WEB ACCESSIBILITY AND WHAT LAW SHOULD LOOK LIKE IN OPEN DATA STORES

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Keywords: ***Digital Network Society, Web Accessibility, Reading Law, Trust, Legal Culture, Deep structure of law, Law Capital***

Abstract: *On our journey towards the Digital Network Society, we have seen the focus of legal regulation shift a number of times. As a society, we have had to make our position clear on various access rights, the processing of personal data, and for example intellectual property rights. Yet this has meant that for some time now we have overlooked the question of how we are to deal with digital information in its more technical context. One solution to the range of problems involved here was the 2016 Web Accessibility Directive. In my presentation, I will take a brief look at what official legal sources should look like in data stores if we are to meet the standard of accessibility for legal information required in the constitutional state. Legal literacy is far too valuable a pursuit for its fate to lie in haphazard national and international efforts. Too often designers of data stores do not remember the important role of official legal texts.*

Auf unserem Weg zur Digital Network Society haben wir erlebt, wie sich der Fokus der Gesetzgebung einige Male verschoben hat. Als Gesellschaft mussten wir unsere Position klären zu verschiedenen Zugangsberechtigungen, zur Verarbeitung von persönlichen Daten und zu intellektuellen Eigentumsrechten. Allerdings bedeutet das auch, dass wir jetzt schon einige Zeit aus dem Auge verloren haben, wie mit digitaler Information in ihrem eher technischen Kontext umzugehen ist. Eine Lösung für die hiermit aufgeworfenen Fragen war die Richtlinie über den barrierefreien Zugang zu den Websites und mobilen Anwendungen öffentlicher Stellen von 2016. In meinem Beitrag will ich kurz darauf eingehen, wie offizielle rechtliche Quellen in Datenbanken aussehen sollten, wenn sie den vom Rechtsstaat geforderten Standard der Zugänglichkeit erfüllen wollen. „Legal literacy" ist eine viel zu bedeutende Aufgabe, als dass man ihr Schicksal beliebigen nationalen und internationalen Bemühungen überlassen könnte. Allzu oft haben Programmdesigner die wichtige Rolle offizieller rechtlicher Texte nicht im Blick.

1. Some steps towards digital networks

When *Oñati,* the International Institute for the Sociology of Law, was opened in May 1989, the speeches and presentations given at the inauguration ceremony were published under the title "Legal culture and everyday life".[1] This choice of title was most appropriate. Our everyday lives have always been linked to the legal culture in some measure. What would law be without a legal culture?

If we take *culture* to mean "cultivation of the spirit", legal culture can be understood to be such cultivation as it relates to law. *Rogelio Pérez-Perdomo* and *Lawrence Friedman* have in fact stated that without a legal culture, law is dead, a skeleton, nothing but words on paper.[2] Living law, by contrast, is a product that owes its very existence to there being a *legal culture*. In this perspective the distinctions that *Kjell-Åke Modéer*, the well-known Swedish professor, draws between the central components of law become particularly illumina-

[1] Legal culture and everyday life. Inauguration ceremony (24 May 1989) Oñati proceedings 1.
[2] Pérez-Perdomo/Friedman Legal Culture in the Age of Globalization: Latin America and Latin Europe p. 2.

ting. Perhaps the most active contributor to the debate on legal culture in the Nordic countries in recent years, *Modéer* views the central components of law as being (1) leading legal ideologies, (2) the content of constitutions, (3) the quality of legislation, (4) the ways in which legal disputes are resolved and (5) the infrastructures available to the lawyer. These all can truly be said to "put meat on the bones" of law's skeleton. It is these elements of law that show us the similarities and differences, and the ones well worth noting, between legal cultures in different countries. In a word, they play their part in helping us determine *what law looks like*.[3]

At their simplest, laws generally present themselves to us as texts and signs. Both have long, long histories. Usually, it is the role of texts that we highlight. But we should not forget the various images and symbols associated with law. Visual art sometimes tells us quite a bit in fact about law as well as concepts related – or once related – to it. As *Julia Shaw* insightfully notes, images and sculptures are unwritten history. This, too, is something a well-educated lawyer should be aware of.[4] And it is of course a part of any legal culture.

