

Transforming Norms: Legal Design, Plain Language and AI for Personalized Law

Nina Toivonen *, *Anne Ketola* **, *Helena Haapio* ***

University of Helsinki, nina.toivonen@helsinki.fi.

(Corresponding author)

Tampere University, anne.ketola@tuni.fi

University of Vaasa | Lexpert Ltd, helena.haapio@lexpert.com

What good is a law if its subjects are unaware of its existence or impact? As personalized law – legal rules tailored to individual circumstances – emerges as a transformative paradigm, it is crucial to critically assess both its promises and pitfalls. Going beyond the traditional one-size-fits-all approach, personalized law aims to improve fairness and efficiency in legal systems by taking individuals' personal traits into account in the creation of legal solutions with the help of Big Data and AI. In line with this Special Issue's focus on the construction of the socio-digital world, this article offers a perspective to personalized law through the lens of legal design, with a particular emphasis on the proactive law and plain language paradigms that inform it. The article discusses some of the key challenges of personalized law, such as the regulatory complexity and opacity that individualized legal rules can introduce and suggests that the most practical potential of personalized law lies in personalizing legal communication and establishing mechanisms for self-personalization of norms. It is highlighted that for the maintenance of legal certainty and the protection of privacy and autonomy, tailoring legal solutions with AI should not happen as a top down, control-and-command type of rulemaking, but rather through using self-regulative and co-regulative strategies. Drawing from information design and plain language literature, the article proposes that personalized accessibility to legal communication should build on three elements: 1) user-centered communication, 2) clear communication and information design principles and 3) the responsible use of AI tools. By doing so, the article argues for personalized law that enables people to act upon their rights and obligations in their individual circumstances based on comprehension and agency.

Keywords: Artificial intelligence (AI), legal design, personalized law, plain language

Introduction

Among the many societal impacts of digitalization is the expansion of personalization into various areas of life. Our clicks and scrolls on social media feeds, websites and streaming services inform algorithms of our preferences, which then tailor the content to show us more of what we like. Retailers use data from our previous purchases to personalize advertisements and offers to our needs, and fitness apps suggest workouts and meal plans to match our body type and lifestyle. Personalization is also revolutionizing health-care. Diagnosis, treatment decisions and disease prevention are increasingly based on individuals' unique anatomical, genetic and genomic data.¹ The overarching philosophy of personalization suggests that just as it feels better to walk in shoes that fit you perfectly, the same logic can be applied to other areas of life as well.

Recently, the trend of personalization has extended into the realm of law. An emerging legal field known as personalized law proposes tailoring legal rules to the unique circumstances of individuals using mass data and algorithmic processing.² Personalized law challenges the universally accepted idea of law as uniform and “blind” and advocates for “seeing” law that recognizes the differences that matter. As envisioned in personalized law literature, advanced technologies could tailor speed limits according to individuals' cognitive abilities and driving skills, and consumer protection could vary based on the consumers' actual needs for the protection, as determined by their socio-economic status. Personalized sentencing could help prevent future crimes by defendants at the risk of recidivism, and the more skilled and educated professionals, such as doctors, could be assessed with higher standards of care. In tort law, the awarding of damages could be adjusted to meet the particular needs and interests of the injured party, instead of applying a uniform compensation scheme. The primary objective of personalized law is to promote the goals of the law. However, it has also been justified on the grounds of enhancing efficiency, autonomy, dignity and equality under the law.³

Although personalized law is a relatively novel approach, it must be noted that there is nothing new in the idea of contextualising legal solutions to individuals' unique circumstances. Jurisdictions have always had “different rules for different people”, and policymakers across the globe are striving to address demographic diversity in the design of their legal systems. For in-

¹ Rogers 2024.

² Ben-Shahar, Porat 2021, 10; Becher, Alarie 2025, 96; Casey, Niblett 2017, 1402.

