 June 2021.

24 Anne-Marie Slaughter, 'On thinking like a lawyer' (*Harvard Law Today*, May 2002).

25 R Amani Smathers, 'The 21st century T-shaped lawyer' (2014) Law Practice 37 <http://dashboard.mazsystems.com/webreader/31892?page=34> accessed 29 August 2021.

ture based on competition and the individual. Whilst this can be useful in arguing a contentious issue, or negotiating the best possible terms in an agreement, when viewed in the context of a human-centred design approach to legal problems it produces a unique set of problems. Here we run through some of the most significant ones, accompanied where appropriate with an observation or example from practice.

3.1. Traditionally, the lawyers' value in the room is determined by knowledge

Psychologically, that makes it very difficult to admit that you don't know something ('..imprisoned by fear…fearful of looking foolish…fearful of appearing weak'[26]), or to be open to the prospect that someone less senior or from a non-professional background will offer something valuable to the solution. Cat Moon, inspired by poet Mary Oliver's "I live in the openmindedness of not knowing enough about anything"[27] speaks of "humble curiosity"[28] as potentially the core mindset of human-centred design, and one which needs to be embedded in all lawyers training.

3.2. Failure is to be avoided

In the competitive landscape of a law firm[29], getting it wrong can have a huge impact on your career.

> *"The idea that failure can have a positive connotation is not easy for lawyers to embrace"*[30]*.*

26 Kevin Davis, 'Lawyers shackled by fear, fear not' (2015) 101(11) ABA Journal 37.

27 Mary Oliver, *Luna' Why I wake early* (Beacon Press 2004).

28 'Making law better with Cat Moon' (Henna Tolvanen and Nina Toivonen, *Legal Design Podcast* (ep.10) 2nd May 2021) <http://legaldesignpodcast.com/10-making-law-better-with-cat-moon/> accessed 12 July 2021.

29 Milton C Regan Jr, 'Moral intuitions and organizational culture' (2007) 51 St Louis Law Journal 941, and Donald C Langevoort, 'Lawyers, impression management and fear of failure' (2016) 51 New England Law Review 75.

30 Reena SenGupta, 'Law firms shed their fear of failure' *Financial Times* (London, 5 October 2017) <www.ft.com/content/e66d15b2-8f39-11e7-9084-d0c17942ba93> accessed 2 December 2019.

Consequently, there is a risk that when legal sensibilities get involved in a design environment, the wrong ideas end up pushed through and championed because they are not allowed to fail – and then evolve or die on the vine as they should have done. Within a pure design approach of course, failure is just seen as a mechanism of learning. The importance of 'owning' failure is highlighted by many, including Tom and David Kelley "you have to figure out what went wrong and do better next time"[31], as well as the acknowledgement that permission to fail comes more easily in some settings than others.[32]

Observation: A platform project in one law firm did not contain any element of research with end users at all. A senior associate who had driven the idea through had invested much of his own career capital in the successful launch. Having sold the idea so successfully, and secured a substantial Capex budget to deliver it, the prospect of validating whether the problem had been fully understood and the right solution applied was strenuously avoided. Measures of success were positioned around delivery and not successful user adoption. The prospect of 'failure' at any point from abandoning to pivoting based on learnings was an obvious gap.

3.3. I must not look stupid

The difference between working with a law firm to solve problems with design and in the wider business world is often extracting the idea in the first place. Building a safe space for lawyers to start thinking out loud - where the idea is still unformed but could be taken and built on by the group is exceptionally difficult.[33] The best facilitators of these sessions are able to read facial expressions and tease those ideas out on a hunch.

Observation: Whilst this is not a behaviour restricted to the legal sector, it seems more prevalent than when working with media or clients from heavily regulated industries. In one workshop it was clear partic-

31 Tom Kelley and David Kelley, *Creative Confidence: Unleashing the creative potential within all of us* (William Collins 2014) 51.

32 ibid 49.

33 Heidi K Brown, 'Fear and lawyering: Create a work culture of 'psychological safety' that encourages taking intellectual and creative risks' (2019) 105(4) ABA Journal <www.abajournal.com/magazine/article/fear-lawyering-psychological-safety> accessed 22 December 2019.

ipants were not articulating ideas as they could not see its successful manifestation. A change of language by the facilitator to 'I haven't finished this thought yet, but what if *x*?' reframed the discussion. It signalled to the group that voicing the germination of an idea does not need to be fully formed, and posing it as a question encouraged the other members to collectively build on it.

3.4. Individual intelligence and collective stupidity

Lawyers by and large are incredibly intelligent people. Their experiences, however, have a high degree of homogeneity due to the hiring practices and criteria applied by law firms - this is especially prevalent in the large law firms and none more so than in the US. This creates a situation of homophily. Individuals collect and agree, underlining each other's viewpoints and biases ("entrenching each other's blind spots"[34]). In order to successfully and sustainably deliver anything more than mediocre outcomes, the group must contain cognitive diversity in understanding the problem and exploring solutions.

Observation: In engagements within the legal sector we often need to push firms to think carefully about the participants of a design exercise, making sure to include varied levels of experience across the firm. In one example where the design problem was attacking a specific process, involving the legal secretaries and members from IT and Business Development was not anticipated by the organisation initially. This is often evident at 'design jams' or at conferences where a session will be dominated by lawyers. This unfortunately underlines a tendency for so-called 'collaborative' teams in law firms to miss out the key multi-disciplinary and experiential difference needed to co-create successfully.

3.5. Assumed knowledge

Lawyers often assume that other lawyers will face the same problems, desires and motivations as themselves. This is a barrier to both understanding the problem fully and designing beyond a data point of one.

34 Matthew Syed, *Rebel ideas: The power of diverse thinking* (John Murray Press 2019) 97.

Observation: On attending a user research interview run by a lawyer, he opened by introducing himself as a fellow lawyer. It changed the entire tone of the session to a kind of professional short-hand, with each leaving the other to fill in the unexplored gaps with their assumed shared experience. Both enjoyed the interview and thought it fruitful. Beyond a high-level shared view of a process, we actually learned nothing. The same interview was conducted by an insight lead a week later. The insight lead introduced herself, stated she was not a lawyer and asked the participant to assume that she knew nothing. She asked her not to worry about offending her by telling her something that might appear to be obvious to the participant. The 'golden nugget' of information derived from that interview formed the basis of a feature key to the success in the growth of an established in-market product.

3.6. Business model

The concept of a 'fee earner' implies that this is the sole source of value of the work produced for the client. Intrinsically this devalues the wider contribution of other functions within the firm to the earning of that revenue - whether they be a legal secretary, developer or designer. The unfortunate fallout of attributing revenue as an individual rather than a collective endeavour is a conscious or unconscious attitude that the role of the lawyer is of a much higher value than others within the firm. If you layer that with professionals from other disciplines like product management and design it can become very fractured. The sector is beginning to realise the damaging effect of this attitude. A post penned by Thomson Reuters was admonished for the title "Non-lawyers and tech are reshaping law firms". It then became "How tech (and the diverse team of legal pros who use it) is changing the modern law firm"[35].

Observation: At a large-scale law firm, a senior experienced Product Manager was subjected to a session on 'how to talk to the lawyers' as part of her induction. The highlighted 'otherness' of these beings who

35 Thomson Reuters, 'How tech (and the diverse team of legal pros who use it) is changing the modern law firm' (*Thomson Reuters Legal blog*, 27 April 2020) <https://legal.thomsonreuters.com/blog/how-tech-is-changing-the-modern-law-firm/> accessed 11 July 2021.

generated (solely of course) the all-important fees was eye opening. Breaking down that siloed, distanced thinking has been a challenge ever since.

4. Is it the case that design applied in a legal context might be different from its application in other sectors?

Dismantling the concept of Legal Design into component parts is helpful in examining whether there is genuine distinction from the application of design thinking in other sectors. Simply put, Legal Design can be broken down into:

– Process design
– Content design
– Service design

These are all aspects that we would expect to see in any other field.

If we scrutinise this in a more specific context, the situation does not change. By redesigning a legal process – you are just designing a process. There are immovable parts to that, but one of our authors would attest, as having worked in other heavily regulated industries and sectors, that is true of many – and they are not special.

In the context of redesigning a contract - potentially to a much more visual representation, this is just content design. Through content design, we are trying to convey accurate meaning in an accessible way to the consumer of that content. Whether the content is a contract, or a warning of a hazard on the side of an appliance, is actually irrelevant.

From the standpoint of service design, design in a legal context is only different in its application from other fields in terms of the idiosyncrasies of its actors. Idiosyncrasies that are artificial and born of the training and culture of the legal sector. All too often there is an assumption that a lawyer can turn their hand to being a service designer or a product manager, a view found much more prevalent than in other sectors. Perhaps unintentionally, this attitude implies a lack of either respect for other disciplines, or an understanding of the level of training, aptitude and experience required to be skilled in its practice. At worst, a lawyer positioned in this way without the accompanying experience becomes a very

well-paid but mediocre designer or product manager. And inevitably this will affect the quality of outcome from any exercise in service design.

There is an argument that the idiosyncrasies of the legal sector are what makes it 'special', and therefore requiring a design discipline all of its own in 'Legal Design'. There are peculiarities in the legal sector of course, however it can be argued that we are maintaining an insular view by not acknowledging that idiosyncrasies exist across most sectors. The magic happens when these peculiarities are tackled from a new standpoint, using models or approaches from an *unrelated* industry or sector. And this isn't even a new concept in the legal sector. Continuous improvement is an approach common throughout law firms today - but that started in manufacturing processes in supply chains in Japan.

There is no doubt that there are some important concepts and values in law exist that require special attention – such as the importance of access to justice. But we can draw comparisons to other pivotal needs in different sectors. For example, the person who needs to understand what their medical insurance does or does not cover - especially at a time of emotional distress e.g. having just been diagnosed with a life threatening condition. Medical insurance is a good comparator for a number of points. Insurance in the UK is a heavily regulated industry, especially in the field of health insurance. Designing a purchasing journey that respects the parameters of those regulatory obligations, whilst conveying to the lay person what they are covered for (and perhaps more importantly what they aren't) is a significant and important challenge. Move on a few months to the point where that person needs to access those services for a serious condition. Understanding the detail of their policy, how comprehensively the treatment of their condition may be covered is difficult and overwhelming at a time of emotional strain and worry….and you can start to see similarities with someone needing legal help as part of a system that can feel equally impenetrable.

Maintaining the 'special' or 'difference' of Legal Design is counterproductive to what it is trying to achieve by the emergence of some unintended consequences. The fact is, not only is it *not* necessarily different, but we are potentially creating more problems by terming it so.

There is a huge industry revolving around this 'specialness', asking for specific *legal* experience from designers or product managers. The repercussion of this is a much smaller talent pool from which to fish,

inevitably blocking access to the best talent available in the wider context. This is not to say there isn't a pivotal role for lawyers to play in design in the legal context - of course there is, but it does mean that *requiring* legal experience from designers, product managers, business analysts etc within the broader design team is counterintuitive.

Ultimately this contributes to an increasing insularity within law - and from a progressive design perspective something to steer away from. In order to really innovate and differentiate, ideas and models are needed from unrelated sectors and industries. The best designs draw on diverse influences and experience.

The attitudes discussed above are often highlighted in the experience of one of the authors on discussing potential opportunities with a new law firm. As a matter of course, the law firm will always want to know what other similar law firms we have worked with. Whilst strict NDAs prevent discussion of either projects or clients, it is however fundamentally the wrong question. The better question would be what other disparate sectors and industries we have worked in – to take advantage of where that different thinking can be applied. Tom and David Kelley note this reference to other industries in *Creative Confidence*:

> *"…we may draw parallels between customer service at a restaurant and the patient experience at a hospital in order to improve customer satisfaction"*[36].

5. How can lawyers best embrace design's human-centred approach?

In practice the same methods are used with lawyers as are used with participants in any other sector; the crucial thing is using the best method for what we are trying to achieve.

Living in a world of text, lawyers in general are much more comfortable manipulating words than turning their hand to something visual. Sometimes it can be beneficial to use a technique which might throw them a little off-balance – maybe break legacy-thinking to something more open. A method like Crazy 8's is well-employed here. Cries reverberate around the room of '…but I can't draw' and panic sets in. Passera

36 Kelley and Kelley (n 28) 23.

notes the lack of confidence the profession has in its ability to visualise without their superpower: words.[37] Lawyers aren't used to (i) being bad at something (see Section 2), and (ii) realising that it doesn't matter. By nudging them into a more vulnerable state you can distract them from taking a traditional position. Dan Jackson describes the ideation/experimentation phase as 'most challenging phase of the design process for the legal mind' and he is not wrong.[38] To counteract the unease, it is useful to remind them that there are different roles within the co-design process; masters/authorities, co-designers/facilitators, stimulators and craftsmen/builders, they are not expected to be all four.[39]

It is important in this context to run exercises which force participants to suspend their own opinion. As a designer or product person, you must be able to drop your singular position in order to form an unbiased point of view based on the collective experience of your users – especially when it differs from your own. For someone whose career largely rests on their ability to form and defend their position, that can be incredibly hard to do, especially for lawyers who "are taught to seek tested, if not bullet-proof, solutions from the outset"[40]. Designers have to have this discussion regularly – even the most open minded will still argue the need to be unshakeable in their position sometimes within a design context. However this is totally the wrong approach. You should never be entrenched, you should always have the door open ready to be convinced of a different path. That is, of course, not to say that you will roll over for anything or decline to fight for a particular outcome.

Basic empathy maps or personas are a helpful way of helping lawyers step outside of their own experiences. These are defined by Cooper as

37 Stefania Passera, *Beyond the wall of contract text: Visualizing contracts to foster understanding and collaboration within and across organisations* (Aalto University 2017) 29, available at <https://aaltodoc.aalto.fi/handle/123456789/27292> accessed 10 June 2021.

38 Dan Jackson, 'Human-centred legal tech: integrating design in legal education' (2016) 50(1) The Law Teacher 82, 95.

39 Yanki Lee, 'Design participation tactics: the challenges and new roles for designers in the co-design process' (2008) 4(1) Co-Design 31, 36.

40 Potel-Saville (n 15).

"fictitious descriptions of users" [41] and an "efficient mental tool"[42] for designers. As we noted previously, years of education, training and practice and 'thinking like a lawyer' have taught lawyers to supress the emotion and disregard any peripheral information that doesn't directly map onto the case in front of them. These can be challenging to create but do work well to focus them on the experiences of others. The strong emphasis on empathy within the Stanford HCD model has been cautioned against however, with some seeing it as too simplified. Akama, Hagen and Whaanga-Schollum note it

> *"does not stress what biases the practitioners might bring to their set of questioning, and a reflexive awareness of who they are in the process of existing and shifting power dynamics"*[43].

Lawyers may find it challenging also to accept that in the landscape of design, users should be seen as "experts of their own experience"[44], not them.

Paper prototyping is a useful and often bypassed technique where the rush to a pretty, high-fidelity prototype is favoured as something concrete to show the partnership layer. It is particularly useful in encouraging non-designers to be less invested in the manifestation of an idea – critical if they are to develop, or even drop it, based on what their users say. Mocking up future services, creating artefacts and using those ubiquitous post-its to plan everything else helps to tell the story – proving there is method to this madness muscling into the legal world.

Creating a safe space in order to flex these new design muscles opens the door to techniques like 'thinking aloud' exercises. Whilst it can feel a little clumsy at first, with a little humour, it can produce excellent collaborative ideas as one participant builds on the thoughts of another. Whilst

41 Alan Cooper, *The inmates are running the asylum. Why high tech products drive us crazy and how to restore the sanity* (Macmillan 1999) 123, cited in Lise Vestergaard, Bettina Hauge and Claus Thorp Hansen 'Almost like being there; the power of personas when designing for foreign cultures' (2016) 12(4) Co-Design 257, 258.

42 ibid.

43 Akama, Hagen and Whaanga-Schollum (n 1).

44 Niels Hendricks, Karin Slegers and Pieter Duysburgh, 'Codesign with people living with cognitive or sensory impairments: a case for method stories and uniqueness' (2015) 11(1) CoDesign: International Journal of CoCreation in Design and the Arts 70, 70.

challenge is good, care must be taken to maintain that safe space within the legal context to avoid falling on old habits and looking for the flaws in the other's argument. The purpose is to shape an idea together, not win the day.

Changing these traditional ways of working within a project has the opportunity to capitalise on a microcosm culture change that can be rippled out to the firm as a whole. The most successful can use that to change the nature of their relationship with clients, a topic coming up with ever increasing frequency in the legal sphere.

This culture and approach can be engendered at scale through review of existing 'innovation' processes. There is a fine line to walk between adding a structure without stifling creativity. A common process with an accompanying box of tools allows for reliable comparison via the same mechanisms. Ideas that have passed through the same level of rigour create good guardrails without falling into the pit of dreaded firmwide Innovation Committees. Its advantage is in allowing more diverse voices to share the stage, meaning that the best salesperson (of an idea) doesn't triumph over a better idea from a less confident advocate.

The observations included within this Chapter give insights into the elements of the legal mindset which can impact on the effectiveness of the design process. The workarounds offered and tools suggested show that these are far from unsurmountable. Having designers, consultants, and external participants with experience of diverse sectors on board and not limiting the firm involvement to fee-earners will make for impactful and valuable work. Yes, law has its unique features but so does every sector. The rise in interest and engagement in design within legal practice is exciting to witness and be a part of, but it is crucial to recognise that this is far more important than the label.

Bibliography

Akama Y, Hagen P, Whaanga-Schollum D, 'Problematizing replicable design to practice respectful, reciprocal and relational co-designing with indigenous people' (2019) 11(1) Design & Culture 61

Brown HK, 'Fear and lawyering: Create a work culture of 'psychological safety' that encourages taking intellectual and creative risks' (2019) 105(4)

ABA Journal <www.abajournal.com/magazine/article/fear-lawyering-psychological-safety> accessed 22 December 2019

Brown T, *Change by design* (Revised edn, Harper Business 2009)

Cooper A, *The inmates are running the asylum. Why high tech products drive us crazy and how to restore the sanity* (Macmillan 1999)

Davis K, 'Lawyers shackled by fear, fear not' (2015) 101(11) ABA Journal 37

Hendricks N, Slegers K, Duysburgh P, 'Codesign with people living with cognitive or sensory impairments: a case for method stories and uniqueness' (2015) 11(1) CoDesign: International Journal of CoCreation in Design and the Arts 70

Huxley-Binns R, 'Tripping over thresholds: a reflection on legal andragogy' (2016) 50(1) The Law Teacher 1

Inkster B, ''Legal Design'. Or should we call it something else?' (*The Time Blawg*, 13 May 2019) <http://thetimeblawg.com/2019/05/13/legal-design-or-should-we-call-it-something-else/> accessed 5 May 2021

Jackson D, 'Human-centred legal tech: integrating design in legal education' (2016) 50(1) The Law Teacher 82

Kelley T, Kelley D, *Creative Confidence: Unleashing the creative potential within all of us* (William Collins 2014)

Krieger L, *The hidden sources of law school stress: avoiding the mistakes that create unhappy and unprofessional lawyers* (2005)

Langevoort DC, 'Lawyers, impression management and fear of failure' (2016) 51 New England Law Review 75

Laursen LN, Moller Haase L, 'The shortcomings of design thinking when compared to designerly thinking' (2019) 22(6) The Design Journal 814

Lee Y, 'Design participation tactics: the challenges and new roles for designers in the co-design process' (2008) 4(1) Co-Design 31

Mazzie LA, 'Thinking like a lawyer' (*Marquette University Law School Faculty Blog*, 4 September 2009) <https://law.marquette.edu/facultyblog/2009/09/thinking-like-a-lawyer/> accessed 10 June 2021

Meyer J, Land R, 'Threshold concepts and troublesome knowledge: linkages to ways of thinking and practising within the disciplines' (2003) <www.etl.tla.ed.ac.uk//docs/ETLreport4.pdf> accessed 10 June 2021

Oliver M, *Luna' Why I wake early* (Beacon Press 2004)

Passera P, Haapio H, 'World Commerce & Contracting Contract Design Pattern Library' <https://contract-design.worldcc.com/> accessed 10 June 2021

Passera S, *Beyond the wall of contract text: Visualizing contracts to foster understanding and collaboration within and across organisations* (Aalto University 2017)

Potel-Saville M, 'An introduction to legal design', Practical Law UK Practice Note w-020-2432

Regan Jr MC, 'Moral intuitions and organizational culture' (2007) 51 St Louis Law Journal 941

SenGupta R, 'Law firms shed their fear of failure' *Financial Times* (London, 5 October 2017) <www.ft.com/content/e66d15b2-8f39-11e7-9084-d0c17942ba93> accessed 2 December 2019

Slaughter AM, 'On thinking like a lawyer' (*Harvard Law Today*, May 2002)

Smathers RA, 'The 21st century T-shaped lawyer' (2014) Law Practice 37 <http://dashboard.mazsystems.com/webreader/31892?page=34> accessed 29 August 2021

Spicer N and others, 'Consumer Use of Legal Services. Optimisa Research report for the Legal Services Board' (April 2013) <www.legalservicesboard.org.uk/wp-content/media/Understanding-Consumers-Final-Report.pdf> accessed 10 June 2021

Syed M, *Rebel ideas: The power of diverse thinking* (John Murray Press 2019)

Thomson Reuters, 'How tech (and the diverse team of legal pros who use it) is changing the modern law firm' (*Thomson Reuters Legal blog*, 27 April 2020) <https://legal.thomsonreuters.com/blog/how-tech-is-changing-the-modern-law-firm/> accessed 10 June 2021

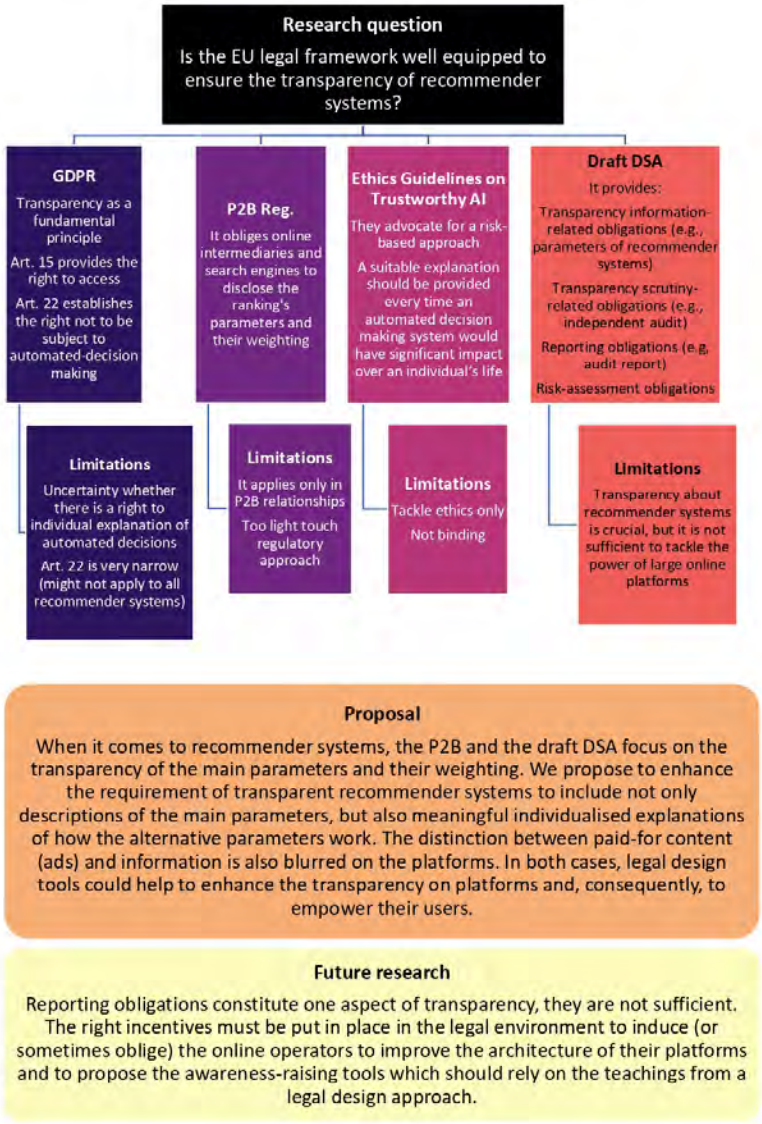
Vestergaard L, Hauge B, Hansen CT, 'Almost like being there; the power of personas when designing for foreign cultures' (2016) 12(4) Co-Design 257

Worthy Campbell r, 'The end of law school: Legal education in the era of legal service business' (2016) 85 Mississippi Law Journal 1

YouGov, 'Legal needs of individuals in England and Wales 2019/20: a report jointly commissioned by and undertaken by the Law Society and the Legal Services Board' (2019) <https://www.legalservicesboard.org.uk/online-survey-of-individuals-handling-of-legal-issues-in-england-and-wales-2019> accessed 10 June 2021

6. THE TRANSPARENCY OF ONLINE PLATFORMS PURSUED BY EU LAWS STILL NEEDS LEGAL DESIGN TOOLS FOR EMPOWERING THE USERS. A PROGRAM FOR FUTURE RESEARCH

Alain Strowel and Laura Somaini



1. A starting point: more transparency is needed because online platforms shape the public debates

Today, the large online platforms are at the center of several public debates on 'fake news', manipulation of elections, privacy, online bullying, incitement to terrorism, etc. Those content platforms challenge not only the competition, copyright or data protection rules[1], they might even put into question the rule of law and the democratic processes that rely on informed and vibrant discussions among citizens. Those platforms are now the focus of various supervisory authorities, mainly in the field of anti-trust, not only in the European Union (EU) but as well on their own turf, the United States, and elsewhere in the world. Regulating those platforms requires to understand how they operate and how their algorithms for ranking and propagating content not only reflect, but also could influence, the public debates on vaccination[2], security, national election, immigration, to name just a few examples. To enhance transparency on online content platforms is an important task today as several platforms such as Facebook – including its acquired competitors Instagram and WhatsApp –, Twitter, TikTok, Snapchat, Pinterest, etc. are orchestrating myriads of conversations and exchanges by constantly cap-

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* This paper is largely based on a more extended study of Alain Strowel and Laura Somaini, 'Towards a robust framework for algorithmic transparency to tacke dissemination of illegal and harmful content on online platforms' (2021) UCL-CRIDES working paper 2021/2 <https://cdn.uclouvain.be/groups/cms-editors-crides/droit-intellectuel/CRIDES_WP_2_2021_Alain%20Strowel%20and%20Laura%20Somaini.pdf> accessed 1 September 2021.

1 Ten years ago, one of us published a book devoted to the, at that time, burgeoning legal issues raised by the ads-based business model deployed by Google: Alain Strowel, *Quand Google défie le droit. Plaidoyer pour un Internet transparent et de qualité* (De Boeck & Larcier 2011). The book advocated for more transparency so as to increase the quality of content available through the various services of Google, including its platform for user-generated content, YouTube.

2 Facebook first quarterly report about the most viewed posts in the US in 2021 shows that the most-viewed link was a news article with a headline suggesting that the COVID-19 vaccine was responsible for the death of a healthy doctor in Florida (Davey Alba and Ryan Mac, 'Facebook, Fearing Public Outcry, Shelved Earlier Report on Popular Posts' *The New York Times* (20 August 2021) <https://www.nytimes.com/2021/08/20/technology/facebook-popular-posts.html> accessed 1 September 2021).

turing the attention of billions of people and shaping their attitudes with regard to various societal debates.

2. Improving the users' awareness through (visual) design tools

Enhancing transparency requires many changes of behavior and a new mindset, in particular for the operators of the platforms and for their users. The content recommendations that take the form of lists or "feeds" are co-determined by the platform users who decide what to upload and who constantly express some feedback (either explicitly through rating, following or subscribing, or implicitly, when scrolling and clicking).[3] The platforms users are obviously responsible for sharing toxic or degrading content, and so are the platforms too: their algorithms have been designed to maximize the attention of the viewers, and it has been demonstrated that the embedded sharing incentive leads to the platforms' weaponization and to disinformation campaigns.[4] Fact-checking, education to online media and other light touch interventions will definitely help to raise the awareness of those who often naively share untrue and sometimes damaging news. Communication design defined as a mixed discipline between design and information science that aims to develop communication channels ensuring that the message reaches the target audience[5] could help in this regard. Such a communication design ap-

3 Paddy Leerssen, 'The Soap Box as a Black Box: Regulating Transparency in Social Media Recommender Systems' (2020) 11(2) European Journal of Law and Technology <https://ejlt.org/index.php/ejlt/Art./view/786> accessed 1 September 2021.

4 See, Sinan Aral, *The Hype Machine. How Social Media Disrupts Our Elections, Our Economy and Our Health – and How We Must Adapt* (Harper Collins 2020). This study of how the social media are "designed to stimulate our neurological impulses, to draw us in and persuade us to change how we shop, vote, and exercise" (ibid 3) and how manipulators, such as the Russian online operators during the annexation of Crimea (ibid 8 ff on the information warfare strategy in Crimea), can create a new reality is a must-read to understand the world we live in and how many people are captured in a manufactured reality. Here is the story line of the Hype Machine: "Its motivation is money, which it maximizes by engaging us. The more precise it gets, the more engaging and persuasive it becomes. The more persuasive it becomes, the more revenue it generates and the bigger it grows. This is the story of the Hype Machine – the social media industrial complex" (ibid 3-4).

5 See the still to be improved definition of "communication design" on Wikipedia (accessed on 1 September 2021).

proach[6] is definitely needed for adequately informing the platforms' users about the truthfulness of news and the risks of inadvertently spreading disinformation and, as a result, of giving credit to uncorrect facts or statements. But this obviously will not suffice. The right incentives must be put in place in the legal environment to induce (or sometimes oblige) the online operators to improve the architecture of their platforms and to propose awareness raising tools.

3. An improved EU framework to impose more transparency on platforms

We have showed in a more developed study that the existing regulatory framework is not likely to induce platforms to adopt a more responsible behavior and an improved content moderation design.[7] Nevertheless the existing EU framework (such as the 2016 General Data Protection Regulation, the GDPR, and the 2019 platform to business or P2B regulation; see below) already includes transparency provisions for the use of automated tools, such as those used by platforms to organize and rank content or those relating to automated-decision making producing legal effects on individuals. Some shortcomings of the existing framework are briefly summarized below. The draft Digital Services Act (DSA)[8] proposed by the European Commission in December 2020 is likely to improve the regulation of platforms and their transparency. The DSA requires at least several improvements, some of which are sketched below. Such improved framework is necessary, it will never be sufficient for ensuring that the platforms redesign their attention machine with a satisfactory level of transparency.

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6 Such an approach relies largely on visual tools and therefore it almost always merges with the discipline of *visual* communication design. See, Meredith Davis and Jamer Hunt, *Visual Communication Design* (Bloomsbury 2017).

7 Alain Strowel and Laura Somaini, 'Towards a robust framework for algorithmic transparency to tacke dissemination of illegal and harmful content on online platforms' (2021) UCL-CRIDES working paper 2021/2 <https://cdn.uclouvain.be/groups/cms-editors-crides/droit-intellectuel/CRIDES_WP_2_2021_Alain%20Strowel%20and%20Laura%20Somaini.pdf> accessed 1 September 2021.

8 Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC, COM(2020) 825 final.

3.1. Narrow focus of existing rules: the GDPR on informing individuals, the P2B Regulation on reporting obligations

GDPR obligations. Transparency constitutes a fundamental principle of the GDPR,[9] yet is not defined thereunder. Pursuant to Article 5(1)(a) GDPR, lawfulness, fairness and transparency are – perhaps inextricably – linked to each other as different sides to the same coin. Transparency under the GDPR requires providing information enabling individuals to understand, and therefore reasonably and fairly expect, the details and limitations of personal data processing.[10]

The right of access (Article 15 GDPR) is typically understood as enhancing fairness and transparency of data processing, allowing the data subject to obtain confirmation from the data controller as to whether personal data relating to him or her are being processed, and if so, to receive access to a set of information concerning the processing. Pursuant to Article 15(1)(h) of GDPR, the data subject may receive information about the existence of automated decision-making, including profiling, and at least in those cases, meaningful information about the logic involved, as well as the significance and the consequences, in a simple and suitable manner. The requirement focuses on information about the logic involved that is meaningful and comprehensive, including which factors were taken into account for the decision-making process and their respective weight on an aggregate level – not necessarily a complex explanation of the algorithms used, nor disclosure of the full algorithm.[11] Complexity in itself does not constitute an excuse for withholding such information.[12] Nonetheless, exceptions based on trade secrets remain available.

Scholars have debated whether Article 15 GDPR awards a right to obtain an individualized explanation of automated assessments and

9 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC [2016] OJ L119/1 (GDPR).

10 Recital 39 GDPR.

11 Article 29 Working Party, 'Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation 2016/679' (WP 251 rev.01 as last revised and adopted on 6 February 2018), 25, 27.

12 Recital 58 GDPR.

decisions, with contrasting conclusions reached so far.[13] In particular, the doubts arise from the ambiguities of Article 15 and Recital 63 of the GDPR, where the obligation to provide information on the 'logic involved' only concerns general information on the methods adopted in a system, or specific information on the application of such methods to the data subject.[14]

Article 22 GDPR establishes a right not to be subject to a decision based solely on automated processing – meaning those with no human involvement at all – including profiling, producing legal effects or a similar and significant impact on the data subject. Article 22 provides a general prohibition of issuing decisions based solely on automated processing,[15] unless the data controller falls within one of three exceptions.[16] To qualify as human involvement, the oversight of the decision must be meaningful, rather than merely symbolic, and performed by an individual who actually has the authority and competence to affect or alter the decision.[17] It appears that the individuals subject to the effects of the platform algorithms for ranking and disseminating content are not

13 See for instance, Bryce Goodman and Seth Flaxman, 'EU Regulations on Algorithmic Decision Making and "a Right to an Explanation"' (ICML Workshop on Human Interpretability in ML 2016); Sandra Wachter, Brent Mittelstadt, Luciano Floridi, 'Why a Right to Explanation of Automated Decision-Making Does Not Exist in the General Data Protection Regulation' (2017) 7(2) International Data Privacy Law 76; Gianclaudio Malgieri and Giovanni Comandè, 'Why a right to legibility of automated decision-making exists in the General Data Protection Regulation' (2017) 7(4) International Data Privacy Law 243; Lilian Edwards and Michael Veale, 'Slave to the algorithm: Why a right to an explanation is probably not the remedy you are looking for' (2017) 16 Duke Law and Technology Review 18; Andrew Selbst and Julia Powles, '"Meaningful Information" and the Right to Explanation' (Conference on Fairness, Accountability and Transparency, 2018); Margot E Kaminski, 'The right to explanation, explained' (2019) 34 Berkeley Technology Law Journal 189.

