This paper was presented at the Legal Design Roundtable, Brussels, Belgium on 1-2 April 2020.

The four spaces of design practice: drawing from design theory to enhance legal design practice

Apolline Le Gall Où sont les Dragons Centre de Recherche en Design (CRD), ENSCI-Les Ateliers, ENS Paris-Saclay Email: <u>alg@ousontlesdragons.fr</u>

Sumi Saint-Auguste Open Law * Le Droit Ouvert Prospective Lab, Lefebvre Sarrut Email: <u>s.saintauguste@lefebvre-sarrut.eu</u>

Keywords: design, design theory, pedagogical experimentation, design practices

The four spaces of design practice: drawing from design theory to enhance legal design practice¹

Introduction

Legal practitioners have been experiencing for a decade a huge move in the legal industry because of the legaltech emerging ecosystem, which is a bunch of actors betting on tech to fuel legal innovation, through software solutions and up-to-date UX. Public service also follows this trend by "digitalizing" its processes, including the judiciary system².

These changes mean that legal practitioners and lawyers are being challenged in the traditional value chain and delivery of legal services and in the vertical relationship they are used to³.

In order to tackle these issues and increase their innovation capacity, the legal community started to rely on an approach based on "design" called "legal design"⁴. However, this starting point has led the legal community to a bias: when it comes to legal design, the intent is focused on "design thinking"⁵, since those concepts are pretty well assimilated by the tech industry.

First, in this paper, we argue that Design Thinking is actually only a small subset of Design practices and will try to qualify its characteristics.

Design has indeed entered the world of innovation and technology, covering a broad spectrum of practices, from the classical approach of product design⁶ to the collaborative process of joint inquiry and creativity coined as co-design⁷. "Design Thinking" is the most popular approach in Management and has often been considered as a synonymous for the use of Design in innovation⁸.

¹ This paper is partly based on a research on design practices for innovation developed in collaboration with Valérie Chanal (Université Grenoble Alpes, Promising) and Olivier Irrmann (Yncréa Hauts-de-France). A non-theorical presentation of the model of the four spaces of design practices is available on the French version of the website "The Conversation": http://theconversation.com/enseigner-linnovation-il-ny-a-pas-que-le-design-thinking-121214

² Deffains Bruno, « Le monde du droit face à la transformation numérique » (2019) 3-170 *Pouvoirs* 43 ; Richard

Susskind, *The end of lawyers?: rethinking the nature of legal services* (2008) ; Harner, Michelle M., The Value of 'Thinking Like a Lawyer' (2011) 70-2 Maryland Law – University of Maryland Legal Studies Research Paper No. 2011-8.

³ Michelle Harner, "The Value of 'Thinking Like a Lawyer' " (2011) 70-2 Maryland Law – University of Maryland Legal Studies Research Paper No. 2011-8.

⁴ See for instance: 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; for an analysis of the emergence and the concept of "legal design".

⁵ Tim Brown and Barry Katz, « Change by design » (2011) 28 *Journal of product innovation management*, 3, 381-383.

⁶ Davide Ravasi, Ileana Stigliani, "Product design: a review and research agenda for management studies" (2012) 14.4 *International Journal of Management Reviews* 464-488.

⁷ Marc Steen, "Co-design as a process of joint inquiry and imagination" (2013) 29.2 Design Issues 16-28.

⁸ Lucy Kimbell, 'Rethinking Design Thinking: Part I' (2011) 3 Design and Culture 285.

However, Design Thinking has also attracted a lot of criticism, being accused of promoting a superficial approach to problems, creating unrealistic visions of Design, being only a package sold by consultants, or even being a sort of intellectual disease that kills analytical and creative minds⁹.

Such criticism may of course be unfounded, as "Design thinking" is now a well theorized practice and successful approach in many cases. But since the practice of legal design is relatively new, we believe that adopting a critical perspective of design, and design thinking specifically, in the legal sector may help a better understanding of the potential of design for the legal field.

Second, most of the publications and current market trends are focused on "visualizations" and information design. Several papers are indeed exploring in depth the balance between pictures and words in a legal document ¹⁰.

Yet, Margaret Hagan highlighted several times that one cannot reduce "design" to "visual law"¹¹ (see for instance her online book "Law by Design"): design practice includes of course "information design" but goes far beyond, such as product design, service design and organization design.

Such practice can lead to a better legal communication, but also to broader projects and innovations, like creating or improving product and service offerings or building a culture of innovation in an organization. Other authors underline the potential of design for different aspects of the legal work: legal design for legal practice, legal activism, policy making, or legal research¹². This underlines that visualizations are one among many of the possibilities for potential processes and outputs of design in legal practice. We state that design should be called by legal practitioners for its powerful capacity to question and renew meanings¹³ and value¹⁴, beyond information design.

⁹ Jon Kolko, "The Divisiveness of Design Thinking" (2018), ACM Interactions 25 (3): 28–34.

