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## Visualisation in contract education and practice: The first 25 years

**Author(s):** Haapio, Helena

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## Visualisation in Contract Education and Practice: The first 25 years

Helena Haapio

Lawyers are often accused of making contracts complex and user-unfriendly: too verbose, expensive to make and manage, and impossible to implement for people who lack legal training. Many clients view contracts and lawyers as business obstacles rather than enablers. In recent years, voices calling for a major shift have started to be heard, and contract simplification and visualisation have gained momentum.

In addition to applying their expertise within the profession, lawyers are increasingly participating in contract planning and management. They need to explain their views to others, often across multi-professional teams. Clients need guidance in how to react to contract proposals, how to respond, and how to frame and present their negotiation points. Technologists developing smart contracts or AI solutions need to understand what contracts mean. For the lawyer advising them it is not just about knowing the law, it is also about communicating, capturing agreements and objectives, and making the meaning of contracts and law visible. Future lawyers need knowledge, skills, and tools to help others understand and act upon their advice. They need to be prepared for contracts and law *in action*, not just *in books*. Visuals can improve communication and help in this endeavor.

How can we prepare ourselves and our students for a world where contracts may need to be summarized, explained visually, or *designed* and not just *drafted*? Building on the author's quarter-century work with visualisation in contract education and practice, this chapter illustrates why and how the world of contracting is changing and how future lawyers can be better equipped to both cope and contribute. The chapter shows, with examples, how visuals can be used to generate insights and understanding, prevent unnecessary disputes, and pave the path to next generation contracts.

## 1. Introduction

*Drawing is a kind of Universal Language, understood by all Nations. A Man may often express his Ideas, even to his own Countrymen, more clearly with a Lead Pencil, or Bit of Chalk, than with his Tongue. And many can understand a Figure, that do not comprehend a Description in Words, tho' ever so properly chosen.* Benjamin Franklin (1749)<sup>1</sup>

Using visual communication to convey complex messages is not new in itself. Contract visualisation – using visual elements to explain, condense, clarify or navigate contracts, contracting or contract law<sup>2</sup> – is not entirely new, either. I started to experiment with it in the 1990s and have been using visuals since, with varying success.

At the time when I started to experiment with contract visualisation this was a somewhat controversial venture, especially among communities who saw themselves as authorities in contract language and drafting. In the early days, contract visualisation was either ignored or called odd and unusual. Who on earth would put pictures in their contracts?

More recently, things have started to change, both within the drafting community and among its clients. In the contracting and legal communities, the availability of new technology tools and the growing interest in designerly ways of thinking and doing have opened up minds and new avenues. In the client community, with the growing number, length, and complexity of contracts many have started to question the value and relevance of contracts to business needs. Seen from the clients' points of view, contract preparation costs too much time and money.

I am no longer alone in calling for a change in the way contracts are designed, communicated, perceived, and taught. Increasing evidence proves that contracts are entering a time of major change, which is likely to have a lasting impact on those who craft, review and negotiate them. The UK Government has issued guidance for business on how to help their customers better understand their contracts.<sup>3</sup> Recent articles in magazines such as the Financial Times, Forbes and Harvard Business Review show that the business community is ready for a new approach to contracts, even for contracts with pictures in them.<sup>4</sup> Is the legal community ready, too?

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<sup>1</sup> Benjamin Franklin, 'Proposals Relating to the Education of Youth in Pensilvania' (*The History Carper*, 1 January 1749) note 9 <[www.historycarper.com/1749/01/01/proposals-relating-to-the-education-of-youth-in-pensilvania/2/](http://www.historycarper.com/1749/01/01/proposals-relating-to-the-education-of-youth-in-pensilvania/2/)> accessed 23 November 2020.

<sup>2</sup> In this chapter, I use the concept 'contract visualisation' to refer to using visuals in the context of contract education and practice, the latter covering both the contracting process (from planning and preparation to negotiation, implementation and management) and the contract itself. The concept can also be used more narrowly, for example to refer to contract documents only, for example, 'the use of diagrams, images, and visually structured layouts to make contracts more searchable, readable, and understandable'; see Stefania Passera, 'Bringing Legal Design and Legal Tech to Contracts' (28 March 2018) <<https://stefaniapassera.com/blog/>> accessed 30 November 2020. For different uses of contract visualisation – visuals *in*, *about*, *for* and *as* contracts – see Section 3 and Helena Haapio, Daniela A Plewe and Robert de Rooy, 'Next Generation Deal Design: Comics and Visual Platforms for Contracting' in Erich Schweighofer and others (eds), *Networks. Proceedings of the 19th International Legal Informatics Symposium IRIS 2016* (Österreichische Computer Gesellschaft OCG 2016).

<sup>3</sup> Gov.uk, 'Contractual Terms and Privacy Policies: How to Improve Consumer Understanding' (Department for Business, Energy & Industrial Strategy, 18 July 2019) <[www.gov.uk/government/publications/contractual-terms-and-privacy-policies-how-to-improve-consumer-understanding](http://www.gov.uk/government/publications/contractual-terms-and-privacy-policies-how-to-improve-consumer-understanding)> accessed 30 November 2020.

<sup>4</sup> See, for example, Kate Vitasek, 'Comic Contracts: A Novel Approach to Contract Clarity and Accessibility' (*Forbes*, 14 February 2017) <[www.forbes.com/sites/katevitasek/2017/02/14/comic-contracts-a-novel-approach-to-contract-clarity-and-accessibility/#7078e76c7635](http://www.forbes.com/sites/katevitasek/2017/02/14/comic-contracts-a-novel-approach-to-contract-clarity-and-accessibility/#7078e76c7635)> accessed 30 November 2020; Bruce Love, 'Can Contracts Use Pictures Instead of Words?' (*Financial Times*, 23 October 2019) <[www.ft.com/content/032ddcb0-e6b1-11e9-b8e0-026e07cbe5b4](http://www.ft.com/content/032ddcb0-e6b1-11e9-b8e0-026e07cbe5b4)> accessed 30 November 2020; David Frydlinger, Oliver Hart and Kate Vitasek, 'A New Approach to Contracts: How to Build Better Long-Term Strategic Partnerships' (2019) 97(5) *Harvard Business Review* 116.

The purpose of visualisation is insight, not just pictures.<sup>5</sup> Irrespective of the task at hand, visualisation can help us present our messages better, whether in training, advice or contracting. Visualisation can be used in contract education and at the various stages of the contracting process: from supporting better communication when capturing or negotiating a deal, to documenting its terms, and throughout its lifecycle.