Statutory texts are also interpreted in other texts – legal literature and legal case law. I have often called lawyers as "text eaters". It is our job to forage for texts, guided and bound as we are by the doctrine of legal sources and doctrines of interpretation. Nothing is too much; nothing is too little. And it is well known that law is an *information-rich science*. We really must manage a lot of information.

Often our practical legal work begins by perusing the text of the written law. And often this is the point where our information seeking ends as well – sad to say. This being the case, the various collections of statutes, which we consult primarily to find laws, have been and continue to be the informational pillars of our work; they are information stores. In contrast to most other social sciences, law has little or no choice when it comes to using statute-level information. *Legal dogmatics* in particular is naturally bound to the body of laws in force at any given time. And these must be published. Today there are many ways to do that.

The spread of computers and the creation of data banks brought us a new way to render official legal sources alongside traditional printed works. We had entered the age of legal data banks. This was a development that changed a lot the legal culture.[5] Searching for information became an essential skill in the core competence of lawyers and many government professionals as well. Searches were run for legal information and the results were read on a computer screen. Various items of *metadata* became essential aids for working with information in practice. For the most part, metadata was created without any uniform national and international agreements or standards. The metadata provided by libraries, largely almost the same everywhere, did not as such meet the needs of data banks or information systems – radically new contexts at the time – particularly where legal data was being processed.[6] Legal data banks *25 years ago* were seeking shape.

As the use of computers and information systems has progressed, we have increasingly witnessed the necessity to assess in legal perspective all manner of new and changed regulatory needs that have emerged as the technology has advanced. Monitoring and assessing these developments has become part of what we do day in and day out in *Legal Informatics*, as we all know. In recent years, especially *data protection* legislation has become a premier example of regulation on a basic right that figures significantly in the world of IT and information systems on a daily basis.[7]

This being the case, before she or he can take a position on the legal impacts of IT, any researcher worthy of the title will do well to take a good look at Legal Informatics and, by extension, the principles of *Information*

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3 See Modèer 'Optimala rättsliga kulturer? pp. 71 in JT 1999/2000. (in Swedish).

4 Shaw Julia J. A Worth a Thousand Words: The Unwritten History of Law as a Jurisprudence of Text and Pictures, International Journal for the Semiotics of Law (2019) 32:753–758.

5 Peter Wahlgren was analysing this change very well in his book The quest for law 1999. Unfortunately, he left in shadow the role of citizens.

6 It is a rather different matter that the ideas put forward by *S.R. Ranganathan*, who died in 1972, are still being successfully applied in digital libraries. I will not go into this question in any detail here.

7 For more details, see Saarenpää, Ahti Legal Informatics: a Modern Social Science and a Crucial One pp. 15–38 in Wahlgren (ed) 50 YEARS OF LAW AND IT, Scandinavian Studies in Law, vol 65, Jure 2018.

Law. Our regulatory environment has changed in a significant way. If we have no principles to guide us, we will lose control of that environment. Occasional articles here and there dealing with law tech, with no principles to underpin them, do not meet the standard whereby law should serve society. Such *law tech* scholarship is only a drop in the bucket.

2. Digital accessibility?

As the importance of the Internet has increased, we have had to take a position on not only legislative concerns but the significance and use of networks as such. One illustrative and important example in this regard is the aim of making *web neutrality* an established principle. It was surprising that some objected to the principle, given that it is one essential for equality in the Network Society. By no means is this to say we have come up with a comprehensive solution where web neutrality is concerned. As we well know, we are constantly bumping heads with the search engines and communications services that fail to meet the expectations of those using information networks and, in fact, violate their rights.[8]

One important group of issues that has occupied us for some time centres on actual opportunities to use information networks. At one time, when talking about IT, we spoke of A-class and B-class citizens, and the notion of the *Digital Divide* emerged. Where equality was concerned, it proved problematic to develop the range of government services and other services such that citizens would have to have fairly solid IT skills if they were to exercise their rights on networks. This of course is still the case today. It is in fact surprising how often we still meet people – not only older people – who have problems with the everyday use of data systems.