¹⁰ See for instance Helena Haapio, 'Lawyers as Designers, Engineers and Innovators: Better Legal Documents through Information Design and Visualization', Transparency. Proceedings of the 17th International Legal Informatics Symposium IRIS (2014); 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; Helena Haapio and Margaret Hagan, 'Design Patterns for Contracts', Networks. Proceedings of the 19th international legal informatics symposium IRIS (2016); Stefania Passera, 'Flowcharts, Swimlanes, and Timelines: Alternatives to Prose in Communicating Legal--Bureaucratic Instructions to Civil Servants' (2018) 32 Journal of Business and Technical Communication 229

¹¹ Margaret Hagan in her online book "Law by Design" available at <u>http://www.lawbydesign.co/en/home/</u>

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

¹³ Roberto Verganti, 'Design, Meanings, and Radical Innovation: A Metamodel and a Research Agenda' (2008) 25 Journal of Product Innovation Management 436

¹⁴Apolline Le Gall, 'Les épreuves de valuation dans le design de services innovants: le role des representations visuelles' (PhD Thesis Management Studies, University of Grenoble-Alpes, 2016).

This paper seeks to explore the full potential of design for the legal world, beyond design thinking and visual law.

In this paper, we will first be sharing a theoretical model of design based on design theory to capture all the dimensions of this discipline. In the second part, a full review of a 3-month experience in a design school will illustrate those dimensions. Doing so, we strive to reconnect with the ambitious spectrum stated by Margaret Hagan and the Legal design Alliance and to widen perspectives and leverage the design practices for legal practitioners.

1. Drawing a path out of design theory: four spaces of design practice

Legal design is a recent approach that helped the legal community deliver clearer and more understandable legal information¹⁵, create new products and services, improve people's experience of judiciary processes¹⁶ and transform legal practice and education¹⁷.

However, "legal design" is currently mostly understood as "design thinking applied to law"¹⁸. We argue that embracing a broader comprehension of design, acknowledging its diversity of practices and involving designers trained in "art-based design schools"¹⁹ could enlarge the spectrum of possibilities for lawyers and legal professionals.

In order to capture all the dimensions of design, we believe one should dive into design theory.

As a matter of fact, most papers in legal design are based on management studies. Such approaches are theoretically based on "design thinking approaches", which designate "the application of designer's methods by others outside the academic field of design", as opposed to "designerly thinking" that designates "the academic construction of the professional designer's practice" ²⁰.

Few current legal studies are actually based on designerly thinking and on design theory (which theoretical roots are diverse). We believe this focus might be one of the reasons why legal design is currently mostly understood as "design thinking" and suggest building on design theory to elaborate our model of design practices.

¹⁵ See all the studies cited in note 10 for example.

¹⁶ Margaret Hagan" A Human-Centered Design Approach to Access to Justice: Generating New Prototypes and Hypotheses for Intervention to Make Courts User-Friendly" (2018), Indiana Journal of Law and Social Equality ; David ball, *redesigning sentencing*, (2014) 46 McGeorge Law Review 817

¹⁷ mark szabo, "design thinking in legal practice management" (2010) 21 *design management Review* 3 44 ; Dan Jackson, *Human-Centered Legal Tech: Integrating Design in Legal Education*, 50 LAW TCHR. 82 (2016)

¹⁸ See for instance Margaret Hagan, Op. Cit. (2018), see note 8 ; Gerlinde Berger-Walliser, Thomas D Barton and Helena Haapio, Op. Cit. (2017), see note 7.

¹⁹ Lucy Kimbell, 2011, Op. Cit.

²⁰ See Lucy Kimbell, 2011, Op. Cit. p. 7

1. Design as an activity creating artifacts that have meaning for multiple stakeholders: formulating/formalizing

For the purpose of this paper, we use the following definition: design is a professional activity²¹ aimed at creating artefacts²² that have meaning²³ and value²⁴ for multiple stakeholders²⁵.

While Herbert Simon describes design as an activity focused on creating artefacts, as opposed to natural things²⁶, Klaus Krippendorff underlines that « Design is making sense of things »²⁷. These approaches leads for exemple Roberto Verganti to define design as an activity based on the renewal of meanings through the renewal of "product languages"²⁸.

Starting from this definition, we understand that designing involves both the capacity to envision new meanings and to express it through sensitive experience, as stated by Richard Buchanan:

« The skillful practice of design involves a skillful practice of rhetoric, not only in formulating the thought or plan of a product, through all of the activities of verbal invention and persuasion that go on between designers, managers, and so forth, but also in persuasively presenting and declaring that thought in products »²⁹.

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

- formulating: the activity aimed at elaborating the meaning, the end of an artefact
- formalizing: the activity of "drawing", embodying the meaning in a "device" that can

be perceived in the sensitive experience (an object, a service, an interface, a book...)³⁰.

²¹ Ezio Manzini, Design, when everybody designs: An introduction to design for social innovation (MIT press 2015).

