Comprehensibility as a rule of law requirement: the role of legal design in delivering access to law

Michael Doherty
Professor of Law, Associate Head of Lancaster University Law School, UK

Abstract. Visualisation, as an element of legal design, has a functional relationship with the issues of free access to law and plain language in law. 'Functional' because we can locate all three issues within an overarching functional account of law – Joseph Raz's doctrine of the rule of law. Raz asked what 'law' – at a meta level – was for, and answered that its function was to guide human behaviour. The further characteristics and structures of law and legal systems that he derived from this meta-function were framed by the technical and social possibilities as they appeared in the 1970s. These possibilities, like so much else, have been disrupted and expanded by the digital revolution. The fact that citizens are now directly accessing primary law raises challenges for how readable and comprehensible that law is. It is in addressing this need for comprehensibility that visualisation can make a uniquely important contribution.

Keywords: visualisation; free access to law; rule of law

1. Introduction

This article draws on debates that have taken place in this journal over the last seven years, and in the Free Access to Law Movement from its origins in the early 1990s work of Case Western Reserve and Cornell Universities, and traces a line between those debates and the potential role of the burgeoning legal design movement. It argues that the innovations of Brunschwig, Hagan, Haapio and Passera, and others, in visualisation and legal design[1] have a relationship with, and build on, the pioneering work of Peter Martin, Tom Bruce and the Legal Information Institute (Martin & Foster, 2000).
Legal design is the application of the methods and mindsets of service design to legal processes and problems. It involves, inter alia, researching and empathising with the specific needs of the users, using divergent thinking to generate a wide range of ideas, and quickly prototyping potential solutions with users. Visualisation is not a synonym for design, but it is a key element of the legal designer's toolkit. The paper proposes that visualisation, as an aspect of legal design, is a third element in the availability and use of legislation;[2]

- Element 1 – access (Free Access to Law Movement)[3]
- Element 2 – readability (plain language movement)[4]

[1] See e.g. Brunschwig, 2014; Haapio & Hagan, 2016; Passera, 2017.
[2] The arguments here focus on the obligations imposed and opportunities afforded by law to citizens, rather than the source of law itself. They therefore also apply to secondary legislation and (in common law countries) to relevant caselaw.
[3] That is, the movement of legal scholars, technologists, public servants and others who have worked to maximise free access to public legal information. See; The Free Access to Law Movement http://www.fatlm.org/ (accessed 9 January 2020); Martin & Foster, 2000; Greenleaf G, (2011) 'Free access to legal information, LIIs, and the Free Access to Law Movement', in Danner, R and Winterton J. (Eds), *IALL International Handbook of Legal Information Management* (Ashgate).
[4] The Plain Language movement is wider than law. It promotes the use of clear, concise and straightforward language, particularly in public documents. See organisations such as

- Element 3 – comprehensibility (visualisation/ legal design movement)

The elements are ongoing and concurrent. It is not implied that legal design is a more evolved form of the access/use process – just that it is a more recent development and that it has a distinct role to play in addressing 'last mile' concerns, i.e. the final part of bridging the distance between a complex legal code and the potential level of understanding of people governed by that code.
Such an analysis raises the question of what binds the three elements together – is there an overarching conceptual framework? This paper argues that the answer lies in the rule of law, and particularly in Raz's conception of the rule of law which states that law must be capable of guiding human behaviour (Raz, 1979). The article concludes by identifying some of the ways in which visualisation and legal design can help make Raz's theory more of a social reality and address the access/use process in ways which are otherwise not possible.

2. Connecting visualisation to open access & readability

Law has traditionally been about words, and lawyers have been 'word people and not picture people' (Silbey, 2012, p.177), though more recently 'the importance of images in the law is gradually increasing' (Boehme-Nessler, 2011, p.115). An interest in law's visual turn is not necessarily located in design methodologies, but this article is concerned with uses of visualisation that are part of a design thinking approach to addressing the needs of legal users and to communicating rights and responsibilities more effectively.