14 Giovanni Sartor and Francesca Lagioia, 'The impact of the General Data Protection Regulation (GDPR) on artificial intelligence' (2020) Study for the Panel for the Future of Science and Technology (STOA), European Parliamentary Research Services (EPRS) 57.

15 Article 29 Working Party (n 11) 19-20.

16 Article 22(2) GDPR. The exceptions are where the decision is: (a) necessary for entering into or performing a contract; (b) authorized by EU or national law, such as for the purposes of fraud and tax-evasion monitoring and prevention, in accordance with applicable laws; or (c) based on the data subject's explicit consent.

17 Article 29 Working Party (n 11) 21.

subject to a *decision* based *solely* on automated processing, and this reduces the relevance of Article 22 GDPR in the present context.

P2B Regulation. The 2019 P2B Regulation[18] is not only a precursor of the transparency provisions contained in the draft DSA (see below), but also an interesting building block for a larger transparency initiative. The P2B Regulation seeks to remedy the power and information asymmetries which often characterize relationships between platforms and traders who conduct their business via the platform. Because of its focus on the platform to business relations, the scope of the Regulation is thus limited. Nevertheless, it is complemented by similar rules in the revised EU consumers laws.[19] The P2B Regulation does not prohibit nor mandate some particular conduct, but rather aims at enhancing transparency through a "light touch regulatory approach" [20]– a bit too light when powerful platforms are involved.

Article 5 of the P2B Regulation provides that search engines set out the main parameters – i.e. any general criteria, processes, specific signals incorporated into algorithms or other adjustment or demotion mechanisms[21] – which individually or collectively are most significant in ranking determination and their relative importance, by providing

18 Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services [2019] OJ L186/57.

19 Promoted by the European Commission, the New Deal for Consumers which has now entered into force aims to modernize the enforcement of consumer rules. One of its pillar is the Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules, [2019] OJ L 328/7 (the Omnibus Directive). It contains several provisions that reflect the transparency obligations along the P2B axis, for example the obligation to provide "general information, made available in a specific section of the online interface that is directly and easily accessible from the page where the query results are presented, on the main parameters determining the ranking of products presented to the consumer as a result of the search query and the relative importance of those parameters" (Article 3 amending the Directive 2005/29/EC).

20 Inge Graef, 'Differentiated Treatment in Platform-to-Business Relations: EU Competition Law and Economic Dependence' (2019) 38(1) Yearbook of European Law 448, 494-495.

21 Recital 24 P2B Regulation.

an easily, publicly available and up-to-date description, drafted in plain and intelligible language.[22] Where options of so-called pay-for-ranking results are available, i.e. where the ranking may be influenced against *ad hoc* payment, the platform must present such possibility and describe its effects on the system overall.[23] The P2B Regulation does not restrict the choice of ranking parameters, but rather, intends to improve predictability for business users.

Article 5(6) states that providers are not required to disclose their algorithms, nor a detailed functioning of their ranking mechanisms or any information that "with reasonable certainty, would result in the enabling of deception of consumers or consumer harm through the manipulation of search results". Indeed, according to the findings of the impact assessment, platforms tend to agree with granting a high-level disclosure, yet have warned against the risks of too great transparency, such as "gaming" and manipulation of algorithms.[24] While providers may act against bad faith manipulation of ranking by third parties, the sole consideration of their commercial interests should never lead to a refusal to disclose the main parameters.[25] In any event, the P2B Regulation is without prejudice to the protection of trade secrets.[26] An exception for the protection of trade secrets such as this one pervades most other provisions on transparency. It is highly advisable that the conditions and scope of this exception are well determined by the law.

On 7 December 2020, the Commission adopted the Guidelines on ranking transparency (hereinafter, "P2B Ranking Guidelines")[27] under the P2B Regulation. The Commission highlights that ranking transparen-

22 Article 5(2) P2B Regulation.

23 Article 5(3) P2B Regulation.

24 Commission Staff Working Document Impact Assessment Annexes accompanying the document Proposal for a Regulation of the European Parliament and of the Council on promoting fairness and transparency for business users of online intermediation services, Part 2/2, SWD(2018) 138 final, 81-82.

25 Recital 27 P2B Regulation.

26 Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016 on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure [2016] OJ L157/1.

27 Commission Notice Guidelines on ranking transparency pursuant to Regulation (EU) 2019/1150 of the European Parliament and of the Council 2020/C 424/01, C/2020/8579 [2020] OJ C424/1.

cy descriptions should provide real added-value to users, in a way that allows an "adequate understanding" of whether, how and to what extent particular factors are taken into account. The description should not be a simple enumeration of the main parameters, but also provide a 'second layer' of explanatory information, for instance, describing the internal 'thought process' used to identify the main parameters and the reasons for their relative importance. Furthermore, it notes that excessive information can be counterproductive for users.[28] Therefore, providers should refrain from providing too lengthy or complicated descriptions, or parameters other than the main ones.[29] In our view, the transparency requirement cannot be limited to the visibility of the parameters, it also should include the possibility to justify that a ranking decision is adequate or to contest its appropriateness.[30] The transparency standard we are advocating thus goes beyond what is sometimes presented as explainability, and it comes close to accountability.

The P2B Regulation and related Guidelines constitute a first step in remedying the imbalances that underly platform ecosystems. The main merit of the Guidelines on ranking transparency is to provide examples and some best practice approaches to the identification and explanation of the main parameters of ranking. However, it is still doubtful whether protecting (business) users by way of imposing information obligations on the platform's end is enough – ultimately this results in an increased burden on business users to review and address the content of the information. Indeed, the P2B Regulation promises the goal of fairness (as per its official title), but then focuses on imposing yet more information duties.

3.2. A soft approach of transparency: the Ethics Guidelines on Trustworthy AI

In 2019, the High-Level Expert Group on AI published the EU Ethics Guidelines for Trustworthy AI[31] ("Ethics Guidelines"). The Ethics Guidelines strive for a "human-centric approach" to ensure the inclusion of

28 ibid 25.

29 ibid.

30 See the notions of justifiability and contestability in Clément Henin and Daniel Le Métayer, 'Beyond explainability: justifiability and contestability of Algorithmic Decision Systems' (2021) AI & Society.

31 AI HLEG, 'Ethics guidelines for trustworthy AI' (2019) 12 < https://digital-strategy.ec.eu-

human-designed ethical values in the development of AI-based algorithms, including those used by platforms. Lawfulness, ethics and robustness are the main components of trustworthy AI, throughout its entire lifecycle.[32] Fairness and transparency are also deeply rooted in those requirements.[33] The ethical requirements which relate to transparency are the following:[34]

- **Transparency** is closely related to explicability and encompasses better information on the elements that compose automatic decision-making systems (hereinafter, "ADMS"), i.e. the data, the system, and the underlying business model.[35]
- **Traceability** requires proper documentation of the datasets used to reach algorithm-based decisions. It should enable to identify the reasons that lead to the decision and allow for better comprehension of the underlying process.[36] Concrete solutions to implement traceability may be to show: which data has been used; resiliency of the analytical data processing; whether or not it guarantees the integrity of those data; if the analytical process proved effective in relation to its initial disclosed purpose.[37]
- **Explainability** concerns the ability to explain not only the technical process behind a decision, but also the human decision related to it.[38] A key question is how to make algorithms understandable by different stakeholders of varying technical literacy.
- **Communication** requires a positive information obligation to ensure that AI systems be not represented or able to represent themselves as human beings.[39] All AI-operated systems should be clearly flagged and proactively disclosed as such to end-users.[40]

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ropa.eu/en/library/ethics-guidelines-trustworthy-ai> accessed 1 September 2021.

32 ibid 5.

33 ibid 28.

34 ibid 14.

35 ibid 18.

36 ibid.

37 Scott Shapiro, 'The automated actuarial: trust and transformation in actuarial sciences' (*KPMG*, June 2017) 3 <https://assets.kpmg/content/dam/kpmg/xx/pdf/2017/06/kpmg-the-automated-actuarial.pdf> accessed 1 September 2021.

38 AI HLEG (n 35) 18.

39 AI HLEG (n 35) 18.

40 ibid.

The Ethics Guidelines advocate for a risk-based approach, where a suitable explanation should be provided every time an ADMS would have significant impact over an individual's life.[41] Moreover, the type, detail and nature of an explanation would be dependent on the quality and expertise of the concerned recipient, e.g. layperson, regulator, or expert/researcher.

3.3. A compliance and risk-based approach: the proposed AI Regulation

The proposed Regulation on Artificial Intelligence[42] seeks to introduce a set of information and transparency obligations in cases of AI systems classified as high-risk,[43] or those "intended to interact with natural persons", which shall be designed and developed in such a way as to inform individuals that they are interacting with artificial intelligence.[44] Furthermore, the use of particular systems falling in the latter category, such as those that conduct emotion recognition or biometric categorization, would require informing individuals of their operation.[45] Conversely, for non-high risk systems, transparency obligations are very limited.

Such new provisions are in principle welcome, however, their merit and practical usefuleness remains largely to be assessed.

3.4. The future framework for enhancing transparency on platforms: the draft DSA

A September 2021 report of the Coalition to Fight Digital Deception

41 Regarding the characteristics of a "suitable explanation", the Guidelines speak about "explanations of the degree to which an AI system influences and shapes the organisational decision-making process, design choices of the system, and the rationale for deploying it". Ibid 18.

42 Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts, COM/2021/206 final (hereinafter "Proposed Regulation on AI"). At the time of writing, the proposal is still in the early stages of the legislative process.

43 Article 13 Proposed Regulation on AI.

44 Article 52(1) Proposed Regulation on AI.

45 Article 52(2) Proposed Regulation on AI.

recognizes "the financial incentives underlying platforms' advertisement-driven business models" and encourages "lawmakers to pursue appropriate legislation and policies in order to promote greater transparency and accountability around online efforts to combat misleading information".[46] This is what the draft DSA intends to do for Europe. The expected impact of the DSA (which is also far from being adopted) has been compared by Commission Vice-President Vestager to that brought about by traffic-lights(!).[47] But the proposed regulatory system is *a bit* more sophisticated than a three-color light…. And its transparency provisions should still be reinforced and, why not, implemented through a legal design approach (that should go beyond a three-color traffic-light!).

The DSA has a modular structure, with different sets of provisions applicable to the following classes of digital services providers, with an increasing tightened set of rules and obligations:

– Providers of online intermediary services;[48]
– Providers of hosting services;
– Online platforms;[49]
– Very large online platforms ("VLOP").[50]

The most intense degree of obligations is applicable to the category of VLOPs. VLOPs face higher standards of transparency and accountability for content moderation, advertising and algorithmic processes. This is considered necessary to address certain public policy concerns and the

46 Coalition to Fight Digital Deception, 'Trained for Deception: How Artificial Intelligence Fuels Online Disinformation' (2021) <https://static1.squarespace.com/static/6103ea02f6f50e4407fa34cf/t/613fd03e1b58a82cf447445c/1631572030813/Trained_for_Deception_How_Artificial_Intelligence_Fuels_Online_Disinformation.pdf> accessed 1 September 2021.

47 European Commission, Statement by Executive Vice-President Vestager on the Commission proposal on new rules for digital platforms, 15 December 2020 <https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_20_2450> accessed 1 September 2021.

48 As defined in Article 2(f) DSA proposal.

49 As defined in Article 2(h) DSA proposal.

50 Pursuant to Article 25 DSA proposal: "online platforms which provide their services to a number of average monthly active recipients of the service in the Union equal to or higher than 45 million, calculated in accordance with the methodology set out in the delegated acts referred to in paragraph 3."

systemic and societal risks they may pose.[51] Such obligations were called for also by stakeholders, who particularly highlighted the necessity to shed light and understand the ways in which information is prioritized and targeted.[52] The DSA also provides obligations to assess and develop risk management tools to safeguard VLOPs' services' integrity against manipulative techniques.[53]

The below table displays the scope of the provisions geared at the VLOPs (some of which are analysed below).

Article number	**Transparency information-related obligations**	**Transparency scrutiny-related obligations**	**Reporting obligations**	**Risk-assessment obligations**
26-27				Risk assessment of systemic risks (Article 26); implementation of related mitigation measures (Article 27)
28		Independent audit		
29	Information about recommender systems (main parameters)			
30	Additional online advertising transparency (add-on to Article 23)			
31		Data access		

51 Recital 54 DSA proposal.
52 DSA proposal, 9.
53 DSA proposal, 2.

33			Transparency reporting (add-on to Article 13): Report on the results of the risk assessment and on mitigation measures; Audit report; Audit implementation report.	

In addition to a number of baseline provisions applying, with increasing levels of intensity to all intermediaries and all platforms, the DSA introduces a set of heightened obligations for VLOPs in view of their potential of causing systemic risks.[54] The key concern is the very design of VLOPs' systems, which rely on and owe their success to behavioral insight and advertising-driven business models.

Further to the identification and assessment of systemic risks, VLOPs must tailor the implementation of reasonable, proportionate (including in terms of the platform's economic capacity) and effective mitigation measures. Such measures may include the following:

– adaptation of content moderation or recommender systems, decision-making processes, the features or functioning of their services, or their terms and conditions;
– targeted measures aimed at limiting the display of advertisements in association with the service they provide;
– reinforcing the internal processes or supervision of any of their activities in particular as regards detection of systemic risk;
– initiating or adjusting cooperation with trusted flaggers in accordance with Article 19;

54 Section 4 DSA proposal. Those systemic risks include the misuse of services through the dissemination of illegal content, including child sexual abuse material or illegal hate speech, the intentional or coordinated manipulation of the platform's services, particularly with the view of potential consequences on health, civic discourse, electoral processes, public security and the protection of minors. VLOPs have an obligation to assess in-depth, manage and mitigate systemic risks (Article 26(1)(a)-(c), and Recital 57 DSA proposal).

– initiating or adjusting cooperation with other online platforms through the codes of conduct and the crisis protocols referred to in Article 35 and 37 respectively.[55]

For instance, VLOPs could enhance or otherwise adapt the design and functioning of their content moderation, algorithmic recommender systems and online interfaces to discourage and limit the dissemination of illegal content, adapting their decision-making processes or their terms and conditions.[56] Corrective measures could also include discontinuing advertising revenue for specific types of content, enhancing the visibility of authoritative information sources, revising internal processes and supervision.

Audits. VLOPs will also be subject to independent external auditing.[57] The audit report should be substantiated to provide a meaningful account of the activities undertaken and the conclusions reached.[58] It should help inform, and where appropriate, suggest improvements to the measures taken in order to comply with the DSA's obligations.

Transparency of recommender systems. A key aspect of the way VLOPs conduct business is the prioritization and presentation of information on the platform's online interface in order to facilitate and optimize access to information.[59] For instance, this can be done by algorithmically suggesting, ranking and prioritizing information, distinguishing through text or other visual representations, or otherwise curating information provided by recipients.[60] These "recommender systems" can affect the ability and ways in which information is retrieved and interacted with by users. This also allows to amplify certain messages, viral dissemination and drive online behaviors.[61] For these reasons, it is important that users of VLOP services are appropriately informed of the why and how infor-

55 Article 27(1) DSA proposal.
56 Recital 58 DSA proposal.
57 Recital 60 DSA proposal: auditors should guarantee the confidentiality, security and integrity of the information, such as trade secrets, obtained in the course of their tasks, as well as hold the necessary expertise in the area of risk management and technical competence to audit algorithms.
58 Recital 61 DSA proposal.
59 Recital 62 DSA proposal.
60 ibid.
61 ibid.

mation is presented to them, as well as have the ability to influence such presentation.

To this end, Article 29 of the DSA provides for information requirements about the recommender systems of VLOPs, which need to set out the main parameters in their terms and conditions in a clear, accessible, and easily comprehensible manner. Indeed, users have the right to know the main parameters of recommender systems, as well as be presented with options to influence or modify those parameters, including at least one option not based on profiling. This is going in the right direction but it remains to be seen whether the transparency provisions of the DSA will suffice to counterbalance the economic incentive for engaging prejudicial content that is often toxic.

4. Transparent recommender systems with explanations for users and separation between ads and news: examples where a legal design approach could help

Transparency of recommender systems. In the context of VLOPs using recommender systems, users should understand the role and impact that such systems have on their digital experiences on the platforms. Simply adding a description of the parameters involved in the platform's terms and conditions (as imposed by some of the legal instruments reviewed above) is not sufficient. Indeed, terms and conditions (T&C) of service are often lengthy and incomprehensible to the average user, at times because of their vague language or because meaningful aspects are buried under tons of other information. The proponents of legal design have pointed this recurrent issue with the standard T&C. There is no doubt that explanations should be drafted in easy and comprehensible language. Although this requirement is embedded in consumer or data protection rules, the goal of a meaningful explanation has hardly ever been considered accomplished in practice.

Article 29 of the draft DSA provides the interesting possibility that platforms' users be shown and explained the options to modify or influence the recommender system's main parameters, including at least one option not based on profiling. Therefore, we propose to enhance the requirement of transparent recommender systems to include not only descriptions of the main parameters, but also meaningful individualized

explanations of how the alternative parameters *work*. This does not entail drafting ad hoc clauses for each user. Rather, based on the provision of Article 29(2), further to providing an "easily accessible functionality" on the VLOP's online interface that enables users to select and modify at any time their preferred option for each of the recommender systems, such functionality should also include a dynamic and tailored explanation system. For instance, through visual and interactive tools, the user could be easily shown what the different options mean and how this impacts their user digital experience. Such tool could contribute to make the options of the recommender system contestable, and this could narrow the gap between explainability and justifiabily or accountability.[62] The methods of legal design, and the use of adequate visual elements could definitely help in this regard.[63] The dynamic explanatory system of the recommender systems we advocate here would help recipients understand in a meaningful and user-friendly way:

– What are the main parameters, their relative importance and what other options users may have;
– How the selected parameters practically work *for each user*, how they can change and what this means for their digital user experience.

The way to make this easily visible and operational for the platforms' users remains to be examined, and this goes well beyond the present

62 Long developments, going well beyond the present contribution, could be devoted to the articulation between the transparency requirement, in the broad sense adopted here, and the need of justifiability and contestability of algorithmic decisions, including on platforms. See for example on this, Henin and Le Métayer (n 30).

63 Legal design which is the focus of the present book can be defined as an interdisciplinary field of research that proposes to use human-centered design to prevent or solve problems that the law is commonly tasked with, such as the adequate information of consumers. See, LeDA, 'Legal Design Manifesto' (2018) <www.legaldesignalliance.org> accessed 1 September 2021. The legal design methodological approach, combining insights from empirical studies and behavioural sciences, has been already used to provide individuals with more meaningful explanation about techno-legal information (such as contracts and regulation). See for example Helena Haapio, *Next generation contracts* (Lexpert Ltd, 2013); Stefania Passera, *Beyond the wall of contract text. Visualizing contracts to foster understanding and collaboration within and across organizations* (Aalto University 2017), as well as the other contributions to the present Volume.

contribution.[64] Such tool will allow the true empowerment of the platforms' users – something that the platforms should care about.

Clearer separation betweed paid-for ads and organic information. Other confusions are prompted by the design of the platform, whether the results page on Google Search or Facebook's "Newsfeed". Former Google executives stress the growing reliance of the search engine on ads, and stress that on Google "it is becoming more complex for the user to understand what is advertising and what is not".[65] Many users with a rather low level of attention – or education – cannot distinguish between ads and true information on the platform's pages. What has been done for other media, such as the printed press and television, must also be provided for in the online media space. For example, in most European countries, there are rather clear rules about how the newspapers and TV channels must distinguish between advertisement and information. The same requirements are not applied to social networks. Article 24 of the draft DSA aims at solving this by requiring the online platforms to "ensure that the recipients of the service can identify, for each specific advertisement displayed to each individual recipient, in a clear and unambiguous manner and in real time […] that the information displayed is an advertisement". Query whether a European standard, hopefully with a clear icon, for flagging the ads will be widely adopted after consultation of various stakeholders. Legal design and a standardized signaletics could help the platforms' users to better discriminate types of content.

Concluding words. While the final text of the DSA is still in the making, and the European Parliament's discussions so far seem supportive of a further enhancement of users' rights vis-à-vis recommender systems,[66]

64 Within the Jean Monnet course on EU IT Law by Design that Rossana Ducato and Alain Strowel are coordinating, the students of the year 2020-2021 have managed to make several design proposals for a more transparent recommender system that are worth to consider. See on this UCLouvain course: http://eitlab.eu/.

65 Tim Bradshaw, 'Small search engines bet on skill and regulation in battle with Google' *Financial Times* (London, 29 December 2020) <https://www.ft.com/content/24efc152-a65d-4c48-9032-ee349a2c885b> accessed 1 September 2021.

66 Draft Opinion of the Committee on Civil Liberties, Justice and Home Affairs for the Committee on the Internal Market and Consumer Protection on the proposal for a regulation of the European Parliament and of the Council Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (COM(2020)0825 – C9-0418/2020 – 2020/0361(COD)) of 19 May 2021; Draft Re-

individuals and civil society organizations will likely have a large role to play in ensuring that the new transparency obligations do not remain solely on paper. We think that meaningful improvements of the legal framework and of the functioning of the platforms algorithms require implementations that rely on the teachings of legal design. This is just an appeal for what we see as an important field for future research on the regulation of the democratic conversation which will be more dependent on the platforms, therefore there is a need for them to put in place the right checks and balances.

Bibliography

AI HLEG, 'Ethics guidelines for trustworthy AI' (2019) < https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai> accessed 1 September 2021

Alba D, Mac R, 'Facebook, Fearing Public Outcry, Shelved Earlier Report on Popular Posts' *The New York Times* (20 August 2021) <https://www.nytimes.com/2021/08/20/technology/facebook-popular-posts.html> accessed 1 September 2021

Aral S, *The Hype Machine. How Social Media Disrupts Our Elections, Our Economy and Our Health – and How We Must Adapt* (Harper Collins 2020)

Bradshaw T, 'Small search engines bet on skill and regulation in battle with Google' *Financial Times* (London, 29 December 2020) <https://www.ft.com/content/24efc152-a65d-4c48-9032-ee349a2c885b> accessed 1 September 2021

Coalition to Fight Digital Deception, 'Trained for Deception: How Artificial Intelligence Fuels Online Disinformation' (2021) <https://static1.squarespace.com/static/6103ea02f6f50e4407fa34cf/t/613fd03e1b58a82cf447445c/1631572030813/Trained_for_Deception_How_Artificial_Intelligence_Fuels_Online_Disinformation.pdf> accessed 1 September 2021

port of the Committee on the Internal Market and Consumer Protection on the proposal for a regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (COM(2020)0825 – C9-0418/2020 – 2020/0361(COD)) of 28 May 2021.

Davis M, Hunt J, *Visual Communication Design* (Bloomsbury 2017)

Draft Opinion of the Committee on Civil Liberties, Justice and Home Affairs for the Committee on the Internal Market and Consumer Protection on the proposal for a regulation of the European Parliament and of the Council Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (COM(2020)0825 – C9-0418/2020 – 2020/0361(COD)) of 19 May 2021

Draft Report of the Committee on the Internal Market and Consumer Protection on the proposal for a regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (COM(2020)0825 – C9-0418/2020 – 2020/0361(COD)) of 28 May 2021

Edwards L, Veale M, 'Slave to the algorithm: Why a right to an explanation is probably not the remedy you are looking for' (2017) 16 Duke Law and Technology Review 18

European Commission, Statement by Executive Vice-President Vestager on the Commission proposal on new rules for digital platforms, 15 December 2020 <https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_20_2450> accessed 1 September 2021

Goodman B, Flaxman S, 'EU Regulations on Algorithmic Decision Making and "a Right to an Explanation"' (ICML Workshop on Human Interpretability in ML 2016

Graef I, 'Differentiated Treatment in Platform-to-Business Relations: EU Competition Law and Economic Dependence' (2019) 38(1) Yearbook of European Law 448

Haapio H, *Next generation contracts* (Lexpert Ltd, 2013)

Henin C, Le Métayer D, 'Beyond explainability: justifiability and contestability of Algorithmic Decision Systems' (2021) AI & Society

Kaminski ME, 'The right to explanation, explained' (2019) 34 Berkeley Technology Law Journal 189

LeDA, 'Legal Design Manifesto' (2018) <www.legaldesignalliance.org> accessed 1 September 2021

Leerssen P, 'The Soap Box as a Black Box: Regulating Transparency in Social Media Recommender Systems' (2020) 11(2) European Journal of Law and Technology

Malgieri G, Comandè G, 'Why a right to legibility of automated decision-making exists in the General Data Protection Regulation' (2017) 7(4) International Data Privacy Law 243

Passera S, *Beyond the wall of contract text. Visualizing contracts to foster understanding and collaboration within and across organizations* (Aalto University 2017)

Sartor G, Lagioia F, 'The impact of the General Data Protection Regulation (GDPR) on artificial intelligence' (2020) Study for the Panel for the Future of Science and Technology (STOA), European Parliamentary Research Services (EPRS)

Selbst A, Powles J, '"Meaningful Information" and the Right to Explanation' (Conference on Fairness, Accountability and Transparency, 2018)

Shapiro S, 'The automated actuarial: trust and transformation in actuarial sciences' (*KPMG*, June 2017) 3 <https://assets.kpmg/content/dam/kpmg/xx/pdf/2017/06/kpmg-the-automated-actuarial.pdf> accessed 1 September 2021

Strowel A, *Quand Google défie le droit. Plaidoyer pour un Internet transparent et de qualité* (De Boeck & Larcier 2011)

Strowel A, Somaini L, 'Towards a robust framework for algorithmic transparency to tacke dissemination of illegal and harmful content on online platforms' (2021) UCL-CRIDES working paper 2021/2 <https://cdn.uclouvain.be/groups/cms-editors-crides/droit-intellectuel/CRIDES_WP_2_2021_Alain%20Strowel%20and%20Laura%20Somaini.pdf> accessed 1 September 2021

Wachter S, Mittelstadt B, Floridi L, 'Why a Right to Explanation of Automated Decision-Making Does Not Exist in the General Data Protection Regulation' (2017) 7(2) International Data Privacy Law 76

EU instruments

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC [2016] OJ L119/1

Regulation (EU) 2019/1150 of of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services [2019] OJ L186/57

Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016 on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure [2016] OJ L157/1

Directive (EU) 2019/2161 of the European Parliament and of the Council of the 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules [2019] OJ L328/7

Commission Staff Working Document Impact Assessment Annexes accompanying the document Proposal for a Regulation of the European Parliament and of the Council on promoting fairness and transparency for business users of online intermediation services, Part 2/2, SWD(2018) 138 final

Commission Notice Guidelines on ranking transparency pursuant to Regulation (EU) 2019/1150 of the European Parliament and of the Council 2020/C 424/01, C/2020/8579 [2020] OJ C424/1

EU legislative proposals

Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC, COM(2020) 825 final

Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts, COM/2021/206 final

WP29 documents

Article 29 Working Party, 'Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation 2016/679' (WP 251 rev.01 as last revised and adopted on 6 February 2018)

7. SPACES FOR LEGAL DESIGN IN THE EUROPEAN GENERAL DATA PROTECTION REGULATION

Rossana Ducato

1. Introduction

One of the core applications of Legal Design (LD) is the ability to present complex legal information in a way that is clearer, more meaningful, and compelling to the user who needs to act upon that information.[1]

This overarching goal can serve well the principle of transparency embedded in EU data protection law. Such a principle establishes a number of obligations aimed at allowing the data subject to exercise control over their data. Notably, these obligations include the provision of mandatory disclosures. According to the latter, the stronger party (the controller) must disclose certain information in a clear and understandable way to the weaker subject (the data subject) in order to address an information imbalance. If provided with such information, the data subject should be in a position to understand the logic behind a processing and to challenge it.

However, the law is general and abstract and, when assessing a concrete situation, including the transparency of information, it usually recurs to 'legal fictio', i.e. normative models such as the 'prudent and reasonable person'. This standpoint seems to be opposite to the human-centred approach adopted in LD, where the actual needs and aspirations of persons are taken into account to develop more human-friendly solutions.

This Chapter argues that this is only an apparent conflict and that the EU data protection framework provides a space for designing legal communication in a more human-centric way. This contribution is structured as follows. First, the information obligations outlined in the General Data Protection Regulation (GDPR)[2] will be critically discussed (Section 2). They represent the 'operational requirements' that should be followed when designing the communication to data subjects. However, they are only the starting point and LD can be helpful to improve the current status of mandatory disclosures, particularly in the case of privacy policies. To this end, Section 3 explores the human-centric framework embed-

1 Margaret D Hagan, *Law By Design* (2016) <https://lawbydesign.co/> accessed 22 August 2021.

2 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC [2016] OJ L119/1 (GDPR).

ded in the GDPR, investigating to what extent it is possible to customise information depending on the user. Design can be used for good, but also for bad (even unintentionally). Therefore, Section 4 draws attention towards a mindful adoption of design solutions, suggesting a possible way for making legal design solutions for privacy notices that are available to all.

2. The general framework of mandatory disclosures in the GDPR

The transparency about how personal data is processed is a fundamental pillar in the current European data protection framework. The principle of transparency is expressly recognised in the Modernised Convention for the protection of individuals with regard to the processing of personal data[3] and the General Data Protection Regulation.[4] Such a principle is not expressly defined, but it has been interpreted as an overarching concept from which derives specific duties, for instance the obligation to inform data subjects in a clear way about the "risks, rules, safeguards, and rights"[5] entailed by the processing and how to exercise such rights.[6]

Transparency fulfils a crucial role within the set of data protection principles: it allows for the reduction of the information asymmetry between the data subject and the controller, allowing the former to meaningfully

3 Articles 5(4)(a) and 8, Council of Europe, *Modernised Convention 108* on Data Protection 2018.

4 Article 5(1)(a) GDPR.

5 Recital 39 GDPR.

6 See, Article 29 Working Party ('WP29', now, European Data Protection Board, 'EDPB'), 'Guidelines on Transparency under Regulation 2016/679' (WP 260 rev.01, as last revised and adopted on 11 April 2018). As recently pointed out by the EDPB, the principle of transparency does not exhaust in the information obligations placed at Articles 12-14 of the GDPR. It is *"an overarching principle that not only reinforces other principles (i.e. fairness, accountability), but from which many other provisions of the GDPR derive"*. See, EDPB, 'Binding decision 1/2021 on the dispute arisen on the draft decision of the Irish Supervisory Authority regarding WhatsApp Ireland under Art. 65(1)(a) GDPR', 28 July 2021 <https://edpb.europa.eu/system/files/2021-09/edpb_bindingdecision_202101_ie_sa_whatsapp_redacted_en.pdf> point 192.

consent (where consent is the lawful basis for the processing) or in, any case, to control the flow of information related to them.[7]

A series of mandatory disclosures in the GDPR stems from the principle of transparency. In particular, the controller must provide: (1) information before the processing begins and (2) communications during the course of the processing. In this Section, we will provide an overview of these obligations, exploring the 'what', 'when' and 'how' related to the provision of information to data subjects.

2.1. What?

Data subjects must be informed about several legal and factual circumstances related to the processing. Some of this information shall be provided before the processing starts or at its beginning. This is the case, for example, of the information that online users (ought to) find in the privacy policies available on websites.

The list of such information is contained at Articles 13 and 14 GDPR.[8] The first case (Article 13) includes the information that the data controller must disclose to the subject when the data is obtained directly from them, e.g. when asking contact details for opening an account or delivering an item. Article 14, on the contrary, applies when the data is collected from any other source. This might be the case of personal data communicated by another controller or publicly accessible online, e.g. on social media.[9] With some functional differences between Articles 13 and 14,[10] the typology of information to be provided concerns:

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7 The GDPR makes rooms for a wider set of tools for informing data subjects about the conditions of the processing. For instance, it is the case of marks and certifications that can communicate to the public the respect of certain quality standard. In this Chapter, the focus is mainly on mandatory disclosures.

8 The timing for the provision of information under Article 14 GDPR may actually vary, but the main idea is that information about the conditions of the processing should be provided at the first occasion without any formal request or action taken by the data subject. It will be discussed later in this Section.

9 This does not mean that publicly accessible personal data is 'freely' available. For instance, the controller will need to have a lawful basis for it and complying with the relevant data protection obligations.

10 More on this in Rossana Ducato, 'Data protection, scientific research, and the role of information' (2020) 37 Computer Law and Security Review 105412.

- Factual information about the actors involved, e.g. identity of the controller;
- Factual information about the processing, e.g. the existence of automated decision making process and, at least in the cases at Article 22, "meaningful information about the logic involved"[11];
- Information about the legal choices done by the controller, e.g. the legitimate interest of the controller or the third party that can constitute the lawful basis for the processing;
- Information about the legal choices available to the data subject, i.e. the rights they can exercise vis-a-vis the data controller or the competent data protection authority;
- Information about the risks, e.g. the significance and envisaged consequences of the automated decision making processing (Article 22) for the data subject;
- Information about the safeguards for the data subject, e.g. when the controller exports the data outside the European Economic Area according to Articles 46, 47 and 49(1) second subparagraph.

The list of mandatory disclosures in the GDPR does not stop here. There are other communication duties that the controller shall fulfil during the course of the processing. The first group concerns information to be provided at the data subject's request or when the individual exercises certain data subject rights.

For instance:

- The controller must inform the data subject about actions taken or not taken in response to the requests brought under Articles 15-22 GDPR.[12] If the controller decides not to proceed with the data subject's request, they shall also inform the individual about both the reasons of their denial and their right to lodge a complaint within a national supervisory authority or to seek a judicial remedy against the controller's decision.[13]
- When the data subject obtains confirmation from the controller that a processing is ongoing, they must access not only the data at stake and obtain a copy of it, but they shall also be informed about the relevant

11 Articles 13(2)(f) and 14(2)(g) GDPR.
12 Article 12(3) and (4) GDPR.
13 Article 12(4) GDPR.

conditions of the processing.[14] This latter information echoes the list contained at Articles 13 and 14 GDPR. However, the controller shall not merely provide a general notice. In such cases, it is expected that a more granular provision of information will respond to the specific access request of the data subject.[15]

– When the data subject obtains the restriction of the processing pursuant to Article 18(1) GDPR, they must be notified by the controller before the restriction is lifted.[16]
– When the rectification, erasure, or restriction of any data is notified by the controller to the recipients to whom the data has been disclosed, the data subject can request to be informed "about those recipients"[17].