²² Herbert A Simon, The Sciences of the Artificial (3rd Edition) (MIT Press, 1996); Willemien Visser, "Designing as construction of representations: A dynamic viewpoint in cognitive design research." (2006) 21.1 Human-Computer Interaction 103 ;

²³ 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); Roberto Verganti, 'Design, Meanings, and Radical Innovation: A Metamodel and a Research Agenda' (2008) 25 Journal of Product Innovation Management 436.

 ²⁴ Apolline Le Gall, 2016, Op. Cit. see note 14.
²⁵ Qin Han, 'Practices and Principles in Service Design: Stakeholders, Knowledge and Community of Service.' (PhD Thesis Dundee, Scotland : University of Scotland 2010) ; Robert Farrell and Cliff Hooker, 'Values and Norms between Design and Science' (2014) 30 Design Issues 29 ; Fabian Segelström, 'Stakeholder Engagement for Service Design. How Service Designers Identify and Communicate Insights' (Linköping, Sweden : University of Linköping 2013).

²⁶ Herbert Simon (1996), Op. Cit. See note 22.

²⁷ Klaus Krippendorff (1989), Op. Cit, p. 3, see note 23.

²⁸ Roberto Verganti (2008), Op. Cit., see note 23.

²⁹ Richard Buchanan, 'Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice' (1985) 2 Design Issues 4.

³⁰ 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) ; Per Liljenberg Halstrøm, 'Design as Value Celebration: Rethinking Design Argumentation' (2016) 32 Design Issues 40.

As a matter of fact, on the one hand, Armand Hatchuel speaks of design as the articulation between "value regime" (the meanings and value criteria used to design and evaluate an object) and "form regime" (the physical structure and languages used in the material object): "*the designer's job is precisely to select the form regimes as design parameters and use them to reach the desired value regimes*"³¹.

Liljenberg Halstrøm, on the other hand, defines design as employing two rhetorical genres: the "epideictic register" describes the way "an artifact [is] seeking to create adherence to one or several values by means of praise or blame", while the deliberative register "serves the purpose of debating what to do in a design process to come up with and create an artifact"³².

We believe both authors converge towards the dimensions identified in the paper: formulating and formalizing.

In this perspective, we understand that "design thinking" may constitute one form of design practice, that is to say one way of formulating and formalizing, among others available.

Formulating in Design

Formulation in design thinking clearly advocates a "human-centered" or "user-centered" approach. The whole process is indeed aimed at identifying a "user problem" (pain point) and adopting the "point of view" of a target user, thanks to user interviews, cultural probes, observations³³.

Design theory, however, highlights multiple other ways and nature of formulating in design.

For instance, Norman and Verganti ³⁴ distinguish between "meaning driven" innovation, which is a design approach based on a vision that the designer offers to the world and "user-centered" design, which is a design approach based on the study and observation of users in order to capture their point of view. For the authors, these approaches respectively lead to "radical innovation" or "incremental innovation" of meaning.

In service design theory, other authors like Qin Han³⁵ identify different roles of the designer. He or she can be either a "leader" proposing a strong vision (vision-lead design) or a facilitator,

³¹ Armand Hatchuel (2006), Op. Cit.

³² Liljenberg Halstrøm (2016), Op. Cit. p. 40.

³³ See for instance: Brown, T., & Katz, B. (2011). Change by design. *Journal of product innovation management*, 28(3), 381-383 ; since this publication, several studies of the approach, methods or outputs of design thinking were carried out in various sectors such as business for example (XXXX), service industry (this is service DT) or legal practice (for instance: Gerlinde Berger-Walliser et al. Op. cit. (2017) see note 7 or Margaret Hagan, Op. Cit. (2018) see note 8)

³⁴ Donald Norman, Roberto Verganti, "Incremental and radical innovation: Design research vs. technology and meaning change" (2014), 30.1 *Design issues* 78-96.

³⁵ Qin Han (2010), Op. Cit., see note 25

helping users and stakeholders to build their problems and solutions (stakeholder-centered)³⁶. Such studies indicate that "user-centered" design is not the only option when it comes to using design in the legal practice.

In other words, the source and the legitimation registers are different and we can hence identify two archetypes:

- on one hand, formulating is grounded in the political, poetic, artistic, .. singular vision of the designer ("inside-out"). We will refer to this as "intention-led" approaches.
- on the other hand, formulating is based on a field study ("outside-in"). We will refer to this as "field-centered" approaches.

Formalizing in Design

Design thinking aims at formalizing products and services that are desirable, feasible and viable. That goal is achieved through rough prototyping and user testing ³⁷.

But as far as formalizing is concerned, different authors have discussed the nature, the output or the end of a design process.

For example, Terry Irwin³⁸ identifies three design approaches: design for service, design for social innovation, transition design. These three approaches vary both on the design process implemented and on the output. The first approach (design for service) aims at designing new products and services in our current paradigm, while the third one (transition design) aims at creating radically new paradigms. Such an approach will hence include formalizing objects that do not (or not only) create new experiences for a market, but will question the systemic level of our paradigms.

Other approaches like speculative design³⁹, critical design or fiction design⁴⁰ don't aim at creating products for the market, but at formalizing "provotypes"⁴¹ or "uncanny objects"⁴² to spark debate.