My work has taken me from an in-house legal setting, where contracts are used for business objectives and dispute prevention, to arbitrating cross-border contract cases involving complex factual disputes. I have had the opportunity to facilitate contract training workshops in various parts of the world and across different professions and disciplines. I have seen the power of visualisation in all these contexts.

This chapter illustrates some highlights of my journey and some findings from my research. It explores visualisation in contract education and practice, illustrating what it can offer for future lawyers and those in charge of educating them. Section 2 addresses the challenges current contracts pose for clients, from their point of view. After presenting the trajectory of contract visualisation from education to practice, Section 3 illustrates how visuals can be used to respond to those challenges and how they can help teachers, students, and practitioners make themselves better understood when explaining contracts and contract law. Section 4 concludes.

## 2. What is wrong with current contracts?

*There are two things wrong with almost all legal writing. One is its style. The other is its content. That, I think, about covers the ground.* Fred Rodell (1936)

These comments were made by Yale Law Professor Fred Rodell in ‘Goodbye to Law Reviews’, an article published in the Virginia Law Review, in 1936.<sup>6</sup> While the main target of Fred Rodell’s critique was law review articles, much of what he wrote also applies to contracts. Reliance on ‘tested language’ presumed to have a clearly established and ‘settled’ meaning has led to a writing style that is far from optimal – in fact, documents that many users find incomprehensible and dysfunctional.<sup>7</sup> Moving from legalese to *plain language* certainly helps,<sup>8</sup> yet it cannot alone solve all the problems. A more profound change is required.

Conventional contracts are not fit for purpose, in fact they fall short in many respects; surveys conducted among the contracting community across the globe tell us so.<sup>9</sup> A huge gap often exists between the

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<sup>5</sup> Jessica Hullman, ‘The Purpose of Visualisation Is Insight, not Pictures: An Interview with Ben Shneiderman’ (*ACM Interactions Blog*, 5 August 2019) <<https://interactions.acm.org/blog/view/the-purpose-of-visualization-is-insight-not-pictures-an-interview-with-ben>> accessed 30 November 2020.

<sup>6</sup> Fred Rodell, ‘Goodbye to Law Reviews (1936) 23 Virginia Law Review 38, 38.

<sup>7</sup> For the causes and consequences, see also Wendy Wagner and Will Walker, *Incomprehensible! A Study of How Our Legal System Encourages Incomprehensibility, Why It Matters, and What We Can Do About It* (Cambridge University Press 2019); Christopher Williams, ‘Functional or Dysfunctional? The Language of Business Contracts in English’ (2010) XLII(3) *Rassegna Italiana di Linguistica Applicata* 217; Christopher Williams, ‘Functional or Dysfunctional? The Language of Business Contracts in English: an Update’ in Marcelo Corrales, Helena Haapio and Mark Fenwick (eds), *Research Handbook on Contract Design* (Edward Elgar forthcoming).

<sup>8</sup> See, for example, Joseph Kimble, *Writing for Dollars, Writing to Please. The Case for Plain Language in Business, Government, and Law* (Carolina Academic Press 2012).

<sup>9</sup> See, for example, International Association for Contract & Commercial Management (IACCM), ‘10 Pitfalls to Avoid in Contracting’ (20 November 2015) <[www.worldcc.com/Resources/Content-Hub/View/ArticleId/7847/10-Pitfalls-to-Avoid-in-Contracting](http://www.worldcc.com/Resources/Content-Hub/View/ArticleId/7847/10-Pitfalls-to-Avoid-in-Contracting)> accessed 23 November 2020; IACCM, *The Purpose of a Contract: An IACCM Research Report* (2017) <[www.worldcc.com/Portals/IACCM/resources/files/9876\\_j18069-iaccm-purpose-of-contract-a4-2017-11-14-v1-webready.pdf](http://www.worldcc.com/Portals/IACCM/resources/files/9876_j18069-iaccm-purpose-of-contract-a4-2017-11-14-v1-webready.pdf)> accessed 30 November 2020.

contract as written ('the paper deal') and the true agreement ('the real deal').<sup>10</sup> The current structure and design of contracts (or lack of meaningful structure and design) overwhelm people. Problems caused by the 'wall of text' and contract complexity have been widely reported.<sup>11</sup> Research has also revealed the current bias of contracts on safeguarding and negatives – something that can seriously harm relationships.<sup>12</sup> Although such contracts might be *legal-friendly* – helping to manage legal risk or win a dispute in court – they are not *user-friendly* or *business-friendly*.<sup>13</sup>

Contract visualisation and contract design have only recently been added to business and legal vocabulary. What most legal scholars and educators have cared about is *contract law*, not *contracts* themselves. The few scholars who have addressed contracts themselves have mostly focused on the formulation and choice of contract clauses around legal concepts, not the needs of clients.<sup>14</sup> Contracts have been *drafted* 'by lawyers for lawyers' – they have not been *designed* to work and be understandable for those who are impacted.<sup>15</sup>

Contracts classes are about *contract law*, you might say, and there is already plenty to cover. But the law is not about content only, it is also about the environment and context in which the law is applied. This is increasingly about matters other than litigation. In order to become successful lawyers and serve their clients well, law students need new mindsets, skills and tools. Adding visualisation to our thinking and teaching toolbox can open up that new path.

The time has come to stop equating *contracts* with *contract litigation*. Apart from being legal tools, contracts are business and management tools. People in charge of negotiating, implementing, managing and monitoring them are mainly business and operational people who do not have law degrees. What they need – and increasingly ask for – is contracts that are not only legally sound, but also easy to work with and act upon. Clients need safeguards and protection, but they also need flexibility and good relationships. Conventional contracts would benefit from a complete overhaul, assuming that they are expected to be read and understood by those whom they are expected serve: the clients.

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<sup>10</sup> Stewart Macaulay, 'The Real and the Paper Deal: Empirical Pictures of Relationships, Complexity and the Urge for Transparent Simple Rules' (2003) 66 *The Modern Law Review* 44.

<sup>11</sup> See, for example, Stefania Passera, *Beyond the Wall of Contract Text: Visualizing Contracts to Foster Understanding and Collaboration within and across Organizations* (Doctoral Dissertation, Aalto University 2017); International Association for Contract & Commercial Management (IACCM), 'Most Negotiated Terms 2018' (11 June 2018) <[www.worldcc.com/Resources/Content-Hub/View/ArticleId/9010/Most-Negotiated-Terms-Report-2018-Top-Terms](http://www.worldcc.com/Resources/Content-Hub/View/ArticleId/9010/Most-Negotiated-Terms-Report-2018-Top-Terms)> accessed 23 November 2020; World Commerce & Contracting (WorldCC), 'Most Negotiated Terms 2020' (7 October 2020) <[www.worldcc.com/Resources/Content-Hub/View/ArticleId/9934](http://www.worldcc.com/Resources/Content-Hub/View/ArticleId/9934)> accessed 23 November 2020.