2.1 Open Access

The Free Access to Law Movement (FALM) has been a success. From a position in the early 1990s when there was no significant free online access to legal information, the movement is 'approaching maturity' (Greenleaf, Mowbray and Chung, 2013, p.1). The work of the Legal Information Institute and partner organisations, such as AustLII and BAILLI, has made a huge volume of (mainly) primary legal information directly and freely accessible to the public, and WorldLII contains legal information for a majority of countries in the world. It has taken on indifference and hostility from state legal institutions and overcome legal barriers, such as Crown copyright concerns over legal materials in Commonwealth countries (Martin & Foster, 2000). The Declaration on Free Access to Law agreed in Montreal in 2002, sets out the aims of the FALM, including the belief that legal information is part of the common heritage of humanity and should be accessible to all anonymously and free of charge. [5]

Clarity https://clarity-international.net/ (accessed 9 January 2020) and PLAIN https://plainlanguagenetwork.org/ (accessed 9 January 2020)

[5] Montreal Declaration, 2002, http://www.worldlii.org/worldlii/declaration/ (accessed 9 January 2020)

There is no mention of a goal of usability or comprehensibility in the Montreal Declaration on Free Access to Law. Whilst the Hague Conference Guiding Principles introduced new goals on translation of materials into other languages,[6] there is no objective of translating 'legal English' into comprehensible language. This is not a criticism of the FALM – it has focussed successfully on a particular set of outcomes – but to point out that if we identify that comprehensibility of legal information is important then we need to turn to another movement, another set of methods to reach that goal.

Most of the statements on free access to information focus on what *it is* rather than what *it is for*. What is clear from the outset is that the direct availability of legal materials to the general public is at the heart of free access (e.g. Principle 2, Montreal Declaration). This is not satisfied by only allowing legally-qualified persons to access law who can then act as translators/advisors to the general public. Curtotti, Haapio and Passera (2015) argue that this process of making law accessible to a much wider audience may affects 'its form, content and manifestation'.

2.2 Plain language Movement

The desire for law to be less impenetrable is not new. The UK Office of Parliamentary Counsel (OPC-UK) quotes Edward VI (1537-1553) 'I wish that the superfluous and tedious statutes were brought into one sum together, and made more plain and short', and goes on to give examples of reforms in the UK on the presentation and language of legislation from 1867 onwards. It also lists similar 'good law' efforts over recent decades in Australia, US and European countries (OPC-UK, 2013, p.3). The plain language in law movement, like the FALM, 'gathered steam during the early 1990s' (Curtotti & McCreath, 2013), and progress on readability requirements can be seen in e.g. the US Plain Writing Act 2010.

The largest empirical study of the readability of primary legal materials, in this case the US Code, was undertaken in 2014 by Cornell University Legal Information Institute and the Australian National University. Researchers carried out a citizen science project involving 43,000 crowdsourced assessments of the readability of legal materials (Curtotti et al (2015)). It found that, 'Non-lawyers find legislative materials harder to access than the legally trained. If we wish to communicate effectively with this substantial audience, we need to re-examine how the law is written'. An earlier study reported that non-lawyer test scores on readability, ranged from 'frustrational' for those with high levels of general education to 'total incomprehension' for those with lower levels of education.[7]

In the context of contract drafting, Haapio and Hagan (2016) explain that the 'felt need to produce legal language easily diverts drafters' attention away from the needs of the users: those who are impacted by or need to work with the text – in contracting, mostly non-lawyers'. The creation of legislation is the public parallel to contract drafting, and the same impulses influence legislative drafters. Simplicity is not the primary goal of

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[6] Hague Conference on Access to Foreign Law in Civil and Commercial Matters, Conclusions and Recommendations (2012) https://assets.hcch.net/docs/b093f152-a4b3-4530-949e-65c1bfc9cda1.pdf (accessed 9 January 2020)

[7] R. Benson, (1984) *End of legalese: The game is over*, Vol. 13 NYU Rev L&Soc Change p. 519.

legislative drafting, though clarity, simplicity and readability are subsidiary goals (Curtotti et al, 2015). The OPC-UK lists ten characteristics of good quality legislation, one of which is to be 'clear, as simple as possible, and well-integrated with other laws', but it is interesting to note that a direct commitment to comprehension is not on this list (OPC-UK, 2013, p. 11).