Finally, an obligation to provide a second type of communication arises during the course of the relationship if something goes wrong in relation to the processing. This hypothesis occurs if the controller suffers a data breach that is likely to result in a high risk to the rights and freedoms of natural persons (Article 34 GDPR).[18] The communication about the data breach shall include the nature of the breach and, at least, the contact details of the data protection officer (if appointed) or

14 Article 15 GDPR.

15 Gabriela Zanfir-Fortuna, 'Article 15' in Christopher Kuner, Lee A Bygrave, Christopher Docksey (eds), *The EU General Data Protection Regulation (GDPR): A Commentary* (OUP 2020) 462.

16 Article 18(3) GDPR. In this way, the data subject can consider the most appropriate measure to take, including whether to exercise any other data subject right before the restriction is lifted. See, Gloria Gonzales Fuster, 'Article 18' in Christopher Kuner, Lee A Bygrave, Christopher Docksey (eds), *The EU General Data Protection Regulation (GDPR): A Commentary* (OUP 2020) 491.

17 Article 19 GDPR. The precise content of this provision is unclear. According to Fuster, the data subject shall be informed about all the recipients of the personal data, not only those notified by the controller. It would undermine data subject's protection to adopt the narrower interpretation. If the goal of the information obligation is to allow the meaningful exercise of data subjects rights, the individual will have the interest to reach out also the recipients which, for any reason, have not been notified. See, Gloria Gonzales Fuster, 'Article 19' in Christopher Kuner, Lee A Bygrave, Christopher Docksey (eds), *The EU General Data Protection Regulation (GDPR): A Commentary* (OUP 2020) 496.

18 The GDPR does not define what constitutes a high risk, but the WP29 has provided guidance on how to perform the risk assessment. See, WP29, 'Guidelines on Personal data breach notification under Regulation 2016/679' (WP 250 rev.01, as last revised and adopted on 6 February 2018).

other contact point, the potential consequences of the breach for the data subject, and the measures the controller has already taken or will be taken to mitigate the adverse effects of the breach.[19] According to Article 29 Working Party (WP29, now 'European Data Protection Board'), where appropriate, the controller should also advise the data subjects on the specific measures that they can take at the individual level (e.g. to change password of the account that has been violated).[20]

The controller is exempted from such a communication duty if they were able to neutralise the risk.[21] They will be also exempted if the communication to the individual affected will involve a disproportionate effort (similarly to Article 14(5) GDPR). Nevertheless, the duty to inform is not eliminated: controllers will have to disseminate the information about the data breach publicly in order to reach indirectly the subjects that they were not able to contact *ad personam*.[22]

The mandatory disclosures here briefly outlined are not a closed list. Those mentioned in Article 12 are only the minimum benchmark. The data controller should in fact provide

> *"any further information necessary to ensure fair and transparent processing taking into account the specific circumstances and context in which the personal data are processed"*[23].

For example, in relation to the explanation of automated decision-making processes, Kaminski and Malgieri argued that riskier operations would require additional safeguards, such as individualised forms of disclosures.[24] This conclusion is anchored by the authors to Article 24 GDPR, i.e. the obligation of the controller to adopt the most appropriate technical and organisational measures to ensure the compliance with

19 See, Article 34(2) GDPR. Such information is not a 'numerus clausus', meaning that the data controller can provide further information to the data subject when required by the circumstances.

20 WP29, 'Guidelines on Personal data breach notification' (n 18) 20.

21 See, Article 34(3)(a) and (b) GDPR.

22 Article 33(3)(c) GDPR.

23 Recital 60 GDPR.

24 Margot E Kaminski and Gianclaudio Malgieri, 'Multi-layered explanations from algorithmic impact assessments in the GDPR' (Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency, January 2020).

the principles of the Regulation (including transparency) depending on the nature, scope, context, purposes, and risks of the processing. Hence, the controller should always perform a case-by-case assessment of the comprehensiveness of the information to be given to data subjects.

2.2. When?

The timing of the provision of information is crucial for fulling the rationale of disclosure mechanisms. The information should reach the data subject when they need it.

The GDPR articulates a different regime depending on the circumstances in which the personal data are obtained.

Concerning the general mandatory disclosures at Articles 13 and 14:

- When the personal data is obtained from the data subject, the latter must be informed at the time of the collection.[25]
- When the personal data is not obtained from the data subject, there are three possible options to consider.[26] The controller must disclose the information to the data subject "within a reasonable period" after the obtainment, but, in any case, within one month. If the personal data is meant to be used for communication with the data subject, the information shall be disclosed at the time of the first communication. Otherwise, if the controller plans to share the data with a third party, the data subject shall be informed at the latest when the data is disclosed.

In both cases, if the controller intends to re-use the data obtained for a further purpose, they shall inform the data subject about the new processing before its begin.[27]

Some specific rules are in place with regard to consent, to preserve its rationale. The GDPR stresses explicitly the need for the data subject to be informed of the possibility to withdraw the consent *prior* giving it.[28]

25 See Article 13(1) and (2) GDPR.

26 Article 14(3) GDPR.

27 See Articles 13(3) and 14(4) GDPR. In particular, the controller shall inform about the new purpose and the elements at Section 2 of Articles 13 or 14 GDPR.

28 Article 7(3) GDPR.

Similarly, the right to object (when the processing is necessary for a task in the public interest or for the legitimate interest of the controller/third party, or when the processing is about direct marketing purposes) shall be specifically brought to the attention of the data subject, "at the latest at the time of the first communication"[29] with them.

When the controller has to communicate information on actions taken in response to the exercise of the data subject rights, they shall do so "without undue delay and in any event within one month of the receipt of the request"[30]. The same timing applies to the communication to be delivered in case the controller does not intend to proceed with the data subject request (Article 12(4) GDPR).

As already mentioned in relation to the information pursuant to Article 18(3) GDPR, this has to be given *before* the restriction is lifted. The principle of fairness would require that the information shall be provided in advance within a reasonable amount of time that will allow the data subject to react.

Finally, in case of a data breach requiring communication to the data subjects, such a communication must occur "without undue delay"[31]. This is different from Article 12(3) GDPR, as the "undue delay" in this case does not allow any extension and must be interpreted as "as soon as possible"[32]. The urgency is motivated by the need to promptly inform the data subject and put them in a position to take the appropriate steps to protect themselves from the potential negative effects of the breach.

2.3. How?

In principle, the form for the provision of all the information under Articles 13-14 (mandatory disclosures before or at the beginning of the processing) and any communications to the data subject pursuant to Articles 15-22 and 34 (mandatory disclosures during the course of the processing) must be in writing or in an equivalent means that can ensure

29 Article 21(4) GDPR.

30 Article 12(3) GDPR. Where the circumstances require it (e.g. due to the complexity or high number of requests), the deadline can be extended for a further two months.

31 Article 34(1) GDPR. See, also Recital 86 GDPR.

32 WP29, 'Guidelines on Personal data breach notification' (n 18) 20.

the fixation and retrieval of information. When requested by the data subject, information can also be provided orally.[33]

Where the controller takes action on a data subject request, and this latter has been introduced via electronic means, the controller shall use the same means, unless the data subject requested otherwise (Article 12(3) GDPR).

Other than that, the principle of transparency in the GDPR requires that such information must be delivered "in a concise, transparent, intelligible and easily accessible form, using clear and plain language, in particular for any information addressed specifically to a child"[34] and, "additionally, where appropriate, visualisation be used"[35]. With reference to the mandatory disclosures at Articles 13 and 14, the GDPR provides that information can be given in combination with "standardised icons"[36] aimed at offering a meaningful overview of the processing. Moreover, when the data subject can consent to the processing through electronic means, the request shall be "clear, concise and not unnecessarily disruptive to the use of the service for which it is provided"[37].

Therefore, the GDPR established few key principles in relation to the disclosure modality. They remain high-level, but we can already stress few points: first, there is a recognition that information design and the use of visualisation can be an effective tool for implementing the legal rationale of the principle of transparency; second, visual tools and icons are not meant to replace information under Articles 13 and 14, but to accompany them; third, the user experience shall be reasonably taken into account in designing the provision of information or the interaction with the controller.

In a couple *loci* the Regulation indicates specific information design features to follow. A first provision relates to the ban of choice architec-

33 Article 12(1) GDPR. Then, the principle of accountability will require that the controller is able to demonstrate that this information has been provided. See, WP29, 'Guidelines on Transparency' (n 6) 13.

34 Article 12(1) GDPR. See also Recitals 39 and 58 GDPR. The requirement of "clear and plain language" is recalled also at Article 34 in relation to the communication of the data breach.

35 Recital 58 GDPR.

36 When the information is provided electronically, the icons shall be machine-readable. Article 12(7) GDPR. See also Recital 60.

37 Recital 32 GDPR.

tures and interfaces (i.e. pre-ticked boxes or structures that take user's inaction or silence as acceptance) that do not allow the collection of an informed consent from the data subject.[38] Such provision implicitly reflects the awareness of the role played by the inertia bias, according to which people tend to stay with the default option. If the consent declaration is pre-formulated and 'ticked' by the controller, there is no actual means to ascertain that the data subject actively consented to the processing.[39]

Another area where the GDPR mandates a clear design presentation is when establishing the structural separation of selected information from other. For instance, the specificity requirement of consent implies that the request shall be presented in a manner clearly distinguishable from other matters (if contained, for example, in a written declaration covering different issues)[40] and that separate consents shall be given in relation to each purpose of the processing.[41]

Similarly, the existence of the right to object shall be presented separately from any other information.[42] Here, the separation is functional to draw the attention of the data subject in a meaningful and timely way when they can make a choice in relation to the processing (e.g. to consent or to opt-out).

Apart from these specifics, the GDPR does not provide the details on the 'how' the information must be provided: the controller is tasked to adopt the most suitable configuration for ensuring the transparent and meaningful provision of information to data subjects depending on the concrete context of the processing.[43] Here design methods can help. The question is whether and to what extent they can be integrated into the normative model provided by the GDPR in relation to transparency.

38 ibid.

39 Case C673/17 *Planet49* [2019] ECLI:EU:C:2019:801, para 55.

40 Article 7(2) GDPR.

41 Recital 43 GDPR.

42 Article 21(4) GDPR. This presentation usually takes the form of an "opt-out" mechanism. As stressed by Gabriela Zanfir-Fortuna, 'Article 21' in Christopher Kuner, Lee A Bygrave, Christopher Docksey (eds), *The EU General Data Protection Regulation (GDPR): A Commentary* (OUP 2020) 519.

43 Such decisions should be duly motivated in light of their duty of accountability.

3. The user-centred nature of transparency in the GDPR

As to the first question (can design methods be integrated into the GDPR-transparency principle), the Regulation seems to be naturally open to the human-centred approach promoted by Legal Design, particularly when it comes to information disclosures. The main legal reference for the principle of transparency in the GDPR, Article 5(1)(a), states that:

> *"Personal data shall be processed […] in a transparent manner* in relation to the data subject*".*[44]

In other terms, the data subject, as a fundamental actor and point of reference for the processing should be put at the centre of the processing design, including the information design of the disclosures and their communication.

This interpretation seems confirmed in the Guidelines on Transparency issued by the WP29.[45] Although not binding, such guidance is an authoritative point of reference to ensure the compliance with the principles enshrined in the GDPR.

The WP29 unambiguously states that:

> *"The concept of transparency in the GDPR is user-centric rather than legalistic and is realised by way of specific practical requirements on data controllers and processors in a number of articles. The practical (information) requirements are outlined in Articles 12 - 14 of the GDPR. However, the quality, accessibility and comprehensibility of the information is as important as the actual content of the transparency information, which must be provided to data subjects."*[46]

In doing so, the WP29 puts a clear emphasis on the need to provide the information in a way that serves data subjects, focusing on the 'user' rather than on an abstract normative concept of transparency. However, who are the users considered by the GDPR? And, to what extent the

44 Emphasis added.

45 WP29, 'Guidelines on Transparency' (n 6).

46 ibid 5. Emphasis added.

legal design human-centred approach based on user research and validation can be factored in?

The Regulation considers the notion of data subject, i.e. the natural person to whom the data refers. Such a category, however, is heterogeneous.

A first sub-category is represented by children. The controller shall tailor the intelligibility of information, "in particular" when addressing them.[47] The reason for a 'reinforced' obligation in this case reflects the consideration that:

> *"Children […] may be less aware of the risks, consequences and safeguards concerned and their rights in relation to the processing of personal data"*[48]*.*

Children are considered 'vulnerable' subjects (see Recital 75), but no other conditions of vulnerability are expressly spelled out in the GDPR.[49] The WP29, however, extended the considerations for children to "people with disabilities or people having difficulties in accessing the information"[50]. Therefore, their needs and hurdles should be specifically taken into account when designing and evaluating the quality, accessibility, and understandability of information.

47 Recitals 58, 65, and Article 12(1) GDPR.

48 Recital 38 GDPR.

49 Contrary, for example, to the consumer protection framework, where the notion of 'vulnerable consumer' is explicitly defined (i.e. someone that might not be able to take a rational/economic behaviour due to "their mental or physical infirmity, age or credulity"). See, Article 5(3), Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council [2005] OJ L149/22; and Recital 34, Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council [2011] OJ L304/64.

50 WP29, 'Guidelines on Transparency' (n 6) 11.

Although not explicitly labelled as a form of vulnerability, the GDPR recognises that the data subject might be exposed to a structural weakness vis-a-vis,

> *"situations where the proliferation of actors and the technological complexity of practice make it difficult for the data subject to know and understand whether, by whom and for what purpose personal data relating to him or her are being collected, such as in the case of online advertising"*[51].

Therefore, the processing occurring in the data-driven economy should require a more careful consideration of the strategies and solutions to effectively inform data subjects.

The concern about the structural and knowledge imbalance between the data subject and the controller was confirmed in case law from the Court of Justice of the EU. In denying the validity of a cookie consent obtained through a pre-ticked box,[52] the Court recognised that the principle of transparency, coupled with the principle of fairness, imposes an additional layer of care (a duty to explain, we might say) in a complex technological environment. In this case, information should be:

> *"clearly comprehensible and sufficiently detailed so as to enable the user to comprehend the functioning of the cookies employed"*[53],

Interestingly, in the opinion of the General Advocate Spuznar the benchmark of the 'average Internet user'[54] in the context of online advertising practices is quite low:

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51 Recital 58 GDPR.

52 The matter, discussed under Directive 95/46/EC of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data [1995] OJ L281/31, has been now resolved at Recital 32 GDPR and the case law of the European Court of Justice (see, *Planet49* (n 39)).

53 *Planet49* (n 39) para 74.

54 The expression 'average Internet user' is used by the Advocate General Szpunar that finds a "conceptual proximity" between the situation of Internet user in this case and the notion of European consumer. For a critical analysis of the concept of data subject as consumer, see Gloria González Fuster, 'How Uninformed Is the Average Data Subject? A Quest for Benchmarks in EU Personal Data Protection' (2014) Revista de Internet, Derecho y Política 92.

> *"due to the technical complexity of cookies, the asymmetrical information between provider and user and, more generally, the relative lack of knowledge of* any *average internet user, the average internet user cannot be expected to have a high level of knowledge of the operation of cookies"*[55].

Therefore, the technological context might require the provisions of further information not expressed verbatim in the GDPR to ensure that the users have the clear picture of the consequences deriving from their consent (in that case, the duration of the operation of cookies)[56].

Hence, there are some spaces in the EU data protection framework for recognising a duty for the controller to adapt the content and presentation of information in light of the concrete circumstances of the processing and the intended or foreseeable recipient of that information.

Along these lines, the WP29 specified that the information must be understood by:

> "*an average member of the intended audience* […] An accountable data controller will have knowledge about the people they collect information about and it can use this knowledge to determine what that audience would likely understand"[57].

How should this 'average member of the intended audience' be interpreted? Should it be considered in abstract terms, along the lines of the 'average consumer' (i.e. a normative standard not based on statistical test)?[58]

In our opinion, the notion of data subject is porous to behavioural insights coming from user research, as the one usually conducted in a Legal Design project. The WP29, for instance, encourages user testing and empirical evaluation as a part of the general duty of accountability

55 *Planet49* (n 39), Opinion of AG Szpunar para 114.

56 Not included in the list of mandatory disclosures at the time of Directive 95/46/EC.

57 WP29, 'Guidance on Transparency' (n 6) 7.

58 It must be said that also the legal fictio of the 'average consumer' has been retained porous to empirical insights. See, Fabrizio Esposito, 'Conceptual foundations for a European consumer law and behavioural sciences scholarship' in Hans-Wolfgang Micklitz, Anne-Lise Sibony, Fabrizio Esposito (eds), *Research Methods in Consumer Law* (Edward Elgar 2018).

of the controller.[59] Here the WP29 expressly mentions the relevance to adopt a behaviourally informed disclosure-design:

> *"If controllers are uncertain about the level of intelligibility and transparency of the information and effectiveness of user interfaces/notices/policies etc.,* they can test these*, for example, through mechanisms such as user panels, readability testing, formal and informal interactions and dialogue with industry groups, consumer advocacy groups and regulatory bodies, where appropriate, amongst other things"*[60]*.*

The examples given by the WP29 reflect some of the methodologies adopted in Legal Design and Empirical Legal Studies to check whether the message is actually understood by its recipient.[61]

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59 It is interesting to note that this aspect has been challenged in a recent case before the Irish Data Protection Commission about the compliance of Whatsapp with the principle of transparency. The decision reports an extract from Whatsapp submission, where the company argues that: "*There is no requirement in the GDPR for controllers to engage experts, or carry out research to assess the best approach to provide the information required by Art. 13 GDPR, or proactively engage with the Commission in advance of launch. In carrying out this work, WhatsApp considers it exceeded what could reasonably be expected of it in order to seek to meet its GDPR transparency requirements"* (see, Irish Data Protection Commission, decision 20th August 2021 [DPC Inquiry Reference: IN-18-12-2] <https://edpb.europa.eu/our-work-tools/consistency-findings/register-for-decisions_en> para 641). Regrettably, the Irish Commissioner does not engage with this point directly. Nevertheless, it stresses that the efforts towards compliance done by the company can be weighted to a limited extent and are not sufficient if they do not achieve the intended transparency result (ibid § 642). The Irish Commissioner found WhatsApp in breach of its obligation transparency towards users and non-users, issuing a fine of 225 million Euros following the decision by the EDPB (n 6).

60 WP29, 'Guidelines on Transparency' (n 6) 7. Emphasis added.

61 Arianna Rossi, 'Legal Design for the General Data Protection Regulation: A Methodology for the Visualisation and Communication of Legal Concepts' (University of Bologna 2019). With reference to contracts, see the work by Stefania Passera, 'Beyond the Wall of Contract Text-Visualizing Contracts to Foster Understanding and Collaboration within and across Organizations' (DPhil thesis, Aalto University 2017); Gerlinde Berger-Walliser, Thomas D Barton and Helena Haapio, 'From Visualization to Legal Design: A Collaborative and Creative Process' (2017) 54 American Business Law Journal 347. When developing a solution note that the testing is a mandatory phase of the process.

4. Few caveats and one proposal

The Guidance of the WP29 is particularly interesting as it provides several recommendations and concrete examples on how to convey information to data subjects in a more transparent way. For instance, they suggest the use of layered information notices (especially online) aimed at reducing the "information fatigue" and the problem of information overload.[62] Further tools might consist of "cartoons, infographics or flowcharts"[63], or "comics […], pictograms, animations"[64] especially when children must be informed. This guidance represents a valuable starting point to take into account when drafting information and communications for the data subject.

Examples of information or graphic design strategies for informing individuals are documented in Rossi and others, where a collection of 'legal design patterns', i.e. information design solutions to solve recurrent problems – in that case – transparency-related, is presented.[65] Building on the behavioural literature about cognitive biases in individuals' decision-making process, the authors identify different visual and informational patterns to provide information aimed at enabling rational choices.

Such solutions can help to implement the principle of transparency in practice. However, they cannot retain an automatic seal of transparency nor a certificate of compliance with the GDPR. First, because these legal design patterns intervene on the 'front end'[66], i.e. when the information has to be communicated. They do not ensure that the information presented is accurate and reflects a fair processing, but they do presuppose it. Second, and more importantly, design patterns should be considered in their actual context of deployment.

The adoption of design principles into legal communication is a delicate activity that needs careful scrutiny. For instance, some designs

62 WP29, 'Guidelines on Transparency' (n 6) 7.

63 ibid 13.

64 ibid.

65 Arianna Rossi and others, 'When Design Met Law: Design Patterns for Information Transparency' (2019) Droit de la Consommation= Consumenterecht: DCCR 79.

66 Following the distinction by Margaret Hagan on legal design operating at the front end, i.e. using design to create better interfaces that can make the legal system more understandable, and back end, i.e. using design to improve the making of the legal system and rules. Hagan (n 1).

could be detrimental to the user and against the very same principle of transparency. It is the case of the so-called 'dark patterns'[67]. These are design solutions that mislead users and lead them toward a certain decision path, hiddenly affecting their decision-making process.[68] These may well consist of a misleading presentation and visualisation of information. While many authors stress the 'intentionality' of the practice to mislead as a key feature of dark patterns, others look at the effect, i.e. whether the practice is likely to trick the data subject in practice.[69] From a legal point of view, this latter interpretation is more convincing, as it is not necessary to ascertain the subjective intention of the designer or the controller adopting a certain interface to attract the protection granted under the GDPR. The potential misleading effect will suffice. A layered notice that omits relevant information upfront should be considered unlawful whether the framing is done on purpose or not.

Dark design patterns are now extensively documented in the literature.[70] Therefore, although not formally contained in a 'black list' of forbidden practices, a diligent controller shall restrain from using such controversial design choices when drafting or using a privacy policy or a consent request form.

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67 Harry Brignull coined the term and inaugurated a 'hall of shame' with exemplars in 2010, https://www.darkpatterns.org/hall-of-shame. The hall of shame has been moved to Twitter, where every user is free to contribute and signal dodgy examples of dark patterns they have encountered online.

68 Jamie Luguri and Lior Jacob Strahilevitz, 'Shining a Light on Dark Patterns' (2021) 13 Journal of Legal Analysis 43.

69 Natali Helberger and others, 'EU Consumer Protection 2.0. Structural Asymmetries in Digital Consumer Markets' (2021) 109 <www.beuc.eu/publications/beuc-x-2021-018_eu_consumer_protection.0_0.pdf> accessed 21 August 2021.

70 See, Colin M Gray and others, 'The Dark (Patterns) Side of UX Design' (Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, April 2018); Arunesh Mathur and others, 'Dark Patterns at Scale: Findings from a Crawl of 11K Shopping Websites' (Proceedings of the ACM on Human-Computer Interaction, November 2019); Arunesh Mathur, Mihir Kshirsagar and Jonathan Mayer, 'What Makes a Dark Pattern... Dark? Design Attributes, Normative Considerations, and Measurement Methods' (Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems, May 2021); Luguri and Strahilevitz (n 64). More specifically in the privacy field: Christoph Bösch and others, 'Tales from the Dark Side: Privacy Dark Strategies and Privacy Dark Patterns' (2016) Proceedings on Priva-

On a more general level, the risk to use design solutions without a proper understanding of them or their consequences might end up in inefficient tools which do not solve the problem that they are applied to solve. For instance, one pattern might work well in a context, but not in others: e.g. a privacy policy presented in the form of a comic where the characters speak in dialect can be a catchy way to attract the attention of local readers; it will not have the same effect if the communication addresses foreign children coming for a school trip. This latter is an exemplification of what Doty and Gupta describes as 'anti-patterns', i.e. patterns used out of context (e.g. focusing on a problem other than the one intended, applied in a different scenario), obsolete, or used with unintended consequences.[71] Hence, designing privacy notices is not a simple task and the application of information and graphic design principles cannot be improvised. Legal Design projects require time, user research, and evaluation.

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cy Enhancing Technologies 237; Lothar Fritsch, 'Privacy Dark Patterns in Identity Management' (Open Identity Summit Proceedings, 2017); Norwegian Consumer Council, 'Deceived by Design, How Tech Companies Use Dark Patterns to Discourage Us from Exercising Our Rights to Privacy' (2018) <https://fil.forbrukerradet.no/wp-content/uploads/2018/06/2018-06-27-deceived-by-design-final.pdf> accessed 25 February 2020; CNIL, 'IP Report: Shaping Choices in the Digital World | LINC' (2019) <https://linc.cnil.fr/fr/ip-report-shaping-choices-digital-world> accessed 25 February 2020; Midas Nouwens and others, 'Dark Patterns after the GDPR: Scraping Consent Pop-Ups and Demonstrating Their Influence' (Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems, April 2020); PAJ Graßl and others, 'Dark and Bright Patterns in Cookie Consent Requests' (2021) 3 Journal of Digital Social Research 1; Colin M Gray and others, 'Dark Patterns and the Legal Requirements of Consent Banners: An Interaction Criticism Perspective' (Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems, May 2021).

71 Nick Doty and Mohit Gupta, 'Privacy Design Patterns and Anti-Patterns Patterns Misapplied and Unintended Consequences' (Symposium on Usable Privacy and Security, July 2013). Doty and Gupta discuss the issue of patterns and anti-patterns in the context of privacy-by-design tools in general. For instance, they consider privacy policies as such a privacy design pattern to facilitate the action of expert watchdogs that can have a view of the privacy practices of a controller. At the same time, they can be an anti-pattern if the problem they intend to solve is the 'clicking-without-reading' attitude of the general Internet user. On the distinction between patterns and anti-patterns, see moreover, Andrew Koenig, 'Patterns and Antipatterns' in Linda Rising (ed), *The patterns handbook: techniques, strategies,*

In order to support controllers and promote the overall transparency of the data-driven environment, it is our opinion that this legal design effort should be brought at a higher level. For instance, data protection authorities could provide a 'GDPR disclosure annotated template' incorporating a design human-centred approach.

The template would be a modular design solution building from best information design practices, such as design patterns aimed at conveying the information in a transparent way.[72] The template should result in a standardised layout, with room for customisation based on the actual audience addressed.[73] The standardisation of the content and the layout would be a functional solution because it allows the comparison of the data protection conditions by the data subjects.[74] The goal of standardisation will not be affected by the possibility of adapting the presentation to categories of subjects, as these would be 'personas', i.e. standard categories as well. Personas are commonly adopted during the first stage of a legal design thinking process to take into account the users' needs and aspirations. However, it is important to stress that even if they are standard categories, personas are not stereotypical characterisations of

and applications (CUP 1998).

72 In this sense, it is encouraging to see that the Italian Data Protection Authority has recently launched a collaboration with the Italian chapter of Creative Commons to simplify the privacy policies in light of the famous CC 3-layered approach, see Italian Data Protection Authority, 'Semplificare le informative privacy attraverso il metodo "Creative Commons". Protocollo tra Garante Privacy e Creative Commons del 26 Luglio 2021' [doc web 9684797] <https://www.garanteprivacy.it/home/docweb/-/docweb-display/docweb/9684797> accessed 30 August 2021.

73 A similar proposal in the consumer protection context is suggested by Joanna Aleksandra Luzak, 'Tailor-made Consumer Protection: Personalisation's Impact on the Granularity of Consumer Information' in Marcelo Corrales Compagnucci and others (eds), *Legal Design: Integrating Business, Design and Legal Thinking with Technology* (Edward Elgar forthcoming). The author suggests that policy makers should provide guidances on how to adapt design and content of standard disclosures, grounded on empirical research, to enhance the comprehensibility of information depending on the category of consumers. This should be an intermediate step (a pilot, we might say) before moving toward a more granular personalisation of disclosures fueled by Big Data.

74 The importance of standardisation in the consumer context has been stressed by Natali Helberger, 'Form Matters: Informing Consumers Effectively' (2013) Amsterdam Law School Research Paper <www.ivir.nl/publicaties/download/Form_matters.pdf> accessed 20 February 2020.

possible users. On the contrary, such tools are rooted in empirical methodology and their construction is based on actual research data. [75]

Furthermore, the template should be annotated, in the sense that it should consist of a step-by-step guide explaining what elements of the processing the controllers shall consider (including the audience of the communication), what information should go in each layer (including, where appropriate depending on the circumstances, what information should be provided in addition to the mandatory list mentioned at Article 12(1) GDPR), and how it should be presented (including where and when it should be provided). In this way, by connecting the design of the processing with the need to adequately communicate it to the user, the transparency of the processing is intertwined in a functional way to the other fundamental data protection principles to the benefit of the data subject.

Ideally, the tool could additionally generate the privacy policy based on the information inputted by the controller. Furthermore, to provide additional support, the tool should generate alert messages, flagging potential inconsistencies among the data entered by the controllers or potential violations of the GDPR. The alert should contain a brief explanation of the possible reasons of the issue spotted and outline the steps to address it.

A template like the one proposed here should not be a one-off tool. It will need to be integrated in the controllers' data protection by design and by default measures and with the data protection impact assessment process, when conducted.

5. Conclusions

The GDPR recognises a user-centric notion of transparency. This means that the information obligations should be constructed around the actual recipient of that information. The LD human-centred approach can help. It provides tools and methods for delivering the information in a

75 Amber Westerholm-Smyth, 'Your Personas Probably Suck. Here's How You Can Build Them Better' (*Medium*, 3 July 2020) <https://medium.com/uxr-content/your-personas-probably-suck-heres-how-you-can-build-them-better-b2b32a45c93b> accessed 30 August 2021.

more granular way, tailoring it to the audience. However, there are a few important points to consider before starting any LD intervention.

First, a statement of the obvious: any LD work shall comply with the law. In other terms, the GDPR rules, as interpreted by the CJEU, the EDPB and the national DPAs, should be considered as operational requirements when designing a disclosure.

Second, LD interventions must be taken seriously and cannot be misunderstood for mere aesthetic embellishments. The form pursues a function, namely the provision of information in a way that is effective. A LD work, like a research project, requires time, effort, and expertise. Clumsy or malicious attempts can make matters worse. To this end, the Chapter proposes to develop a LD initiative for creating a 'GDPR disclosure annotated template' at the European level. Such a template should be devised as a standardised but modular solution to guide the data controllers in the creation of their own privacy policies and communications to the data subject. This tool could represent a useful solution not only for the data subject (because if the content and format is standardised, then the comparability of data protection conditions becomes easier), and for the controller (who would have a guiding instrument), but also for enforcement authorities and digital rights groups (who could investigate certain complaints and violations more efficiently, e.g. through automated tools).

In this Chapter, we have considered LD applicable to the provision of the legal communication devised in the GDPR. However, this is only one part of its actual potential. LD could be implemented to create further human-centred solutions for effectively solving or preventing information asymmetries beyond privacy notices. The personalisation of information relying on Big Data,[76] the creation of privacy icons signalling the risks of the processing,[77] or the automated translation of legalese into plain language[78] are some examples of the research lines currently at the centre of scholarly investigation.

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76 Luzak (n 73).

77 Zohar Efroni and others, 'Privacy Icons: A Risk-Based Approach to Visualisation of Data Processing' (2019) 5 European Data Protection Law Review 352.

78 Marcelo Corrales Compagnucci, Mark Fenwick, Helena Haapio, 'Digital Technology, Future Lawyers and the Computable Contract Designer of Tomorrow' in Marcelo Corrales Compagnucci, Helena Haapio, Mark Fenwick (eds), *Research Handbook on*

Nonetheless, design can contribute in other ways to the field of data privacy. It can help "critique, speculate, and explore critical alternatives"[79]. There are forms of design – such as speculative design, discursive design, fiction design, forensic architecture[80] – that can be used to question the status quo of data protection, digging into its shortcomings, its nature, reconstructing the past of a certain solution, or exploring what alternative future would be conceivable.[81] Here the artifact is not meant to solve a problem, nor to determine what the future should be. The goal of such types of design is to elicit a reflection,[82] spark the debate,[83] prefigure actions.[84] These methods would be useful not only to privacy scholars to challenge their assumptions and unleash their intellectual creativity,[85] but also to policy makers to engage citizens in imagining the implications of future policy initiatives,[86] and to data protection advocates to make "political speculations easier to experience, to experiment with, and ultimately to enact"[87]. This avenue is not exempted from difficulties and limitations, but it seems that is time to start asking ourselves 'what if?'

Contract Design (Edward Elgar forthcoming).

79 Richmond Y Wong and Deirdre K Mulligan, 'Bringing Design to the Privacy Table' (CHI Conference on Human Factors in Computing Systems Proceedings, Glasgow, May 2019).

80 Amanda Perry-Kessaris, *Doing Socio-Legal Research in a Design Mode* (Routledge 2021).

81 For an overview of these different design forms, see Apolline Le Gall, 'Legal Design beyond Design Thinking: processes and effects of the four spaces of design practices for the legal field', in this Volume.

82 Anthony Dunne and Fiona Raby, *Speculative everything* (MIT Press 2013).

83 Bruce M Tharp and Stephanie M Tharp, *Discursive design* (MIT Press 2018).

84 Carl Di Salvo, 'Design and Prefigurative Politics' (2016) 8(1) The Journal of Design Strategies 29.

85 Perry-Kessaris (n 80).

86 Emmanuel Tsekleves and others, *The little book of speculative design for policy-makers* (Lancaster University 2020). Speculative design has been experimented by the UK Courts & Tribunals Service in collaboration with the Policy Lab to explore the future of 'Open Justice', <https://openpolicy.blog.gov.uk/2019/11/01/using-speculative-design-to-explore-the-future-of-open-justice/> accessed 30 August 2021.