<sup>12</sup> Anna Hurmerinta-Haanpää and Sampo Viding, 'The Functions of Contracts in Interorganizational Relationships: A Contract Experts' Perspective' (2018) 4 *Journal of Strategic Contracting and Negotiation* 98.

<sup>13</sup> Helena Haapio and Thomas D Barton, 'Business-Friendly Contracting: How Simplification and Visualisation Can Help Bring It to Practice' in Kai Jacob, Dierk Schindler and Roger Strathausen (eds), *Liquid Legal: Transforming Legal into a Business Savvy, Information Enabled and Performance Driven Industry* (Springer International 2017).

<sup>14</sup> Promoters of the *proactive approach to contracting and law* have started to change this, and found allies in the emergence of Contract Design and Legal Design. See, for example, Helena Haapio (ed), *A Proactive Approach to Contracting and Law* (International Association for Contract and Commercial Management & Turku University of Applied Sciences 2008); Thomas D Barton, 'Re-Designing Law and Lawyering for the Information Age' (2016) 30 *Notre Dame Journal of Law, Ethics and Public Policy* 1; Helena Haapio, Thomas D Barton and Marcelo Corrales Compagnucci, 'Legal Design for the Common Good: Proactive Legal Care by Design' in Marcelo Corrales Compagnucci and others (eds), *Legal Design: Integrating Business, Design, & Legal Thinking with Technology* (Edward Elgar forthcoming); Thomas D Barton and others, 'Reframing Contract Design: Integrating Business, Legal, Design, and Technology Perspectives' in Marcelo Corrales Compagnucci, Helena Haapio and Mark Fenwick (eds), *Research Handbook on Contract Design* (Edward Elgar forthcoming).

<sup>15</sup> See, for example, Thomas D Barton and others, 'Successful Contracts: Integrating Design and Technology' in Marcelo Corrales Compagnucci, Mark Fenwick and Helena Haapio (eds), *Legal Tech, Smart Contracts and Blockchain* (Springer 2019).

### 3. Pioneering contract visualisation: experimenting in education and practice

In recent years, a growing number of organisations and lawyers, especially in-house lawyers, have started to see contracts in a more ‘designerly’ and managerial way. Their focus is not on litigating or winning in court, but supporting business in achieving their objectives and preventing unnecessary problems. The *proactive contracting* approach, founded in the Nordic countries in the late 1990s and early 2000s,<sup>16</sup> started to highlight the *ex ante* promotive and preventive uses of contracts and their managerial functions, putting the users in the center.<sup>17</sup> The founders, of whom I was one, saw the need to change mindsets and how contracts are designed, communicated, perceived, and taught. Contract visualisation offered a natural way to bring the approach to practice. The early experiments were encouraging, and the enthusiasm of the people who joined in was contagious. Gradually, *proactive contracting* grew into a multidisciplinary stream of research and practice,<sup>18</sup> adopted by scholars exploring topics varying from contract visualisation to functional contracting<sup>19</sup> and from the proactive visualisation of legal information to proactive legal design.<sup>20</sup>

I had the privilege of being part of the early developments of proactive contracting and contract visualisation. Inspired by the work of Colette R Brunschwig, Emily Allbon, Tobias Mahler, Richard K Sherwin, and others,<sup>21</sup> I turned from a pioneering practitioner to a researcher of knowledge visualisation and contract (re)design. The following auto-ethnography illustrates some highlights from my journey, showing how finding and pursuing one’s mission and vision can contribute to changing an entire community, in this case the contracting community. I hope it can serve as inspiration for future designerly lawyers, something we should encourage our students to become. In the words attributed to the influential cultural

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<sup>16</sup> See, for example, Haapio (ed), *A Proactive Approach to Contracting and Law* (n 14); George Siedel and Helena Haapio, ‘Using Proactive Law for Competitive Advantage’ (2010) 47 *American Business Law Journal* 641; Gerlinde Berger-Walliser, ‘The Past and Future of Proactive Law: An Overview of the Development of the Proactive Law Movement’ in Gerlinde Berger-Walliser and Kim Østergaard (eds), *Proactive Law in a Business Environment* (DJØF Publishing 2012).

<sup>17</sup> See, for example, the resources mentioned in notes 14–16. See also Soili Nystén-Haarala, ‘Ennakoivan sopimisen tutkimusmenetelmät’ [‘Research Methods of Proactive Contracting’] (2017) 115 *Lakimies* 1015; Anna Hurmerinta-Haanpää, *The Many Functions of Contracts. Empirical Studies on How Companies Use Contracts in Interorganizational Exchange Relations* (Doctoral dissertation, University of Turku forthcoming); Jouko Nuottila, Osmo Kauppila and Soili Nystén-Haarala, ‘Proactive Contracting: Emerging Changes in Attitudes Toward Project Contracts and Lawyers’ Contribution’ (2016) 2 *Journal of Strategic Contracting and Negotiation* 150; Helena Haapio, *Next Generation Contracts: A Paradigm Shift* (Lexpert Ltd 2013).

<sup>18</sup> Nystén-Haarala (n 17); Hurmerinta-Haanpää (n 17).

<sup>19</sup> For example, Passera, *Beyond the Wall of Contract Text* (n 11); Hurmerinta-Haanpää (n 17).

<sup>20</sup> For example, Passera, *Beyond the Wall of Contract Text* (n 11); Arianna Rossi and Helena Haapio, ‘Proactive Legal Design: Embedding Values in the Design of Legal Artefacts’ in Erich Schweighofer, Franz Kummer and Ahti Saarenpää (eds), *Internet of Things. Proceedings of the 22nd International Legal Informatics Symposium IRIS 2019* (Editions Weblaw 2019); Michael D Murray, ‘Cartoon Contracts and the Proactive Visualization of Law’ (forthcoming) 16 *University of Massachusetts Law Review*; Michael D Murray, ‘Diagrammatics and the Proactive Visualization of Legal Information’ (forthcoming) 43 *University of Arkansas Little Rock Law Review*. See also Haapio, Barton and Corrales Compagnucci (n 14).