Persons with disabilities also must have the right to make use of the digital environment and different kinds of digital tools. Finland saw a significant legal step forward in legal equality where IT was concerned in 2006. The *Supreme Administrative Court* handed down a decision (KHO:2006:18) that a person with a hearing and visual impairment should have the right, as part of his or her *social welfare*, to receive software that made use of a computer possible.[9] This decision can be seen as adhering to the idea of the e-Europe 2005 programme. However, this was not mentioned in the Court's decision nor did the Court refer to the UN Convention on the Rights of Persons with Disabilities, which was being adopted at the time. The Court rejected the notion which local authorities had of computers as no more than a source of entertainment, stating: "In light of the fact that public and private services are becoming increasingly and primarily network based, A's request for assistive devices does not constitute support for a hobby but, rather, will enable him/her to function socially, to live independently and to cope in his/her daily routine." Here, the Court was very much abreast of the times. But we were still just opening our eyes to the world of *digital rights*.

3. Web Accessibility

More recently, the *Web Accessibility Directive* adopted in 2016 has been another step in what has been a rather slow awakening.[10] The path leading to adoption of the Directive saw quite a number of international conferences. Perhaps the most important of these was one held in January 2007 that marked the first of meeting of

[8] One example worth mentioning here is the decision of the Norwegian Data Protection Authority *Datatilsynet* in summer 2021 to stop using *Facebook* in its communications. The decision followed from a data protection impact assessment: "We have carried out a risk assessment and a DPIA of Facebook, based on the obligations that follow from data protection regulations."

[9] The person had earlier been granted social support to acquire programs using the DOS operating system. He now wanted to get new Windows programs.

[10] DIRECTIVE (EU) 2016/2102 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 October 2016 on the accessibility of the websites and mobile applications of public sector bodies.

the *European e-Accessibility Forum*, which has met annually since. Part of the slow development we have seen was the equally slow progress in developing the standards that later became connected to the Directive.[11]

If and when the public sector wants to promote digitalisation by creating a highly developed digital environment for the country's citizens, it cannot afford to have gaps in the system that might jeopardise people's opportunity to exercise their basic rights. Here, the legal quality of the system's operation surfaces as an important consideration alongside the more familiar question of technical quality. In specific terms, we must address the question of what law – texts, signs and images – *looks like in the digital environment*. Judging from the literature at least, this issue has not been given much consideration in the public sector. Yet the Directive, it It goes without saying that legislation is the cornerstone of the constitutional state.

It is, has been and will continue to be at the core of the knowledge capital that a well-functioning democracy requires. From here we must go on to the level of *social capital*.[12] Legal information has sometimes been seen as a part of society's social capital. In this capacity it is a form of capital that is stable and brings stability.[13] Then again, law investigates – it is called upon to do so – the instability of texts and their impacts.[14] This consideration has come to the fore in recent years in reflecting on the interrelationship of *basic rights*. The trust that statutory texts once commanded in their readers is declining.

I have years reflected on and taught students about issues[15] relating to the publication of statutory material with reference to certain basic requirements for its publication and how it is published[16]. Following are some, but not all, of these:

(1) comprehensive accessibility of official materials
(2) accuracy of the information
(3) locatability of the information in time and place
(4) retrievability of the information from data bases
(5) linguistic and systematic comprehensibility of the information
(6) technical usability of the material in the work of the person retrieving it
(7) the extent to which the material is available free of charge
(8) interoperability – structural, semantic and technical

Adhering to these requirements would bring order to our statutory texts, but as guidelines they still do not go far enough; they do not tell us what the available statutes and other official legal sources *should look like*. What is more, they do not tell us enough in what form the materials in question should be detectable in information networks and digital environment.[17]

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11 See more Web Accessibility Directive – Standards and harmonisation at https://digital-strategy.ec.europa.eu/en/policies/web-accessibility-directive-standards-and-harmonisation.

12 See for example Wise/Schauer Legal Information as Social Capital, Law Library Journal, Vol. 99, Issue 2 (Spring 2007), pp. 267–284.

13 In the Finnish literature, Risto Harisalo and Ensio Miettinen have spoken of *trust* as the capital of capitals. See Harisalo/Miettinen Luottamus – pääomien pääoma (2010). (in Finnish).