87 Di Salvo (n 84) 34, as reported in Perry-Kessaris (n 80).

Bibliography

Berger-Walliser G, Barton TD, Haapio H, 'From Visualization to Legal Design: A Collaborative and Creative Process' (2017) 54 American Business Law Journal 347

Bösch C and others, 'Tales from the Dark Side: Privacy Dark Strategies and Privacy Dark Patterns' (2016) Proceedings on Privacy Enhancing Technologies 237

CNIL, 'IP Report: Shaping Choices in the Digital World | LINC' (2019) <https://linc.cnil.fr/fr/ip-report-shaping-choices-digital-world> accessed 25 February 2020

Compagnucci MC, Fenwick M, Haapio H, 'Digital Technology, Future Lawyers and the Computable Contract Designer of Tomorrow' in Compagnucci MC, Haapio H, Fenwick M (eds), *Research Handbook on Contract Design* (Edward Elgar forthcoming)

Di Salvo C, 'Design and Prefigurative Politics' (2016) 8(1) The Journal of Design Strategies 29

Doty N, Gupta M, 'Privacy Design Patterns and Anti-Patterns Patterns Misapplied and Unintended Consequences' (Symposium on Usable Privacy and Security, July 2013)

Ducato R, 'Data protection, scientific research, and the role of information' (2020) 37 Computer Law and Security Review 105412

Dunne A, Raby F, *Speculative everything* (MIT Press 2013)

Efroni Z and others, 'Privacy Icons: A Risk-Based Approach to Visualisation of Data Processing' (2019) 5 European Data Protection Law Review 352

Esposito F, 'Conceptual foundations for a European consumer law and behavioural sciences scholarship' in Micklitz HW, Sibony A, Esposito F (eds), *Research Methods in Consumer Law* (Edward Elgar 2018)

Fritsch L, 'Privacy Dark Patterns in Identity Management' (Open Identity Summit Proceedings, 2017)

Gloria González G, 'How Uninformed Is the Average Data Subject? A Quest for Benchmarks in EU Personal Data Protection' (2014) Revista de Internet, Derecho y Política 92

-- 'Article 18' in Kuner C, Bygrave LA, Docksey C (eds), *The EU General Data Protection Regulation (GDPR): A Commentary* (OUP 2020)

-- 'Article 19' in Kuner C, Bygrave LA, Docksey C (eds), *The EU General Data Protection Regulation (GDPR): A Commentary* (OUP 2020)

Graßl PAJ and others, 'Dark and Bright Patterns in Cookie Consent Requests' (2021) 3 Journal of Digital Social Research 1

Gray CM and others, 'The Dark (Patterns) Side of UX Design' (Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, April 2018)

-- 'Dark Patterns and the Legal Requirements of Consent Banners: An Interaction Criticism Perspective' (Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems, May 2021)

Hagan MD, *Law By Design* (2016) <https://lawbydesign.co/> accessed 22 August 2021

Helberger N, 'Form Matters: Informing Consumers Effectively' (2013) Amsterdam Law School Research Paper <www.ivir.nl/publicaties/download/Form_matters.pdf> accessed 20 February 2020

Helberger N and others, 'EU Consumer Protection 2.0. Structural Asymmetries in Digital Consumer Markets' (2021) <www.beuc.eu/publications/beuc-x-2021-018_eu_consumer_protection.0_0.pdf> accessed 21 August 2021

Kaminski ME, Malgieri G, 'Multi-layered explanations from algorithmic impact assessments in the GDPR' (Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency, January 2020)

Koenig A, 'Patterns and Antipatterns' in Rising L (ed), *The patterns handbook: techniques, strategies, and applications* (CUP 1998)

Luguri J, Strahilevitz LJ, 'Shining a Light on Dark Patterns' (2021) 13 Journal of Legal Analysis 43

Luzak JA, 'Tailor-made Consumer Protection: Personalisation's Impact on the Granularity of Consumer Information' in Compagnucci MC and others (eds), *Legal Design: Integrating Business, Design and Legal Thinking with Technology* (Edward Elgar forthcoming)

Mathur A and others, 'Dark Patterns at Scale: Findings from a Crawl of 11K Shopping Websites' (Proceedings of the ACM on Human-Computer Interaction, November 2019)

Mathur A, Kshirsagar M, Mayer J, 'What Makes a Dark Pattern... Dark? Design Attributes, Normative Considerations, and Measurement Methods'

(Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems, May 2021)

Norwegian Consumer Council, 'Deceived by Design, How Tech Companies Use Dark Patterns to Discourage Us from Exercising Our Rights to Privacy' (2018) <https://fil.forbrukerradet.no/wp-content/uploads/2018/06/2018-06-27-deceived-by-design-final.pdf> accessed 25 February 2020

Nouwens M and others, 'Dark Patterns after the GDPR: Scraping Consent Pop-Ups and Demonstrating Their Influence' (Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems, April 2020)

Passera S, 'Beyond the Wall of Contract Text-Visualizing Contracts to Foster Understanding and Collaboration within and across Organizations' (Aalto University 2017)

Perry-Kessaris A, *Doing Socio-Legal Research in a Design Mode* (Routledge 2021)

Rossi A, 'Legal Design for the General Data Protection Regulation: A Methodology for the Visualisation and Communication of Legal Concepts' (DPhil thesis, University of Bologna 2019)

Rossi A and others, 'When Design Met Law: Design Patterns for Information Transparency' (2019) Droit de la Consommation= Consumenterecht: DCCR 79

Tharp BM, Tharp SM, *Discursive design* (MIT Press 2018)

Tsekleves E and others, *The little book of speculative design for policy-makers* (Lancaster University 2020)

Westerholm-Smyth A, 'Your Personas Probably Suck. Here's How You Can Build Them Better' (*Medium*, 3 July 2020) <https://medium.com/uxr-content/your-personas-probably-suck-heres-how-you-can-build-them-better-b2b32a45c93b> accessed 30 August 2021

Wong RY, Mulligan DK, 'Bringing Design to the Privacy Table' (CHI Conference on Human Factors in Computing Systems Proceedings, Glasgow, May 2019)

Zanfir-Fortuna G, 'Article 15' in Kuner C, Bygrave LA, Docksey C (eds), *The EU General Data Protection Regulation (GDPR): A Commentary* (OUP 2020)

-- 'Article 21' in Kuner C, Bygrave LA, Docksey C (eds), *The EU General Data Protection Regulation (GDPR): A Commentary* (OUP 2020)

International Instruments

Council of Europe, Modernised Convention 108 on Data Protection 2018

EU instruments

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC [2016] OJ L119/1

Directive 95/46/EC of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data [1995] OJ L281/31

Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council [2005] OJ L149/22

Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council [2011] OJ L304/64

Case law

CJEU

Case C673/17 Planet49 [2019] ECLI:EU:C:2019:801

Case C673/17 Planet49 [2019] Opinion of AG Szpunar ECLI:EU:C:2019:246

EU Data Protection Board and WP29 documents

EDPB, 'Binding decision 1/2021 on the dispute arisen on the draft decision of the Irish Supervisory Authority regarding WhatsApp Ireland under Art. 65(1)(a) GDPR', 28 July 2021 <https://edpb.europa.eu/system/files/2021-09/edpb_bindingdecision_202101_ie_sa_whatsapp_redacted_en.pdf>

WP29, 'Guidelines on Personal data breach notification under Regulation 2016/679' (WP 250 rev.01 as last revised and adopted on 6 February 2018)

WP29, 'Guidelines on Transparency under Regulation 2016/679' (WP 260 rev.01 as last revised and adopted on 11 April 2018)

National Data Protection Authorities decisions and documents

Italian Data Protection Authority, Semplificare le informative privacy attraverso il metodo "Creative Commons". Protocollo tra Garante Privacy e Creative Commons del 26 Luglio 2021 [doc web 9684797] <https://www.garanteprivacy.it/home/docweb/-/docweb-display/docweb/9684797>

Irish Data Protection Commission, decision 20th August 2021 [DPC Inquiry Reference: IN-18-12-2] <https://edpb.europa.eu/our-work-tools/consistency-findings/register-for-decisions_en>

8. BACK TO THE FUTURE WITH ICONS AND IMAGES: USING 'LOW-TECH' TO COMMUNICATE AND PROTECT PRIVACY AND DATA

Marietjie Botes and Arianna Rossi

1. The quest for a universal language

Since the myth of the tower of Babel, humankind has been concerned with the impossibility of communicating across cultures, societies, and literacy levels. Although multilingualism can solve some of these challenges, pictograms and images carry even more potential of easily crossing cultural barriers. This is why traffic worldwide is governed by a set of symbols that uses minimal lettering to be culturally neutral and avoid misunderstandings on the road that could be fatal.[1] Similar wayfinding systems were created for the Olympic games in the Seventies and have then spread to be internationally adopted in airports and similar facilities where travellers of different origins need to move around effortlessly and rapidly.[2]

Convinced by the success of such initiatives in a growingly globalized society, policymakers have started to propose and regulate the use of pictograms in other domains, for instance to improve public safety. The European Union has elaborated and standardized several sets of symbols, seals, and labels meant to transparently inform consumers about the characteristics of similar products and support them in their comparison of the products to make better purchase decisions, for example in terms of energy consumption and food.[3]

1.1. Iconic language for data privacy

Basing their assumptions on similar premises, recently regulators[4] have

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1 Rayan Abdullah and Roger Hübner, *Pictograms, Icons & Signs: A Guide to Information Graphics* (WW Norton 2006).

2 Arianna Rossi and Gabriele Lenzini, 'Making the Case for Evidence-Based Standardization of Data Privacy and Data Protection Visual Indicators' (2020) 8 Journal of Open Access to Law 1.

3 ibid.

4 In Article 12(7), the General Data Protection Regulation explicitly provides for the use of standardised icons to give "in an easily visible, intelligible and clearly legible manner a meaningful overview of the intended processing". Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the

proposed the creation of a standardized iconic language capable to express data privacy concepts. Like pictograms employed to protect consumers, such a visual vocabulary would plainly inform individuals about how their personal data are collected and processed, including the entailed risks. It would thus supposedly empower them to make more informed decisions about whether to use one service over another.

In fact, icons are designed by humans with intent, thus their meaning must be interpreted by the viewer (unlike e.g., most photographs). If they intend to communicate efficiently and trespass language barriers, icons need to be easily recognizable. Lastly, they are a means to attract and retain the attention of viewers.[5] Pictograms can be designed for multiple goals: they may give directions, inform about a state, or signal the existence of an entity (i.e., indicative function); they may aim to induce or discourage a certain behaviour (i.e., imperative function); or they may try to influence the feeling of the receiver to trigger a certain reaction (i.e., suggestive function).[6]

The use of icons to increase information transparency has been conceived to solve some of the well-known problems of privacy notices that fail to effectively inform individuals about personal data practices, i.e., extreme length, language complexity, lack of visible textual structure.[7] For instance, existing evidence points to the role of icons to enhance navigability and noticeability of key notions in online legal notices,[8] even though much of the existing usable privacy research focuses on standardized formats and labels[9] rather than pictograms. Generally,

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Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data, and Repealing Directive 95/46/EC [2016] OJ L119/1 (GDPR).

5 Rossi and Lenzini (n 2) 2-3.

6 ibid 3.

7 Arianna Rossi and others, 'When Design Met Law: Design Patterns for Information Transparency' (2019) Droit de la Consommation = Consumenterecht : DCCR 79.

8 The Behavioural Insights Team, 'Best Practice Guide. Improving Consumer Understanding of Contractual Terms and Privacy Policies: Evidence-Based Actions for Businesses' (Department of Business, Energy and Industrial Strategy of the UK 2019).

9 Patrick Gage Kelley and others, 'Standardizing Privacy Notices: An Online Study of the Nutrition Label Approach' (SIGCHI Conference on Human factors in Computing Systems, ACM, 2010).

icons can improve legal documents understandability, help information finding,[10] and retain a reader's attention.[11] They can be easily recognized, processed, and memorized, serving as cognitive support.[12] Usable security research demonstrates that visual indicators are effective to attract and retain attention, improve understanding, and make online risks more tangible.[13] On the other hand, some studies revealed the potential danger of misleading individuals[14] due to lack of standardization,[32] low quality design,[15] bad implementation,[16] or misalignments between designers' and users' mental models,[17] which casts doubt about the reliability of visual indicators for privacy and security.

1.2. Necessary conditions for universality

To overcome such challenges, two solutions can be devised. The first is a standardization that can be achieved via two complementary means, namely the combination of established norms and uniform use.[18] The European Commission has imposed the standardization of the consumer

10 Stefania Passera, 'Beyond the Wall of Text: How Information Design Can Make Contracts User-Friendly' (International Conference of Design, User Experience, and Usability, 2015).

11 Matthew Kay and Michael Terry, 'Textured Agreements: Re-Envisioning Electronic Consent' (Sixth Symposium on Usable Privacy and Security, ACM, 2010).

12 Connie Malamed, *Visual Language for Designers: Principles for Creating Graphics That People Understand* (Rockport Publishers 2009).

13 Sadie Creese and Koen Lamberts, 'Can Cognitive Science Help Us Make Information Risk More Tangible Online?' 24(6) Intelligent Systems, IEEE 32.

14 Ana Ferreira and others, 'Do Graphical Cues Effectively Inform Users?' (International Conference on Human Aspects of Information Security, Privacy, and Trust, 2015).

15 Jason RC Nurse and others, 'Trustworthy and Effective Communication of Cybersecurity Risks: A Review' (1st Workshop on Socio-Technical Aspects in Security and Trust (STAST), IEEE, 2011).

16 Douglas Stebila, 'Reinforcing Bad Behaviour: The Misuse of Security Indicators on Popular Websites' (22nd Conference of the Computer-Human Interaction Special Interest Group of Australia on Computer-Human Interaction, ACM, 2010).

17 Borce Stojkovski, Gabriele Lenzini and Vincent Koenig, '"I Personally Relate It to the Traffic Light" - a User Study on Security & Privacy Indicators in a Secure Email System Committed to Privacy by Default' (36th Annual ACM Symposium on Applied Computing 2021).

18 Rossi and Lenzini (n 2).

protection symbols mentioned earlier and is expected to do the same for the privacy icons, by taking expert advice into account. Habib et al., for example, have demonstrated how an empirical evaluation of icons is essential to convey the presence of privacy choices without creating misconceptions and, as a consequence, to inform policymaking.[19] The second key factor for successful standardization is widespread and coherent use of the pictograms across domains and applications. Immediately recognizable icons like the geolocation pin and the security padlock are *de facto* standards because they have been used across graphical user interfaces, becoming familiar to millions and even billions of users.

The second solution is machine-readability, which would also incidentally support the understanding of a graphical language by visually impaired people. A formal, machine-readable representation, as also prescribed in the law, can assign a semantic meaning to the icons by means of metadata in a machine-readable format (e.g., RDFa or RDF). Thus the icons become self-explainable and can facilitate searches, comparisons, and transparency.

2. From icons to characters: Comics as visual communication tool to obtain ethical and legal informed consent in genome research

Contrary to popular assumptions, icons may not always facilitate the expected level of comprehension necessary to comply with legal or ethical requirements. To fully understand what is depicted by an icon, the viewer thereof needs a certain amount of existing knowledge to make the icon easily recognisable.[20] Although the meaning of arbitrarily presented icons may be learnt over time as the viewer's familiarity with the icon increases, instant comprehension at first sight is unlikely. Factors

19 Hana Habib and others, 'Toggles, Dollar Signs, and Triangles: How to (In)Effectively Convey Privacy Choices with Icons and Link Texts' (CHI Conference on Human Factors in Computing Systems, ACM, 2021) <https://dl.acm.org/doi/10.1145/3411764.3445387> accessed 10 June 2021.

20 Arianna Rossi and Gabriele Lenzini, 'Which Properties Has an Icon? A Critical Discussion on Evaluation Methods for Standardised Data Protection Iconography' (Socio-Technical Aspects in Security and Trust. 9th International Workshop (STAST), Luxembourg City, Luxembourg, September 2019) *Revised Selected Papers* (Groß, Thomas, Theo, Tryfonas (eds), Springer 2021).

such as the viewer's cultural background, age, literacy, levels of education, sophistication, or existing knowledge of the icon's technical domain have major influences on whether the viewer can quickly and correctly interpret the meaning of the icon.[21] This assumption of pre-knowledge as condition for understanding icons poses a huge challenge to international standardisation efforts in respect of icon evaluation.[22]

On this basis the mere introduction of data protection icons to solve transparency problems and enhance privacy related communication issues has been criticised.[23] In reiteration of these icon designs it was found that the introduction of colour to designs is not only important to make a design visually more attractive, legible, and viewer-friendly, but it also enhanced direction and navigation in respect of icons used in computer displays.[24] The combination of icon and colour proved to be an effective integration of pleasure and comprehension whilst paving the way for more innovative designs following a holistic methodology that combines several media and evaluation indexes – such as comics.

2.1. Iconic thinking – a western mistake?

The human mind has powerful "image memory and processing capabilities" and images are often perceived as being universal in its communication capabilities.[25] In many areas, including the digital world, graphic

21 Siné McDougall and others, 'Measuring Symbol and Icon Characteristics: Norms for Concreteness, Complexity, Meaningfulness, Familiarity, and Semantic Distance for Symbols' (1999) 31(3) Behavior Research Methods, Instruments, & Computers 487.

22 ISO, 'Graphical-symbols–Test methods–Part 1: Method for testing comprehensibility' <https://www.iso.org/standard/59226.html> accessed 7 July 2021.

23 Yves Punie and others, 'DigComp into action, get inspired make it happen: A user guide to the European Digital Competence framework' (Publications Office of the EU, 2018) <https://op.europa.eu/en/publication-detail/-/publication/2b2c2207-5ca2-11e8-ab41-01aa75ed71a1> accessed 7 July 2021.

24 Yan-Peng and Peter C Woods, 'Experimental Color in Computer Icons' in M.L. Huang and others (eds), *Visual Information Communication* (Springer 2010) 149.

25 Ronald Baecker, Ian Small, and Richard Mander, 'Bringing icons to life' (SIGCHI Conference on Human Factors in Computing Systems, 1991) <https://dl.acm.org/doi/10.1145/108844.108845> accessed 8 July 2021. Steve A Connor, 'World's most ancient race traced in DNA study' (*UK Independent*, 23 October 2011) <https://www.independent.co.uk/news/science/world-s-most-ancient-race-traced-dna-

icons serve as road signs to guide people towards important and useful information to enable them to make informed decisions.[26] This was subsequently the premise on which a visual communication tool was designed to help bridge the communication gaps between an indigenous population and genome researchers in 2015.

The ancestry lines of the San people in southern Africa dates back approximately 100,000 years ago causing today's San people to carry the oldest living, and most diversified, genes in the world.[27] This diversity makes their genes extremely sought after globally for purposes of genomic research, i.e., to examine genetic variants and traits that provide important insights into disease development, the spread of diseases and the epigenetic influences that cause such diseases, which can lead to accelerated drug and diagnostic developments.[28] However, these genetic resources were almost lost to the world as a result of seemingly insurmountable language and educational barriers. Western researchers failed to obtain adequate ethical informed consent from San elders because they found it impossible to communicate with them and published the gene sequences without consent.[29] Despite the Working Group of Indigenous Minorities in Southern Africa objecting to this, the western scientists persisted in their refusal to engage with the San in an effort to acknowledge the need to consult with the San leadership, instead they justified their actions by referring to the ethical approval they had received from no less than four separate Research Ethics Committees (RECs). However, apart from most members of the San community

study-1677113.html> accessed 8 July 2021.

26 William Horton, 'Designing icons and visual symbols' (Conference Companion on Human Factors in Computing Systems, 1996) <https://dl.acm.org/doi/10.1145/257089.257378> accessed 8 July 2021.

27 Erna van Wyk, 'Largest genomic study shows Khoe-San people are unique' (*Phys Org*, 20 September 2012) <https://phys.org/news/2012-09-largest-genomic-khoe-san-peoples-unique.html> accessed 8 July 2021.

28 Eddie Cano-Gamez and Tania Trynka, 'From GWAS to Function: Using Functional Genomics to Identify the Mechanisms Underlying Complex Diseases' (2020) Frontiers in Genetics <https://www.frontiersin.org/articles/10.3389/fgene.2020.00424/full> accessed 8 July 2021.

29 Roger Chennells and Adriens Steenkamp, 'International Genomics Research involving the San People' in Doris Schroeder and others (eds) 'Ethics Dumping – Paradigmatic Case Studies, a report for TRUST' (Trust Project 2016) <http://trust-project.eu/deliverables-and-tools/> accessed 16 August 2021.

being illiterate, having low levels of formal education, and linguistically limited to their own indigenous languages, such indigenous populations also do not view individuality and individual rights in the same way as is commonly understood in western civilisations. In this regard numerous research ethics guidelines have been published which clearly set out the requirements for conducting research on indigenous peoples.[30] Although solutions to this problem, as proffered by the San councils, included a Code of Conduct, a research contract, an elected council, and collective permission principles, none of these provided any solution to the main problem of the San being unable to understand any consent forms presented to them, hence the need to create a communication solution that suits the needs of the San, whilst staying true and respectful of their culture.

The San have a history of storytelling and rock art to transfer knowledge which tradition, infused with modern usage of icons, could serve as an ideal medium of communication between researchers and the San population.[31] Steenberg-Botes subsequently created the visual informed consent communication tool shown in Fig. 1 to overcome the aforementioned communication obstacles and to enable the San to make fully informed decisions about their involvement in research projects, whilst protecting the public research interest in the research.

30 Australia National Health and Medical Research Council, 'Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities: Guidelines for researchers and stakeholders' (2018) <http://nhmrc.gov.au/guidelines-publications/e52> accessed 16 August 2021; and Canadian Government National Health Council, 'Research involving First Nations, Inuit and Metis Peoples of Canada' (2018) <http://www.pre-ethic.gc.ca/eng/policy-politique/initiatives/tcps2> accessed 16 August 2021.

31 David M Witelson and David-Lewis Williams, 'An ancient San rock art mural in South Africa reveals new meaning' (*The Conversation*, 31 March 2021) <https://theconversation.com/an-ancient-san-rock-art-mural-in-south-africa-reveals-new-meaning-157177> accessed 8 July 2021.

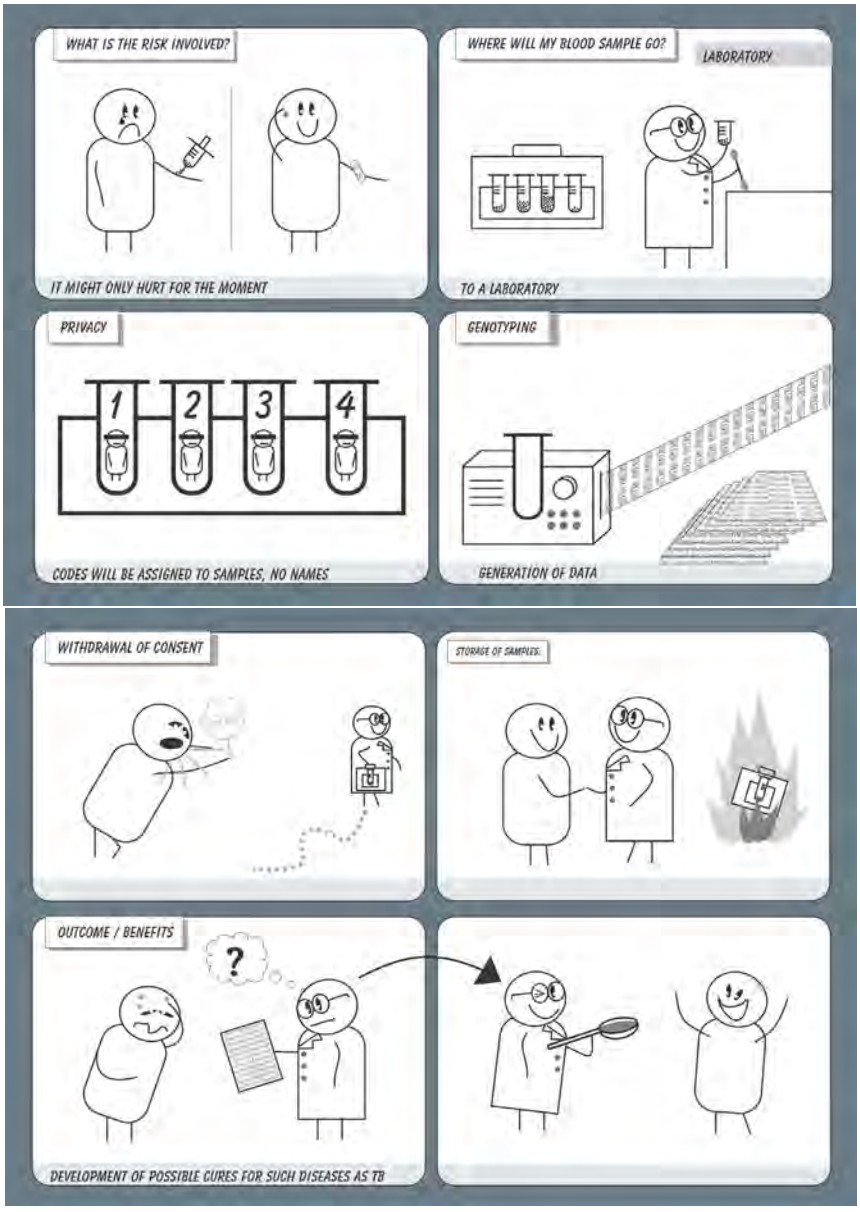


Fig. 1. Pages from the original San Genome Research comic that was tested during the study discussed

The design of this comic was conceptualised to depict the characters as a combination of icons and fully developed characters, which design was cost-effective to produce, reproduce, and scale. However, the San population did not identify with these characters. To the contrary, when viewed against the historical discrimination they suffered, it became clear that participants had a desire to be accepted by and incorporated into modern society and expressed the need to be portrayed as fully developed characters, in colour, and fully clothed in modern westernised clothing.[32]

2.2. Empirical testing and research results

The above genome consent comic was undertaken in two of the biggest South African San communities consisting of approximately 3,500 !Xhun and 1,100 Khwe speakers residing at Platfontein, 15 km from Kimberley in the northern Cape Province. A total of 150 members of these communities were identified to participate in the study, making sure that participants roughly represented the age groups of 18-30, 31-60 and 61-80+ years, and to ensure that all the age generations, levels of educational development, foreign language ability, and gender were fairly represented in the study.[33] Steenberg-Botes primarily followed a qualitative research method to explore the issues of comprehension improvement and identification with the characters, seeking insight rather than a statistical analysis of data.

Almost all the participants requested that the characters in the comics be clothed, indicating that the representation via the use of iconography did not resonate with them. This aversion seems to be related to historical discrimination and humiliation the San had to endure, hence their current strong need to fit into modern society and to be accepted by local communities, which must also be depicted in any visual material pertaining to them.[34]

32 Wilhelmina Marietjie Steenberg-Botes, 'Visual communication as legal-ethical tool for obtaining informed consent in genome research involving the San community of South Africa' (DPhil thesis, University of South Africa 2018).

33 ibid.

34 ibid.

This need confirms the theory by cartoonist McCloud, that people who prefer a more realistic depiction of visuals tend to have a more concrete perception of their environment, as opposed to the abstraction of symbols used in the written word.[35] Many of the San people also requested the use of only pictures and no words, which underscore their general concrete perception or awareness of their environment and tendency to move away from the abstraction of the written word to gravitate more towards concrete depictions, consistent with what is expected from people with lower levels of education or literacy. The participants with a higher level of education favoured the use of words in the comic more, whilst participants with lower or no levels of education favoured the exclusive use of pictures in the comic.[36]

The introduction of the genome comic increased participants comprehension of what genome research entails by 8,33%.[37] What was interesting is that there was a decrease of comprehension in two of the study questions that dealt with biological terminology and concepts of genome research, namely the methods used for obtaining genetic material (decrease of 6, 15%) and the fact that genes are located inside the human body's cells (decrease of 2, 89%).[38] It appears that research participants, when entering the study, had preconceived ideas about genes, their location, and how scientists obtain these for research purposes. Although some of the research participants previously encountered terminology relating to genomes or genome research, it was clear that they held incorrect preconceived ideas about these concepts and its actual meaning. The introduction of the comic appeared to have added to the San's initial confusion or diminished comprehension as a result of being forced to revisit such pre-conceived and incorrect ideas of these concepts when confronted with the correct meaning of genome terminology.

As opposed to the scientifically oriented questions, discussed above, the only legally oriented question that revealed a decrease in comprehension after the introduction of the comic was related to the issue of

35 Scott McCloud, 'Understanding Comics: The Invisible Art' (1993) <https://www.academia.edu/39224115/Understanding_Comics_The_Invisible_Art_Scott_McCloud> accessed 8 July 2021.

36 Steenberg-Botes (n 32).

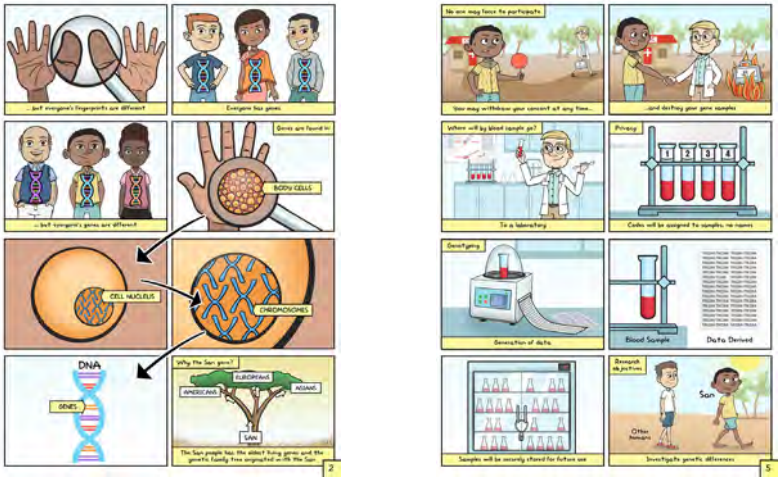
37 ibid.

38 ibid.

privacy. Research participants were especially concerned about the scientific handling of their genetic samples, as well as about the information that scientists could obtain from their biomedical samples. Almost all the participants refused to have their genome information published and were especially concerned about how the San will be depicted and received by the international (scientific) community. These concerns arguably stem from the historical exploitation that the San community in general experienced at the hands of scientists, as discussed above, as well as modern day discrimination and humiliation that they continue to suffer at the hands of local (non-San) communities.

2.3. Designing for experiental learning – colour, characters, comics

In consideration of the above research outcomes, the redesigned comic shown in Fig. 2 boasts full colour panels with much more background detail as requested by the participants during the study. Characters have also been developed into detailed characters and depict the San and scientists as fully clothed in modern day fashions and with smiling faces, as explicitly requested by the San. Text in this comic has been kept to the minimum but was still included to support the meaning of the images and provide a holistic message.



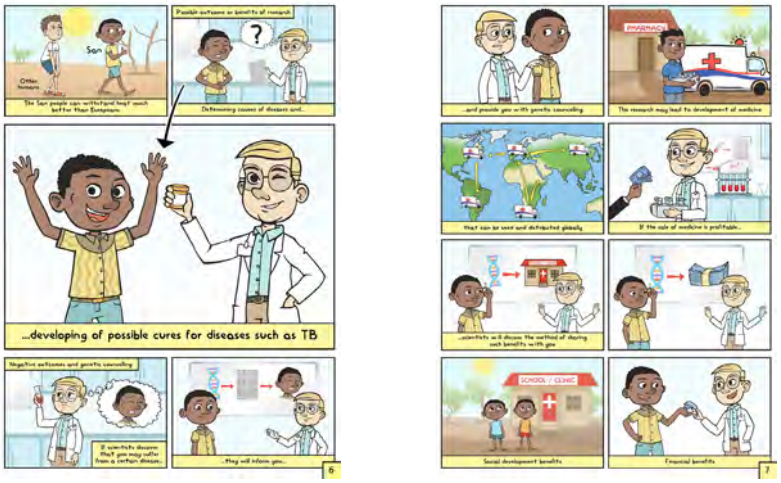


Fig. 2. Pages from the redesigned San Genome Research comic

Comics may overcome language and educational barriers and are a very effective medium to communicate complex concepts to a large diversity of people.[39] Characterising science or law brings alive otherwise abstract concepts from a lay person's perspective. The images make these concepts real and interactive, increase enjoyment and elicit an active engagement and a better information exchange between parties.[40] They provide an active learning experience as opposed to a passive one which changes the engagement dynamic and allows for deeper, more meaningful learning to take place. Traditional pedagogical approaches predominantly focus on content and are evaluative in nature, whilst experiential pedagogy focuses on the process and is developmental in nature.[41] With icons we have seen that a certain amount of existing knowledge is often necessary to make the icon easily recognisable.[42] This knowledge gap can also be overcome by the use of comics to convey

39 Elisa Schoenberger, 'Communication Science through Illustration' (2021) <https://bookriot.com/science-illustration/> accessed 8 July 2021.

40 Vincenzo De Masi and Yan Han, 'Animation: A New Method of Educational Communication in China' in Matteo Stocchetti (ed) *Media and Education in the Digital Age: Concepts, Assessments, Subversions* (Peter Lang 2014).

41 Colin Beard and Toby Rhodes, 'Experiential Learning: Using comic strips as 'reflective tools' in adult learning' (2002) 6 Journal of Outdoor and Environmental Education 58.

42 Rossi and Lenzini (n 20).

scientific or legal content to participants, thereby assisting with the development and empowerment of people.

Using graphic characters acknowledged the cultural values of the San in a respectful way and thereby allowed them the freedom to exercise autonomous decision making, more so than was the case with mere verbal information or written consent forms. This active involvement is what sets the use of comics as experiential teaching and learning mediums apart from other information or communication tools.

Comics promote comprehension which is experienced when a person understands a matter and is able to conceptualise it to help define his or her future activity, as opposed to apprehension, which is when a person is only aware of a matter in the here-and-now. The understanding of any matter is based on the formation of a proper concept thereof. Comics can facilitate the conceptualisation of otherwise abstract theories to attain a more holistic knowledge of it by achieving an adequate level of comprehension that complies with ethical and legal informed consent requirements.

Conclusions

Icons may become a universal language for data privacy only if they are standardized (both through norms and widespread, uniform use) and machine-readable to aid visually impaired people and maintain semantic meaning over time. However, they are not always the most appropriate solution to effectively communicate with different audiences. For instance, the socio-economic background and cultural rights (human rights), such as the right to receive information in a language or form that will enable full comprehension, which complies with the ethical requirement of respect and the legal requirement of dignity, must be taken into account. Therefore, any visual communication about data privacy must be sensitive to cultural interpretation. Only by incorporating human rights in the design of icons, comics, and other images will the messages be legal, ethical, and effective. Future work intends to analyze whether comics can communicate complex scientific and legal concepts to a more educated audience in a European context. It would also be meaningful to experiment whether a comic redesign may be more culturally correct and enable readers to better identify with the characters.