<sup>21</sup> Colette R Brunschwig, *Visualisierung von Rechtsnormen – Legal Design [Visualisation of Legal Norms – Legal Design]* (Schulthess Juristische Medien 2001); Emily Allbon, ‘IT’S ALIVE! The birth of Lawbore and the Indispensability of the Law Librarian’ (2005) 5(4) *Legal Information Management* 21; Richard K Sherwin, Neil Feigenson and Christina Spiesel, ‘Law in the Digital Age: How Visual Communication Technologies are Transforming the Practice, Theory, and Teaching of Law’ (2006) 12 *Boston University Journal of Science & Technology Law* 227; Tobias Mahler, ‘A Graphical Interface for Legal Texts?’ in Dan Jerker B Svantesson and Stanley Greenstein (eds), *Internationalisation of Law in the Digital Information Society. Nordic Yearbook of Law and Informatics 2010–2012* (Ex Tuto Publishing 2013).

anthropologist Margaret Mead: 'Never doubt that a small group of thoughtful, committed people can change the world. Indeed, it is the only thing that ever has.'<sup>22</sup>

My journey in contract visualisation started with sketching and real-time visualisation in contract training workshops in the 1990s. The first experiments were about helping Contractual Quality and Risk Management workshop attendees see how contracts impact business, how the law interacts with contracts, and how careless contracting can have unexpected consequences. For example, if the parties do not include a notices provision or time limit for making claims, the default rules of the law will determine when and how a party must give notice and whether a claim is time-barred. If the people in charge of sending or receiving those notices or making or responding to those claims do not know the law, how can they comply? In the training, I started to call the default rules that are so read in into the contract even though the parties did not expressly include them 'invisible terms'. I could have called them 'implied terms' or 'terms that are deemed to be part of the contract', but invisible terms seemed to work better in conversations and interactions with the audience.

After meeting Annika Varjonen, a real-time visualiser, who made cartoon-type graphic notes on the spot, it became so much easier to make the invisible visible. Working together we found new ways to verbalise and visualise contract concepts in ways that made them more accessible, even intriguing for the audience. Attendees liked our playful approach to the serious topics. Interviews conducted several weeks after the workshop events revealed that attendees had actually changed their thinking habits and working practices and could still recall the insights they had gained. Many reported that they treasured their visual notes and had shared them with their colleagues.

After receiving the encouraging feedback I created more workshop hypotheticals and visual metaphors (for example, 'camouflaged contracts') that seemed to work. They became so popular that attendees wanted to know more. So the sketches and visuals moved from flipcharts to handouts and later to contract handbooks, conference papers, book chapters and articles; the era of 'visualisation *about* contracts' had begun. It soon expanded beyond training workshops. In the book on contract risk I co-authored with University of Michigan Ross Business School Law Professor George Siedel in 2013, we dedicated an entire section to visualisation as a tool to simplify and demystify contracts.<sup>23</sup>

The next step was applying visualisation to improve contracts themselves, in order to transform what had been *drafted* 'by lawyers for lawyers' to become *designed* to be understandable for those who are impacted.<sup>24</sup> When I met Stefania Passera, an information designer and PhD student at that time, our lawyer-designer team started to experiment with the research and practice of what we now call 'visualisation *in* contracts': embedding visual navigation aids, such as highlighting and color-coding, and diagrams, such as timelines and flowcharts, in contracts themselves.<sup>25</sup> Through networking, Legal Design Jam events<sup>26</sup> and professional and academic conferences we found colleagues working with visualisation

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<sup>22</sup> While often cited, researchers have been unsuccessful in finding the quotation in Margaret Mead's work. See, for example, Garson O'Toole, 'Never Doubt That a Small Group of Thoughtful, Committed Citizens Can Change the World; Indeed, It's the Only Thing That Ever Has' (*Quote Investigator*, 12 November 2017) <<https://quoteinvestigator.com/2017/11/12/change-world/>> accessed 2 December 2020; Wikiquote contributors, 'Margaret Mead' (*Wikiquote*) <[https://en.wikiquote.org/w/index.php?title=Margaret\\_Mead&oldid=2899095](https://en.wikiquote.org/w/index.php?title=Margaret_Mead&oldid=2899095)> accessed 2 December 2020.

<sup>23</sup> Helena Haapio and George J Siedel, *A Short Guide to Contract Risk* (Gower 2013).

<sup>24</sup> See Thomas D Barton and others, 'Successful Contracts' (n 15).

<sup>25</sup> For examples, see Passera, *Beyond the Wall of Contract Text* (n 11) and the resources mentioned in notes 4 and 39. See also WorldCC, 'Contract Design and Simplification' <[www.worldcc.com/Research-Analytics/Contract-Design-Simplification](http://www.worldcc.com/Research-Analytics/Contract-Design-Simplification)> accessed 23 November 2020.

<sup>26</sup> For example, CISG Legal Design Jam, Information Design Summer School, Syros 30 September - 4 October 2013; Legal Design Jam @ Stanford University, Stanford, 11 October 2013; Legal Design Jam @ The Embassy SF, San Francisco, 12 October 2013 – see <http://legaldesignjam.com/jams/past-jams/> for details.

*for* contracts (used in negotiations, contract preparation and deal-design<sup>27</sup>) and visualisation *as* contracts (such as comic contracts<sup>28</sup>).

In hindsight, my work as a pioneer of the proactive and visual approach to contracts appears to have taken place in a designerly way: it was always about experimentation, first with different methods to make contract training and related materials more relevant and engaging and, later, with different ways of simplifying, (re)designing, and communicating contracts to make them more useful and usable for everyone, especially the parties themselves. Technology and design started to enable entirely new contract genres, and we started to explore them.<sup>29</sup> We reflected on our projects and reported on our findings. We listened to the users. The journey continued from contract education to contract practice, and after using visuals *in* and *about* contracts we witnessed the use of visuals *for* and *as* contracts.<sup>30</sup>

The following Figure (Figure 1) illustrates some highlights of my contract visualisation journey and some hallmarks of our thinking and doing.

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<sup>27</sup> See, for example, Daniela Alina Plewe and Robert de Rooy, 'Integrative Deal-Design: Cascading from Goal-Hierarchies to Negotiations and Contracting' (2016) 2 *Journal of Strategic Contracting and Negotiation* 19.