14 Aaron Hauptman has opportunely written: "We live in a republic of statutes, yet understanding those statutes has become so cognitively difficult that judges cannot properly interpret them, citizens cannot properly understand them, and legislatures cannot properly write them." Hauptman Statutory Diagrams, Yale Journal on Regulation 38 (2021) p.413. See also Liebwald On transparent law, good legislation and accessibility to legal information: Towards an integrated legal information system, passim, Artif Intell Law (2015) 23:301–314.

15 In this connection, it merits pointing out that, where trust is concerned, the relation of data protection to other basic rights is not expressed in the GPDR as well as it might have been. The text of the GDPR does open up many possibilities when locating data protection in the family of basic rights.

16 See for example Saarenpää The Network Society and Legal Information, Law via Internet 2011, Hong Kong.

17 From the *information law* point of view it is also important to remember, that access as such is a too general concept when thinking about our communicational rights and principles. See more already Pöysti ICT and Legal Principles: Sources and Paradigm of Information Law, Scandinavian studies in Law , IT Law (2004) pp. 560–600.

One way forward I have earlier suggested is that we could set our sights on *interactive legislation*. By interactive legislation I mean legislation in which the text and other images of the laws are accompanied by information on their background and the broader context. The traditional abstract linear text of the law would, at least in part, be replaced by communication of a different kind. In other words, some of the information typically found today in the drafting materials or even the legal literature would accompany the legislation in the form of text references in the electronic collection of statutes. The user of the text could thus obtain additional information on the relevant points as these are made actively available in the information space. The legal superhighway from human rights to the interpretation of individual provisions and guidelines would be rendered more readily visible. Working with law and legal texts in this way would bring us closer to the level of understanding known as the *deep structure of law*. Texts would be situated in a historical and systematic knowledge structure.[18] Drawing on professor *Luciano Floridi's* description, one could say information would be augmented with explanatory material.[19]

To judge from the way people have thought and acted fairly often, statutory texts have been considered material that is intended primarily for the eyes of lawyers and other professional interpreters of the law. Here, communication is seen as occurring between the legislator and those whose profession is to interpret the law. And this is the case in many respects. Legal positivism is in fact largely predicated on statutory texts. Yet we could not have it any other way in a constitutional state, one of whose aims is to prevent arbitrary justice.[20]

But this logic conceals a colossal misconception where *democracy* is concerned. Legislation and other official legal sources are intended first and foremost – and should be – for the average citizen. This is an essential consideration, especially in today's evolving constitutional state. It is a very odd thing indeed if a person has to pay for information on what is right, and pay plenty. In this light we can hail as a positive development the work done on legal data banks that has resulted in statutory materials being available free of charge in most European countries.[21] Notwithstanding, it took quite some time – 2001 – before the UN's *Århus Convention* came into force, which provides for access to legal information.[22]

4. The perspective of the average citizen

From the perspective of the average citizen, mere accessibility and material being free of charge are not enough, however. The society has to give careful consideration to what law *should look like* when the average citizen consults it. Here, among other things, we also have to consider the importance of national, European and international *standards*.[23] In legal life we are nowadays increasingly reliant on international sources, and in my view making the official materials among these sources available to the average citizen is also essential in the modern constitutional state.

In the realm of Legal Informatics, in 2015 Dr. *Doris Liebwald* provided an interesting look from the citizen's perspective at the opportunities for integrated presentation of legal sources. She proceeded using the ideas put earlier forward in the 1980s by professor *Jon Bing* of Norway on what needed to be improved where legal

[18] See shortly already Saarenpää The long roads that data and data protection travel in the era of information government pp. 17–36 in Schweighofer – Gaster – Farrand (eds) KnowRight 2010 and nowadays Saarenpää Legal Information: the Long Path and the Way Home in International Trends in Legal Informatics. Festschrift Erich Schweighofer.

[19] Floridi Luciano Information: A Very Short Introduction, passim. See also practically Berteloot Walking from CELEX to EUR-Lex, passim. in: Jusletter IT 21. Dezember 2020.