Bibliography

Abdullah R, Hübner R, *Pictograms, Icons & Signs: A Guide to Information Graphics* (WW Norton 2006)

Australia National Health and Medical Research Council, 'Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities: Guidelines for researchers and stakeholders' (2018) <http://nhmrc.gov.au/guidelines-publications/e52> accessed 16 August 2021

Baecker R, Small I, Mander R, 'Bringing icons to life' (SIGCHI Conference on Human Factors in Computing Systems, 1991) <https://dl.acm.org/doi/10.1145/108844.108845> accessed 8 July 2021

Beard C, Rhodes T, 'Experiential Learning: Using comic strips as 'reflective tools' in adult learning' (2002) 6 Journal of Outdoor and Environmental Education 58

Behavioural Insights Team, 'Best Practice Guide. Improving Consumer Understanding of Contractual Terms and Privacy Policies: Evidence-Based Actions for Businesses' (Department of Business, Energy and Industrial Strategy of the UK 2019)

Canadian Government National Health Council, 'Research involving First Nations, Inuit and Metis Peoples of Canada' (2018) <http://www.pre-ethic.gc.ca/eng/policy-politique/initiatives/tcps2> accessed 16 August 2021

Cano-Gamez E, Trynka T, 'From GWAS to Function: Using Functional Genomics to Identify the Mechanisms Underlying Complex Diseases' (2020) Frontiers in Genetics <https://www.frontiersin.org/articles/10.3389/fgene.2020.00424/full> accessed 8 July 2021

Chennells R, Steenkamp A, 'International Genomics Research involving the San People' in Schroeder D and others (eds) 'Ethics Dumping – Paradigmatic Case Studies, a report for TRUST' (Trust Project 2016) <http://trust-project.eu/wp-content/uploads/2016/03/TRUST-664771-Paradigmatic-Case-Studies-WP1-Final.pdf> accessed 16 August 2021

Connor S, 'World's most ancient race traced in DNA study' (*UK Independent*, 23 October 2011) <https://www.independent.co.uk/news/science/world-s-most-ancient-race-traced-dna-study-1677113.html> accessed 8 July 2021

Creese S, Lamberts K, 'Can Cognitive Science Help Us Make Information Risk More Tangible Online?' 24(6) Intelligent Systems, IEEE 32

De Masi V, Han Y, 'Animation: A New Method of Educational Communication in China' in Stocchetti M (ed) *Media and Education in the Digital Age: Concepts, Assessments, Subversions* (Peter Lang 2014)

Ferreira A and others, 'Do Graphical Cues Effectively Inform Users?' (International Conference on Human Aspects of Information Security, Privacy, and Trust, 2015)

Gage Kelley P and others, 'Standardizing Privacy Notices: An Online Study of the Nutrition Label Approach' (SIGCHI Conference on Human factors in Computing Systems, ACM, 2010)

Habib H and others, 'Toggles, Dollar Signs, and Triangles: How to (In)Effectively Convey Privacy Choices with Icons and Link Texts' (CHI Conference on Human Factors in Computing Systems, ACM, 2021) <https://dl.acm.org/doi/10.1145/3411764.3445387> accessed 10 June 2021

Horton W, 'Designing icons and visual symbols' (Conference Companion on Human Factors in Computing Systems, 1996) <https://dl.acm.org/doi/10.1145/257089.257378> accessed 8 July 2021

ISO, 'Graphical-symbols–Test methods–Part 1: Method for testing comprehensibility' <https://www.iso.org/standard/59226.html> accessed 7 July 2021

Kay M, Terry M, 'Textured Agreements: Re-Envisioning Electronic Consent' (Sixth Symposium on Usable Privacy and Security, ACM, 2010)

Malamed C, *Visual Language for Designers: Principles for Creating Graphics That People Understand* (Rockport Publishers 2009)

McCloud S, 'Understanding Comics: The Invisible Art' (1993) <https://www.academia.edu/39224115/Understanding_Comics_The_Invisible_Art_Scott_McCloud> accessed 8 July 2021

McDougall SJP and others, 'Measuring Symbol and Icon Characteristics: Norms for Concreteness, Complexity, Meaningfulness, Familiarity, and Semantic Distance for Symbols' (1999) 31(3) Behavior Research Methods, Instruments, & Computers 487

Nurse JRC and others, 'Trustworthy and Effective Communication of Cybersecurity Risks: A Review' (1st Workshop on Socio-Technical Aspects in Security and Trust (STAST), IEEE, 2011)

Passera S, 'Beyond the Wall of Text: How Information Design Can Make Contracts User-Friendly' (International Conference of Design, User Experience, and Usability, 2015)

Peng Y, Woods PC, 'Experimental Color in Computer Icons' in ML Huang and others (eds), *Visual Information Communication* (Springer 2010)

Punie Y and others, 'DigComp into action, get inspired make it happen: A user guide to the European Digital Competence framework.' (Publications Office of the EU, 2018) <https://op.europa.eu/en/publication-detail/-/publication/2b2c2207-5ca2-11e8-ab41-01aa75ed71a1> accessed 7 July 2021

Rossi A and others, 'When Design Met Law: Design Patterns for Information Transparency' (2019) Droit de la Consommation = Consumenterecht : DCCR 79

Rossi A, Lenzini G, 'Making the Case for Evidence-Based Standardization of Data Privacy and Data Protection Visual Indicators' (2020) 8 Journal of Open Access to Law 1

-- 'Which Properties Has an Icon? A Critical Discussion on Evaluation Methods for Standardised Data Protection Iconography' (Socio-Technical Aspects in Security and Trust. 9th International Workshop (STAST), Luxembourg City, Luxembourg, September 2019*) Revised Selected Papers* (Groß, Thomas, Theo, Tryfonas (eds), Springer International Publishing 2021)

Schoenberger E, 'Communication Science through Illustration' (2021) <https://bookriot.com/science-illustration/> accessed 8 July 2021

Stebila D, 'Reinforcing Bad Behaviour: The Misuse of Security Indicators on Popular Websites' (22nd Conference of the Computer-Human Interaction Special Interest Group of Australia on Computer-Human Interaction*,* ACM, 2010)

Steenberg-Botes WM, 'Visual communication as legal-ethical tool for obtaining informed consent in genome research involving the San community of South Africa' (DPhil thesis, University of South Africa 2018)

Stojkovski B., Lenzini G., Koenig V., '"I Personally Relate It to the Traffic Light" - a User Study on Security & Privacy Indicators in a Secure Email System Committed to Privacy by Default' (36th Annual ACM Symposium on Applied Computing, 2021)

van Wyk E, 'Largest genomic study shows Khoe-San people are unique' (*Phys Org*, 20 September 2012) <https://phys.org/news/2012-09-largest-genomic-khoe-san-peoples-unique.html> accessed 8 July 2021

Witelson DM, Williams DL, 'An ancient San rock art mural in South Africa reveals new meaning' (*The Conversation*, 31 March 2021) <https://

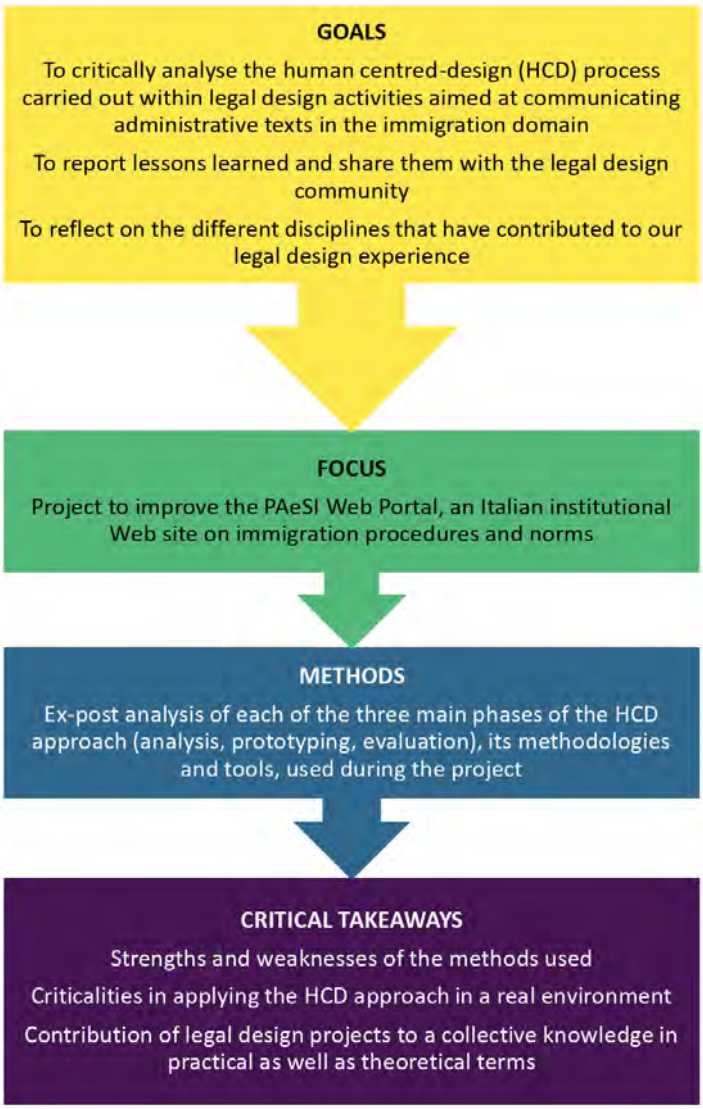
theconversation.com/an-ancient-san-rock-art-mural-in-south-africa-reveals-new-meaning-157177> accessed 8 July 2021

EU legislation

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC [2016] OJ L119/1

9. LEGAL DESIGN PROJECT ACTIVITIES IN THE IMMIGRATION DOMAIN. LESSONS LEARNED AND CONTRIBUTIONS FROM DIFFERENT DISCIPLINES

Chiara Fioravanti and Francesco Romano



1. Introduction

In recent years, as part of the development of the PAeSI Web Portal, an Italian institutional website on immigration procedures and norms, several project initiatives that can be defined as "legal design" activities were developed by the Institute of Legal Informatics and Judicial Systems of the National Research Council of Italy. These initiatives, have in fact been carried out with a human-centred approach[1], adopting the design methods and mindsets "to deliver services that were usable, useful and engaging"[2] for a specific audience in a specific legal domain.

These activities fall within the domain of access and comprehensibility of administrative texts for citizens (especially the ones published on institutional websites) and target recently settled migrants in Italy.

The following table gives a brief overview of the four different initiatives.

Name of activity	General aim
PAeSI Web Portal Redesign	Redesigning interface and information architecture of a web portal on immigration procedures and norms to simplify its use for migrants living in Italy.
Information sheets simplification	Redesigning information sheets on administrative procedures designed for expert users to adapt them for the migrant target audience.
Illustrated simplified glossary of public administrative terms.	Creating a glossary to help migrants understand Italian public administration procedures.
Co-design laboratory of public authorities' web content	Creating informative content for migrants in cooperation with Italian university students from a migrant background.

The activities were carried out in the framework of projects funded by the Asylum, Migration and Integration Fund (AMIF), led in Italy by the Italian Ministry of the Interior.

1 Jennifer Preece, Yvonne Rogers and Helen Sharp, *Interaction design: Beyond human-computer interaction* (Wiley & Sons 2019) 47.

2 Margaret Hagan, 'Law by Design' <www.lawbydesign.co> accessed 9 August 2021.

Recently settled migrants in Italy were the intended audience of the projects. However, these users have also been considered "extreme users"[3], as they belong to a vulnerable category with regard to understanding written material, particularly of the legal kind. The difficulties stem not only from linguistic obstacles but also from having a different socio-cultural background[4]. Accessing legal information is vital for all citizens but often, when conveyed by public authority websites, it is hardly accessible and understandable even by native citizens. Setting up the design process for the most vulnerable users, in this context, newcomers, was therefore useful to establish general design guidelines for this domain pertaining to a multicultural and multilingual society.

2. Description of the project activities, context and goal

The different project activities are all connected to the development of the PAeSI Web Portal.[5] This website provides information on procedures and norms regarding to immigration in Italy. It was initially designed to be consulted only by domain expert users such as immigration civil servants of the local authorities and associations who give assistance to third-country citizens living and working in Italy. Through various activities, described below, the website has subsequently undergone changes to become suitably accessible to the end users, who are the migrant target audience. In regards to the different meanings of "access to law", as indicated in Curtotti et al.[6], our activities are especially concerned with

3 According to Hagan, extreme users are users "with an extreme problem, an extreme obsession with a thing, an extreme impairment, or is otherwise at the far end of a spectrum". See ibid <www.lawbydesign.co/en/design-mindsets> accessed 9 August 2021.

4 Sara Conti and others, 'Access and knowledge of the law: supporting migrants in understanding law' (IFLA WLIC - Libraries: dialogue for change in Session 167 - Law Libraries, Athens, 2019).

5 PAeSI Web Portal (www.immigrazione.regione.toscana.it) is managed and developed by the Institute of Legal Informatics and Judicial Systems (IGSG) of the National Research Council of Italy (CNR) on behalf of the Tuscany Region and in collaboration with the Prefecture of Florence.

6 "Access to law has a number of possible meanings. The New Zealand Law Commission and the New Zealand Parliamentary Counsel's Office identify three. Firstly, access in the sense of 'availability' to the public (such as via hard copy or electronic

the second and third meanings: access in the sense of "navigability" (the ability to know of and how to reach it) and in the sense of "understandability" that allows real access to such information.

The first project activity was aimed at redesigning the interface and the information architecture of the web portal to simplify its use for lay people, specifically migrants living in Italy. The scope of the activity was to allow migrants to find information on immigration rules and procedures directly, without the "informational mediation" of specialized civil servants. Connected to this activity was the redesign of the website content intended to illustrate immigration administrative procedures[7]. In practice, information sheets on administrative procedures designed for expert users were simplified and adapted for the migrant target audience, through a collaborative process with stakeholders and users that involved language, text structure, and layout.

Furthermore, the creation of a simplified illustrated online glossary of public administrative terms was added. The content simplification activity, in fact, taught us that it was better not to replace some terms, even complex ones, with simpler synonyms but to provide a simplified explanation. These public administrative terms are technical terms believed to be useful for migrants in the integration process. They are also terms that refer to legal concepts that do not correspond to other countries' legal systems or that cannot be replaced by simpler words.

A final activity of the project was a co-designed laboratory of the public authorities' web content, which involved university students with migrant backgrounds and foreign students recently settled in Italy. After attending administrative language training, the students participated in a cooperative design process aimed at redesigning web content on administrative procedures from municipal websites to make them more easily understandable even to new citizens. This activity was intended

access). Second, 'navigability' - the ability to know of and reach the relevant legal principle. Finally, 'understandability' - that 'the law, once found, [is] understandable to the user". See, Michael Curtotti and others 'Citizen science for citizen access to law' (2015) 3(1) Journal of Open Access to Law.

7 Chiara Fioravanti and Francesco Romano, 'Stakeholders engagement to simplify communication of administrative procedures in the field of immigration: experimentation of methods and tools', in Shefali Virkar and others (eds), *Proceedings of the International Conference EGOV-CeDEM-ePart 2018* (Donau-Universität Krems 2018).

to produce materials that would enrich the informative content of the PAeSI Web Portal.

As mentioned in the introduction, these projects have been developed with the general objective of providing support to the public offices interacting with non-EU citizens living in Italy, particularly in the Tuscan Region, which is the pilot territory for the project, in delivering information to the migrant population. This information activity addresses the complex procedures that migrants must follow in order to reside, seek employment, reunify with family members, and open their own businesses in Italy.

The activities performed within the project's framework had two specific objectives: to create useful tools for the target audience; and to obtain guidelines and general indicators for new projects in the same area.

3. Strengths and weaknesses of the methods used

Within each human-centred design phase of the activities we would like to share the difficulties encountered and their motivations as well as the methodological choices that led to successful outcomes.

3.1. Analysis phase

Understanding users and defining scenarios

The first phase of analysis was aimed at identifying system users' demographic, needs, and usage scenarios. The following reflections are related to the different strategies implemented to understand users' groups from various cultural backgrounds, the stakeholders involved, and the appropriate tools to be used in this context. The difficulty of this activity concerns having a large and varied target audience. The numerous foreign residents who live in Tuscany vary considerably based on their countries of origin, ages, level of education, length and purpose of their stay in Italy, and their knowledge of the Italian language and culture.

Simply by analysing the statistical data published every year in Italy on the presence of migrants in the different regions, we might get an overall picture of their demographics. But we were above all interested in investigating the users' needs and their difficulties in relation to

the specific domain of the projects (comprehensibility of administrative procedures). We had to understand what could be called their "Italian public administration literacy". The information gathered could not be derived from a vast and varied audience through existing statistical data or through quantitative research aimed directly at migrants (for example using questionnaires), due to the difficulty encountered in obtaining this type of data from the specific users and as suspected only partial knowledge was forthcoming.

Strategy used

To gather data on the users and their needs, different stakeholders were involved, namely categories of people who have a thorough knowledge of project's domain and who work closely with the migrant target audience.

Identified stakeholders were:

– *civil servants working in immigration front-offices* who are in daily contact with migrants, and are aware of the complexity of immigration procedures and the bureaucratic language;
– *linguistic-cultural mediators* who support various public offices, and whose contribution was considered especially crucial because they are familiar with the peculiarities of a certain linguistic-cultural group, they know how to associate linguistic and semantic code for the purpose of correct cross-cultural translation, and how to adapt the language to the level of knowledge and education of the user; and
– *teachers of Italian as a second language* whose involvement was considered important because of their understanding of the specific difficulties inherent to various linguistic groups, and of the elements of the Italian language that are more problematic.

Methods used

The user survey was conducted through focus groups[8] and semi-structured interviews[9] with stakeholders. The findings obtained were organized in a report describing the characteristics of the context of use and its criticality, users' needs, and difficulties. Another technique that we

8 David L Morgan, *Focus Groups as Qualitative Research*, (Sage Publications 1996).
9 Preece, Rogers and Sharp (n 1) 272.

could have used to communicate our findings is "storytelling"[10], because focus group participants and interviewees told stories about the users' experiences. These stories could have been compared and important details added to the analysis phase. However, it was decided not to use these stories because they were shared by stakeholders and not by the people directly involved (migrants) and therefore would not have had the same value.

Direct observation in the field (municipality immigration offices) could have provided additional data but this data-gathering technique was not possible due to bureaucratic issues that didn't allow observation in the public offices. In addition, it would also have been useful to consult data from the analysis of the same category of users in the same legal domain in different projects. On the other hand, we also had to consider that "requirements are highly prescriptive and implementable but are difficult to generalize beyond the settings where they have been explored"[11]. The user survey was considered productive, nonetheless, because we were able to identify the usage scenarios and the initial requirements of the tools to be implemented. The analysis phase also included a benchmarking activity with public authority websites from other countries, to identify good practices in the online communication of procedures on immigration.[12]

3.2. Designing alternatives and prototyping phase

From the conceptual model to the concrete design using prototypes, our reflections mainly concern the methodologies used and the role that culture plays in this phase.

10 ibid 344-345.

11 ibid 434.

12 The analysis focused on the web portals of the countries with the highest MIPEX - Migrant Integration Policy Index, taking as reference the countries with a score higher than 60 (MIPEX slightly favourable and favourable), based on data from the 2015 MIPEX report, valid until 2019. These countries are: Sweden, Portugal, New Zealand, Finland, Norway, Canada, Belgium, Australia, USA, Germany, Netherlands and Spain. See: Thomas Huddleston and others, *Migrant Integration Policy Index 2015* (Barcelona Center for International Affairs and Migration Policy Group 2015).

Conceptual models

The first problem with the prototype design phase was that the conceptual models of the products (an outline of what people can do with a product and which concepts are needed for the users to understand how to interact with it)[13] were in part already defined, because the funded projects included specifications on the shape of the products and therefore on the methods of interaction with users (website, online information sheets, glossary).

This can be considered a weakness in the design process, which would have been more effective without initial constraints, "without having the technology in mind but rather thinking about what experience should be facilitated"[14]. However, this sort of constraints are also a common factor when working with public administrations, and it is therefore necessary to try to develop an effective product despite these restrictions.

The design was initially guided by the relevant literature (for example, strategies and standards for website design, guidelines on clear legal language) and by the specific requirements obtained in the analysis phase. The design phase was then carried out with the stakeholders involved in the analysis phase (civil servants of the immigration sector and linguistic-cultural mediators) with the exception of the teachers of Italian as a second language. The latter were helpful in understanding user skills but they were not experts in the usage scenario.

For the redesign of the website and the information sheets, the design activity was carried out through focus groups. Starting from the previous versions of the products, the stakeholders were asked to give suggestions on how to modify content and information architecture to make access to the website and its content more suitable for the intended users. All considerations that emerged were described in a structured report and were useful in further specifying the requirements of the products. Migrants were not part of this phase, as it was preferable to involve them in the following phase, which was to test the first prototypes. This is because the initial website was designed for civil servants as a target

13 Corina Sas and others, 'Generating Implications for Design through Design Research' in *Conference on Human Factors in Computing Systems – Proceedings* (2013) 1972.

14 Preece, Rogers and Sharp (n 1) 434.

audience, and it would not make sense to ask migrant users to suggest modifications.

Without the initial constraints on the products, it would have been useful to build, together with the stakeholders, a visual representation of the user's experience through a "customer journey map". This would create a complete view of the user's experience, visualizing different solutions that could engage stakeholders and drive collaborative conversation.[15] This would also make it possible to better reflect on alternative means of presenting information.

For the glossary project, on the contrary, migrants were directly involved in the initial phase of the design. The basic idea was to understand the natural word defining style of our target audience to create a glossary of definitions in a way that reflects the mind map and the needs of the users. This was done by asking them to explain in their own words certain terms used in the language of public administration.

This approach was effective because it allowed us to learn which communication strategies our intended audience spontaneously used and which aspects of the concepts they considered most important to help others understand them. The results of this activity (the different strategies used in the explanations) were implemented as guidelines for creating the definitions, in addition to the European standards for the "Easy-to-Read" language.[16]

In developing co-design laboratories with students with immigration backgrounds to simplify administrative texts of institutional websites, a different approach was used. Here the conceptual model was not predefined, so participants were free in their design exploration. It was a small experimentation of participatory design, whose characteristic is to make users members of the development team.[17]

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15 Kate Kaplan, 'When and How to Create Customer Journey Maps' (*Nielsen Norman Group*, 31 July 2016) <www.nngroup.com/articles/customer-journey-mapping> accessed 9 August 2021.

16 Beat Vollenwyder and others, 'How to Use Plain and Easy-to-read Language for a Positive User Experience on Websites', in *Proceedings of the ICCHP Conference 2018 - 16th International Conference on Computers Helping People with Special Needs* (2018).

17 Preece, Rogers and Sharp (n 1) 454.

The design of the information materials took place amongst small groups of students (maximum 4) made up of "expert users" (students with high knowledge of the Italian language, as well as technical-administrative jargon) and non-expert users (students with basic knowledge of language and administrative structure). This collaboration was effective because there was a positive effort by the teams to make the less experienced understand the content so that they could collaborate on the project. This process allowed participants to find effective solutions to make content simpler and clearer. For example, almost all groups opted for the use of graphics and images to make content easier.

This positive dynamic helped us to understand that it would have been useful to involve the stakeholders in co-designing the first two activities, also using visual tools at this stage, creating together sketches and schemes with them. Collaborative sketching is a powerful tool; however, it can be difficult to get stakeholders comfortable with the idea of drawing in a group setting, especially when they are not used to it in their jobs as public civil servants. Nielsen Norman group provides useful suggestions on this point.[18] At the end of this phase, low-fidelity prototypes were made to be tested for the various projects in the following phase.

The cultural aspects

Other challenges in the design process concerned dealing with the different cultural characteristics and needs of users due to their various countries of origin. The reference guidelines used in the initial design phase did not take these aspects into consideration. Instead, we know that culture can be one of the most important aspects that communication designers need to consider when developing materials for an audience. The more communication designers know about dealing with cultural communication expectations, the more effectively they can develop materials that meet the needs of a broader global audience in seeking information and their ability to use the materials. Therefore, it is crucial to identify areas in which miscommunication might occur.[19]

18 Kate Kaplan, 'How to Get Stakeholders to Sketch: A Magic Formula' (*Nielsen Norman Group*, 22 December 2019) <www.nngroup.com/articles/how-to-get-stakeholders-to-sketch> accessed 9 August 2021.

19 Kirk St Amant, 'Introduction to the special issue: Cultural considerations for communication design: integrating ideas of culture communication, and context into

The critical point was that the projects involved the creation of a single product that had to be suitable for people of different cultural backgrounds. This can certainly produce critical issues in the choice of visual elements to explain or represent a concept. Different cultures, for example, often have different expectations relating to visual communication. In some cases, these differences can involve what an item or object should look like in order to be recognizable (i.e., what should a mailbox look like so potential users correctly identify a "send mail" icon?).[20]

In our projects, the choice of visual elements was made by determining that if the images are used to understand aspects of the host society, then these images must correspond to those commonly used in the host society. This is also supported by the fact that "the ideas of recognizability and credibility are both related to the notion of exposure over time"[21]. For foreign citizens, symbols and images used for public communication in the host society should therefore become more and more familiar over time. Despite choosing to use images from an Italian context, with the help of cultural mediators, we selected new images and evaluated existing ones so as not to produce misleading visual elements.

3.3. Evaluation and redesign phase

Finally, in the phase of evaluation and redesign, the reflections are related to the testing methods carried out, to the target audience involved in the evaluation, to the strategies and criticalities in assessing satisfaction, usability, and behavioural change. The evaluation activity took place at various stages of design, from the definition of the concepts in collaboration with the stakeholders at the beginning of the production phase through the testing of the prototypes.

Choice of the sample of users

The first difficulty encountered in this phase concerned the choice of users to be involved in the evaluation. Users must be representative of the

user experience design' (2015) 4 Communication Design Quarterly 6.

20 ibid 8-9.

21 Jean Aitchison, 'Bad birds and better birds: Prototype theories' in Virginia P Clark, Paul A. Eichholz, and Alfred F. Rosa (eds), *Language: Introductory readings* (5th edn, St Martin's Press 1994) 445, 457.

population to which the projects are addressed. Identifying the sample of users sought was particularly challenging: citizens with different ages and cultural backgrounds, different levels of knowledge of the Italian language and of the Italian administrative context.

In an attempt to represent the different categories, a large user sample was selected from an Italian as a second language school attended by foreign residents in Italy for work, family, or for studies. It was therefore possible to create well-represented groups of the intended audience as they were already categorized by the school based on their language ability.

Another sample was selected from a reception centre for asylum seekers and was composed of people who had just arrived in Italy and, in some cases, were in personally vulnerable situations. The tests carried out with these types of users showed us that the tools, which were based largely on written content, were not suitable for people with poor knowledge of the language and made us aware that a mistake we made in the analysis phase by not mapping this type of user. For this category of users, their specific vulnerability and needs should have been taken into consideration.

Evaluation methodology

Another crucial aspect of this phase was the choice of the evaluation methodology. First, it should be noted that, in the earliest stages of the design we used the "quick and dirty" evaluation method. This is a practice where designers obtain informal feedback from users or experts in order to verify that their ideas are in line with users' needs.[22]

This type of evaluation is suitable for projects developed in the context of public administration, where civil servants are busy with their daily activities. It provided an opportunity to take advantage of every mini-meeting or short interview to gather opinions or make notes of comments that may be useful for the design process.

For the new access to the PAeSI Web Portal, prototypes at different fidelity levels were assessed. The first low-fidelity prototypes (sketches and then power point storyboards) were submitted only to stakeholders. The more advanced versions (with interaction functionality) have been submitted to the category of migrants. Stakeholder assessment fo-

22 Preece, Rogers and Sharp (n 1) 362.

cused on information architecture, content selection and labelling while usability tests were performed with end-users based on tasks: finding information (e.g. explanations about specific procedures), downloading documents (for example the form to request a service), doing actions (applying for an online service).

This usability test was conducted following the instructions of the eGLU 2.1 protocol.[23] The latter is a protocol created by the Italian Department of Public Administration for the implementation of simplified usability tests to be carried out in public administrations.

On the other hand, the effectiveness of the simplified information sheets on the procedures was more complex to evaluate. The objective of the evaluation was to understand if the information in the new redesigned information sheets was easily understood by the target users and what content needed to be modified to make the information clearer. The strategy adopted was to submit the information sheets to the stakeholders, through focus-group sessions, ask their opinion on how comprehensible they were for the target audience. It also required the stakeholders to indicate terms or parts deemed too complex. They were then asked to suggest improvements (i.e., the use of different terms).

The information sheets were then submitted to migrants who were requested to underline the words they did not know or parts of text they did not understand. Questions were then asked to find out if the procedure was clear to them. These tests made it possible to gather important data on information sheet language and structure.[24]

The critical component of this method, however, is that we cannot fully know if the reading of the information sheets produced a real understanding of the procedures. Difficulty arose in understanding whether issues of comprehensibility were merely grammatical or functional which allows users to truly understand the practical consequences of what they have read and causes a real behavioural change in the user.[25] Behavioural changes can be measured by studying the intended audi-

23 Dipartimento della Funzione Pubblica, 'Linee guida per i siti web delle PA, Il Protocollo eGLU 2.1' (June 2015) <www.funzionepubblica.gov.it/sites/funzionepubblica.gov.it/files/Protocollo_eGLU_2_1_19082015_DEF_2.pdf> accessed 9 August 2021.

24 For a summary on text comprehension tests, see J. David Greiner, Dalie Jiménez and Lois Lupica, 'Self-Help, Reimagined' (2017) 92 Indiana Law Journal 1166, 1168.

25 Zsolt Ződi, 'The limits of plain legal language: understanding the comprehensible

ence's habits and analysing how successful they have been in achieving their goals.[26] To be able to analyse behaviour change would require carrying out a real setting test.[27] For example, it would have been very useful to see whether users were able to apply for a specific immigration procedure after reading the related information sheets designed for them but unfortunately, this type of evaluation wasn't possible.

The final evaluation of the simplified illustrated glossary was also carried out, at different stages, with the involvement of the stakeholders who participated in its creation and with the target users.

Glossary definitions were given to immigration office public servants, teachers of Italian as a second language, and cultural mediators. These stakeholders gave feedback on understandability, completeness, language difficulties, and rewriting suggestions by answering a questionnaire. Mediators were also asked whether there was any concept in the definitions that did not correspond in the culture of the user's country. The definitions modified on the basis of the feedback received were then submitted to groups of end-users through a highlighter test.[28]

As for the co-design workshops with students with a migrant background who had the aim of redesigning webpages on administrative procedures, an initial evaluation phase took place through the exchange of the prototypes made by the various participating groups and a cross-evaluation. This peer evaluation produced useful suggestions and a productive exchange of experiences for the redesign. The modified prototypes were then submitted during a public event to the public officer responsible for the procedures that were dealt with in the workshops. However, the limited time of the project did not allow for obtaining enough quality content to be considered institutional and was not included in the web portal to be shared and evaluated by a wider public.

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style in law' (2019) 15 International Journal of Law in Context 246, 251 - 252.

26 Sheila Pontis, *Making sense of field research* (Routledge 2018) 114.

27 Preece, Rogers and Sharp (n 1) 536.

28 This simple technique consists of asking participants to highlight the clear and understandable part of the text in one colour and the unclear or confusing part in another. See, Pete Gale, 'A simple technique for evaluating content' (*User research in government*, 2 September 2014) <userresearch.blog.gov.uk/2014/09/02/a-simple-technique-for-evaluating-content> accessed 9 August 2021.

The results of the evaluations of the different projects were analysed qualitatively in determining how usable the prototype was or why a design didn't work[29] including from a cultural point of view (for example, an image that might be misunderstood by users from a specific country and would need to have some elements added to be recognized universally).[30] The quantitative approach was used only to evaluate the information sheets and the glossary this was done through a percentage analysis of the least understood words in relation to the degree of the participants' knowledge of the Italian language. Findings from the evaluation were not only used to modify the products but also to derive guidelines and indications for future designs in this specific domain. These results were systematized and shared in a dedicated collaborative platform (see, Section 4).

Iterativity

The qualifying feature of a human-centred design is "iterativity": the design process of an artifact involves multiple cycles of evaluation, correction and redesign, a heuristic way of proceeding, by trial and error, which offers gradually improving solutions.[31] As said, an intrinsic limitation were the time constraints that allowed us to conduct only one cycle of iteration. Furthermore, each phase of the redesign process required legal validation from the public officers responsible for the content, to ascertain that no important information had been lost in the redesign and that all the contents were still legally valid. A remedy for this problem could be to always leave a communication channel open (using for example a collaborating platform - see Section 4) in which not only stakeholders involved in the design but also new stakeholders could leave feedback through "free evaluation"[32]. Legal validation activities could also be carried out through the same platform.

29 Pontis (n 26) 120.

30 Such as the information icon represented with an "I" that was not considered recognizable for all users and necessitated the addition of an information desk in the icon.

31 Jacopo Pasquini, Simone Giomi and Maria Cristina Caratozzolo, *#UX Designer* (Feltrinelli 2018) 62.

32 The goal of the free evaluation is to ask participants to use and evaluate the new design at their own pace. This type of evaluation is less structured than overt evaluation, but it demands a higher level of commitment from participants. Pontis (n 26) 126.

4. Contributions from other disciplines

These activities were carried out according to the human-centred design approach, thus focusing on the users' needs and according to information design as a discipline that seeks to enhance understanding for an intended audience and to design clear communication.[33] However, the planning and implementation of the project required the contribution of different disciplines. All the activities carried out fall within the framework of legal informatics, in particular, in some of its sub-disciplines such as dissemination of legal information, legal language studies, and digital public administration.

The purpose of the dissemination of legal information is to guarantee access to legal information in a wide sense. Access to consultation of the legislation is only the initial prerequisite for understanding it. What must be guaranteed in practice is the effective understanding of the legal content.

In this regard, the opinion is now widely shared for the need to combine traditional forms of dissemination already used - such as the publication of normative texts - with other information content as explanatory secondary sources. These tools are used to illustrate the legal content and the legal consequences for the recipients.[34] It is the concept of "layering"[35], i.e. to create alternative layers of information that vary in depth or style, suitable for the differing needs of users, also using various formats. The activities described in this Chapter attempted to produce secondary legal dissemination tools to support citizens, in particular migrants, in the form of information sheets on the procedures and explanatory glossaries available, through an ad hoc designed web access.