Readability metrics have some limitations in this context; they were developed to help select age appropriate reading materials rather than to improve the writing of texts. The OPC-UK do not regard the tests as a good standalone measure of readability but rather as a potentially useful screening device to indicate problematic text. The key finding from most studies, though, is that plain language interventions improve comprehension (Curtotti & McCreath, 2013, p.19), and Curtotti et al (2015) argue that there is a 'wide spread of readability in legal sentences. This suggests that there is no inherent reason why legislative sentences must be difficult. Many legislative sentences are not'.

3. From readability to comprehensibility

The wider opportunity to access legislation online 'has opened the law to a new and greatly expanded readership. These new readers need the law to be readable by them when they encounter it' (Curtotti and McCreath, 2013, p. 1). Similarly, whilst it is easier for people to find the law, 'once they have found it, they may be baffled' (OPC-UK, 2013). Passera (2017, p. 51) argues, in the context of contract language, that plain language 'although absolutely necessary, is not, by itself, enough', and leading scholars on legal readability concur in relation to legal material more generally: 'even plain language does not significantly alter the reality [of incomprehension]' (Curtotti & McCreath 2013, p. 5).

We can link the three elements together. 'Addressing the readability of legislation … is a natural extension of the work already carried out by the FALM' (Curtotti et al, 2015), and likewise addressing the comprehensibility of key laws (through visualisation and legal design) is a natural extension of the work done by the plain language movement. The wider frame is the rule of law and specifically Raz's hard question of what – at a meta level – law is for? His answer, that its purpose is to guide human behaviour, has consequences for the access/use question:

- Inaccessible laws are a problem for the rule of law.
- If law is accessible but impenetrable then that is still a problem.
- If law is accessible and is objectively readable but is still incomprehensible to the actual user then it remains a rule of law problem.

4. Human-centred processes

The first principle of design thinking is that it is human-centred, and 'it follows that the quality of legal documents, services, and processes should be evaluated also in terms of usability' (Passera, 2017, p.37). To state it

bluntly, 'The most effective way of testing legislation is to ask people whether they can understand it – a comprehension test'.[8]

4.1 Who are the users of primary laws?

Krongold argued in 1992 that only 'a lunatic fringe' of the general public would read legislation.[9] Historically this was true, but direct access to and use of primary laws in no longer 'the exclusive preserve of lawyers and the legally literate' (Curtotti, Haapio & Passera, 2015).

Poulin (2004) thought that legal information would normally need to be conveyed by 'intermediaries' before reaching the ordinary citizen, but evidence shows that this is not the actual use case: 'It seems once to have been supposed that law was the preserve of lawyers and judges, and legislation was drafted with them as the primary audience. It is now much better understood that acts of Parliament … are consulted and used by a large number of people who are not lawyers and have no legal training' (PCO-NZ, 2008). The equivalent office in the UK, reported two million unique users per month for the legislation.gov.uk site (OPC-UK 2013). The Curtotti et al (2015) study provided empirical evidence that the direct audience for legislation is wider than lawyers. A majority of respondents to the study (engaging with the Cornell LII site) were non-lawyers, and it is reasonable to conclude that a majority of readers of the US Code are not legally trained.

This matters because the law is regarded by its users as 'intricate and intimidating' and the level of confidence of the public in dealing with legislation is 'very low'. The 'public' in this regard is not limited to private individuals. SMEs with limited expertise and resources find it 'particularly taxing' to comply with legislation (OPC-UK, 2013, p. 17). The OPC reported that 'even legally qualified users frequently complain about the excessive complexity' of legislation, and that the comprehension level of legally qualified users was worryingly low. Passera (2017, p. 40) further argues that lawyers face 'cognitive challenges due to the complexity of their work'.

The aim in Element 3 is not so much *the visualisation of the law*, but the visualisation of key obligations imposed and opportunities afforded by the law. In this way, it is quite different from a wider aim of access to the whole statute book. Curtotti et al (2015), make a similar argument for the target of readability efforts, pointing out that most of the US Code is rarely read and 'efforts to improve its readability may not be warranted'. There should, instead, be a focus on the most used parts of the Code that have poor readability. Ducato (2019) argues the need for selectivity, that particular situations and provisions mean that certain modes of visualisation can be effective, whilst in other situations this is not so. The difficulties and controversies involved in such visualisation efforts ought not to be underestimated. The risks include that abstracting legal information to present in a multi-modal way involves interpretation, and interpretation is never neutral. Visualisation might add a gloss to laws that (consciously or unconsciously) nudges behaviour in directions not fully

[8] Australian Parliamentary Committee 1993 – quoted in Curtotti & McCreath, 2013, p. 8.