<sup>28</sup> See, for example, Robert de Rooy, 'Comic Contracts: Everyone Can Understand Them' *Contracting Excellence Journal* (17 September 2018) <<https://journal.iaccm.com/contracting-excellence-journal/comic-contracts-everyone-can-understand-them>> accessed 30 November 2020; Camilla Baasch Andersen and Robert de Rooy, 'Employment Agreements in Comic Book Form: What a Difference Cartoons Make' in Marcelo Corrales Compagnucci, Helena Haapio and Mark Fenwick (eds), *Research Handbook on Contract Design* (Edward Elgar forthcoming).

<sup>29</sup> See Helena Haapio, Robert de Rooy and Thomas D Barton, 'New Contract Genres' in Erich Schweighofer and others (eds), *Data Protection / LegalTech. Proceedings of the 21th International Legal Informatics Symposium IRIS 2018* (Editions Weblaw 2018). In this paper we took stock of the developments and envisioned a future where contracts are designed to contain code, text, sound, visuals, comics, and more.

<sup>30</sup> Our team coined the continuum of visuals *in*, *about*, *for* and *as* contracts, but we were not the first or only persons applying the ideas. Flowcharts, in particular, had already become popular tools. One of the early articles about the topic was Henry W Jones and Michael Oswald, 'Doing Deals with Flowcharts' (2001) 19(9) *ACCA Docket* 94. See also Henry W Jones, 'Envisioning Visual Contracting: Why Non-Textual Tools Will Improve Your Contracting' (2009) 2(6) *Contracting Excellence* 27. The first edition of *Contract Law: Flowcharts and Cases: a Student's Visual Guide to Understanding Contracts* by Frank J Doti was published by Thomson West in 2007. Many NEC3 contracts come with guidance notes and flowcharts; see, for example, NEC, 'NEC3: Guidance Notes & Flowcharts' <[www.neccontract.com/NEC3-Products/NEC3-Contracts/NEC3-Engineering-Construction-Contract/NEC3-Guidance-Notes-Flowcharts](http://www.neccontract.com/NEC3-Products/NEC3-Contracts/NEC3-Engineering-Construction-Contract/NEC3-Guidance-Notes-Flowcharts)> accessed 30 November 2020.



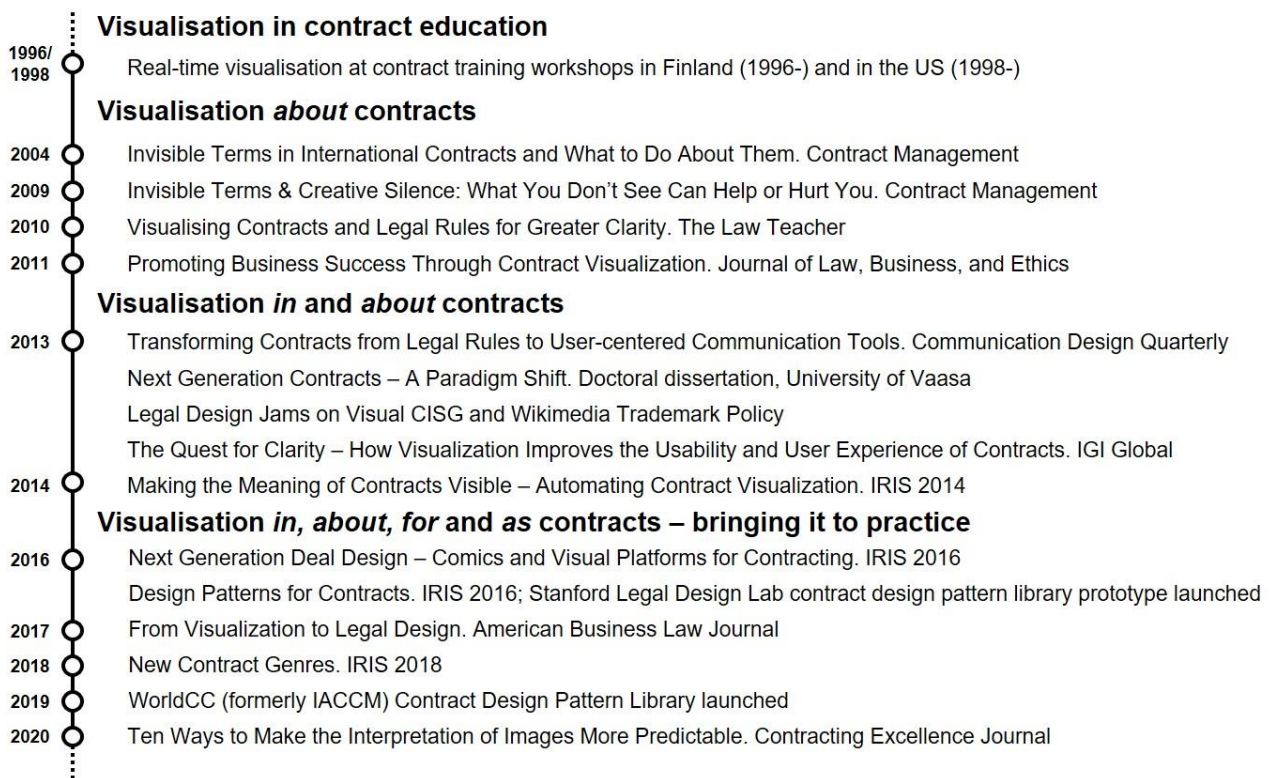


Figure 1. A Brief Chronology of my Contract Visualisation Journey<sup>31</sup>

The following Figure (Figure 2) is an early example of visualisation in a contract workshop, showing Annika Varjonen's real-time visualisations, graphical notes made on the spot, distilling complex contract and legal topics into images that enable engagement.