³ Ben-Shahar, Porat 2021, 35, 143; Becher, Alarie 2025, 97.

stance, in the Finnish legal system, which the authors are most familiar with, certain crimes have been sanctioned by unit fines, also known as “day fines”, that are based on each offender’s daily disposable income.⁴ Consequently, offenders with higher income will receive higher sanctions. Additionally, Finnish law treats over-indebted consumers differently based on their “age, status and circumstances” when assessing their eligibility for a debt relief.⁵ Therefore, young debtors without employment or education, who have been targeted by aggressive instant loan marketing, may have better chances of accessing a debt adjustment proceeding, regardless of the reasons for their over-indebtedness. Both examples reflect the philosophy of personalized law, which emphasizes balancing fairness and proportionality by adapting legal rules to the unique situations of those they govern.

What distinguishes personalized law is its envisioned reliance on mass data, artificial intelligence and other advanced technologies, alongside the extensive use of personal information in designing policies and legal solutions. Advocates of personalized law argue that legal steering of human behaviour could be optimized, and various social benefits achieved, if individuals’ personal information were more openly available for rulemaking, and if reliable AI agents were entrusted with collecting, analyzing, and making decisions based on the information.⁶ Responses to this ambitious vision have been skeptical and critical, with the central challenge being the underlying assumption of personalized law that people’s behaviours could be predicted or classified adequately, even with vast amounts of data.⁷ It has also been noted that personalized legal rules risk undermining social coordination, increasing uncertainty, and making simple decisions more complex and burdensome for people. Additionally, personalized rules may threaten the principle of equality under the law due to the potential of arbitrary, biased or manipulated decisions made by algorithms⁸. It may also violate or conflict with other fundamental elements of democracy and undermine a “shared sense of the meaning of citizenship”.⁹

It is evident that advanced technologies are changing law – they may even change the very nature of it.¹⁰ Therefore, engaging with the discussions on the potentials of novel approaches to law in the age of AI, such as person-

⁴ Criminal Code, in Finnish Rikoslaki, ch. 2a, § 2.2.

⁵ Act on the Adjustment of the Debts of a Private Individual, in Finnish Laki yksityishenkilön velkajärjestelystä, ch. 3, § 10.7

⁶ Ben-Shahar, Porat 2021, 7; Becher, Alarie 2025, 77.

⁷ Gillis 2024, 66.

⁸ Ben-Shahar, Porat 2021, 9.

⁹ Becher, Alarie 2025, 96.

¹⁰ Becher, Alarie 2025, 120.

alized law, is essential despite the possible uncertainties and controversies surrounding them. This article suggests that among the most constructive and practicable promises of personalized law are personalization of legal information and self-personalization mechanisms. Personalized law literature illustrates how people “self-personalize” norms all the time, such as by adjusting their driving speed to their preference or determining their will through a testament or a contract.¹¹ Therefore, personalization of law does not need to be a top-down process but can also be self- or co-regulative.

Personalized law literature also recognizes how tailoring legal rules to the unique circumstances of people involves personalized delivery of those rules.¹² The effectiveness of personalized law – or any law, to be precise – is inherently linked to the awareness and understanding of those it governs. Without adequate legal literacy, individuals may remain unaware of the legal norms that apply to them, undermining the very goals of the law.¹³ Therefore, as “different methods of information delivery have varying effectiveness in reaching people”, legal information would need to be tailored to formats that ensure accessibility and comprehensibility, which support legal compliance as well as avoidance of risks and harm.¹⁴

Similar arguments for enhancing justice by more contextual, fit-for-purpose and empowering legal solutions have also been made within another emerging and evolving approach to law, legal design. According to the definition by the Legal Design Alliance, “legal design applies human-centered design to the world of law to enable desirable outcomes and prevent the causes of problems from arising and developing into conflicts and disputes”.¹⁵ Like personalized law, legal design emphasizes achieving the goals of the law and its users, as well as preventing the causes of risks and harm using contextual and real-life knowledge.¹⁶ This future orientation of legal design builds on the paradigms of proactive law.¹⁷ Proactive law has two key dimensions: *prevention*, which seeks to reduce the root causes of legal problems and disputes, and *promotion*, which uses the law and legal knowledge to promote positive outcomes and real-world goals.¹⁸

Both legal design and personalized law also advocate for using innovative communication strategies to meet people’s cognitive capabilities and oth-

¹¹ Ben-Shahar, Porat 2021, 33; Becher, Alarie 2025, 95.

¹² Casey, Niblett 2017, 1411.