[9] S Krongold (1992) *Writing laws: making them easier to understand*. Vol. 24 Ottawa L Rev p. 495 (cited in Curtotti et al 2015).

foreseen or intended by lawmakers when they were considering a textual draft of the proposed law.

Hagan raises an interesting point. People with legal problems are in need of support for self-help to educate themselves about the system and the law: 'The primary goal of self-help materials is to develop people's legal capabilities, in order that they understand the law, can apply it strategically to their own situation, and have the readiness to follow through on it' (Hagan, 2019). But her research on self-help materials in Californian traffic court showed that people 'do not want to engage in lengthy, generic, and detailed educational experiences to build legal capacity'. They want to know, in a very functional way, the obligations and opportunities in law that will cost or save them time and money.

In the past, the 'user' of legal information was almost exclusively the professional lawyer. Through social heuristics or direct instruction (e.g. laws around driving) citizens became aware of legal rules at a general level but needed to consult a lawyer if they perceived that they had a legal problem. Now the 'user' must be defined to include the citizen directly because, a) there is an ongoing access to justice crisis across many countries including the US and UK and b) citizens are taking advantage of the digital availability of legal materials. If law is to fulfil its internal morality – its particular virtue – then it must be sufficiently comprehensible (at least for certain people, and certain laws and certain times) to guide the ordinary citizen. Visualisation, properly perceived as an integral part of user-centred service design, can play a crucial role, building on the work of the free access and plain language movements, in delivering the rule of law.

5. The rule of law

There are lots of ontological accounts as to what law *is*; HLA Hart and positivism, natural law theory, Dworkin on law as interpretation, critical legal accounts of law as power.[10] The towering jurisprudential contribution as to what – at a meta-level – law *is for* comes from Joseph Raz and his instrumental conception of the rule of law.

In its broadest sense, the rule of law means that people should obey the law. The narrower element, that government should be ruled by law, has attracted the attention of writers like Bingham, Fuller and Dicey. Raz was concerned to move rule of law debates away from Dicey's 'unfortunate doctrine' which had 'mesmerised' English writers for too long; his objection to Dicey was partly that it was descriptive of a specific legal system and a particular time. He was highly critical of the maximalism approach of e.g. the International Congress of Jurists, Declaration of Delhi 1959, that the rule of law equals the rule of good laws, calling it a 'perversion of the doctrine' by including 'just about every political ideal' (1979, p.211). His rather astonishing ambition, for a so-called limited or merely 'formal' conception of the doctrine, was to create a normative benchmark that could be used in all legal systems at all times.

[10] HLA Hart (1962) *The Concept of Law* (Clarendon); on natural law e.g. J Finnis (1980) *Natural Law & Natural Rights* (Clarendon); R Dworkin (1986) *Law's Empire* (Harvard UP); on critical legal studies e.g. D Kennedy (1998) *A Critique of Adjudication* (Harvard UP).

Raz's starting point is to ask - what is the overarching purpose of law? His answer is that it is to guide human behaviour. 'A person conforms with the law to the extent that he does not break the law. But he obeys the law only if part of the reason for conforming is his *knowledge of the law'*, and '… if [law] is to guide people they must *be able to find out what it is* … An ambiguous, vague, obscure or imprecise law is likely to mislead or confuse at least some of those who desire to be guided by it' (Raz, 1979, p. 214 – emphasis added). The doctrine of the rule of law 'explains that law must be capable of guiding the behaviour of its subjects' and consequential principles include that all laws must be prospective, open and clear, that laws should be relatively stable, and that courts should be accessible.

Raz described this as the 'internal morality' of law. He derives from Hayek the importance of making it possible 'to foresee with fair certainty how the authority will use its coercive powers in given circumstances, and to plan one's individual affairs on the basis of this knowledge'.[11] As neutral as the doctrine is intended to be, this is still a moral claim, at base an assertion about human dignity and respecting people as 'capable of planning and plotting their future' (Raz, 1979, p. 220).