<sup>31</sup> Image by Helena Haapio. Used with permission. See also Lexpert, 'Contract Visualisation: the Trajectory' <[www.lexpert.com/our-approach/visualization/](http://www.lexpert.com/our-approach/visualization/)> accessed 30 November 2020. The events and resources listed in the Figure not mentioned elsewhere in this chapter are: Helena Haapio, 'Quality Improvement through Proactive Contracting: Contracts are too important to be left to lawyers!' (American Society for Quality ASQ Annual Quality Congress, Philadelphia, 5 May 1998) with real-time visualisations by Annika Varjonen, Visual Impact; Helena Haapio, 'Invisible Terms in International Contracts and What to Do About Them' *Contract Management* (July 2004) 32; Helena Haapio, 'Invisible Terms & Creative Silence: What You Don't See Can Help or Hurt You' *Contract Management* (September 2009) 24; Helena Haapio, 'Visualising Contracts and Legal Rules for Greater Clarity' (2010) 44 *The Law Teacher* 391; Gerlinde Berger-Walliser, Robert C Bird and Helena Haapio, 'Promoting Business Success Through Contract Visualization' (2011) 17 *Journal of Law, Business and Ethics* 55; Stefania Passera and Helena Haapio, 'Transforming Contracts from Legal Rules to User-centered Communication Tools: a Human-Information Interaction Challenge' (2013) 1(3) *Communication Design Quarterly* 38; Helena Haapio and Stefania Passera, 'The Quest for Clarity – How Visualization Improves the Usability and User Experience of Contracts' in Mao Lin Huang and Weidong Huang (eds), *Innovative Approaches of Data Visualisation and Visual Analytics* (IGI Global 2013); Stefania Passera, Helena Haapio and Michael Curtotti, 'Making the Meaning of Contracts Visible – Automating Contract Visualization' in Erich Schweighofer, Franz Kummer and Walter Hötendorfer (eds), *Transparency. Proceedings of the 17th International Legal Informatics Symposium IRIS 2014* (Österreichische Computer Gesellschaft OCG 2014); Gerlinde Berger-Walliser, Thomas D Barton and Helena Haapio, 'From Visualization to Legal Design: A Collaborative and Creative Process' (2017) 54(2) *American Business Law Journal* 347.

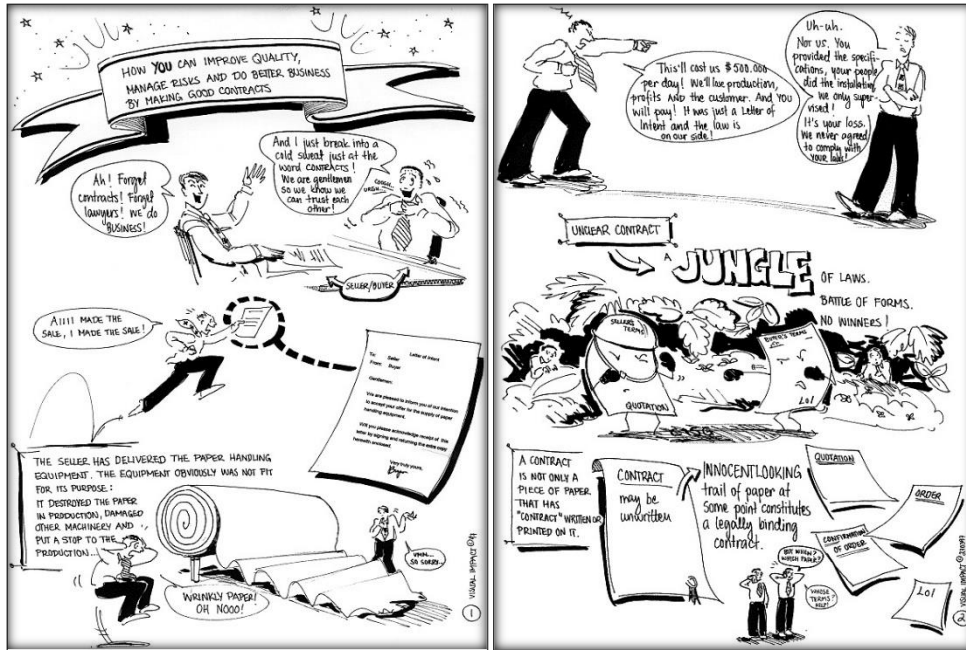


Figure 2. Sample pages of a 1997 contract workshop visualisation<sup>32</sup>

Figure 3 shows two timelines that I have used in my workshops to illustrate how visualisation might prevent disputes from arising. The image is shared with workshop participants after we have explored a widely cited Canadian dispute<sup>33</sup> concerning the meaning of the following termination clause:

This agreement shall be effective from the date it is made and shall continue in force for a period of five (5) years from the date it is made, and thereafter for successive five (5) year terms, unless and until terminated by one year prior notice in writing by either party.

In this dispute, one of the parties, Rogers, thought that it had a five-year deal. The other party, Aliant, was of the view that even within the initial term, it could terminate the agreement with one year's notice and increase its fees. This is where visualisation enters the picture: simple timelines, as in Figure 3, would have shown the parties their different understandings.

<sup>32</sup> Images by Annika Varjonen. Used with permission. For real-time visualisations from the Proactive Law conference 'Future Law, Lawyering, and Language: Helping People and Business Succeed' held in Helsinki on 12–13 May 2003, see <[www.lexpert.com/wp-content/uploads/2015/08/ProactiveLawConference2003-VisualNotesbyAnnikaVarjonen.pdf](http://www.lexpert.com/wp-content/uploads/2015/08/ProactiveLawConference2003-VisualNotesbyAnnikaVarjonen.pdf)>.

<sup>33</sup> For details, see, for example, Ian Austen, 'The Comma that Costs 1 Million Dollars (Canadian)' (*The New York Times*, 25 October 2010) <[www.nytimes.com/2006/10/25/business/worldbusiness/25comma.html](http://www.nytimes.com/2006/10/25/business/worldbusiness/25comma.html)> accessed 30 November 2020; Haapio and Siedel (n 23) 164–68.