⁴⁰ Max Mollon, "Design pour débattre – Comment créer des artefacts dissonants, et leurs situations de communication, afin d'ouvrir des espaces de contestation mutuelle (agonisme) et d'expression des voix marginales (dissensus) », (PhD Thesis Design Studies, Sacre-PSL, 2019).

³⁶ Fabian Segelström (2013), Op. Cit., See note 25.

 $^{^{37}}$ See note 18.

³⁸ Terry Irwin, 'Transition Design: A Proposal for a New Area of Design Practice, Study, and Research' (2015) 7 Design and Culture 229.

³⁹ Anthony Dunne and Fiona Raby, Speculative Everything: Design, Fiction, and Social Dreaming (2013).

⁴¹ Laurens Boer, Jared Donovan and Jacob Buur, 'Challenging Industry Conceptions with Provotypes' (2013) 9 CoDesign 73.

⁴² Max Mollon and Annie Gentès, 'The Rhetoric of Design for Debate: Triggering Conversation with an "Uncanny Enough" Artefact (Pp. 1--13)' (2014) *Proceedings of the Design Research Society International Consortium* (DRS), Umeå, Sweden.

Finally, Alain Findeli and Rabah Bousbaci identify a movement from the initial focus of design, that is "object", in two different directions:

- "Downstream": designers tend to focus on different systems of objects, the functionalities and the user experience
- "Upstream": designers tend to focus on processes and actors configurations⁴³.

Based on these studies, we can identify two different modes of formalizing in design:

- Formalizing "user experience" and design objects, services, interfaces...
- Or, formalizing "systems and processes" in order to help systemic reasoning.

1.2. The model: four spaces of design practices

Crossing the matrix based on our two dimensions, we can then identify 4 spaces of design practice that we suggest to call as follows.

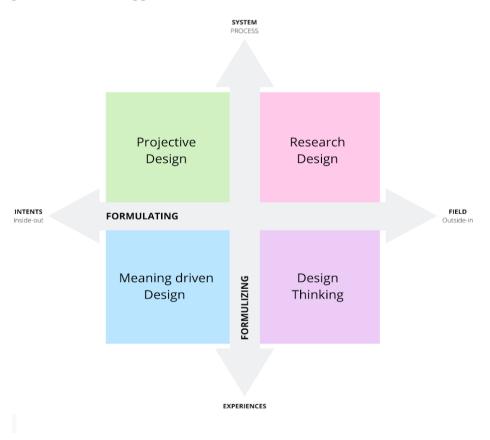


Figure 1: 4 spaces of design practices

⁴³ Alain Findeli, 'La Recherche-Projet En Design et La Question de La Question de Recherche: Essai de Clarification Conceptuelle' (2015) Sciences du design 45; Alain Findeli and Rabah Bousbaci, 'L'éclipse de l'objet Dans Les Théories Du Projet En Design' (2005) 8 The Design Journal 35

- **Design Thinking** (DT) [Field x Experience]: DT is the current widespread design practice in many economic sectors. The process aims at formulating a "problem" from a user's point of view and try and solve it by creating desirable, viable and feasible experiences. The process is based on a field investigation (involving for instance user interviews, observations, user tests...).
- Meaning Driven Design (MDD) [Intent x Experience]: according to Armand Hatchuel or Roberto Verganti, MDD is the traditional "art-based" design approach44. In this space, the designers will create new meanings embedded in experiences based on their "intent" (political, aesthetical, artistic, environmental... vision). The designers might confront their vision to users in order to make sure it does make sense for them, but that is not the starting point of the project. In this space, designers usually don't carry out field studies at the beginning of the project, but rely on their inspiration.
- **Projective Design** (PD): [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 topic. It is not about creating an experience that could be implemented on a market but 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.
- **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 state of the art review, organizing user research or stakeholders focus groups. The new knowledge generated is formalized in a device aimed at supporting complex thinking.

2. Methodology

2.1. Studio expérimental: an exploratory project

Nul n'est censé ignorer la loi ("Ignorance of law is no excuse") is a Design Studio which was organized at l'ENSCI-Les Ateliers (Design School in Paris) from October to December 2018. The

⁴⁴ See Kimbell (2011), Op. Cit.

design agency Où sont les Dragons and the non-profit Association Open Law* Le droit Ouvert partnered up to bring this 10 week course to life.

Nine students were asked to dive into the complex and technical world of law, identify interesting leads of improvement and translating them into concrete projects: objects, books, websites, applications, services, workshops, "provotypes"...

Course overview:

The project was based on three steps. 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.

For ten weeks, the students participated in a weekly 4 hoursdesign coaching session and were asked to work another 4 hours individually during the week.

The project was organized in three phases.

Starting from collective immersions and conferences that we organized in phase 1 "Immersion", all of the students were asked to design their own methodology for phase 2 and 3.