[20] See also Wise/Schauer Legal Positivism as Legal Information, Cornelll Law Review 1997 pp. 1080–1110.

[21] In Finland, the statutory materials in the national Finlex data bank were made free of charge in 1997. Even before that, in 1995, parliamentary materials were made available free of charge. When making the formal decision to do so in the executive board of the Library of Parliament, the point was made that the decision would make it easier to publish later products for sale commercially.

[22] The UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, Convention, was signed on 25 June 1998 in Aarhus. It entered into force 2001.

[23] An area of interest in its own right is comparative law in the digital environment. The topic is extremely important, but I will not be going into it an any detail here.

information and information retrieval were concerned[24]. *Bing* envisioned official legal information as comprising a body of materials in which the subjects of regulation – citizens – would be the most prominent element.

After an interesting examination of the issues, which including a look at the potential of artificial intelligence, *Liebwald* nevertheless came to the following conclusion:

> This paper presented a modified variant of Jon Bing's vision of an integrated national legal information system. It addressed the issue of vagueness in law from point of view of the persons subject to the law and came to the conclusion that putting the person who is subject to the law at the centre provides more rational reason to aim for the greatest possible precision of law by exploiting the means and technologies of our time than to uphold strategic vagueness. On this basis, it proposes the development of a basic set of controllable and justiciable basic legal drafting standards on EU and on national level, and promotes a transparency by design approach for legal knowledge engineering in order to enhance precision, integrity, comprehensibility and accessibility of law. This vision of an integrated legal information systems is, most probably, also likely to remain unfulfilled. However, what would science be without visions and (science) fictions?[25]

In my view, today we have to add one regulated perspective into the range of issues we are looking at – the Web Accessibility Directive. The Directive encourages us to give closer thought to what official legal sources could look like in the digital environment.[26] Here we are not working in the narrow confines of *law tech* but looking in broader perspective at how our informational basic rights are to be realised in a society that is reliant on information networks.

Clearly, it will be a while before we can reach an agreed conception of what legal sources should like in the digital environment. The matter did not receive enough attention back when data banks were first being created. The variety of legal, commercial and IT cultures resulted in divergent outcomes[27]. We can achieve more uniform approaches by developing general doctrines in the area of accessibility regulation. We should not narrow our focus to the obstacles facing and skills needed by groups of disabled people. They are important but the issues have to be addressed in the light of a broader, comprehensive view of law. Citizens must get to know what is right and what is wrong.

The 2006 Convention on the Rights of Persons with Disabilities is a good example of how *the general doctrines* relating to certain functions – in this case *guardianship* – can be brought together in regulation targeting special groups. As I see it, we could proceed in much the same way in the case of the accessibility of legal sources. The Directive needs to be brought up to date here – and quickly.[28] Similarly, there would be good reason to take a good look at how the more important court rulings could be presented in a consistent format that makes the citizen the true, intended recipient. The most straightforward way to accomplish this would be to take web accessibility into account consistently when drafting court and administrative decisions. Artificial

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24 Bing defended his famous doctoral thesis in 1982 on legal information retrieval.

25 Liebwald On transparent law, good legislation and accessibility, Artificial Intelligence and Law volume 23, p. 312.

26 Article 4, requirements for the accessibility of websites and mobile applications: Member States shall ensure that public sector bodies take the necessary measures to make their websites and mobile applications more accessible by making them perceivable, operable, understandable and robust. See from the technical point of views W3C pages in https://www.w3.org/WAI/fundamentals/accessibility-intro/.

27 In Finland efforts to achieve formal consistency of information produced by the government are guided by the Act on Information Management in Public Administration. The Act has only limited applicability where official legal source materials are concerned nor does take any stance on the understandability of text.

28 Commission will review the application of the Directive by June 2022. Main questions in this process are:"
Are the Directive and its implementing acts still relevant and fit for purpose, given other accessibility related laws changes in technology? Has the Directive harmonised the web accessibility market? Has the Directive strengthened social inclusion – has it made it easier for persons with disabilities to access public services and information?
Are further actions needed for a successful implementation?" See https://digital-strategy.ec.europa.eu/en/policies/web-accessibility.

intelligence would be a ready aid in this task today. We could and we should get *legal literacy* from the primary textual level toward a higher system level with coordinated algorithms.