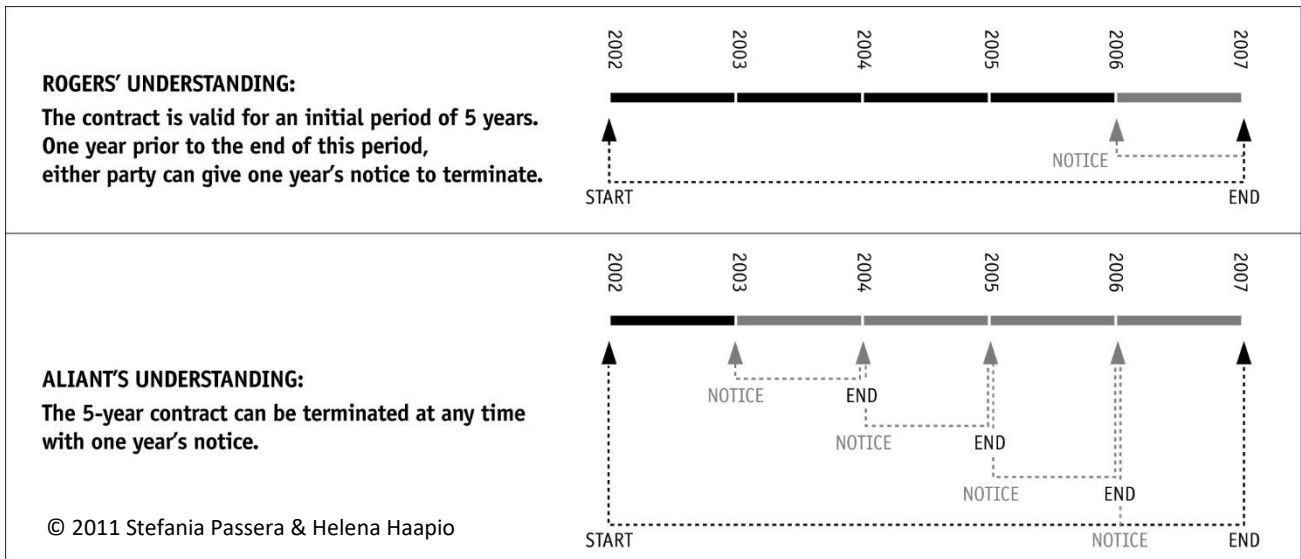


Figure 3. Two timelines that make different understandings visible<sup>34</sup>

A simple timeline drawn on a flipchart would have allowed the parties, during the negotiations, to come to a mutual understanding and remove the ambiguity – or to see that they had no deal and walk away. In the words of Louis M. Brown, the Father of Preventive Law: ‘It usually costs less to avoid getting into trouble than to pay for getting out of trouble’.<sup>35</sup>

My 2013 doctoral dissertation, *Next Generation Contracts*<sup>36</sup>, explored how visualisation can accelerate a paradigm shift in contract thinking and improve the quality, usability and user experience of contracts. As illustrated in Figure 1, after having gained experience with the concept, we started to look for ways to spread the word and make it easier for others to apply contract visualisation. We explored ways of presenting complex legal information in other contexts, too – for example, in privacy communication. Design patterns<sup>37</sup> and pattern libraries offered a way to identify, collect, and share good practices across these different contexts. Working with Margaret Hagan of the Stanford Legal Design Lab we developed our first contract design pattern library prototype as part of a co-authored conference paper.<sup>38</sup> After having convinced the leadership of the International Association for Contract and Commercial Management

<sup>34</sup> Image used with permission. See also Helena Haapio, ‘Contract Clarity through Visualisation – Preliminary Observations and Experiments’ in Ebad Banissi and others (eds), *Proceedings of the 15th International Conference on Information Visualisation, IV2011 (London 13–15 July 2011)* (IEEE Computer Society 2011) 339.

<sup>35</sup> Louis M Brown, *Preventive Law* (Prentice-Hall 1950) 3.

<sup>36</sup> Haapio, *Next Generation Contracts* (n 17). The work examines criteria for ‘good’ contracts and merges contract design with information design and visualisation, seeking to accelerate a paradigm shift in contract thinking and help implement the new thinking.

<sup>37</sup> Design patterns are, in essence, reusable solutions to commonly occurring problems. They are not templates intended to be copy-pasted. See, for example, Helena Haapio and Stefania Passera, ‘Contracts as Interfaces: Exploring Visual Representation Patterns in Contract Design’ in Daniel M Katz, Michael Bommarito and Ron Dolin (eds), *Legal Informatics* (Cambridge University Press forthcoming), with references.

<sup>38</sup> Helena Haapio and Margaret Hagan, ‘Design Patterns for Contracts’ in Erich Schweighofer and others (eds), *Networks. Proceedings of the 19th International Legal Informatics Symposium IRIS 2016*. (Österreichische Computer Gesellschaft OCG / books@ocg.at 2016); Stanford Legal Design Lab, ‘Contract Design Pattern Library’ <[www.legaltechdesign.com/communication-design/legal-design-pattern-libraries/contracts/](http://www.legaltechdesign.com/communication-design/legal-design-pattern-libraries/contracts/)> accessed 30 November 2020.

(IACCM; after rebranding, World Commerce & Contracting, WorldCC) of the feasibility of the idea, Stefania Passera and I started to design and build a Contract Design Pattern Library for them.<sup>39</sup>

The work continues. While many welcome contract visualisation, some worry: what would a judge say, or will a visual contract hold up in court? Images and word-image combinations have been researched in language studies and communication sciences for years, yet their scholarly exploration has only just begun for the legal field. In order to promote the practice of contract visualisation, I am currently exploring ways to reduce worries around the interpretation of visuals in contracts.<sup>40</sup>

#### 4. Towards next generation contracts: the way forward

In recent years, design thinking, simplification and visualisation have gained new proponents, even in the legal community.<sup>41</sup> Social media networks and Twitter tweets about these topics have become popular. Law students and their future clients are likely to be exposed to them. Visual contracts are no longer a remote possibility, they are real: examples are increasingly available, thanks to the early adopters and the WorldCC (formerly IACCM).<sup>42</sup> Law students should know about these developments and resources, and contracts teachers and legal scholars should not ignore them, either.

For information designers, the primary questions always are: what is the context in which the information will be used, and how do we expect people to use it in that context?<sup>43</sup> These are useful questions for those in charge of contract preparation as well. One approach or visual does not fit all contexts, and contract visualisation is not appropriate for every context. The purpose of the contract and the goals of the client need to be considered. To help contract planners and users, it usually makes sense to supplement text with explanatory diagrams and navigation tools. Such tools make it easier for everyone to find the information they need, to understand the information they find, and to use and act upon it.

Lawyer-designer teams and a new breed of contract designers are already joining forces with clients and technologists to improve contracts' functionality, usability, and user experience. This requires a new mindset, shifting lawyers from being *unconscious* designers - creating contracts, disclosures, and manuals in conventional ways - to *conscious* designers, with a focus on the users and their needs for more useful and

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<sup>39</sup> WorldCC, Stefania Passera and Helena Haapio, 'WorldCC Contract Design Pattern Library' <<https://contract-design.iaccm.com/>> accessed 30 November 2020; to see examples of actual contracts and clauses provided by companies such as Airbus, DXC Technology, Shell, and Telstra, go to 'Explore Library', choose a pattern and click on 'Examples'.

<sup>40</sup> Helena Haapio, Vesa Annola and Merja Koskela, 'Ten Ways to Make the Interpretation of Images More Predictable' *Contracting Excellence Journal* (5 November 2020) <<https://journal.iaccm.com/contracting-excellence-journal/calculating-cost-recovery-in-commercial-item-contracts-significance-of-present-value-part-2-0>> accessed 30 November 2020; Vesa Annola, Helena Haapio and Merja Koskela, 'Interpreting Images in Contracts' in Marcelo Corrales Compagnucci, Helena Haapio and Mark Fenwick (eds), *Research Handbook on Contract Design* (Edward Elgar forthcoming).