- <u>Step 1: immersion:</u> Step 1 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. This step ends with the presentation of the students' "intents" to the partners and invited guests (legal experts, designers...).
- <u>Step 2: Generating a proposition:</u> Step 2 aims at elaborating a design project: identifying a target user, meanings, and the types of device to be designed. This first draft of design project is presented to the partners and invited guests (legal experts, designers...).
- <u>Step 3: Refining:</u> The last step of the project aims at producing the demonstrator, that is to say the device or system of devices that embody the project.

Since we asked the students to design their own methodology, the coaching sessions were adapted to their individual projects. Both the design teachers (who are design practitioners) and the legal experts and practitioners were participating in the coaching sessions.

Our role could be described as the traditional role of "design coaches" in a "design studio⁴⁵".

⁴⁵As described for instance in Robin Adams, Tiago Forin, Mel Chua, David Radcliffe, "Characterizing the work of coaching during design reviews" (2016), Design Studies 45, 30-67 or Janet McDonnell, "Scaffolding practices: A study of design practitioner engagement in design education", Design Studies 45, 9-29.

Because our students were designers, their knowledge of law and legal practice was very limited. In addition, we wanted them to explore freely and focus on something that would interest them, question them or surprise them. This is why we designed the immersion sessions in a very broad way.

Phase 1: "Immersion" - Description

Week #1:

- Introductory lecture: design and law, the making of law, hierarchy of legal norms...
- Immersion: with a judge, visit of the (new) Paris Courthouse + attending a court session (minor offences such as drunk driving or minor theft)

Week #2 :

- Lecture in philosophy of law: "why the law ?"
- Collective workshop: identifying situations where someone breaks the law (which laws, why)
- Workshop: First impressions on week 1

Week #3:

- Lecture with law practitioners (court + in-house lawyers) history, uses and limits of the "codes" and mediums to diffuse law
- Workshop: practice information research in the "codes" + identify all the mediums used to diffuse legal information (from "codes" to road signs, permits, posters, tickets, ...)
- Workshop: First identification of a design opportunity

2.2. Research methodology

Our research is based on the collection of three types of data:

- Participant observation of the coaching sessions and formal presentations
- Analysis of the tools and presentations of the students
- Interviews with 8 of the 9 students (on average, the interviews lasted 1h).

The semidirective interview guide included questions about design, the retrospective description of the project, the methodology implemented, the tools used, the intentions of the student and the potential of design for law.

In this material, our analysis was centered both on the methodology and on the output of the design project, in order to identify the different ways of formulating and formalizing in design for legal practice.

2.3. Mapping the projects on the 4 spaces of design practice

In order to be able to describe precisely the projects, we present here only 4 of the 9 students' projects, that are characteristics of the 4 design spaces identified in part 1.2.

1/ Design Thinking - Project #1: "the plaintiff's path"

The Project:

The student redesigned the process of filing a complaint for sexual abuse and following up the judiciary process, by drawing a set of objects, signs and space to be implemented in police stations, along with a process and an interface both for victims and police officers.

The project could be considered a service design project. It is based on three different moments:

- Before filing a complaint: a "pre-filing form" online aimed at helping victims to describe the events safe at home, and guidelines describing the process,
- During the filing: space design reinforcing visual and sound intimacy in the police precincts thanks to opaque acoustic panels,
- After filing a complaint: online follow-up of the different steps of the process.

The student's methodology:

After attending the immersion trial, the student focused on the whole journey of a victim, from the event to the potential conviction of his or her abuser: "*My first task was to unfold the whole process and map the journey, from filing the complaint, and identify all the actors involved*". She synthesized this first step on a "complaint journey map".

Then, the student started her research:

- User research: meeting with victims through associations, collection of online testimonies in dedicated forums, observations of precincts (though she was not able to attend the specific moment when a victim files a complaint), reading of public reports and press articles,
- Analysis of the documentation and training for the police officers receiving the victims.

She then synthesized this research in two different tools: an "actors map" and a "Service Blueprint"⁴⁶: "using the service blueprint, especially with the emotional curve, helped me being focused on the whole user experience and not just on the journey of the complaint itself".

⁴⁶ As theorized in Lynn Shostack, "How to design a service" (1993), 16.1 European journal of Marketing 49-63.

She used the service blueprint to identify the "pain points"), that she called "critical points" or "knots": "For example, the arrival in the precinct is a very hard moment, especially because of the space organization and the interactions with the police officers. Lots of them are not specifically trained to deal with sexual abuse complaints and may be very violent in their questions or remarks. I also realized, that the follow-up of the complaint was very important, because currently, victims are not reassured, they don't know what's happening after the filing of the complaint, it gets totally lost in limbo..."

After identifying these "knots", she generated solutions to improve them. The solutions were highly feasible in the current context: "the whole point was to produce solutions that were implementable in today's world, it really wasn't about "fiction design" or long term plans, it was for now."

This project is very characteristic of a design thinking approach. It is based on extensive user research in order to capture their "problems", and it's aimed at producing a "more pleasant" (if we may say so, or a "less hard" experience) for victims of sexual abuse filing complaints.