Comprehensibility of legal language (especially that of public administration) and the many studies and practices that aim to provide indications to make it more understandable for lay people were also important

33 ibid 3.

34 Paolo Benetti, *L'uso della lingua negli atti e nella comunicazione dei poteri pubblici italiani* (Giappichelli 2016) 74.

35 Gerlinde Berger-Walliser, Thomas D Barton and Helena Haapio, 'From visualization to legal design: A collaborative and creative process' (2017) 54 American Business Law Journal 347.

issues for our project.[36] Clarity can be achieved through an approach for communicating called "Plain Language", which has been a topic of interest in numerous countries for many years.[37] However, "Plain Language" might not be enough depending on the context. There are various special groups of people (like recent migrants) that may need a major simplification, through what is called "Easy-to-Read Language" or "Easy Language".[38] "Easy-to-Read Language" tries to make a text as simple as possible. Guidelines include the use of simple words, very short sentences, clear text structures, making only one statement per sentence, and using images to describe what a text is about.[39]

Furthermore, it is not only a matter of language in the strictest sense because "Plain Language" refers to the usability of communications (in our domain "legal communication"), namely all the factors that could enhance the user's understanding (such as composition of the text, interactivity level, use of visuals).[40] In the "Easy-to-Read" approach, moreover, the use of visual communication is highly recommended.

Digital Public Administration is another issue related to the application domain of the projects described. Operating in this context, specific methodologies and guidelines, and especially the national laws enforced for public online communication, must be considered in the designing process. For Italy, the Digital Administration Code (CAD) is the reference law for public web sites and digital services together with the guidelines

36 On this topic, see Pirkko Nuolijärvi and Gerhard Stickel, 'Language use in public administration: theory and practice in the European states' (European Federation of National Institutions for Language Conference, 2016).

37 On this topic, see Michèle M Asprey, 'Plain Language Around the World' in ibid., *Plain Language for Lawyers* (4th edn, The Federation Press 2010).

38 Aino Piehl and Eiv Sommardahl, 'Working towards clear administrative language in Finland – bilingually' in Pirkko Nuolijärvi and Gerhard Stickel (eds), *Language Use in public administration. Theory and practice in the European states* (Research Institute for Linguistics, Hungarian Academy of Sciences 2016).

39 For more information on the Easy-to-read guidelines, see IFLA (2010), Guidelines for easy-to-read materials, Professional Reports 120 (International Federation of Library Associations and Institutions 2010).

40 Margaret Hagan, 'Plain Language & Legal Design' (*Open Law Lab,* 2 September 2015) <www.openlawlab.com/2015/02/09/plain-language-legal-design> accessed 9 August 2021.

provided by the Agency for Digital Italy (AgID) of the Presidency of the Council of Ministers.[41]

Learning disciplines were also involved, because the aim of the activities was to educate people about law and administrative procedures, fundamental knowledge to fully live out their citizenship, considered broadly as active participation in the public life of society. The learning approaches specifically involved were "constructionist learning" and "coaching".

The constructionism approach places special emphasis on the fact that learners are more likely to become intellectually engaged when they are working on personally meaningfully activities and projects. Constructionist theory suggests a strong connection between design and learning. It asserts that activities that involve making, building or programming - in short designing - provide a rich context for learning.[42]

The involvement of this discipline has been particularly evident in the activity of the codesign laboratory with students. In that project, the participants activated mechanisms to understand the administrative procedures themselves in order to redesign web content to make it more comprehensible for others. In the same activity, the coaching approach was also applied because within the groups the most experienced (especially in relation to the knowledge of the Italian language) supported the less experienced, who in turn were "teachers" in suggesting terms and methods of communication more suitable for them and therefore simpler.

Intercultural communication was also implicated in the projects as a discipline that allows facing the difficulties of designing in today's multicultural societal environment, and it also enhances the contribution and richness of cultural diversity. Having accessible public authority texts for the entire population does not mean the same thing today as it did a few decades ago, given that the composition of the population in many countries has changed and we need to think about improving accessibility even to people whose first language is not that of their host country. It is not just about translating texts into other languages but starting with

41 See, <www.agid.gov.it/en/linee-guida> accessed 9 August 2021.

42 Yasmin Kafai and Mitchel Resnick, *Constructionism in Practice: Designing, Thinking, and Learning in A Digital World* (1st edn, Routledge 1996) 12-13.

content which can be understood by as many people as possible through different accessibility adaptations.[43]

We also have to consider that cultures have distinct preferences for organizing ideas and presenting them in writing[44], and that all cultures have a frame of reference, including a sign system, that determines how objects or signs are perceived and interpreted.[45] These aspects certainly emerged in discussions with the cultural mediators while developing the various activities, during which, for example, they indicated concepts that would not have been understood by users from some countries or images that might have confused them.

Finally, knowledge management is another discipline which played an important role in the systematization and sharing of our research findings. A dedicated collaborative platform was experimented in regards to this issue. This platform, called WikiPAeSI[46] from the name of the web portal, is intended as a repository of all the data obtained from the design participatory phase with stakeholders and users like guidelines, recommendations and tools (for example "translation" tables of complex terms). The platform is also open to stakeholders who participated in the design process, because it represents a tool to continuously welcome new input from product assessments and it is therefore useful for the development of the research, because it allows for the tracking of all findings relating to activities in the same domain.

5. Final considerations

The experience gained from the various activities carried out leads us to a further and final consideration regarding the contribution that the

43 Rickhard Domeij and Jennie Spetz, 'Can official websites be accessible to all? A Swedish language policy perspective' in Pirkko Nuolijärvi and Gerhard Stickel (eds), *Language Use in public administration. Theory and practice in the European states* (Research Institute for Linguistics, Hungarian Academy of Sciences 2016) 61, 67.

44 Myron W Lustig and Jolene Koester, *Intercultural Competence: Interpersonal Communication Across Cultures* (Harper Collins 1995).

45 Clifford Geertz, *Local knowledge: further essays in interpretive anthropology* (Basic Books 1983).

46 <www.immigrazione.regione.toscana.it/areacollaborativa/> accessed 9 August 2021.

practical applications of legal design such as those described can give to this discipline. As indicated by Hagan:

> "like many other fields that also use a design-driven approach to generate new interventions and knowledge, legal design can create a hybrid of methodologies that leads to practical and academic results"[47].

Andrew Dillon notes that the main problem for converting scientific studies into design guidance is that, while the principles derived from science are invaluable, they are not articulated in a form that can be used directly in design. To achieve this, it may be necessary to reverse the classic bottom-up relationship from science to design and to appropriately frame the human aspect of the tasks that allows us to make justifiable claims about what will or will not work in a given context.[48]

Our experience with legal design activities has provided very specific results and considerations for the legal domain considered (immigration law), the specific recipients (recent migrants, who are considered a vulnerable category with regards to legal information)[49], the environment involved (public administration, with its specific criticalities)[50] and the different disciplines implicated, which made it possible to further specify the methods of human-centred design for the given context.

For Legal Design to grow as an academic discipline, it could therefore be important to be able to share and systematize practical applications in the various legal domains in order not to waste the lessons learned, but rather to lay them at the foundation of the theoretical aspect of the discipline.

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47 Margaret Hagan, 'Legal Design as a Thing: A Theory of Change and a Set of Methods to Craft a Human-Centered Legal System' (2020) 36 Design Issues 6.

48 Andrew Dillon, 'Applying science to design' in Alison Black and others (eds), *Information design. Research practice* (Routledge 2017) 294, 297.

49 Chiara Fioravanti, 'Communicating the Law and Public Information to Vulnerable Audiences: Contexts and Strategies' (2021), 9 Journal of Open Access to Law 2.

50 For issues related to the application of human-centred design in public administration, see Mieke van der Bijl-Brouwer, 'The Challenges of Human-Centred Design in a Public Sector Innovation Context' in *Proceedings of DRS 2016 (*Design Research Society 50th Anniversary Conference, Brighton, 27–30 June 2016).

Bibliography

Aitchison J, 'Bad birds and better birds: Prototype theories' in Virginia P Clark, Paul A. Eichholz, and Alfred F. Rosa (eds), *Language: Introductory readings* (5th edn, St Martin's Press 1994) 445

Asprey MM, 'Plain Language Around the World' in ibid., *Plain Language for Lawyers* (4th edn, The Federation Press 2010)

Benetti P, *L'uso della lingua negli atti e nella comunicazione dei poteri pubblici italiani* (Giappichelli 2016)

Berger-Walliser G, Barton TD and Haapio H, 'From visualization to legal design: A collaborative and creative process' (2017) 54 American Business Law Journal 347

Conti S and others, 'Access and knowledge of the law: supporting migrants in understanding law' (IFLA WLIC - Libraries: dialogue for change in Session 167 - Law Libraries, Athens, 2019)

Curtotti M and others 'Citizen science for citizen access to law' (2015) 3(1) Journal of Open Access to Law 8

Dillon A, 'Applying science to design' in Alison Black and others (eds), *Information design. Research practice* (Routledge 2017)

Domeij R and Spetz J, 'Can official websites be accessible to all? A Swedish language policy perspective' in P Nuolijärvi and G Stickel (eds), *Language Use in public administration. Theory and practice in the European states* (Research Institute for Linguistics, Hungarian Academy of Sciences 2016)

Fioravanti C, 'Communicating the Law and Public Information to Vulnerable Audiences: Contexts and Strategies' (2021) 9 Journal of Open Access to Law 2

Fioravanti C, Romano F, 'Stakeholders engagement to simplify communication of administrative procedures in the field of immigration: experimentation of methods and tools', in Virkar S and others (eds), *Proceedings of the International Conference EGOV-CeDEM-ePart 2018* (Donau-Universität Krems 2018)

Gale P, 'A simple technique for evaluating content' (*User research in government*, 2 September 2014) <userresearch.blog.gov.uk/2014/09/02/a-simple-technique-for-evaluating-content> accessed 9 August 2021

Geertz C, *Local knowledge: further essays in interpretive anthropology* (Basic Books 1983)

Greiner DJ, Jiménez D and Lupica L, 'Self-Help, Reimagined' (2017) 92 Indiana Law Journal 1166

Hagan M, 'Plain Language & Legal Design' (*Open Law Lab,* 2 September 2015) <www.openlawlab.com/2015/02/09/plain-language-legal-design> accessed 9 August 2021

-- 'Law by Design' (2016) <www.lawbydesign.co> accessed 9 August 2021

-- 'Legal Design as a Thing: A Theory of Change and a Set of Methods to Craft a Human-Centered Legal System' (2020) 36 Design Issues 6

Huddleston T and others, *Migrant Integration Policy Index 2015* (Barcelona Center for International Affairs and Migration Policy Group 2015)

IFLA, Guidelines for easy-to-read materials, Professional Reports 120 (International Federation of Library Associations and Institutions 2010)

Kafai Y and Resnick M, *Constructionism in Practice: Designing, Thinking, and Learning in A Digital World* (1st edn, Routledge 1996)

Kaplan K, 'How to Get Stakeholders to Sketch: A Magic Formula' (*Nielsen Norman Group*, 22 December 2019) <www.nngroup.com/articles/how-to-get-stakeholders-to-sketch> accessed 9 August 2021

-- 'When and How to Create Customer Journey Maps' (*Nielsen Norman Group*, 31 July 2016) <www.nngroup.com/articles/customer-journey-mapping> accessed 9 August 2021

Lustig MW and Koester J, *Intercultural Competence: Interpersonal Communication Across Cultures* (Harper Collins 1995)

Morgan DL, *Focus Groups as Qualitative Research* (Sage Publications 1996)

Nuolijärvi P and Stickel G, 'Language use in public administration: theory and practice in the European states' (European Federation of National Institutions for Language Conference, 2016)

Pasquini J, Giomi S and Caratozzolo MC, *#UX Designer* (Feltrinelli 2018)

Piehl A and Sommardahl E, 'Working towards clear administrative language in Finland – bilingually' in Pirkko Nuolijärvi and Gerhard Stickel (eds), *Language Use in public administration. Theory and practice in the European states* (Research Institute for Linguistics, Hungarian Academy of Sciences 2016)

Pontis S, *Making sense of field research* (Routledge 2018)

Preece J, Rogers Y and Sharp H, *Interaction design: Beyond human-computer interaction* (Wiley & Sons 2019)

Sas C and others, 'Generating Implications for Design through Design Research' in *Conference on Human Factors in Computing Systems – Proceedings* (2013)

St Amant K, 'Introduction to the special issue: Cultural considerations for communication design: integrating ideas of culture communication, and context into user experience design' (2015) 4 Communication Design Quarterly 6

van der Bijl-Brouwer M, 'The Challenges of Human-Centred Design in a Public Sector Innovation Context' in *Proceedings of DRS 2016* (Design Research Society 50th Anniversary Conference, Brighton, 27–30 June 2016)

Vollenwyder B and others, 'How to Use Plain and Easy-to-read Language for a Positive User Experience on Websites', in *Proceedings of the ICCHP Conference 2018 - 16th International Conference on Computers Helping People with Special Needs* (2018)

Ződi Z, 'The limits of plain legal language: understanding the comprehensible style in law' (2019) 15 International Journal of Law in Context 246

PART II

PROJECTS' OUTLINES IN THE PUBLIC AND PRIVATE DOMAIN

10. EMPOWERING CHILDREN TO UNDERSTAND AND EXERCISE THEIR PERSONAL DATA RIGHTS

Marie Potel-Saville and Elisabeth Talbourdet

"*We cannot expect a young person to be able to understand terms and conditions that even an experienced adult struggles with; we cannot serve teenagers personalized ads that they cannot critically process. And it's the responsibility of governments and online platforms to respect every user and build their services and products around the people and not the opposite*."
Charampoulos, BIK Youth Ambassador from Greece, February 2020, Safer Internet Day, European Commission

"*It is unreasonable to design digital services to be addictive and then reprimand children for being interested only in their screens*."
Eva Lievens and Ingrida Milkaite[1]

1. Summary

Amurabi, a legal innovation by design agency, worked with the French Data Protection Authority (the CNIL) to create interfaces to help under-age users better understand and exercise their data protection rights and empower designers to replicate this approach through methodology kits.[2]

1 Ingrida Milkaite and Eva Lievens, 'Internet of Toys: Playing Games with children's data', in Giovanna Mascheroni and Donell Holloway (eds), *The Internet of Toys Practices, Affordances and the Political Economy of Children's Smart Play* (Palgrave Macmillan 2019).

2 Amurabi is a legal innovation by design agency, that focuses on a user-centric approach of the law to solve problems, create new services and generate value. To achieve this goal, Amurabi combines legal expertise with design thinking, plain language, all the areas of design (graphic, service, UX and strategy design) and neurosciences.

In an Internet mainly designed for adults, the project goal was both to protect and empower children when they browse online and to ensure they can make well-informed decisions as to their personal data.

To this end, the project involved children through focus groups and collaborative design workshops in the co-creation process, to ensure to truly address their needs and to take into account their own preferences and limitations.

This project, including about thirty children and teenagers, as well as their parents, took place between October and December 2020, in three phases. First, Amurabi's lawyers & designers facilitated focus groups to understand and measure children's current usage of digital tools as well as to assess their knowledge of personal data protection. Then, the team conducted co-creation workshops with the same users to design interfaces based on their experiences and daily uses.

Finally, Amurabi tested these interfaces with other children to measure their efficiency, clarity and acceptability, counting 50+ participants in this unique co-design process overall. The final deliverables are published on the CNIL 'Data & Design' website under a creative commons license including: 3 case studies on interfaces designed for children, 3 methodology kits for designers, and 3 privacy key concepts dedicated to underage users. Amurabi now hopes these new standards will be widely used by designers, teachers, children-oriented companies, and by the public at large.

2. Research question

Children represent about a third of Internet users worldwide.[3] While they browse websites or play games dedicated to them, children often also use social media or apps that do not (or even refuse to) acknowledge the existence of under-age users. Regardless of the interface used, most websites and apps do not take into account children's specificities and access to information about their data protection rights and how to exercise them is often too complex. This makes children particularly vulnerable in the digital environment because they might be less aware

3 Global Kids Online: Comparative Report, UNICEF Office of Research, Florence, 2019.

of the risks they are exposed to.

Yet, children have the same rights over their personal data as adults. Like adults, they are free to request the deletion, modification, or access to their personal data – with or without their parents depending on their age. The General Data Protection Regulation (GDPR)[4] even provides a higher clarity standard for this specific audience: the information must be written in "clear and simple terms that the child can easily understand"[5]. This obligation has been reinforced by the Article 29 Working Party's Guidelines on transparency under the GDPR: when a data controller is targeting children or is aware that they are using its service, it must ensure that the vocabulary, tone, and level of language used are understandable by children and resonate with them.[6]

In this context, the CNIL asked Amurabi to investigate how to:

– create model interfaces empowering under-age users to better understand and exercise their data protection rights.
– equip designers with methodology and tools to embed the protection of children's personal data in their web and app designs.

The CNIL has long been aware of the decisive role of designers of digital services: as interface creators, they can maintain the status quo and the "walls of text" which have been plaguing the Internet for decades when it comes to legal notices in general and privacy policies in particular. They can also – willingly or not – set up mechanisms that will collect children's personal data in a manipulative way or leverage their design skills to protect the privacy of the users. As Tristan Harris, former Google Ethicist and founder of the Center for Human Technology describes it: "[n]ever before in history has such a small number of designers had so much influence on the thoughts and choices of billions of people". Woodrow Hartzog, Director of the Privacy Law Scholars Foundation and Professor

4 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), 2016 OJ L119/1.

5 Recital 58 GDPR. The concept is also present in Article 12 GDPR.

6 Article 29 Data Protection Working Party (now, European Data Protection Board), 'Guidelines on Transparency under Regulation EU 2016/679' (WP 260 rev.01 as last revised and adopted on 11 April 2018), 10.

of Law and Computer Science at Northeastern University School of Law and College of Computer and Information Science, argues that software and hardware makers should be required to respect privacy in the design of their products, rather than leaving it to under-informed users to decide whether these tools function for good or ill. Hartzog considers that most of these tools are designed to trick users into disclosing ever more personal data.[7]

This context led the CNIL and, in particular, its digital innovation laboratory (the *laboratoire d'innovation numérique de la CNIL,* "LINC") to put an emphasis on the design aspects of privacy issues over the past 5 years, combining research, experimentation, and practical tools. While the project specifically targeted underage users, Amurabi was to build-on the LINC previous research and recommendations conducted on designing interfaces respectful of adults' digital rights and on their "Data and Design" website and community:

> *"Article 25 does not seem to be explicitly addressed to designers, but it nevertheless allows us to take an interest in and point out " privacy by design", as a way in which the different design techniques are used to present - sometimes detrimentally - the protection of individuals' data, particularly with regard to the major principles of transparency, consent and the rights of individuals. A gateway to link both design and regulation*".[8]

3. Background and context

Amurabi began this project by conducting extensive research on data privacy for under-age users, building on the work the CNIL had already conducted. They performed a desk-based literature review on legal, neuro-scientific studies, and design experiments conducted to evaluate the current privacy framework for underage users.[9] This research phase provided four main conclusions at a preliminary stage, which directly

7 Woodrow Hartzog, *Privacy's Blueprint, The Battle to Control the Design of New Technologies* (Harvard University Press 2018).

8 Gwendal Le Grand and others, 'Shaping Choices' (2019) 6 Innovation & Prospective Journal 10; see also, <https://design.cnil.fr> accessed 2 July 2021.

9 Amurabi's research stopped in October 2020.

impacted the methodology choices for conducting the project.

1. **The delicate balance between protecting vulnerable users and empowering them to help them grow**: under-age users are more vulnerable than adults due to their cognitive limitations. Laurence Steinberg highlights that the transformation phase of growing-up is accompanied by a greater vulnerability to the risk's minors encounter, especially among teenagers: cognitive sciences demonstrate the existence of a "competition" between the gradual construction of their cognitive control network (which controls the functions of anticipation, organization and self-regulation) and the sudden development of their socio-emotional network in adolescence. Involved in decision-making contexts, the interaction between these two dynamics increases teenagers' inclinations to take risks online, increased by the social pressure of peers to which they are particularly sensitive. This exacerbated vulnerability is therefore a major element to be taken into account in any interface design that addresses underage individuals, whether they are the main target or only a part of the users.[10]

At the same time, children psychologists point out the need for children to experiment by themselves to learn and grow.[11] This led to specify the project goal: it was also about finding the right balance between protection and empowerment – to help children becoming more data protection-savvy.

2. Researchers at Ghent University point out the '**datafication of childhood**', as advergames, dark patterns, and profiling for targeted ads are gaining ground.[12] Ingrida Milkaite, Eva Lievens, and their colleagues find that children are not "equipped" to identify the extent to which certain recurring commercially driven digital practices may violate their rights and the protection of their personal data.

3. **The key role of designers in the search for a balance between protection and empowerment of under-age users as regards their person-**

10 Laurence Steinberg, 'Risk taking in adolescence: New perspectives from brain and behavioural science' (2007) 16(2) Current Directions in Psychological Sciences 55.

11 Simone van der Hof, 'I agree, or do I? A rights-based analysis of the law on children's consent in the digital world' (2017) 34(2) Wisconsin International Law Journal 409.

12 Eva Lievens and others, 'The child's right to protection against economic exploitation in the digital world' (2019) 38(4) International Journal of Childrens Rights 833.

al data: most children and teenagers understand the concept of privacy, but it's harder for them to understand the connection between their online behaviour and what companies can do with their personal data. Designers thus have a key role to play in creating awareness and empowering users, through the very interfaces they create.[13]

4. **How to "do better"?** Several authors analysed the types of fonts that are easier to read by under-age users, as well as the type of illustrations which increase engagement depending on their age group.[14] Some of these recommendations have been included in the ICO 'Age appropriate Code' that came into force in September 2021.[15] Other studies focused on the how push mechanisms, coupled with plain language, might be the solution to provide the right doses of information at the right time of a child's user journey on an app.[16]

In addition to the academic research, Amurabi also undertook an extensive benchmark of over 30 privacy policies in the world targeting under-age users for various services from social media, to video games, to research tools, and to encyclopedias dedicated to children. Unsurprisingly, there are plenty of bad examples: classic walls of text, cookie banners that the user cannot refuse, as well as features creating a false sense of accessibility: for instance by using colours and icons to illustrate a privacy policy, that is however still written with the same legalese, incomprehensible language.

Through this benchmark, Amurabi researchers also found confirmation of the worrisome phenomenon stressed by the Norwegian Consum-

13 Baroness Kidron, Alexandra Evans, Jenny Afi, *Disrupted Childhood, The Cost of Persuasive Design* (5Rights Foundation 2018) 16.

14 Michel Bernard and others, 'Which Fonts Do Children Prefer to Read Online?' (2001) 3 Usability News <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.529.6655&rep=rep1&type=pdf> accessed 2 July 2021.

15 United Kingdom's Information Commissioner's Office, 'Age-appropriate design: a code of practice for online services' (2020) <https://ico.org.uk/media/for-organisations/guide-to-data-protection/key-data-protection-themes/age-appropriate-design-a-code-of-practice-for-online-services-2-1.pdf> accessed 2 July 2021. ICO's Age-Appropriate Design Code came into force on the 2nd of September 2020, with a 12 months transition period.

16 Ingrida Milkaite and Eva Lievens, 'Child-friendly transparency of data processing in the EU: from legal requirements to platform policies' (2020) 14(1) Journal of Children and Media 5.

er Council back in 2018[17], and by Milkaite and Lievens, i.e. interfaces that use opacity and deceptive practices to collect more personal data. The Belgian authors noted that Snapchat leverages the proximity they have created with its users by offering to identify who are their best friends, those they talk to the most, to place them at the top of the screen and facilitate the exchanges even more. According to Milkaite and Lievens, by presenting these types of features in a complicit, friendly tone, sounding as a cool service, this feature allows the application to collect excessive data on a user's contacts and messages sent by playing on a false sense of trust.[18]

There were several examples of interfaces that seem to justify excessive data collection by offering new services and presenting them in a positive light, such as Snapchat's Privacy Policy: "*If we see that you're spending a day at the beach, we can make sure your Bitmoji is dressed for the occasion. Nice, right?*"[19] or Google's Family link, encouraging parents to geolocate their children: "*Help your family create healthy digital habits (…) It's helpful to be able to find your child when they're out and about. You can use Family Link to help locate them, as long as they're carrying their device*"[20].

Nevertheless, good examples were identified, those which leverage graphic elements of the main site to avoid a fragmented user experience or maximise engagement on legal terms by adapting the language to the intended audience.[21] The benchmark also highlighted good practices and recommendations such as those of the 5Rights Foundation, for instance:[22]

– Autoplay default off, and if changed, switch back to 'off' once a child logs out or navigates away.

17 Norwegian Consumer Council, 'Deceived by Designed' (2018) <https://fil.forbrukerradet.no/wp-content/uploads/2018/06/2018-06-27-deceived-by-design-final.pdf> accessed 2 July 2021.

18 Milkaite and Lievens (n 16).

19 Extract from Snapchat UK Privacy Policy <https://snap.com/en-GB/privacy/your-privacy> accessed 2 July 2021.

20 Extract from Google Family Link <https://families.google.com/intl/en-GB_ALL/familylink/> accessed 2 July 2021.

21 Discord's Security Centre, entirely tailored to under-age users <https://discord.com/safety> accessed 2 July 2021.

22 Kidron, Evans, and Afi. (n 13) 6-7.

– Notifications and summonses default off, such as buzzes, read receipts, pings and all other non-specific alerts.
– Save buttons (so children are not forced to stay online to complete a task).

4. Research project design

The research project design was undergone in three main phases, each constituted of several different steps detailed in the following sections:
– The first phase was the "*Immersion and Analysis phase*", focusing on analysing the state of the art and the benchmark, but also running focus groups with children to understand children's perception of data privacy when navigating online
– The second phase was a "*Co-creation phase*" where the project team ran 3 distinct 3h workshops with both designers and kids creating the new age-appropriate interfaces through 12 different prototypes
– The third phase was a "*Testing and iteration phase*" to improve and develop the initial versions of the prototypes created during the workshops and ensure the new interfaces created would meet international accessibility standards.

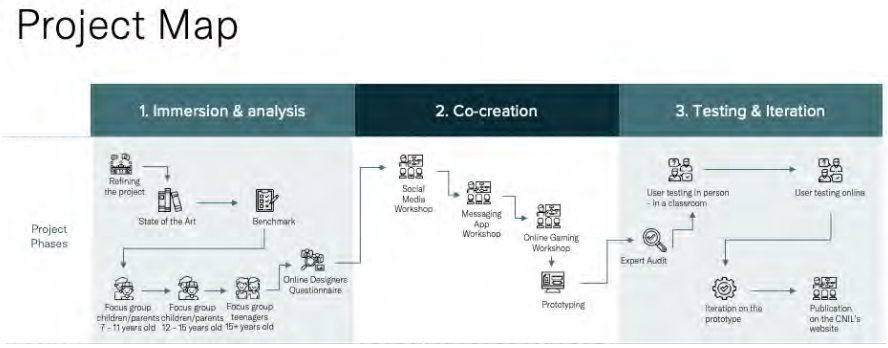


Fig. 1. Project map

5. Methodology

After carrying out the analysis on the state of the art and the benchmark (**Step 1**, Figure 1), it was very clear that one of the pitfalls to avoid was

"adults thinking on behalf of children". Although it had not been foreseen by the CNIL at the conception stage, Amurabi chose to co-create the solution with under-age users throughout the project.

Amurabi lawyers & designers dove into an immersive phase, carrying out a series of focus groups with children and teenagers to collect qualitative data on their current usage, expectations, and needs in relation to their rights on their personal data (**Step 2,** Figure 1).

With the help of a panelist (a professional recruiter for focus groups), the project gathered a group of 24 children and teenagers, alongside with their parents. Professional recruitment was necessary to ensure there would be a representative panel of users, taking into account gender, geographic, and social background. This was all the more important as the state of the art had shown that socio-economic inequalities play a critical role in relation to children's understanding of data privacy.[23]

The recruitment process was also a delicate aspect of the project, as Amurabi had to ensure that child-participants (not only their parents) were fully willing to participate in the workshop and were truly interested on a personal level by the research topic. To do so, Amurabi created dedicated children-friendly consent forms, describing the project and their rights in plain language, and providing information in a user-centric way, that each participant had to read and sign before joining the participant panel.

Leveraging the research findings, these participants were split into three age groups: 8 to 10 years-old, 11 to 14 years-old, and 15 to 17 years-old. The focus groups were facilitated by designers and lawyers. Amurabi created tailored activities such as sentence completion or pain-storming that allowed to better understand under-age users' practices: they often browse online alone without their parents, have a limited awareness of personal data, its processing, and their rights. However, children have a good understanding of the concept of privacy, even in the youngest age group. One of the key insights was that underage users will not deliberately look for privacy-related information but would be

23 Sonia Livingstone, Mariya Stoilova, Rishita Nandagiri, *Children's data and privacy online – Growing up in a digital age, an evidence review* (London School of Economics and Political Science 2019) <http://eprints.lse.ac.uk/101283/1/Livingstone_childrens_data_and_privacy_online_evidence_review_published.pdf> accessed 2 July 2021.

interested in reading about it, if that information “falls upon them”. This essentially means that they would react favourably to a format they are used to, when they browse onto a given interface (i.e. a short video, a push message or a post in a feed).

Amurabi designers are going over the prototypes created by the participants

Thanks to this in-depth understanding of their current online habits, the project team was able to start a co-creation phase through participatory 3h-workshops. Amurabi aimed at making children and teenagers, co-researchers and co-designers of interfaces, to better convey their needs and expectations into the new prototypes (**Step 2**, Figure 1). Prototypes are the equivalent of a first draft of the interface, where designers layout the basis of the interaction, content, and look and feel based on the analysis of the user-research phase. The main purpose of a prototype is to be tested – not to be perfect the first time. Prototyping is essential to the design process, as it enables designers to test out a concept rapidly, to improve it through numerous iterations, and to ensure the end result fully meets the users’ needs.

Amurabi also chose to involve child-psychologists such as Véronique Rizzi[24] as a facilitator at this stage of the project to set the workshops ground-rules and to create a favourable environment that would lead to fruitful productions. CNIL and LINC observers were also present at each stage of these workshops.

Amurabi facilitating the prototype presentation by one participant to the other teenagers, to gather the group's comments and potential improvements on the production.

One of the key elements of the workshops, before diving into co-creation, was to ensure participants clearly understood the implication of data privacy concepts. Amurabi began each session with the "Amusement Park" storytelling activity – participants were asked to imagine being in an amusement park divided into different worlds ("fairy tales", "dragons" or "sport" for example, depending on their age).[25] As visitors enter the amusement park, a computer analyses their prior tastes and habits, and directs them on a train that will only take them into the world that corresponds to those tastes. It is impossible to leave the train

24 ibid.

25 This analogy was created by the Amurabi team and Veronique Rizzi ahead of the workshop.

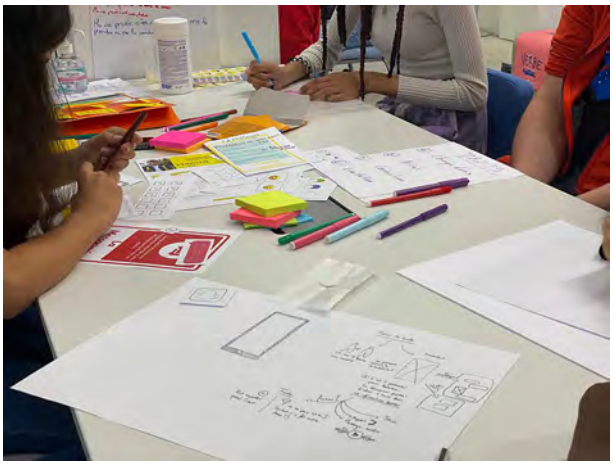
and change worlds to visit the others. Participants were asked to discuss such questions as: is it useful; and does it create issues. The purpose of this activity was to allow children to uncover by themselves the potential consequences of being exposed mostly to targeted content according to their previous tastes and habits – all the more as the point of childhood is to discover and build oneself. All age groups came to the natural conclusion that exploring diverse content, in particular what one does not know, is a positive experience that helps them learn and grow up.

Marie Potel Saville, Amurabi Founder & CEO, facilitating the workshop with children

Then, the participants were divided into two sub-groups and went into tailored co-creation activities. The purpose of these activities was to co-create mock-ups of digital interfaces that would address the needs and constraints of different personas. A persona is a key step in the design methodology: personas are fictional characters, created based upon research in order to represent the different user types that might use a given service in a similar way. Creating personas is decisive in understanding users' needs, experiences, behaviours, and goals.[26] In this instance each persona corresponded to an age-range and were data-driv-

26 Rikke Friis Dam and Teo Yu Siang, 'Personas – A Simple Introduction' (*Interaction Design.org*, 2021) <www.interaction-design.org/literature/article/personas-why-and-how-you-should-use-them> accessed 2 July 2021.

en: Amurabi researchers built them during the first phase of the project, based on the insights collected during the focus groups and prior research. At the end of each session, a group would present its three best interface ideas to the other participants, who would then share their feedback to improve the prototypes, discussing how to best meet the needs of the various personas.



Children designing the interface prototypes, facilitated by Amurabi Designers

Overall, the 24 participants drafted no less than 12 interface prototypes.

Children designing the interface prototypes, facilitated by Amurabi Designers

6. The prototype: results and impact

Amurabi designers then worked internally to improve and develop digital versions of the prototypes created during the workshops, leveraging neuroscience to tailor the words and the density of sentences to children's cognitive capacities (**Step 3,** figure 1). They ensured the information would be structured in small doses, to avoid any overload that would discourage the child from reading, for instance by always linking the data item, a tool for control and the consequences of the action.

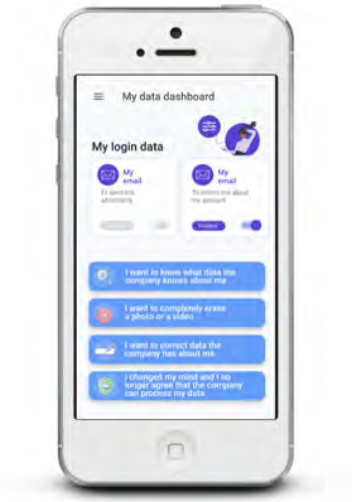


Fig. 2. Mock-up of a dashboard with a dedicated button for each action, set out in a granular way.