<sup>41</sup> For a maturing body of scholarship and practical application of Visual Law and Legal Design, see the 2019 and 2020 Special Issues of the Journal of Open Access to Law (JOAL) and Michael A Curtotti, 'Visualising a Visual Movement – Reflections on a Growing Body of Research' (2020) 8 Journal of Open Access to Law <<https://ojs.law.cornell.edu/index.php/joal/article/view/105>> accessed 2 December 2020. See also Normactivity, 'Law' <[www.normactivity.com/law.html](http://www.normactivity.com/law.html)> accessed 2 December 2020.

<sup>42</sup> In addition to its Contract Design Pattern Library and many other resources, the WorldCC offers a network for members sharing an interest in the topic: see WorldCC, Contract Design – Simplification and Visualisation <[www.iaccm.com/gp/ContractSimplification](http://www.iaccm.com/gp/ContractSimplification)> (for members only).

<sup>43</sup> David Sless, 'From Semiotics to Choreography' (2017) 23(2) *Information Design Journal* 173.

usable contracts and guidance.<sup>44</sup> Visualisation can help change mindsets, too, so the move toward a new paradigm and next generation contracts can begin. Figure 4 shows what it entails.

From This ...	... To This
<b>Legally perfect</b> contracts that prepare for failure and seek to allocate all risk to the other party.	<b>Usable</b> contracts that facilitate and guide desired action and help implement what is agreed.
Contracts are purely <b>legal</b> tools, made to win in court: legally binding, enforceable, must cover all conceivable contingencies.	Contracts are also <b>business</b> tools: must be clear and easy-to-use to achieve business goals for a win-win deal.
Contracts allocate <b>risk</b> . They are needed only when things go wrong.	Contracts add <b>value</b> . They enable business success and prevent problems and disputes.
Contracts are <b>text-only</b> .	Contracts can be <b>presented as text, visuals, or hybrids</b> , depending on the needs of the audience. Visual elements can help explain, condense, organize, clarify and navigate text.

Figure 4. Moving to Next Generation Contracts<sup>45</sup>

Lawyers are increasingly working with other professions, whether they work in business or academia. It is no longer enough for lawyers who work with contracts to master *contract law in books*. They are expected to contribute to *contracts in action*. This often includes helping others – for example technologists developing smart contracts or AI solutions – understand what contracts mean.

Contract visualisation is not just about embedding visual elements in contracts and ‘paper deals’. It is also about ensuring that the ‘real deal’ is captured, represented and implemented as intended. A contract is not the goal, its successful implementation is. A cross-functional team is in the position to make this happen. The processes of *visualising* and *designing* offer ways to respond to the needs and requirements related to the business purposes and managerial functions of contracts. Collaborating with clients and users and applying designerly methods such as customer journeys in those processes, future lawyers may finally be able to bridge the gap between the real (or actual) deal and the paper (or apparent) deal, which generations of conventional lawyers have not managed to do. Moving forward, the new breed of lawyers and law teachers will no doubt develop new tools and techniques to do so.<sup>46</sup>

<sup>44</sup> Helena Haapio, ‘Legal Design in Action: From Text-Only Guidebooks to Digital, Visual Playbooks’ in Erich Schweighofer, Franz Kummer and Ahti Saarenpää (eds), *Internet of Things. Proceedings of the 22nd International Legal Informatics Symposium IRIS 2019* (Editions Weblaw 2019). Similarly, Margaret Hagan, ‘Law by Design’ <[www.lawbydesign.co](http://www.lawbydesign.co)> accessed 30 November 2020. – For the challenges of using current contracts as training data for machine learning and AI systems, see Helena Haapio and Daniel W Linna Jr, ‘Contract Quality and AI: Garbage In, Garbage Out?’ *Contracting Excellence Journal* (31 August 2020) <<https://journal.iaccm.com/contracting-excellence-journal/contract-quality-and-ai-garbage-in-garbage-out>> accessed 30 November 2020, with references.

<sup>45</sup> Adapted from Haapio, *Next Generation Contracts* (n 17) 41-42 and Rob Waller, Helena Haapio and Stefania Passera, ‘Contract Simplification: The Why and the How’ *Contracting Excellence Journal* (24 July 2017) <<https://journal.iaccm.com/contracting-excellence-journal/contract-simplification-the-why-and-the-how>> accessed 30 November 2020. Used with permission.

<sup>46</sup> For tools and inspiration, see also City Law School, ‘tldr - The Less Textual Legal Gallery’ (City, University of London) <<https://tldr.legal>> accessed 2 December 2020 and Emily Allbon, ‘Changing Mindsets: Encouraging Law Teachers to Think Beyond Text’ (2019) 7 *Journal of Open Access to Law* <<https://ojs.law.cornell.edu/index.php/joal/article/view/96>> accessed 2 December 2020.

Future lawyers have been predicted to operate as *transformers*<sup>47</sup>, *transaction engineers*<sup>48</sup> and as *designers*<sup>49</sup>; 'like engineers, [they] want to make something useful that works for their clients.'<sup>50</sup> Many of them will do things 'in designerly ways', with an 'emphasis on communication, experimentation, and making things visible and tangible'.<sup>51</sup> Visualisation can help today's law students be better equipped to take new roles and work successfully as part of cross-professional teams. Visualisation can help law teachers, too, to be better communicators.

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<sup>47</sup> Stefania Passera, Emily Allbon and Helena Haapio, 'Contract Transformation: Merging Drafting and Design to Meet the Needs of Human Readers' in Marcelo Corrales Compagnucci, Helena Haapio and Mark Fenwick (eds), *Research Handbook on Contract Design* (Edward Elgar forthcoming).

<sup>48</sup> See, for example, Marcelo Corrales and others, 'Tomorrow's Lawyer Today? Platform-Driven LegalTech, Smart Contracts & the New World of Legal Design' (2019) 22(10) *Journal of Internet Law* 3, with references.

<sup>49</sup> Hagan (n 44).

<sup>50</sup> David Howarth, *Law as Engineering. Thinking about What Lawyers Do* (Edward Elgar Publishing 2013) 67.

<sup>51</sup> Amanda Perry-Kessaris, 'Making Socio-Legal Research More Social by Design: Anglo-German Roots, Rewards and Risks' (2020) 21 *German Law Journal* 1427. See also Amanda Perry-Kessaris, 'Legal Design for Practice, Activism, Policy and Research' (2019) 46 *Journal of Law and Society* 185.



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