Such a project can then help approach law and justice with a new perspective: the user's experience and its material configuration: "*I actually realized 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 surrounding it, or rather embedding it, there is the real life, the precincts, the courthouses, the jails... My project is based on that, on raising awareness on the criticality of the material and the experience of law."*

2/ Meaning Design - Project #2: "Rape, story of a legal iceberg"

The project:

Based on the notion of "iceberg", the project is a little book "peeling" out the multiple layers behind the actual wording of a law article in the French "Code Pénal" (penal code): the article 222-23 legally defining "rape".

The book aims at unfolding how and why the article is currently built as such, by contextualizing its content with previous versions of the article, jurisprudence, parliamentary debates, but also social debates.

The law article is written on the interior cover of the book and, through a system of cutting and folding, each page highlights a different part of it and connects it to the different "layers" of explanation.

The student's methodology:

The student is a feminist activist and even before the beginning of the studio she knew that she wanted to work on "women's rights, violence against women, sexual education, popular education, because it is my field of activism and my field of research".

During the conference about legal information mediums and "codes", the student grabbed the "Code pénal" and started searching through different sections describing notions connected to women's rights.

One of them was the article 222-23, which defines "rape": "At this point, I was outraged. Not only the section I was looking at was not mentioning the idea of 'consent', that I've been defending for years, but also it is so short: in thirty words, it defines something that is so crucial to women, thirty words!"

In order to overcome this initial surprise and anger, she started to investigate why, and how a "law article" is actually built.

In order to do that, she dived into the different materials on the topic: institutional communication on sexual abuse, activist documentation on rape and sexual and sexists violence, press articles, history and sociology books, lawyers' blogs, Open Law lawyer experts (non-profit organizations, penal lawyers), law articles and parliamentary debates (discussions in the chamber leading to the adoption of the different versions of the said article): "*I wanted to understand how we got to this specific law section, what it means, why this word was chosen and not another one*".

At this point of her research, she realized that she wanted to share this understanding with other people, especially ones that do not necessarily identifies as feminist activists: "I wanted to make something that informs, that helps understand, but also that moves the debate elsewhere, I wanted to raise the issue, not only to the feminists that discuss it, but to other people too, the ones that might be interested but are reluctant to get involved, because of this "activist" label that they're scared of, the ones who do not want to get in this space of conversation but could be concerned."

In order to do so, the student searched for a way to share all of her research. She chose to formalize a book because it could allow people to have different types of information on the same level, and get to this information through a sensitive and physical interaction. She thought it would be a good way to *"both respect and reinvent the 'raw material' of law that is written text"*.

This project is characteristic of the "Meaning Driven Design" approach. As a matter of fact, the designer formulated her whole project based on her political vision (feminist gaze) and formalized a device aimed at conveying an experience to share it.

In the end, "the project is not a product on which you can say "it does work or it does not work", it is not a product on which we can improve the features or anything like that, it is a statement." Which is why she did not carry out "user tests", but rather shared her vision to the world: "I've shown the book to what ? 4 or 5 people? but I did not ask them for 'feedback, I just wanted to share this vision that I built".

3/ Prospective Design - Project #3: "The Fair"

The project:

"The Fair" is a "serious game" aimed at experimenting a "restorative trial". The whole process invites the participants to take part in a fictional "restorative justice system", which is an alternative judiciary approach aiming at "repairing" society rather than punishing the culprits. The kit includes:

- a printed leaflet describing the scenario: a middle-aged woman claims she was mugged by a young drunk man and his girlfriend,
- "characters cards" describing the different parts: the accused (a man and a woman), the victim and her family,
- the "community" which can be based on the victim's relatives and/or the accused's relatives and/or the neighboorhood and/or total strangers,
- a device aiming at randomly selecting a configuration (who can talk and/or decide at different phases of the game),
- guidelines for the animator.

Each participant is given a character to embody in a three steps process, facilitated by a "neutral" participant:

- first, collectively discussing the facts;
- second, discussing the potential "restorative actions";
- third, based on different conditions, making the decision of what should be done to "restore" justice and society.

The student's methodology:

During the immersion, the student was struck by the theatricality of the court and the trials: "What I feel after this very brief immersion in the legal world, it is the very high symbolical dimension of the very moment of the trial, and how this moment is structured. One can feel this ritual aspect in the vocabulary, sometimes **abstruse**, or the very traditional incantations that are

the markers of the specificity of this moment. It seems like a catharsis, it seems that it is a collective **performance**, both in the sense that it looks like a theatrical performance and in the sense that it is a process aimed at performing a social common. At this point, what I'm interested in is to understand how the moment of a trial is structured, in order to question its ability, its legitimacy in producing a truth."

Following this path, the student started researching how the current French judiciary processes works, through extensive reading of press articles, documentaries, podcasts, and meeting with judges and lawyers.