In our efforts to offer official legal information in the digital environment in a form that better serves the needs of citizens, we will do well to tap the research that has been done on *visual law*. The Grand Old Lady in the field, Dr. Colette Brunschwig, has provided an excellent summary of that scholarship in the proceedings of IRIS 2021 in the paper "Visual law and legal design: questions and tentative answers." Her well-argued analysis goes well beyond the scattered observations in the literature on adding lines and colour to text to make it more "visual". In her study Brunschwig clearly demonstrates the limited point of departure that work on visual law has customarily taken: traditional legal text. She places the debate in a richer theoretical context and highlights interdisciplinary perspectives.[29] With her contribution we move one step closer to a shared understanding of what visual law has to contribute.[30]

One example of simple legal signs has been and is the use of traffic signs. In side legal semiotics it has been quite often in discussion too.[31] Nowadays we have already some years been waiting for the Information superhigway traffic signs. But simple signs and complicated systematic structures of law are different things. GDPR iconography can later be one step forward together with the Akoma Ntoso standard. But they are not yet giving clear answers.

Artificial intelligence has, or may have a key role to play here. As Sandra Wachter has put it, AI can also help us be rid of the feeling of ethical poverty that readily accompanies minimalised textual communication. In enriching the quality of official information, AI can vividly convey the importance of fairness in realising justice.[32] The role of *trust* is the key point in those processes in the digital environment.[33] And of course we must take the linguistic point of view more seriously than earlier when drafting law.[34] This must be one part of *trust* discussion too. When speaking about official legal information trust is absolutely the key to the real constitutional state.[35]

I will conclude my presentation with the wise words of Finland's Chancellor of Justice, Tuomas Pöysti, LLD, words which I have cited in teaching and in my Finnish textbook for many years. *Pöysti* wrote: "The right to understand law and justice is a citizen's fundamental right and the foundation of active citizenship."[36] When thinking about the new *digital ready legislation*, this should be a clear starting point.[37]

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[29] See Brunschwig Visual law and legal design: Questions and tentative answers, pp. 179–230 in Schweighofer – Kummer – Saarenpää – Hanke (eds) Cybergovernance, Weblaw 2021.

[30] I would add here the Quality House (QFD) thinking on interdisciplinarity, which has its origins in Japan, asking what the quality house of official legal information would be like?

[31] See for example. Dudek Can informative Traffic Signs also be Obligatory? Polish Constitutional Tribunal and Supreme Court versus Traffic Signs, INT J SEMIOT LAW (2018) 31:771–785.

[32] See more Wachter How Fair AI Can Make Us Richer EDPL 3/2021 pp. 367–372.

[33] See also Weber Cybergovernance revisited. Regulierungserwartungen für die Zukunft, pp. 9–10.

[34] About this problematics see especially Schefbeck, Rechtssprache und Rechtsinformatik im europäischen mehrebenensystem, passim in: Jusletter IT 21. Dezember 2020.

[35] See also from the EU point of view Strohmeier, Rudolf W. Can official publishers win the trust of citizens? in address https://op.europa.eu/documents/2895081/7575954/Can+official+publishers+win+the+trust+of+citiens.pdf and generally from the linguistic point of view Mattila, Heikki E. S.. Comparative Legal Linguistics: Language of Law, Latin and Modern Lingua Francas, passim 2nd edition, Routledge 2016. Already 2002 professor Mattila was worried about the tensions between EU and National Legal languages.

[36] In the Finnish literature, drawing on the ideas of Fabian Muff and Hans-Georg Fill, I have proposed using an *augmented reality* application in order to create guardianship authorisations, for example. See Saarenpää Näkymiä vanhuusoikeuteen in festschrift Antti Kolehmainen (2021). (in Finnish).

[37] In Denmark there is already an interesting *Digital ready* legislation politics. See also OECD Regulatory Policy Outlook 2021. Unfortunately citizens rights to know in the digital environment are mostly in shadow in those two politics. See https://en.digst.dk/policy-and-strategy/digital-ready-legislation/ and https://doi.org/10.1787/38b0fdb1-en.

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