Amurabi lawyers also ensured to leverage the words that were carefully chosen by the participants during the workshops, to ensure they would truly resonate: using references and a tone adapted to children while avoiding the pitfall of infantilizing words which triggers reject. For example, young children (8 to 10 years-old) do not understand what lies behind the word “cookie” and suggested to use the image of a tracker or a crystal ball instead (see Figure 3).

Fig. 3. Mock-up explaining the meaning of cookies.

Once the prototypes were developed, they were submitted to an expert audit (**Step 3,** figure 1). The audit focused both on the UX design, to ensure that the interfaces ergonomics fully met the accessibility standards of an underage audience. The audit also focused on the content, to ensure compliance with GDPR and the CNIL's guidelines.[27]

The prototypes were then tested with new users, both in a 3rd grade classroom and through online testing with participants of all ages. The testing followed Amurabi's Testing Lab protocol set up by Mathilde Da Rocha (PhD in cognitive sciences). Creating various user-scenarios, participants were asked to rank the actions taken on a scale of 1 to 5 to test acceptability, readability, and perceived usability. These tests allowed to consolidate the 12 prototypes created initially and then iterate to come up with three final prototypes that collected the best efficiency, understandability, and accessibility scores among participants.

27 Gwendal Le Grand and others (n 8); see also <https://www.cnil.fr/en/cookies-and-other-tracking-devices-cnil-publishes-new-guidelines> accessed 2 July 2021.

These three prototypes were then presented as three distinct case studies, two of them are already available on the Data and Design platform within the CNIL website:

The "Instap" case study illustrates how to inform teenagers about geolocation data collection on social media: this interface pattern for a social media allows users to know where their contacts are and automatically add location to their posts. This data is also used to send personalized editorial content based on the user's location, which, for example, makes it possible to push content posted by friends who are physically closest. The social network also offers a "ghost mode" that allows users to make their location invisible to their friends.

Focus-groups and workshops showed that teenagers are well-aware to the potential risks of sharing their location, which is why teens particularly enjoy the "ghost mode". However, they forget or do not understand that the network can continue to access their location data, even when they think their visibility was very limited by the ghost feature.

Clearly linking information and action on the platform as well as presenting it on a single page emerged as an essential criterion to facilitate the exercise of rights by underage users during the workshop. Thus, the prototype had two distinct setting options available, highlighting key information (such as who will have access to the location) in small paragraphs. During the workshops, teens insisted that the information should clearly reflect the consequences of their choices, with a plain language explanation of how their data will be used.

Fig. 4. Instap geolocation set up page

The "Brawlcrush" case study illustrates how young users can regain control over the data they share during the registration process when signing up for an online game. Indeed, the focus groups had revealed a gap between their perception and actual understanding. Children aged between 8 and 10 think they have mastered the registration process, but in reality, they have difficulties understanding the notion of a company collecting their data and using it. As a result, they have limited control over the process. For instance, during focus groups, Amurabi researchers used a sentence completion exercise, e.g. "creating an account online is..." (to be completed by each participant). Most children across all age groups completed the sentence with the word "very easy" or similar, adding comments such as "I never need help", "I do it very easily on my own". The following exercise included a range of questions, digging into the children's knowledge about what happens with the information they provide when creating an account. Results clearly showed that 8 to 10 year-old children have no clue and that 11 to 14 year-olds are confused.

Amurabi carefully avoided information overload, which is particularly detrimental to children accessing information, especially if they are in a hurry to access the content of the app they are browsing. This is why each screen displayed very little text, associating it with very explic-

it and visible buttons, alongside specific plain legal language to ensure only understandable terminology was used. The choice of words must be concrete, referring to environments and concepts already known to children. For example, the company developing the game is referred to as "the people who created the game", a formulation that is more meaningful to children. The option to make the information publicly visible is called "Other games or people," both of which give substance to the notion of information being public and visible to all.

Nevertheless, and in addition to the information provided before the setting, full information is easily accessible if the child or his parents wish to learn more. For example, they can click on a dedicated link to get directed to a full privacy policy specifically designed to be read by children.

Fig. 5. Brawlcrush registration page

In addition to the above-mentioned prototypes, Amurabi created a complete toolbox that not only incorporates these case-studies but also offers concrete methodological kits to equip UX designers to address the challenges of children's privacy protection, including:

– 3 key privacy concepts explained to designers, illustrating in plain language the fundamental notions of privacy as well as good practices and illustrative examples to design respectful interfaces.

– Methodology-kits, giving designers a conception and facilitation process to run user research, co-creation and testing workshops with children.
– An article summarizing the research phase findings, sharing the key insights from renowned authors on children's digital rights and data protection issues.
– Three Youtube tutorials in a short and engaging format, sharing tips and tools for designers to create privacy-compliant platforms dedicated to underage-users, to be published by the CNIL.[28]

7. Critical takeaways

One of the key take-aways from this project was the necessity to radically change the approach to the language used in child-friendly privacy content. If the need to adapt the level of language to children was obvious to Amurabi, the researchers had not anticipated the crucial importance of (i) limiting the quantity of text to the bare minimum (three lines is already way too much for young children) and (ii) using not just plain legal language, but also words that 'resonate' with children and with which they can easily identify.

Under-age users want the tone to be more direct, favouring interjections and the use of the pronoun "you", reflecting an oral style that allows a better ownership of information about their personal data. Obviously, reader identification is at the heart of the plain legal language methodology: "writing in such clear terms that the reader immediately identifies the information, easily understands what he or she is reading, and easily determines what to do with it."[29] However, Amurabi learnt how critical it is to use an understandable and playful language, but without being childish. The younger the users are, the more concrete the language must be and the more it must refer to known notions: school, social networks, and family rather than administrative vocabulary.

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28 Expected to be released on the CNIL Innovation Lab website throughout 2021 <https://design.cnil.fr/en/> accessed 2 July 2021.

29 Center For Plain Language, 'Five Steps to Plain Language', <https://centerforplainlanguage.org/learning-training/five-steps-plain-language/> accessed 2 July 2021.

Furthermore, Amurabi researchers also found that younger children (8 to 10 years-old) can only absorb an extremely limited amount of information at a time, and information must therefore be sequenced in very limited blocks of text, making very short sentences conveying one idea at a time. It is essential when dealing with under-age users to be extra careful and empathetic in writing in plain legal language, to ensure that the information is really understood by these users with very specific needs.

At the same time, the most critical takeaway is that children and teenagers *do* understand the concept of privacy and *do* care about their personal data if they are given the means to decrypt the notions and seamless tools to make their own choices. Their natural curiosity and playful mindset are also great assets that can be leveraged to empower them understanding and exercising their rights.

This project was concurrent to the coming into force of the ICO Age-Appropriate Design Code in the United-Kingdom, that sets standards and explains how the General Data Protection Regulation applies in the context of children using digital services.[30]

Leveraging the insights from this project, Amurabi is now working to help various companies comply with these guidelines, by entirely redesigning several children-friendly online privacy policies, in particular, in the video game industry.

Bibliography

Bernard M and others, 'Which Fonts Do Children Prefer to Read Online?' (2001) 3 Usability News <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.529.6655&rep=rep1&type=pdf> accessed 2 July 2021

Center For Plain Language, 'Five Steps to Plain Language', <https://centerforplainlanguage.org/learning-training/five-steps-plain-language/> accessed 2 July 2021

Friis Dam R, Siang TY, 'Personas – A Simple Introduction' (*Interaction Design.org*, 2021) <www.interaction-design.org/literature/article/personas-why-and-how-you-should-use-them> accessed 2 July 2021

30 United Kingdom's Information Commissioner's Office (n 15).

Hartzog W, *Privacy's Blueprint, The Battle to Control the Design of New Technologies* (Harvard University Press 2018)

Kidron B, Evans A, Afi J, *Disrupted Childhood, The Cost of Persuasive Design* (5Rights Foundation 2018)

Le Grand G and others, 'Shaping Choices' (2019) 6 Innovation & Prospective Journal 10

Lievens E and others, 'The child's right to protection against economic exploitation in the digital world' (2019) 38(4) International Journal of Childrens Rights 833

Livingstone S, Stoilova M, Nandagiri R, *Children's data and privacy online – Growing up in a digital age, an evidence review* (London School of Economics and Political Science 2019) <http://eprints.lse.ac.uk/101283/1/Livingstone_childrens_data_and_privacy_online_evidence_review_published.pdf> accessed 2 July 2021

Milkaite I, Lievens E, 'Child-friendly transparency of data processing in the EU: from legal requirements to platform policies' (2020) 14(1) Journal of Children and Media 5

-- 'Internet of Toys: Playing Games with children's data', in G Mascheroni and D Holloway (eds), *The Internet of Toys Practices, Affordances and the Political Economy of Children's Smart Play* (Palgrave Macmillan 2019)

Norwegian Consumer Council, 'Deceived by Designed' (2018) < https://fil.forbrukerradet.no/wp-content/uploads/2018/06/2018-06-27-deceived-by-design-final.pdf> accessed 2 July 2021

Steinberg L, 'Risk taking in adolescence: New perspectives from brain and behavioural science' (2007) 16(2) Current directions in psychological sciences 55

United Kingdom's Information Commissioner's Office, 'Age-appropriate design: a code of practice for online services' (2020) < https://ico.org.uk/media/for-organisations/guide-to-data-protection/key-data-protection-themes/age-appropriate-design-a-code-of-practice-for-online-services-2-1.pdf> accessed 2 July 2021

van der Hof S, 'I agree, or do I? A rights-based analysis of the law on children's consent in the digital world' (2017) 34(2) Wisconsin International Law Journal 409

EU instruments

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC [2016] OJ L119/1

EU Data Protection Board and WP29 documents

WP29, 'Guidelines on Transparency under Regulation 2016/679' (WP 260 rev.01 as last revised and adopted on 11 April 2018)

11. HELPING THOSE UNDER ARREST TO UNDERSTAND THEIR RIGHTS IN CRIMINAL PROCEEDINGS

Florence Cols

1. Summary

The Letter of Rights is the document which explains to people, who are arrested or who are suspects being questioned by the police, what their rights are in that situation. These rights include: the right to remain silent, the right to obtain legal assistance, and the right to receive medical help, amongst others.[1]

This document, however, does not effectively inform people of their rights, especially since the document is provided to them during a stressful situation. As a consequence, people, who are under arrest or who are suspects, may remain unaware of their rights or may remain unaware of how to exercise them.

A European project called "Access Just" aims to improve the access to criminal justice, mainly by clarifying all European Letters of Rights. This project is financed by the European Union and implemented by the Fair Trials Europe[2] and the Hungarian Helsinki Committee.[3] Belgium was one

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* This Chapter presents an updated version the previous paper "A Methodology to Rewrite the Belgian Letter of Rights" published in "Journal of Open Access to Law Vol. 9 No. 1 (2021): Communicating the law and public information to vulnerable audiences".

1 Article 47bis § 5 of the Code of Criminal Investigation; Article 33ter of the Law of 5 August 1992 on the police function; Articles 2bis and 16 of the Law of 20 July 1990 concerning preventive detention; Article 12 of the Belgian Constitution.

2 'Home | Fair Trials' <https://www.fairtrials.org/> accessed 24 August 2021.

3 'Home' (*Hungarian Helsinki Committee*) <https://helsinki.hu/en/> accessed 24 August 2021.

of the pilot countries and Droits Quotidiens Legal Design[4] was asked to help as a Legal Design expert.

This Chapter explains how Droits Quotidiens rewrote the Belgian Letter of Rights, in order to make it clear, understandable, and effective for people under arrest. The Chapter presents the steps and methodology followed. It then shows the results and the expected impact of the project, in terms of improving access to criminal justice. All in all, the first step towards justice is to understand our rights and obligations.

2. Research question

The current Letter of Rights does not reach its goal. The people who are arrested and the suspects who are questioned by the police **do not understand their rights** after reading this document. What if the Letter of Rights was provided in a clearer way? Could this official document be **redesigned** in order to be **more comprehensible for its target audience**?

The goal of this project is to:
- redesign the Letter of Rights, by applying Legal Design rules and techniques;
- transform the Letter of Rights into a clear, understandable, and effective document for those under arrest or under questioning;
- test the rewritten document with stakeholders and with its target audience; and
- advocate for the adoption of the rewritten document, as the official Letter of Rights, to the authorities.

The project also aims to show that Legal Design rules and techniques can apply to official legal documents and to help society improve their access to justice.

4 A Belgian non-profit organization, expert in Legal Design, 'Accueil' (*Droits Quotidiens Legal Design*) <https://droitsquotidiens.design/> accessed 24 August 2021.

3. Background and context

3.1. The legal obligation to inform people under arrest of their rights

Informing people of their rights in criminal proceedings is a fundamental right **in the EU**:
- under the European Convention for Human Rights (ECHR) and the related case law;
- under the European Directive; and
- under national requirements.

For instance, Article 6(3)(a) of the European Convention for Human Rights (ECHR) establishes that people charged with criminal offences have the right, 'to be informed promptly, in a language which he understands and in detail, of the nature and cause of the accusation against him'.

In Belgium, and in all EU Member States, people under arrest and suspects who are being questioned by the police shall receive a Letter of Rights, which explains to them their rights. The Belgian Letter of Rights is regulated by the royal decree of 23 November 2016 implementing Article 47bis § 5 of the Code of Criminal Investigation (*arrêté royal du 23 novembre 2016 portant exécution de l'article 47bis § 5 du Code d'instruction criminelle)*.

Arrested persons must be informed of their rights, according to the following Belgian provisions:
- Article 47bis § 5 of the Code of Criminal Investigation;
- Article 33ter of the Law of 5 August 1992 on the police function;
- Articles 2bis and 16 of the Law of 20 July 1990 concerning preventive detention; and
- Article 12 of the Belgian Constitution.

The Belgian legislature, in respect to the Letter of Rights, implemented European law, in particular Directive UE 2012/13/EU on the right to information in criminal proceedings ('Right to Information Directive').[5]

5 Directive 2012/13/EU of the European Parliament and of the Council of 22 May

The right to information is necessary to ensure a **fair trial**. If people who are arrested do not receive this information in an accessible form, then they are unable to effectively exercise their rights. Therefore, the provision providing the right to information in criminal proceedings is crucial to effectuate these rights in practice.

3.2. The problem: people under arrest do not understand their rights

A study conducted in 2010 highlighted that the language used in many European Letters of Rights is **technical and inaccessible**.[6] To address this problem, the Right to Information Directive requires information to be provided in a 'simple and accessible language' (Article 3(2), and Article 4(4)).

In 2015, several European associations started a research project called "Accessible Letters of Rights in Europe (2015-2017)". The goal of this project was to assess how the requirement of "simple and accessible language" is applied in practice.[7] They conducted research, including a survey of stakeholders and sociolinguistic surveys in almost all of the EU Member States.

The **survey**, in particular, addressed the members of the Legal Experts Advisory Panel (an EU-wide network of experts in criminal justice and human rights). They tested the existing official Letters of Rights. This led to a comparative report of good practices (2017) and to a set of recommendations.[8]

The project's outcomes showed that the European Letters of Rights are **not tailored for informing people** under arrest about their rights, especially as they receive these documents during a stressful situation.

2012 on the right to information in criminal proceedings, [2012] OJ L142/1.

6 Taru Spronken, 'EU-Wide Letter of Rights in Criminal Proceedings: Towards Best Practice' (2010) Ius Commune Europaeum, <http://arno.unimaas.nl/show.cgi?did=24161> accessed 24 August 2021.

7 Accessible Letters of Rights in Europe (2015-2017). The partners of the project were: Rights International Spain, the Lithuanian Human Rights Monitoring Institute, Fair Trials Europe, and the Bulgarian Helsinki Committee.

8 Hungarian Helsinki Committee, 'Accessible Letters of Rights in Europe – Comparative study' (2017) <www.helsinki.hu/wp-content/uploads/Comparative-Report_FINAL_ENG.pdf> accessed 24 August 2021.

The documents were found to be far too long, written in legalese, with complicated vocabulary, illogical structure, unnecessary information, etc.[9]

As a consequence, people under arrest **do not read** the document, or do not read it in its entirety, or **do not understand** what they read.

They remain unaware of their rights, or they do not know how to exercise their rights. They do not know what the police officers can or cannot do. They do not know that they can take certain actions or inactions (for example, they can remain silent and refuse to answer questions), without the police or a judge using this against them at a later point. They do not know that they can ask for an interpreter or for a translation of key documents.

In some countries (e.g., in Belgium) there is a right to legal aid: if a person does not have their own lawyer, they can get one for free. However, as they do not understand the Letter of Rights and do not know this lawyer, they may think that this is the lawyer of the police and they do not trust him or her. Of course, this is not the case, as the lawyer is an independent professional who is there to assist the person under arrest. However, if the person does not know this information, then they cannot benefit from the effective legal assistance from their lawyer.

3.3. The "Access Just" project

In this context, a group of European associations launched the project "Access Just: Demystifying Justice – Training for Justice Actors on the Use of Plain Language and Developing Clear and Accessible Letters of Rights (2018-2020)". This project aimed to improve access to justice, mainly by

9 Fair Trials, 'Our vision: A world where every person's right to a fair trial is respected – Accessible Letters of Rights in Europe – International and Comparative Law Research Report' (2016) <www.fairtrials.org/wp-content/uploads/2017/05/Letters-of-Rights-International-and-Comparative-Law-Research-Report.pdf> accessed 24 August 2021. The importance of plain language in criminal proceedings has been stressed in European Union Agency for Fundamental Rights, *Handbook on European law relating to access to justice* (Publications Office of the European Union 2016). More generally, on the relevance of public and stakeholders' feedback in the legislative process, see Interinstitutional Agreement between the European Parliament, the Council of the European Union and the European Commission on Better Law-Making, [2016] OJ L123/1.

clarifying all European Letters of Rights. The project was financed by the European Union and coordinated by the Hungarian Helsinki Committee[10] in partnership with other associations, including Fair Trials Europe.[11]

More specifically, the focus of the project was to make 'criminal procedure more accessible to suspects or accused persons by:

- Stimulating a movement for an open and accessible European legal culture grounded in the use of plain language;
- Encouraging better implementation of the provisions on notification of rights of the Right to Information Directive (Directive 2012/13/EC); and
- Drafting alternative, plain language Letters of Rights (LoRs) that Member States can use to better comply with their obligations under Article 3 and 4 of the Right to Information Directive.'[12]

Belgium was one of the pilot countries and Droits Quotidiens Legal Design was involved as a Legal Design project partner. Droits Quotidiens had the task to rewrite the Belgian Letter of Rights, in order to make it clear, understandable, and effective for people under arrest.

10 See above (n 3).

11 See above (n 2). On the Access Just project, see 'Plain language makes justice accessible' (*FairTrials.org* 11 February 2019) <www.fairtrials.org/news/plain-language-makes-justice-accessible> accessed 24 August 2021.

12 Fair Trials Europe and the Hungarian Helsinki Committee, *Access Just project description* (unpublished).

4. Research project design

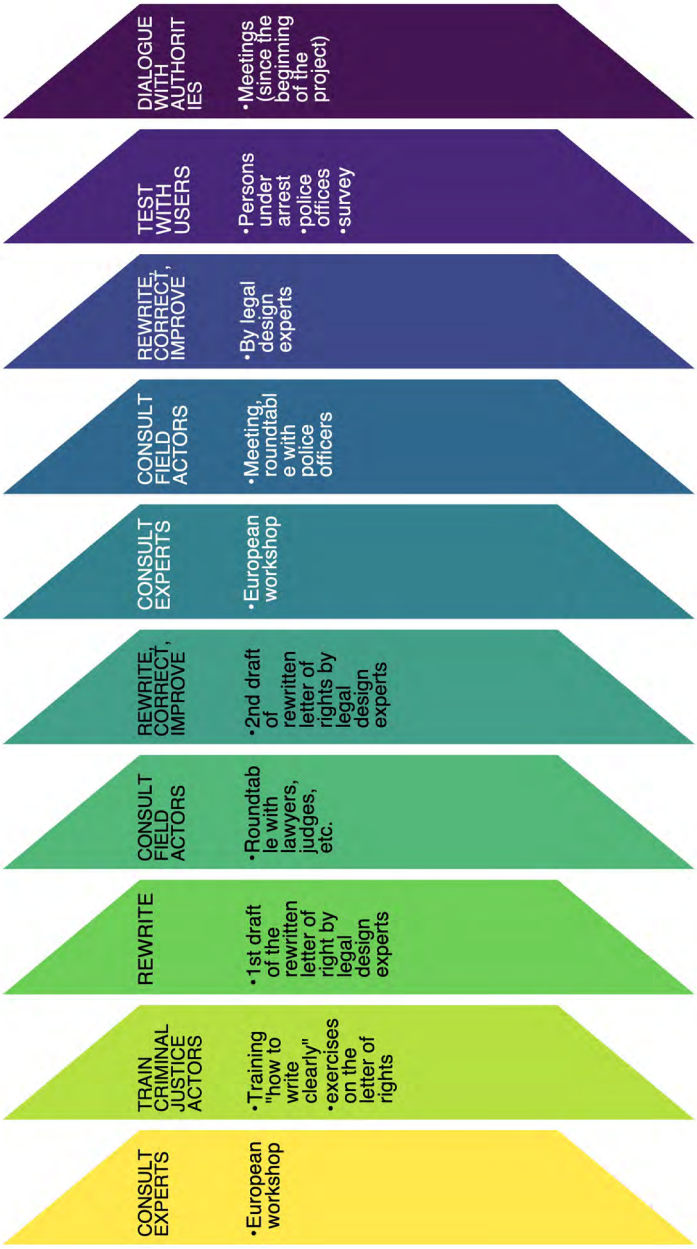

Fig. 1. Research project design

5. Methodology

Changing a document is a process that requires many **interactions** between several stakeholders. For this project, the Legal Design experts worked on the rewriting of the Letter of Rights, but they regularly consulted field actors to take into account their knowledge of the field.

This is a concrete and practical project, that aims to reach 2 goals:

- raise awareness among the criminal justice actors about the importance of using language that is clear and understandable, in order to provide real access to justice; and
- rewrite the Letter of Rights.

Here is the methodology and steps that was followed to rewrite the Belgian Letter of Rights.

1. Fair Trials and the Hungarian Helsinki Committee organized a European **workshop** in January of 2019. The goal was to gather European experts in the fields of plain language, criminal justice, and plain legal language, in order to define the framework of the project, the goals, and the content of the training module. This training module on plain legal language for lawyers and judges, was to be tested in 4 pilot countries, and then implemented in all participating countries. Each participating country had 2 practitioners attending the workshop:
   - 1 plain language expert (linguist, translator, communication expert, designer, etc.); and
   - 1 criminal justice expert (lawyer, judge, etc.).

2. In Belgium, Droits Quotidiens and Fair Trials created a practical **training module**, "How to write clearly", for lawyers and judges in criminal procedures. This training module was tested with Belgian professional participants, as a pilot project. The training took place in June of 2019, where Droits Quotidiens and Fair Trials organised 2 sessions for 2 groups: 1 group of lawyers and 1 group of judges. Each group had 2 half-day ses-

sions, so they could work and think between the 2 sessions. The training goals were to:
- raise awareness on the importance of being clear;
- teach the participants the plain legal language method[13]; and
- work on the Letter of Rights.

The training included **exercises** on rewriting the Belgian Letter of Rights. These exercises aimed to:
- identify the target audience of the Letter of Rights, the objective of this document, and the context of the communication;
- select important and relevant information to retain from the current version;
- structure the information in a logical order for the people under arrest; and
- rewrite the document in plain legal language.

The training led to informative and constructive exchanges, ideas and instructions. It assisted the experts work on rewriting the Belgian Letter of Rights.

Later in 2019 and 2020, the training module was improved by the Hungarian Helsinki Committee and Fair Trials, and translated into all languages of the participants EU member states. This training module is available online.[14]

3. After the training, the experts started **rewriting the Belgian Letter of Rights**. This work was accomplished by:
   - plain legal language and Legal Design experts (Droits Quotidiens);
   - criminal law experts (Fair Trials); and
   - a graphic designer (Droits Quotidiens).

   The experts worked not only on rewriting the text, but also on presenting the information visually. They designed a whole new document and added visual elements. This resulted in the first draft of the rewritten Letter of Rights.

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13 This method has 3 major steps: Think, Write, Review. Each step has several tips and tricks on plain legal language, such as identify your target audience, select the relevant information, use daily words, write short sentences, use active voice, use bullet points, make the structure visual, etc.

14 'Hungarian Helsinki Committee E-Learning' <https://elearning.helsinki.hu/> accessed 24 August 2021.

4. Droits Quotidiens and Fair Trials then presented the **first draft** to **field actors** that included lawyers, judges, and legal aid actors. This step was intended to take the input from the field actors and to assess if the new version was:
   – relevant, pertinent, and usable for the people under arrest; and
   – complete enough to be legally correct.

   Here again, the experts received very interesting information, as well as, relevant and important elements. During a half-day session of discussions, the field actors commented on the draft, and shared how it could be improved. They also explained how things work in theory and how it works in reality. For example, they explained that sometimes people do not trust their lawyer because they think he/she is employed by the police.

5. The experts went back to work, in order to **improve the rewritten Letter of Rights** based on the exchanges with the field actors. The feedback of the field actors helped them to improve the rewritten Letter of Rights and to adapt it more to the field, to the practice, and to the reality of people under arrest. They created a **second draft**, based on comments received from the field actors.

6. In November of 2019, Fair Trials and the Hungarian Helsinki Committee organized a second European **workshop**, gathering the same experts as in January of 2019. Two drafts were presented to the European plain language experts and criminal law experts: the Belgian and the Hungarian Letter of Rights. This presentation was meant to:
   – present the rewritten versions to the European experts;
   – identify the cultural and national aspects that must be considered to adapt the Letters of Rights to each domestic context; and
   – show 2 examples of the rewritten Letter of Rights, to aid the European experts in their own work on their Letter of Rights in their home country.

7. Shortly thereafter (the timing depended on the availability of the appropriate individuals), a **meeting with police officers** in Belgium was arranged. This was an opportunity to present the rewritten version of

the Letter of Rights to the officials who are responsible for handing out the document to people under arrest. The police officers are the first contacts for people under arrest. It was also an opportunity to highlight the importance of plain language in their exchanges with people who are under arrest.

During a half-day session of free discussion, the police officers provided valuable **feedback** on whether the rewritten version was:

- suitable for use by the police officers;
- relevant for the people under arrest; and
- suiting their needs.

The police officers confirmed that the rewritten version met all three goals stated above. The input of individuals working in the field, who have contact on a daily basis with people under arrest, was very important. These individuals know the reality of people under arrest, their needs, their reactions, the risks of giving them a paper document in an abbreviated format, and other practical implications important to the success of this project.

8. After these meetings, the experts worked on incorporating information and comments received from the field actors. They further **improved the rewritten version** of the Letter of Rights with the input received and created a **third draft** of the rewritten Letter of Rights.

9. The next step is to present the rewritten Letter of Rights to people under arrest and to **test** this rewritten document in comparison with the existing official version. The user here is the **target audience**: the best person a designer can learn from, those who are able to verify whether the new version of the document matches users' needs. At the time of writing, this step has yet to be implemented.

Ideally, user involvement should be integrated throughout all stages of the process as it is a key element for any design thinking process in the Legal Design approach. In this project, user tests could not be done at an earlier stage because when Droits Quotidiens came into the project, the beginning steps were already launched by the other partners (Fair Trials and the Hungarian Helsinki Committee).

10. From the outset of the project, and for some time in the future, the task of **advocating** to the Belgian Ministry of Justice, to adopt the new version of the Letter of Rights and make its use mandatory for all criminal justice actors, remains. At the time of this writing, these discussions are still on-going and no confirmation has been given as to when the proposed new version of the Belgian Letter of Rights will be used.

11. In July of 2021, the experts again **redesigned** the Letter of Rights. The content is the same, but the presentation has changed, in order to make the document **easier to use in practice**.

    In fact, police officers and other associations had pointed out that the rewritten version, as a coloured leaflet, was difficult to use in practice, because it needs to be printed in colour, and then folded. This presents logistical complications and potential risk of being able to keep the documents in stock. Coloured versions also cost more than the actual black and white document.
    So the experts worked with a graphic designer, to adapt the rewritten version and make it easier to use. They designed a 2 page document (A4 double-sided or 2 pages), available in colour or in black and white. At the time of writing, the new version is just finalized. It is now distributed to police officers, associations, professionals, etc. It is not the official version, but it still can help professionals and people under arrest or questioned as suspects.

6. The prototype: results and impact

Here is an overview of the former version and the new version of the Letter of Rights.

6.1. Former Letter of Rights – Original version

The official Letter of Rights in Belgium is a 4 page document, in black and white.[15] It is very dense and **difficult to read**. It is very difficult to

15 'Vos Droits Si Vous Êtes Privé de Liberté / Your Rights When Being Detained - Service Public Federal Justice' <https://justice.belgium.be/fr/themes_et_dossiers/

understand for people under arrest for many reasons. Here are the main characteristics that make this document unclear, according to the **plain legal language standards**.

- 4 pages is too long to read and discouraging: when a person sees all the text that they have to read, they might give up reading it.
- There is only text: no pictograms, no visual presentation of the information.
- There is too much information, including information that is irrelevant for people under arrest. For example, it contains unnecessary legal references, useless details, etc. Some secondary information may be useful for a lawyer, but not for the target audience (people under arrest).
- Duplicative information is included in throughout the document, creating unnecessary repetition and a risk of confusion.
- The information is organized according to judicial logic, which does not correspond the logic of the person under arrest. It makes it difficult for the person to follow the reasoning and to understand the document.
- The vocabulary is complicated, the text is full of legalese, and complicated formulations.
- The sentences are very long with a complicated structure, thus making them difficult to read, to understand, and to memorize.

6.2. New Letter of Rights – Rewritten version

Droits Quotidiens proposed a rewritten version of the Letter of Rights, in which **plain legal language rules and Legal Design principles** were applied. The document is shorter, contains only relevant information, and explains their rights in a way that gives the reader a better possibility to understand their rights and to memorize important information.

Droits Quotidiens first proposed a practical leaflet, but then the experts realized that this format was difficult to use in practice. Droits Quotidiens created a second version, in a A4 format, which is easier to use in practice.

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documents/telecharger_des_documents/declaration_de_droits/vos_droits_si_vous_0> accessed 24 August 2021.

Here are the characteristics of the rewritten version.

- The 4 page document was transformed into:
  - a **practical leaflet**: it is smaller and easy to keep (pocket size) (first rewritten version – 2019-2020); and
  - a double-sided page, or **2 page document**, which is easier to use for field actors and authorities in charge of giving the document to people arrested or suspected of a crime (second rewritten version – July 2021).
- The new version contains far **less information. Only pertinent** and important information for people under arrest was retained. For example, the information about the rights of the individual if they are taken to the examining magistrate (prosecutor) was removed and the text focuses on their immediate rights during police custody.

  This information was removed for 2 main reasons.
  - If you want the people to read, understand, and remember the information, you must give them the information **in the right moment**. The document must provide information that is relevant to their current situation (police custody in this case). Any other information, for example relating to the next steps in the criminal procedure (being interviewed by a magistrate), is not relevant at the time of arrest. Therefore, it is useless and confusing to provide this information in the moment a person is arrested and taken to the police station.
  - It is very **stressful** for a person to be under arrest and to talk to police officers. It is not necessary to add further stress by providing extraneous information about being presented to a judicial authority. In fact, many persons who are arrested and questioned by the police, are never taken to the magistrate, because the procedure ends, or because they are not found further suspects.
- The document was **structured** according to the **logic of a person** under arrest. Therefore, the following questions were addressed:
  - What information do they really need?
  - What information do they need first?
  - What information is most important for them and should be emphasised?

This led to the organization of the information according to the following structure.

  - First: the most important rights on the very beginning (they were on the last page in the former version).
  - Second:
    1. the rights that the person can exercise at any time, as soon as they are arrested;
    2. the specific rights of the person before the police interrogation;
    3. the specific rights of the person during the police interrogation; and
    4. the specific rights of the person after the police interrogation (step 4 is included in step 3 in the first rewritten version, but it is a separate step in the second rewritten version).
  - Third: in another document: the rights of the person who are taken to a judicial authority (in Belgium, an examining magistrate, such as the prosecutor).
- Similar information was grouped together.
- Colours and a **colour code** was added. The intention of the colour scheme is to help the person under arrest to memorize the information, to follow the logic of the document, and to find their bearings in the document. It also makes it easier for them to find the relevant information in the document. For example, the lawyer during the initial telephone consultation can point the arrested person to what is written on the green page.

  In the first rewritten version, colours are used for the background.
  - In orange, the rights of the person at any time, as soon as they are arrested.
  - In green, the specific rights of the person before their interrogation.
  - In blue, the specific rights of the person during their interrogation.

In the second rewritten version, colours are used in a more discreet way, as this version needs to be also printable and readable in black and white. Colours are not in the background, but they are used to highlight the steps, the pictograms, and the frames.

- In red, the rights of the person at any time, as soon as they are arrested.
- In green, the specific rights of the person before their interrogation.
- In blue, the specific rights of the person during their interrogation.
- In yellow, the specific rights of the person after their interrogation.

- Important information and **key words** were **highlighted**.
  - Key words are highlighted:
    1. in white in the first rewritten version, which stands out against a coloured background; and
    2. in bold character in the second rewritten version;
    - Subtitles are visible and logical for the reader: they indicate the steps of the events that the person experiences (before – during – after the interrogation);
    - Speech bubbles that contain important details and further information about how to exercise a specific right in practice.