¹³ Ben-Shahar, Porat 2021, 11.

¹⁴ Ben-Shahar, Porat 2021, 41.

¹⁵ Legal Design Alliance n.d.

¹⁶ Doherty et al. 2021, 3.

¹⁷ Pohjonen 2006; Haapio et al. 2021, 64.

¹⁸ Berger-Walliser, Shrivastava 2015.

er needs in delivering legal information.¹⁹ While AI is recognized in legal design research and practice as a tool for creating more comprehensible legal texts, it has also been emphasized that improving legal communication should happen by using plain language as a standard.²⁰ Plain language refers to communication in which wording, structure and design are so clear that intended readers can easily find what they need, understand what they find and use that information.²¹

The purpose of this article is to explore the possibilities and challenges of personalized law through the lens of legal design, with an emphasis on proactive law and plain language that inform it. This exploration consists of three parts. In the next chapter we take a closer look at some of the key promises and challenges of personalized law, particularly the argument for improved equality under the law through personalization, and the risk for increased regulatory complexity and uncertainty that individualized rules may cause. We also illustrate why personalized legal communication and self-personalization of law appear as the practicable and readily accessible strategies to increase personalization in law. Both hold the potential of improving agency and autonomy, while aligning with the critical function of law in maintaining stability and certainty. The second chapter is followed by our proposal of the key elements of personalized access to legal information using AI in chapter three. These elements are 1) user-centered communication, 2) clear communication and information design principles and 3) responsible use of AI tools. In the conclusion we summarize our key observations and propose some ideas to develop the topic in future research.

What is personalized law?

The principle of equality under the law implies that people should be treated similarly in similar situations. If the speed limit is 50 km/hour, it is the same limit for all drivers, regardless of their skills and capacity. In the same way, if the law grants consumers a two-week right to withdraw from online purchases, it is the same withdrawal period both for consumers who need it and those who don't. Personalized law challenges the notion that equality under the law would require treating individuals similarly in similar situations. According to Ben-Shahar and Porat, setting one-size-fits-all legal rules overrides the diverse reality of human existence and risks imposing behavioral expectations that may be difficult to meet. Therefore, such legal rules

¹⁹ Ben-Shahar, Porat 2021, 63.

²⁰ Doherty 2020; Autto et al. 2024; Haapio et al. 2024.

²¹ International Plain Language Federation n.d.; ISO 2023.

would undermine rather than promote equality, as they reflect a societal compromise and the preferences of the majority.²² Instead of uniform legal standards that assume uniformly reasonable behavior, individuals should be assessed according to their own personal best – a concept that could be termed the “reasonable you”.²³ However, as will be discussed below, implementing personalized law comes with significant challenges, such as the complexity and opacity that accompany highly specific regulations.

Personalized law – Increasing or tackling regulatory complexity?

Personalized law suggests that as law seeks to guide human behavior, it should be designed in a way that aligns individuals’ unique behavioral traits to the goals of the law. This goal orientation is considered as one of the strengths of personalized law, as it would demand regulators to articulate clearly what the goals of the personalized rules are and use those goals as benchmarks for measuring their effectiveness.²⁴ Such clarity is often missing in traditional regulations, making them harder to comprehend and comply with.

However, tailored legal rules would not necessarily make legal compliance any easier. Legal systems organically seek stability and certainty through the creation of normative expectations.²⁵ In a personalized legal regime, accuracy could take precedence over stability, making the creation of normative expectations more challenging.²⁶ If an individual’s legal treatment depends on their specific circumstances, their personal law would change often, making the regulatory system complex and unpredictable. For example, a person might be eligible for broader consumer protection in one point, but have only limited protection at another, due to a change in their personal circumstances. Also, when people could not expect the same rules being applied to other people, it would become more difficult to anticipate other people’s behaviors as well as adjust one’s own. As a consequence, making simple decisions or planning future events based on legal constraints would become more taxing, potentially hindering individuals from exercising the very rights the law protects.²⁷

Personalized law could potentially increase uncertainty also due to the possible prediction errors in people’s preferences. Personalized law requires making profiles of individuals in order to tailor laws. Those profiles would

²² Ben-Shahar, Porat 2021, 155.