We can take the same purposive approach to ask – what is open access to law for? It is to allow people to access the law, but this is not an end in itself. It must be so that people can act upon that information. We can see how access, in itself, promotes a Razian doctrine of the rule of law by permitting 'knowledge of the law' and allowing citizens to 'find out what the law is'. We also now know that whilst citizens can and do use modern technology to directly access law, they cannot properly act upon that information if it is unreadable and incomprehensible.

Some accounts of the access/use problem of law have drawn similar, albeit brief, connections to the rule of law (e.g. Greenleaf et al, 2013, p. 57). Poulin's (2004) underlying rationale for open access starts with the maxim that 'ignorance of the law excuses no-one', and in the context of readability Curtotti and McCreath (2013, p. 2) argue, 'As citizens we often need to know, and are entitled to know, the law which affects us'.

Raz warns of loading too much meaning onto the rule of law, but we can identify some wider positive consequences that flow from adherence to the doctrine. It is not simply concerned with individual rights or planning one's own life, there is a democratic element to the rule of law that allows citizens to question state actions regardless of personal interest, which in turn promotes good governance and policy effectiveness (OPC- UK, 2013). Having equal access to the law is a necessary, but not sufficient, element to equality of arms in legal disputes. Kohl (2005) makes similar points, that it is unfair to impose obligations on citizens who are unable to know the law and characterises this need for understanding as a moral obligation. Human empowerment is 'central to a design view of the law … Law making at its best empowers citizens' (Curtotti, Haapio & Passera, 2015).

Raz's doctrine of the rule of law is elegant, rational and persuasive. It is coherent with the concerns of the law access/use problem. Yet, forty years on and with knowledge of FALM, plain language and the possibilities in legal design, Raz's doctrine seems rather divorced from social reality. The

[11] F. Hayek (1944), *The Road to Serfdom* (Routledge), p.54 - Raz uncoupled his doctrine from the hard economic libertarianism of Hayek.

ultimate end user, the citizen, will almost always find the primary law obscure. To go back to our starting point, a law might be accessible and even readable, but most law is going to lack the comprehensibility that a citizen would need for it to practically guide their actions.

The traditional guild way of resolving this comprehension gap was through a cadre of trained lawyers. They could interpret the law and provide high-touch tailored one-to-one advice. This is not a realistic solution the access to justice challenge (nor even to legal entry barriers facing many economic actors). Raz was looking out over a pre-digital world, where citizens had no means of directly accessing law. When he talked about law guiding behaviour it was natural for him to centre the role of lawyers and courts. In a contemporary context of digital access to law, together with a serious access to justice problem[12] it must require something a little different; the role of lawyers and courts is reduced and the need for direct understanding increases.

Raz's doctrine is sometimes criticised as too limited and formalistic but taking his central idea that the virtue of law is its ability to guide behaviour, and then reading that characteristic in the light of advances in technology (open access and readability metrics) and thought (the development of legal design and visualisation) to include comprehensibility has far-reaching and potentially radical implications.

It points to where the work needs to be done – not just in NGOs, not just in firms or law schools doing innovative pro bono or other public legal education providers, but by the state itself. As the promulgator of laws, it is the state that has the primary, but not exclusive, duty to promote the rule of law. In a modern reading of the rule of law, this ought to include a duty (that also incorporates free access and plain language) to use the tools of visualisation and legal design to make law more directly comprehensible.

6. Benefits of visualisation

Visualisation promotes the effective communication of complex ideas to a wide audience. It can make 'that which is difficult to understand understandable, and that which is uninteresting, engaging' (Ambrose and Harris, 2009). We are all visual learners: 'Vision is by far our most dominant sense, taking up half of our brain's resources'.[13] The Picture Superiority Effect indicates that people remember pictures better than words, especially over longer periods of time, and combining pictures with words is even more effective.[14]

This multi-modality is particularly useful. Cognitive load theory shows that presenting information across different channels reduces some of the limits on working memory. There is a body of empirical evidence, summarised by Passera (2017, p. 50) that 'organizational actors understand business contract documents faster and more accurately when they include