  The highlights allow for an **easy scan** of the document and a quick overview of the information. In a glance, the arrested person can grasp the key information about their rights.
- **Visual** elements and a **lay-out** that helps the comprehension was added.
  - The structure is visual, with numbers for the titles, bullet points, etc.
  - Pictograms were added. Pictograms help the persons to:
    1. find information in a glance;
    2. link information to an action (how they can practically exercise their right);
    3. memorize information more easily and rapidly; and
    4. understand or recognise information via a visual element that they often see, recognize, and understand (e.g., a phone, a pen, a doctor, etc.).
- The new version uses a **common vocabulary**, everyday words or those words most easily understood by people generally. In fact, 80% of the population understands a text written in a language level B1, according to the Common European Framework of Reference for Languages (CEFR). Level B1 is obtained by using everyday words. Legal documents currently use the C2 level, understood by only 5% of the population. This is even more important as this document is addressed to people under arrest. They are under a situation of stress, which makes comprehension and assimilation of information more difficult.
- The information is written in **short and simple structured sentences**. They are easy to read, to understand, and to memorize. Even for per-

sons with a good language knowledge, long and complicated sentences are difficult to read. Especially when the person is in the stressful situation of being under arrest.

– The document was clarified where the arrested person is concerned: it is written in the **first person singular** («I have the right to…»). People immediately see that this document is important to them if it is addressed to them.
– A **note page** or frame was added where people can write important information to them, such as, the phone number of their lawyer.

Fig. 2. First rewritten version of the Belgian Letter of Rights, in French, folded.

Fig. 3. First rewritten version of the Belgian Letter of Rights, in French, unfolded.

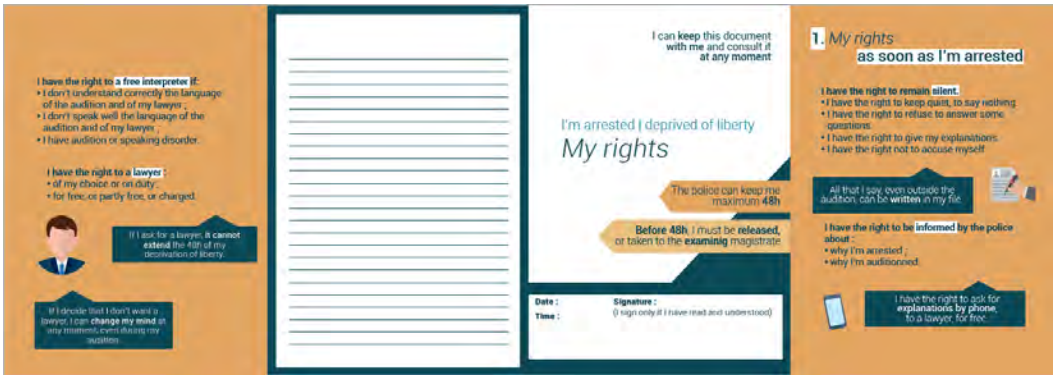

Fig. 4. First rewritten version of the Belgian Letter of Rights, in English, unfolded.

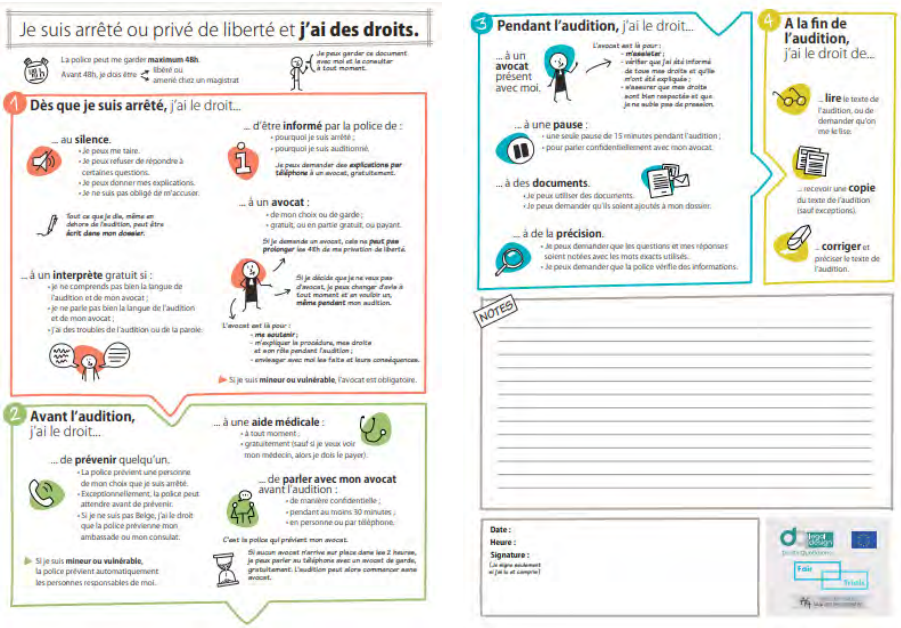

Fig. 5. Second rewritten version of the Belgian Letter of Rights, in French, coloured.

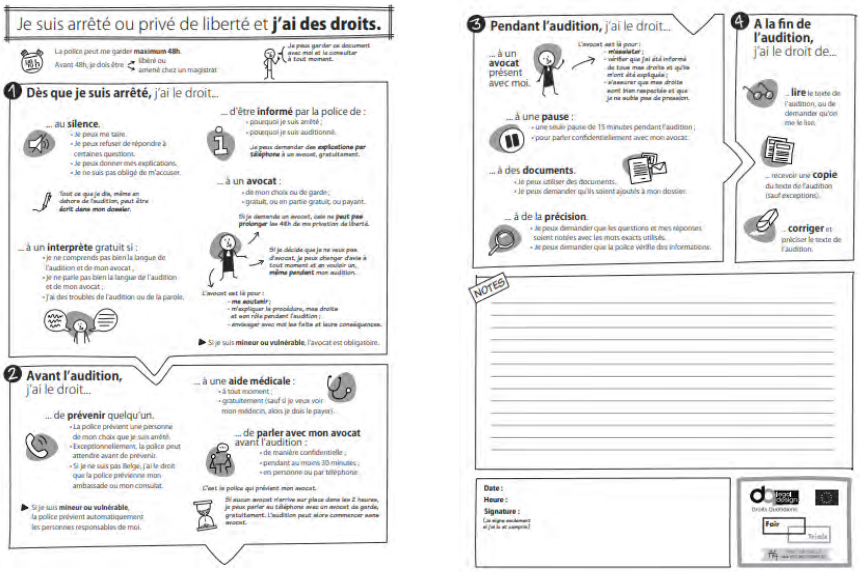

Fig. 6. Second rewritten version of the Belgian Letter of Rights, in French, black and white.

6.3. Improve the access to criminal justice

The Access Just project seeks to have an overall positive impact while improving **access to justice** in criminal investigations. The project sets out to achieve these goals by dedicating its attention to the specific issues of access to justice in criminal procedures, for instance by turning the Letters of Rights into accessible and understandable documents.

The accessibility and understandability have yet to be measured yet, but it is hypothesized that the new version of the Letter of Rights will:

- allow people under arrest to:
  - understand that they have rights;
  - know how they can concretely exercise these rights;
  - know that they can ask for their rights to be respected;
- help educate the criminal justice actors to respect those rights;
- show all actors and citizens that **official documents** can be written in plain legal language and that the **Legal Design** also applies to official documents; and
- inspire a new approach for more clarity and comprehension for legal procedures and justice.

The next step of the project is to **measure of the impact by testing** the new version of the Letter of Rights with its target audience, people under arrest. The testing of this step is still being organized. At the time of this writing, the rewritten version will be distributed to:

- police officers that will take part of a pilot project; and
- private and public associations doing social work and assisting their beneficiaries in (re-)integration.

The idea is to create a question-list that assesses what the person under arrest understands and how they behave after having read the Letter of Rights. Some members of the group will receive the former version, while others will receive the new version. This approach is useful to compare the results and show the differences between the comprehension level before and after this project.

7. Critical takeaways

This project shows that Legal Design can be applied to official legal documents and the preliminary results are particularly encouraging. In particular, it shows how the **interaction** between Legal Design experts and stakeholders, or field actors, can lead to create legal documents that are accessible and understandable for citizens. The expertise of the **experts in Legal Design** clearly presents the practical information and the knowledge of the **field actors**. Legal Design experts on the other hand need the information from the field actors in order to understand the situation of the target audience of the document, the context of the communication of the document, and other context derived from real life experiences.

The project is still on-going and is now preparing for the last step: **user testing**. This will confirm, hopefuly, that the rewritten version of the Letter of Rights is understood by a majority of the people under arrest. And if not, it will provide more information about how to better help these people understand their rights, elucidating if they need something else than a document or another type of document, or something else entirely.

An intrinsic **limitation** of the project is that the **final decision** about the use of the improved letter of rights will be made by public authorities. The rewritten version was distributed to several associations and services but this is not enough. Meetings with the actors of the Ministry of Justice have taken place several times, but it takes time for such a change. There are also some financial and technical constraints, such as translating the new document in many languages.

Fair Trials has inquired with the authorities where they are with this project and how they can further assist. There is hope that the second rewritten version (easier to use and less expensive to print), with positive user testing results, will **convince the authorities** to adopt the new document as the official one.

Furthermore, some other **challenges** remain.

– The rewritten version should be **translated** in many languages, because every person should receive the document in their own language. It has already been translated in the 3 official languages in Belgium (French, Dutch and German), and in English. Further translation implies further costs.

– The first rewritten version is in colour and needs to be folded. It requires **logistical organisation** in order to have enough documents available in each police station at any time. This concern led to a second version, which is easier to use in practice and it helps to overcome the logistical constraints.
– The rewritten version was provided to professionals in the field of criminal procedures and they confirmed that it is legally correct. However, the **validity and legitimacy** of the version will be reinforced when it is approved by the official legal authorities. The new Letter of Rights may still be assessed by the think tank from the Ministry of Justice, which is a group of legal professionals, gathered to think about strategic changes in order to improve Justice in Belgium.

Bibliography

Cols F, 'A Methodology to Rewrite the Belgian Letter of Rights' (2021) 9 Journal of Open Access to Law 1

European Union Agency for Fundamental Rights, *Handbook on European law relating to access to justice* (Publications Office of the European Union 2016)

Fair Trials, 'Our vision: A world where every person's right to a fair trial is respected – Accessible Letters of Rights in Europe – International and Comparative Law Research Report' (2016) <www.fairtrials.org/wp-content/uploads/2017/05/Letters-of-Rights-International-and-Comparative-Law-Research-Report.pdf> accessed 24 August 2021

Fair Trials Europe and the Hungarian Helsinki Committee, *Access Just project description* (unpublished)

Hungarian Helsinki Committee, 'Accessible Letters of Rights in Europe – Comparative study' (2017) <www.helsinki.hu/wp-content/uploads/Comparative-Report_FINAL_ENG.pdf> accessed 24 August 2021

Spronken T, 'EU-Wide Letter of Rights in Criminal Proceedings: Towards Best Practice' (2010) Ius Commune Europaeum <http://arno.unimaas.nl/show.cgi?did=24161> accessed 24 August 2021

EU instruments

Directive 2012/13/EU of the European Parliament and of the Council of 22 May 2012 on the right to information in criminal proceedings [2012] OJ l142/1

Interinstitutional Agreement between the European Parliament, the Council of the European Union and the European Commission on Better Law-Making [2016] OJ L123/1

International instruments

European Convention on Human Rights

National instruments

Belgium

Belgian Constitution

Law of 5 August 1992 on the police function

Law of 20 July 1990 concerning preventive detention

Royal decree of 23 November 2016 implementing Article 47bis § 5 of the Code of Criminal Investigation

12. LAWYERS OFFER A SERVICE AND THIS SHOULD BE DESIGNED! AN EXAMPLE OF A CHOREOGRAPHED LEGAL SERVICE

Angélica Flechas, Nicolás Guío, Daniela Bretón, and Jorge García

1. Summary

Nacional Monte Piedad is a financial institution based in Mexico with more than 244 years of experience, and thus recognized as Latin America's first financial institution. Through secured loans, financial services, and social investments, it is mainly dedicated to social financing, and therefore benefiting more than 3 million families each year, basically covering the entire country with its 320 branches.

Nacional Monte Piedad initiated this project with Háptica[1] to capitalize on the great opportunities that existed to close a wide gap that had grown between the legal department and the rest of the company. Some argued that they needed tools to properly work with to prevent the feeling that legal department would be messy, hard, or very technical. For this reason, Legal Design presented an ideal way of tackling those legal and operative problems.

The project was deemed a bit uncertain for the institution, because from the beginning of the consultancy the project itself could not be define as a normal Legal Design brief that involved documents that were going to be redesigned. This was a challenge because the project would not result in contract/document design but in a reformation of the services that the legal department and its members deliver to other departments. It was a concern at first for client leaders to accept the method

* We want to thank all our team in Háptica who participate in this project: Nicolás Perez, Juanita Aranguren, Maria Paula Guarnizo, Carolina Sesana, María Sanz de Santa María and Daniel Pinilla. Also, the team in Nacional Monte de Piedad who were part of the project as one more of us, believing since the beginning that the service lawyers provide must be designed.

1 Háptica is a Legal Service Design consultancy based in Colombia, <https://haptica.co>.

because it was not supported by a document design approach. People involved in the project asked, "how can a Legal Design company give us, a legal department, tools that do not involve documents whatsoever?".

We had further challenges. National Monte Piedad is a financial institution with highly structured and regulated activities. The lawyers work isolated with their jobs being divided according to their specialties and they rely on the processes of their particular unit, which depends on others to complete their work and fully deliver their input. This clearly generated a sluggish workflow. Changing this approach, had to be addressed through change management, which would result in a reformation in how lawyers do their work to include new activities that were not previously contemplated in their organization chart or mindset.

2. Research question

The declared purpose, as initially set by the project beneficiary, was to redesign processes within the legal department. However, after a round of interviews with several shareholders, the consultancy team understood that the innovation opportunity was completely different and we needed to reframe it.

So, the main research questions were planned to elicit answers regarding the legal concerns, the legal experience of the users involved with the legal area, and to elicit a deeper understanding of the users (how they work, what matters to them, and how they preferred to relate with others at work). For example, the following objectives were part of our interview questionnaire:

1. What is preventing the legal department from delivering a service to their internal clients that allows them to co-work in a clear and easy way for both parties?
2. What are the legal constrains and opportunities that must be taken into account in the Legal Service Design intervention?
3. What are the user's needs and preferences when they work with other people?

Even though the redesigning processes were complex and needed intervention to solve the wide gap between the legal department and the rest of the company, the approach also had to be holistic considering that the lawyers provide a certain service and processes are part of it.

However, to actually make a difference, it was more than the processes that needed to be redesigned. That's why legal service design was appropriate for this project, as it sees legal services as stories that are assembled and materialized by touchpoints[2]. So one of the challenges in this project was how to get the most of every solution by orchestrating the design of objects, processes, channels, and people (roles) in the legal context.

3. Background and context

It is commonly known that legal departments tend to work in silos. Studies, like the one carried out by Liquid Legal Institute in 2018,[3] show the tensions caused by such a work flow structure. In the case of Nacional Monte Piedad, the legal activities were done within the legal team and the intersection with other areas of the business were not planned in a way to maximize the service provided. The other departments were customers in need of a service and their specific needs and conditions were not thoughtfully considered. This situation provided a perfect environment for the utilization of service design and these types of legal teams must be aware of the fact that the lawyers are essentially service providers. This might be easy to say, but it is not probably fully assimilated within the industry. Lucy Kimbell, in the Service Innovation Handbook, defined a service as follows:

> *"Services are more than customer service attached to a product. The basic concept of a service is the co-creation of value by actors, who combine and exchange resources"*[4].

To co-create value and to be able to deliver a service, we must understand who is the user, what are their needs, and what do they offer. If there is not a logical connection between the providers and the receiv-

2 This term refers to all of the contact intersections between the user or customer and the service provider.

3 Astrid Kohlmeier and Joaquin Santuber, 'Is the Common Legal Platform a Wicked Problem' in Kai Jacob, Dierk Schindle and Roger Strathausen (eds) *Liquid Legal* (Springer 2020).

4 Lucy Kimbell, *Service Innovation Handbook* (BIS Publishers 2014) 34.

ers, then the users will never request any services and, as a result, the lawyers will never be able to show what they are capable of providing.

Second, it was important to understand all the scenarios and touchpoints within a certain service and to further analyse them and identify opportunities to offer the clients. One key issue found during this project was that the rest of the company did not understand what the legal department could offer and did not know the perimeters of the work that they could request of the legal department. Also, we came to the fact that the request channels were not clear and these represented a major bottleneck.

Furthermore, when the legal team had requests for work, they had trouble assigning the job and working as a team. They also experienced communication problems when they had to address certain legal risks. As a result, the time of execution was affected and so was the user's perception.

We then redesigned, the service according to Lara Penin would entail:

> *"The activity of choreographing people, infrastructure, communication, and material components of a service in order to create value for the multiple stakeholders involved ..."*[5]

This meant that it was essential not to just think about the processes, but to consider the rest of the touchpoints within the entire experience and how they communicate between themselves to maximize the user's experience. Additionally, we had to design connected solutions that were able to co-create value with the final user.

4. Research project design

Innovation as a Learning Process, by Sara L. Beckman, was the starting point and the inspiration to apply the Legal Design method to this project.[6] However, this was not our only source, as Háptica is a Legal Design company with more than 6 years of experience and it has created many tools that apply to legal service design.

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5 Lara Penin, *Designing the Invisible: an introduction to service design* (Bloomsbury 2018) 39.

6 Sara L Beckman and Michael Barry, 'Innovation as a Learning Process: Embedding Design Thinking' (2017) 50 California Management Review 25.

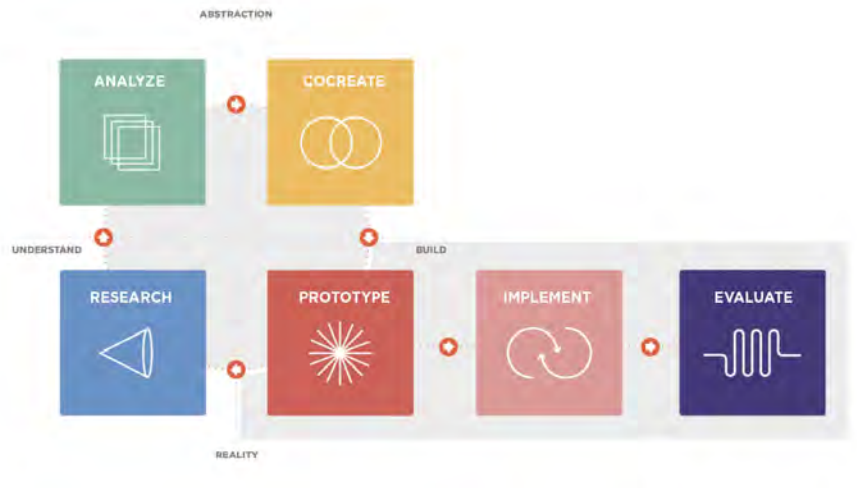

Fig. 1. Beckman and Barry – Innovation as a Learning Process – Háptica Adaptation

Beckman and Barry's method entails an interesting way to classify the phases within each process. The steps follow the Design Thinking methodology, first by making an exploration and investigation of the process; then analysing this information and reframing the main pain points in questions that could lead to innovative solutions. Thirdly, co-creating solutions with the help of creativity workshops; allowing users and stakeholders to propose solutions to the pain points that we presented to them. The next step, prototype, is about materializing the ideas that are more feasible and effective. After testing these solutions, begins an iterative process of improving the touchpoints that were designed by having a controlled implantation of the potential solutions. Finally, measuring the impact of these proposed solutions in the protype phase is important to keep a record of the project.

4.1. Methodology Implementation

4.1.1. Research

The research phase is basically the result of 'understanding the reality'. In this step the consultancy team uses different tools to gather informa-

tion to understanding the reasons for the wide gap between the legal department and the rest of the company. Tools, like structured interviews combined with some other trigger discussion activities, help the project participants understand the research questions.

Many of the changes identified within this phase are related to the time it took to get things done and the lack of information that the other areas of the company had regarding the legal department. Therefore, the consultancy team had to research exhaustively through tools that allowed them to understand the process, timing, roles, tools, and channels that make up the service itself. Then, with this level of detail, the service could be redesigned.

To better understand the operations within the legal department thoroughly, the consultancy team investigated the area by using a set of ethnographic tools for opening conversations. These tools allowed them to understand the people involved in the project context. For example, interviews were conducted using questions that were constructed to elicit responses along three main objectives[7]: I) what is the legal context, what are their limitations, and what are those restrictions that must be considered for designing the service; II) what is the legal experience that the users are receiving, this means searching in detail for the touchpoints that relate to legal implications or concerns; III) last, but not least, are the questions related to the research of the user's needs, desires, pains, and general context. In this last objective the main concern is to understand the person.

4.1.2. Analysis

Here, the consultancy team combined all results from our research phase through customer journey maps, profiles, and insights relevant to the project. These insights were reshaped into innovation opportunities and questions on how to advance on to the next phase.

To reshape the insights to make them more valuable to legal practitioners, the team, if we decided to solve the problem through the insight, worked in a way that allowed the legal department to identify the legal impact of a particular opportunity. The compilation of the con-

7 This approach is used by Háptica for entering every legal project.

versations with the lawyers had to be understood not only in terms of business opportunities but also in terms of the legal risks that working towards these findings would imply. As a result, we were able to frame the problems and give direct solutions and explanations to subject matters that are essential to the lawyers' activities, and thus, they became more interested and involved in the project. From this investigation the consultancy team learned all their dynamics, pains and gains, and the scope of work to be completed.

As a result of the former phase, all the information gathered was analysed and triangulated through the definition of strategic moments of the service. They were categorised under this label after validating both the amount of value they gave to the users of the legal area and his internal clients and the most difficult pains they gave the users and internal clients. Then, we developed our insights from our investigation findings and distributed them in a blueprint. Finally, we generated the legal department organization chart which allowed us to strategically envision those key people and areas to identify relationships and dynamics that had room for improvement.

4.1.3. Co-creation

From an abstract point of view, the consultancy team tried to answer questions of the previous phase through ideas from lawyers and other people within the organization. In this step, the team invited the shareholders to participate in the project, as they are users of the lawyer's services, and thus, must be included in the solution creation process. This was the main reason of the Co-creation step in the project.

To execute this phase, three typologies of workshops were selected from the consultant's set of workshops that were planned for triggering solutions from users and stakeholders' minds. The number of workshops were planned to tackle the main tensions analysed in the previous steps and to allocate the right amount of people to represent each sub-area.

In these workshops we had to generate awareness of how important the active spaces for creation were, besides those involving executive meetings. At first, these active spaces for creation created a shock to the attorney's dynamics, because we were dealing with individuals that have a managerial profile and are not familiar with participatory design.

However, they quickly understood how valuable their participation was in this project.

Additionally, in this phase, we had the opportunity to apply Lotus Blossom[8], a widely known and highly used tool in the Legal Design industry. The use of this tool allowed us to link the entire process with the traditional legal space and generate mental and creative disruptions by inspiring lawyers through the visualization and openness of discussions regarding legal innovation.

4.1.4. Prototype

Considering all the ideas resulting from the co-creation process, the Legal Design team focused on prioritizing and defining which of the ideas that emerged could be feasible and effective to create the first prototypes. The team further evaluated the ideas that connected with the main pain points of the project and establish a strategy that would connect the touchpoints that were going to be designed.

For this design phase, we focused on the inputs of the previous phases to generate proposals that would respond to previously identified and prioritized insights and opportunities. In order to guarantee that these proposals would be aligned with previously co-created guidelines, we had to reshape them by following a four-step methodological process: (i) defining tactics that entail strategies resulting from a previously defined purpose; (ii) identifying each tactic components, which means all consisting parts of the group of strategies; (iii) detailing and classifying proposals in each component according to specific goals; and (iv) landing these proposals to tangible concepts within the experience, which means those proposals whereby we materialize our intervention.

8 The lotus blossom method is a creativity exercise. It is a framework for idea generation, starting from one central theme. Eight conceptual themes flow out from the main theme and each of them are used as central theme to generate 8 more themes. See, 'Design Method Toolkit Lotus Blossom' <https://toolkits.dss.cloud/design/method-card/lotus-blossom-2/> accessed 23 August 2021.

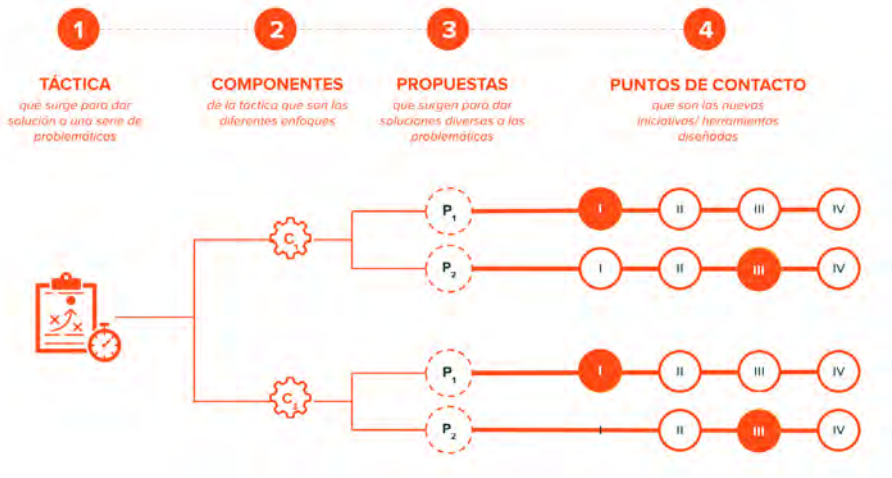

Fig. 2. Process followed by the consulting team for structuring the strategy that help choreograph the new design touchpoints for designing a new service.

This process allowed us to classify those strategies that we had to use to take advantage of all the opportunities found. Hence, we were able to have internal creation processes among designers and lawyers regarding specific proposals for each strategy. This also allowed us to think about specific problems and requirements of the legal service and further focus on the general challenges that we identified in the initial stages of the project.

4.1.5. Implement and Evaluate

Within the process of designing the touchpoints, we had the opportunity to prototype and iterate with the help of lawyers and other key members whom would eventually become the final users. It is important to note that within this stage, we legally validated all scenarios focused on avoiding risks associated with daily activities.

After concluding the design phase, we focused on our clients' understanding of all the touchpoints we designed. We taught several workshops whereby the final users and other key members became familiar

with the use and implementation guidelines we proposed. This stage guarantees the implementation of the service.

Our last phase within our methodology consisted in creating an impact measurement strategy whereby we sought to provide quantity and quality information resulting from 3 indicators: (i) access, to measure how easy it was to access and locate touchpoints information; (ii) relevance, to measure how useful was the information of the touchpoints; and (iii) effectiveness, to measure performance of the relevant touchpoint within the legal department and the main services offered. At the moment this phase is being developed and analysed so there is still feedback waiting to be recovered.

5. The prototype: results and impact

At the end of the process the consultant team deliver 8 touchpoints that responded to the following opportunity questions:

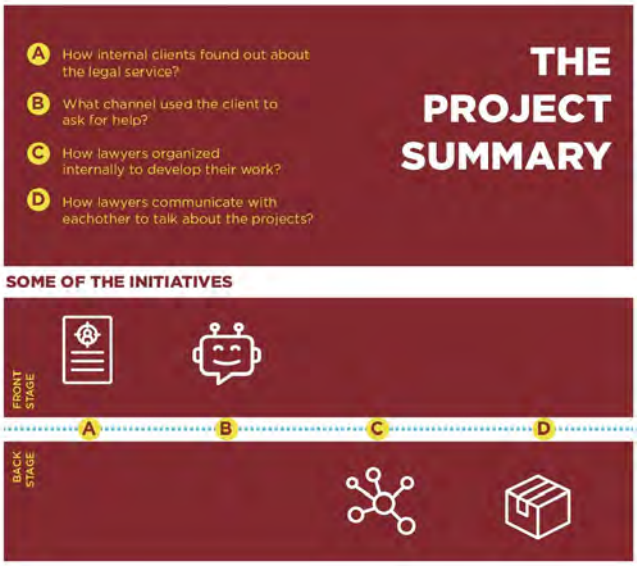

Fig. 3. Project Summary

5.1. Menu of the legal department

One of the challenges that we found with this project was that the users/clients of the legal area did not clearly understand what services the legal department was offering to them and how they could access those services. For this reason, a low rate of solicitation of services was taking place in some of the areas of the legal department and this created a bottleneck within the areas involved, also it caused a lot of mistakes to be made when requesting services due to a lack of understanding about how to properly make a request. As a solution we built a simple service menu that could explain basic information of the terms of the service to the users of the legal department. An example of the information offered includes, "what are the services the area offers and how do they offer them?" This allows for users to ask for the services without hesitation or doubt.

Fig. 4. A brochure presenting and exactly defining the services offered by the legal department.

5.2. Legal Chatbot

The legal department of Nacional Monte de Piedad is divided into several sub-departments. These carry out different processes and further offer different services to users. However, they do not see themselves as service providers, thus, we identified the main failure: users felt lost and abandoned when asking for a service because of the lack of effective requesting channels.

The legal chatbot centralizes communication channels between the user areas and the legal department. Thus, it allows the latter to receive different requests and arrange them according to the users' needs. As a result, users have an immediate response, or at least, certain guidance to communicate with the appropriate area through the correct channel.

Additionally, this tool generates non-disruptive and adaptive technological change by automating certain tasks and therefore saving valuable resources (all which goes along with the bank's mission). On the other hand, it generates data from the moment of implementation, allowing to follow up on important user information, requirements, and usage indicators. This data also shows important information to update the tool and take data-driven decisions.

Fig. 5. A representation of a chatbot that could organize the way the internal clients process their requests and doubts.

5.3. Follow-up Unit

One of the legal department processes entails a document review and approval phase from different members and areas of the organization. Here, the main challenge was the lack of alignment in their vision, time, and dynamics. Each member had a 'separate area mentality' attached to their own dynamics and purposes. They needed to work as a team to respond to common goals.

Thus, we created the follow-up unit. Teams materialise if there is a common goal that must be achieved with the participation of different areas of the organization. These units are governed by methodologies identified in the project as 'Request Manager' and 'Service Manager'. The Request Manager supervises, guides and maintains the strategic vision of the unit. The Service Manager works together with the team to manage and overcome challenges.

The follow-up unit was created to meet the necessity of generating legal bridges to rescue collaborative and interdisciplinary values, appealing to dynamics and concepts found in agile methodologies and legal project management to adapt it to Nacional Monte de Piedad's reality.

Fig. 6. A meeting planner tool for encouraging and organizing the way the legal department works with other teams of the Financial Institution.

5.4. Legal Risk Deck

The legal department had several issues communicating with its users, and thus, generating effective information channels. Also, there were problems within the area to translate information from the direction to the operation, especially information regarding the quantification and evaluation of legal risks for advising other departments of the institution in providing a quantified opinion on some of their actions.

The process was documented through an internal policy which included a legal management tool to facilitate the execution. However, it was constantly failing because of user's resistance and recurring errors when quantifying and evaluating the risks.

Hence, the legal risk deck uses card-based learning to explain the quantification and evaluation of the risk process. It represents the hierarchy of the information using graphics and straightforward narrative to break down all the information into steps, and triggers questions to guide lawyers on a successful execution path.

An interesting fact about this touchpoint is that the cards are analogous. They represent both a printed and a digital tool part of the lawyers' workspace. The printed tool complements the digital work and activates their memory and knowledge appropriation by having to physically engage and interact when they need to search for information within the deck.

Fig. 7. This deck is meant to give lawyers a step-by-step process to assess risk.

6. Critical takeaways

Other areas of the company deemed the lawyers as 'burdens' during their daily activities and not as an asset to co-create or collaborate with their work. They talked to them because they had to, never because they wanted to. This situation clearly generated tension and friction between them. After the implementation of this project, lawyers are deemed as an internal service ready to make things happen within the company. The co-creation process between user areas and the legal department made this very clear. The implementation of the new touchpoints is being made at the moment of producing this document, but the project already gives the legal department a mindset on how there are many non-legal ways to produce value in their work. Also, the other areas of the institution are stimulated, as they were also part of the process to receive this new way of doing the legal work with this area.

As a Legal Service Design agency, Háptica constantly work touchpoints related to documents. However, this project was living proof on how important it is to intervene touchpoints unrelated to legal documents. Once again, we convinced ourselves that designing legal services must be understood thoroughly, considering all touchpoints that shape up the business, and how it connects with other departments.

As Legal Designers, we must stop seeing the processes as flow charts that look good on paper or design programs. A process is a touchpoint part of a service that materializes thanks to its connection to other touchpoints. These can be people's behaviours, tools to offer services and better perform the processes, technical platforms to support activities, and methods to help service providers during their daily activities.

During law school, we are never faced with the fact that lawyers act as "service providers in the sense stressed by Kimbell"[9] regardless of their area of expertise. Furthermore, companies should understand the relevance of the lawyers' role as service providers within the organization and should further encourage a link between legal departments and the rest of the areas to work as a team towards the same goal. This project allows the consultancy team to avoid the short side of legal duties: control, problems, and tension. With this precedent we can co-create value

9 Kimbell (n 4).

and new opportunities to have a more business oriented legal department.

Lawyers can offer a great service within the organization. But none of it matters if the rest of the organization does not understand this or cannot properly access it. It is of utmost importance to think about all touchpoints before, during, and after the 'core service' to ensure users can take advantage of the entire experience.

Bibliography

Beckman SL, Barry M, 'Innovation as a Learning Process: Embedding Design Thinking' (2017) 50 California Management Review 25

Digital Society School, 'Design Method Toolkit Lotus Blossom' <https://toolkits.dss.cloud/design/method-card/lotus-blossom-2/> accessed 23 August 2021

Kimbell L, *Service Innovation Handbook* (BIS Publishers 2014)

Kohlmeier A, Santuber J, 'Is the Common Legal Platform a Wicked Problem' in Jacob K, Schindle D, Strathausen R (eds) *Liquid Legal* (Springer 2020)

Penin L, *Designing the Invisible: an introduction to service design* (Bloomsbury 2018)

Over the last few years, Legal Design has grown as a field of research and practice. The potential of design in the legal domain has been investigated and experimented in various sectors such as access to justice, dispute resolution, privacy indicators, policy prototyping, contractual negotiation. Being an interdisciplinary area of study, Legal Design combines different disciplines and methodologies and relies on insights from legal practice.
This book intends to contribute to the study and advancement of Legal Design by presenting different voices and perspectives from scholars and practitioners active in this field. The volume brings together critical essays on the nature and methods of Legal Design and illustrations from the practice. The contributions provide the readers with the state of the art of Legal Design and a prospective outline of its future development.

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