During this research, he also researched other ways of carrying out justice (other forms of trials through the world and through time, ancient ways of "serving justice"), and accidentally discovered the concept of "restorative justice", especially theorized by Lode Walgrave⁴⁷, that he sums up as follows: "*Basically, and very roughly, the aim of these practices is not to find the "fair punishment", but to repair as much as can be done, the damage inflicted to the victim, and by extension, to society*".

But according to the designer, the works and studies about the notion are very "theoretical": "*No* one really knows how a trial in restorative justice happens, [the studies] do not give any concrete clues on how such a justice system would be carried out".

At this point, the student realizes that the way to allow this is to design a "game", an operative fiction in which we could somehow "prototype" the roles and interactions of different actors: "You know, I really don't see myself knocking at a judge's door and kindly ask him or her to "borrow" one of his-her murderers to try something cute, and that this criminal will not go to prison because what I want is 'reparation'..."

While he starts a new stream of research on games or the way trials are staged in movies, in theaters... he realizes that the most adapted gameplay would be "roleplay". As in other role playgames (dungeons and dragons, Werewolves' village), such a "game" could then be used as a way to create "*actual moments of justice for those who live them*", and experiment "*what it feels like*".

In order to do that, he maps the structuring variables of such a restorative trial based on Lode Walgrave's paper: "The first version of the game was an application of the article, that-is-to-say that everything that Walgrave has specified rather precisely (such as the different actors) are the constants of the game, they are fixed; while the fuzzy elements (like the division of power,; or

⁴⁷ Lode Walgrave, *Restorative justice and the law* (2002), ed.Cullompton: Willan

what the "community" stands for) become variable to be tested in the game, either by selecting or by random drawing their characteristics."

This modelization, improved by prototyping and light testing with other students, led the student to identify 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 when,
- modes of decision: who decides what.

This game was then tested, with actual lawyers and judges, during a fictional "restorative trial" at Open Law.

This project is representative of "Projective Design approaches": on the one hand, it is based on the student's vision and intent to champion restorative trials. On the other hand, it is based on a systemic and theoretical modelization, formalized in a device that sparks debate (the "game").

This project underlines how using design to immerse people in "livable" experiences can foster the debate about the desirability of implementing restorative justice and its modalities, hence questioning the very meaning and forms:"I *realized that in order to know whether a certain type of trial would be desirable, one should experiment. And that was the point of my project* [...] *the objective was to create, through design, the sufficient immersion conditions to simulate all kinds of restorative trials*".

4/ Research Design - Project #4: Comparative Democracies

The project:

"Comparative democracies" is an interactive platform aimed at helping high school students to better understand the mechanics of the democratic electoral process by manipulating elements such as the profile of lawmakers or voters, the voting methods or the law making process. The web platform includes 3 tabs:

- "Democracy, what ?!": 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": "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": a glossary explaining the major concepts (such as constitution, legislative authority, selective suffrage...).

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

The student's methodology:

In this project, the student was interested in the notion of "democracy". Through the immersion phase, especially during the philosophical lecture, she realized, that democracy was actually a complex idea and could take many forms: "*I realized that I considered "Democracy" as a "normal" thing, and that I had both a strong but vague idea of what it was… And through the lecture, I realized that the boundaries between "democracies" and "non-democracies" were actually very fuzzy, since democracy could look so different from a place or a time to another"*.

Her idea was to design a "device" (unidentified at this point) that could help people envision the complexity and variety of democratic systems: "At first, I wanted to build something, maybe something physical, that could show that democracy is a system, and that what matters is the agency of elements, and not just one element on its own. For example, "voting" is a good sign of 'democracy', but if you don't have alternatives, then can we really call your country democratic? The same thing is true with freedom of press, or separation of powers...".

She started research to explore what "is" democracy, through the mapping of two different dimensions: the common markers of democratic systems, the elements of distinction between the systems.

In order to do that, she carried out a collaborative research with law university teachers (philosophers and constitutional lawyers) and their students: "*The process was very interesting: I would go in their "constitutional law" class and show them what I had done, and they would validate or correct the different maps. I was really struck by their precision and attention to details, while I was precisely trying to build a comprehensive vision. Conversely, they were amazed by how I could represent abstract concepts in very concrete and material shapes or stories".*

This led to the 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).

Once the map and the variables were identified, she realized that the best medium to convey this complexity was a website, in which one could have access to different levels of information (more or less complex), and different types of interactions with the content (passive reception of information, active "hands-on" work on the concepts).

After a comparative research on web platform aimed at popularizing complex content, especially for teenagers, the student started to design the website. She confronted the website several times to the university teachers and students involved.

This projects 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 practices of four major countries. It is then based on the systemic modelization of the variables of democracies, formalized in a website, that helps understand such a complex and abstract concept.

Here, design allows to create mediation device to help a young public understand a very complex notion. But it also allows legal training and research to have another perspective on their research object through an "actionable" device: "*They kept telling me how it would change their whole perspective on the theory because the website would show whenever the theory would not work in practice. I mean since the web platform would connect some "choices" on how to vote etc. to different democratic systems, we had to make sure it would actually work and be true..."*

3. Discussion

This paper identifies 4 spaces of design practices in legal design and illustrates their application in the legal field.