[12] See e.g. Hazel Genn (1999), *Paths to Justice* (Hart) in relation to the UK, or for a global perspective the Hague Institute for Innovation of Law (HiiL) 'Justice isn't just about courts and laws. It's about the common people. Their daily lives, their pain and frustration – and the justice outcomes that they get or don't get.' https://www.hiil.org/what-we-do/measuring-justice/ (accessed 9 January 2020)

[13] John Medina (2009), *Brain Rules*, (Pear Press) p. 14

[14] Paivio, Allan; Csapo, Kalman (1973), *Picture superiority in free recall: Imagery or dual coding?*, Vol 5(2) Cognitive Psychology pp. 176–206.

visualisations'. This applies 'across literacy levels, language proficiency, and background'. There is no reason to believe that the same does not apply to primary legal materials.

6.1 Types of visualisation

Visualisation, in this context, needs to be understood in very broad terms. Using layout and typography to aid communication has a long history in the law. Up to the start of the 19th century UK legislation was presented in densely written text with little attempt at spacing. Criticisms of what would now be known as the user interface and user experience (UI & UX) led to the introduction of section numbering, and more spacing (described in Curtotti et al, 2015).

The toolkit available to the information designer working on a legal communication project is very extensive; pictograms, icons and symbols, charts of all kinds, process and organisation maps, timelines and swim lanes.[15] The starting point is always to identify the context and the audience. This focus on the needs of the user means that legal design can go beyond what we may recognise as a visualisation in order to arrive at pragmatically useful outcomes.

In Hagan's work with California state courts Self Help Centers for example, she identified seven key areas for action. Six have a direct relation to visual forms of communication, but they go beyond the paradigm of the infographic to include navigable pathways through processes, wayfinding tools (i.e. physical signage within court buildings), clear paperwork, online tools to help people prepare for court visits, work stations and materials at court. A wider legal design approach to the access/use challenge of legislation would similarly not limit its response to the visualisation techniques identified above. And would need to include 'interactive visual representation, and graphical user interfaces' (Passera, 2017, p.40).

It would involve de-centering the (sacred) text of the law in favour of addressing contextual and user-centred problems identified through human-centred research and empathy. Abstraction techniques could be deployed where the most important information is put in the foreground, or information layering with the full legal information lying underneath the problem representation, i.e. 'overview first, the details on demand' (Passera, 2017).

7. Public legal education

The possibilities sketched out above are not abstract. Public legal education organisations are already using legal design mindsets and methods to empower citizens with an understanding of their legal responsibilities and opportunities in ways that Joseph Raz could never have imagined when he said that 'if [law] is to guide people they must be able to find out what it is'.

[15] There is a really good summary of the range of techniques here; Material Design, Data Visualisation; https://material.io/design/communication/data-visualization.html#types (accessed 9 January 2020)

The Center for Urban Pedagogy uses a range of visualisation and information design techniques to enhance citizen understanding of law and policy on e.g. street vendor regulation, immigration rights and school suspensions; 'We believe that increasing understanding of how these systems work is the first step to better and more diverse community participation.' The Graphic Advocacy Project is using cartoon-like visuals to educate people on their legal rights to vote, and the consultancy Amurabi draws on psychology, document design, and colour theory to produce better outcomes for businesses seeking to comply with anti-corruption legislation. [16]

This creative use of a palette of information design techniques is not limited to non-governmental organisations. State institutions – the primary defenders of the rule of law – can also avail themselves of legal design methods. Curtotti, Haapio & Passera (2015) give the example of Australian migration law, 'a forbidding and impenetrable morass'. This was converted into a usable user interface where the primary concerns of those who want to visit, live or study in Australia are prioritised: 'While, under the hood, legal 'rules' (the legislative 'code') govern and define the process, the legal rules are re-organised, with irrelevant and less relevant information hidden'.

8. Conclusion

The British Parliamentary draftsman Francis Bennion said in 1982 that 'It is strange that free societies should … arrive at a situation where their members are governed from cradle to grave by texts they cannot comprehend'. He thought that the inherent complexity of law-making made this outcome inevitable (Bennion, 1982). We have arrived at a position, established by the efforts of the access to law, the plain language and now the legal design movements, where we can wholeheartedly disagree with this conclusion. If the particular virtue of law as whole lies in its ability to guide behaviour then legal design and visualisation offer possibilities to realise this goal that cannot be ignored.

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