It highlights again that the contribution of design to law and legal practice is much wider and deeper than design thinking applied to law, as other authors had highlighted and called for.

Margaret Hagan⁴⁸ has underlined many times the multiple potentials of design for legal practice. The projects presented in this paper clearly demonstrate the variety of design "disciplines" and cratfing deployed by the students: graphic design, web design, service design, space design, game design, ...

Amanda Perry-Kessaris⁴⁹ had also highlighted the potential of design for legal practice, activism, policy and research.

As a matter of fact, projects #1 and #3 show how adopting a design approach of 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 #2 underlines how design encourages to question the very "writing" of law, and gives access to "laymen" in the debate, replacing politics at the heart of the legal practice and policy making.

Project #3r and #4 show how design helps systemic reasoning and support research through new ways of envisioning and experimenting.

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.

In the end, our paper 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).

Our paper is a first step in the exploration of design practices in the legal field.

Further research should be carried out to robustify the modelization 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.

Our modelization 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 realized in real legal practices.

Second, our study is based on the analysis of only nine 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.

⁴⁸ See note 11

⁴⁹ See note 12

4. Conclusion

As a final assumption, looping the loop with our very first observation on how legal professionals have been renewing their practice thanks to legaltech new players, we would like to make a zoom out by questioning the way those professionals deal with what we call the innovation injunction. What we observe now is an attempt to mimick the systemic approach and open innovation models, that tend to lead, because of multiple and contextual factors, to a "legal design theater"⁵⁰ Though our study is run on an art-based design educational field, we state that "Exeperimental Studios" could be transposed to the legal professional landscape and leverage the adoption of design for legal and justice issues by practitioners by enabling an actual and evidence-based access to other dimensions of design. To do so, we state that magistrates, lawyers and corporates legals should dare to include designers in their experiments and assign them to in-house or court projects to take full profit of the ability of design to *question* as well as *resolve* any legal issue, be it a service optimization, a radical innovative process or organization, or a new way of thinking and considering the meaning of law.

⁵⁰ Steve Blank, <u>"Why-companies-do-innovation-theater-instead-of-actual-innovation</u>" (2019), *Harvard Business Review*

Annex

Project #1: The plaintiff's path

Figure 1: Service Blueprint – "Filing a complaint for sexual abuse"



Figure 2: Space design – Installing acoustic panels in precincts

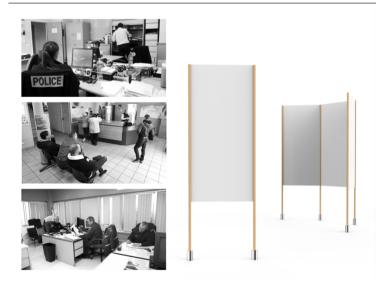
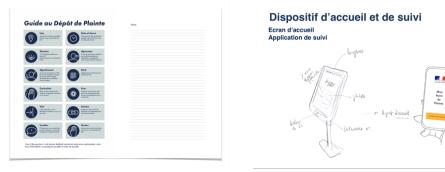


Figure 3: Guidelines and pre-filing online interface



Project #2: Rape, story of a legal iceberg

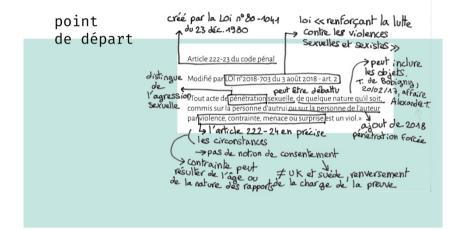
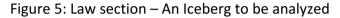


Figure 4: Student's analysis of a law section



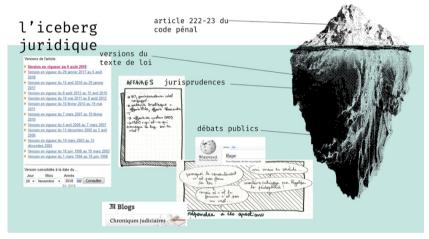


Figure 6: The Book "Rape, Story of a legal iceberg"



Project #3: The Fair

Figure 7: Characters cards and the "wheel of power" (who can talk/decide when)



Figure 8: Experimentation of the "game"



Figure 9: Different configurations of how the "community" is defined



Project #4: Comparative Democracies

comparative democracies la démocratie, hein ? exp	plore les démocraties approfo r	ndis les démocraties	schémas définitions	kit [*] info.
CHOISIS QUI PEUT ÊTRE ÉLECTEUR Choisis s'il est nécessaire de payer un impôt :				
	\bigcirc		pour être électeur. On a référence au cens qui é Seule la noblesse ou le	s riches propriétaires pouvait politiques. Payer l'impôt était perçu ducation, de capacités
	non	oui		
struct/nexts Involve allius to (annexative damaged				

Figure 10: Explore your democracy – "Chose who can vote"

Figure 11: "Democracy, what ?!" – Extract of the explanatory part of the website – UK model