²³ Ben-Shahar, Porat 2021, 1.

²⁴ Ben-Shahar, Porat 2021, 36; Gillis 2024, 66.

²⁵ Luhmann 2004, 11.

²⁶ Gillis 2024, 84.

²⁷ Gillis 2024, 77.

consist of various predictions or classifications of the individual's personal traits, habits and behaviors. However, as pointed out by Gillis, prediction and classification means that people would be grouped statistically, which would likely result in some prediction error. Such instability could lead to incorrect personalized law in some cases, undermining the benefits of personalized law.²⁸

According to personalized law literature, however, personalized law is not only about tailoring legal rules. It is also about how those rules are communicated to people. Personalized law implies “giving people (...) the information useful to them, at the time that fits their schedules and in the format that best suits their cognitive capabilities”.²⁹ While personalized legal rules can potentially increase regulatory complexity and uncertainty, personalized legal communication could help tackle them. As highlighted in legal design and plain language literature, when legal communication is designed with the user experience in mind, it can help individuals to navigate and shape their legal environment more effectively, supporting agency, autonomy and personal empowerment.³⁰ Therefore, the most practical and readily accessible potential of personalized law thus lies in tailoring legal communication to individuals' needs.

Designing legal communication for the “reasonable you”

As discussed above, the personalized law approach challenges the traditional interpretation of the fundamental principle of equality under the law. By doing so, it also challenges the uniform standard of “a reasonable person”, an underlying assumption in law that stems from the notion that people should be treated similarly in similar situations.³¹ The standard is used for example in EU and US consumer protection law to determine how “an average consumer” would act as part of commercial practices.³² According to the definition of the Court of Justice of the European Union (CJEU), an average consumer is a person who is “reasonably well-informed and reasonably observant and circumspect”.³³

It is well understood that law's underlying assumption of uniform reasonability does not correspond to the modern understanding of humanity. People are complex, and their behavior is influenced by a range of contextual,

²⁸ Gillis 2024, 83.

²⁹ Ben-Shahar, Porat 2021, 11.

³⁰ Haapio et al. 2021; ISO n.d.

³¹ Ben-Shahar, Porat 2021, 61.

³² Cohen 2019, 2.

³³ Case C-210/96 Gut Springenheide and Rudolf Tusky v. Oberkreisdirektor des Kreises Steinfurt [1998] ECR I-4657.

social and psychological factors. For instance, people are often highly sensitive to how information is presented, with the framing of facts sometimes having more influence on the choices made than the facts themselves.³⁴ In addition to personalized law, this understanding is particularly reflected in the behavioral approach to law,³⁵ but also in legal design.³⁶

Citing OECD reports, Waller points out that in reality the average consumer is likely to be less informed, observant and careful than an average judge or civil servant who draft the law.³⁷ According to the latest available OECD survey on adult skills in developed countries, nearly 20 % of adults are on level 1 in reading, numeracy and problem-solving skills on a scale of 1 to 5. Adults at level 1 can understand short texts and organized lists when information is clearly indicated, find specific information and identify relevant links. Those below this level can only understand short, simple sentences. In comparison, adults at level 4 or 5 are top performers, who can understand and assess long, dense texts and grasp complex ideas or hidden meanings, as well as use their prior knowledge to understand texts and complete tasks.³⁸ Waller points out that level 3 would be the minimum requirement to understand typical legal documents, which the majority of people do not reach. He also notes that “When regulations about transparency refer to the ‘average’ person, it is these people who we should call to mind, not people like ourselves – academics, lawyers, or managers who would be assessed at Levels 4 and 5 and represent around 12 percent of the population. We are not typical and should not trust our own judgement about what is or is not clear.”³⁹

In the light of the OECD survey on adult skills it becomes evident that the design of legal communication should be more or less personalized to address the diversity of literacy skills. Similarly to what personalized law advocates suggest, the standard for assessing what kind of communication is clear and comprehensible should not be the abstract “reasonable person”, but rather “the reasonable you”. Legal design and plain language have much to offer in ensuring that laws are cognitively and practically accessible to people. Legal design draws from the human-centered design paradigm, which highlights engaging users throughout the design process, from understanding their needs and experiences related to the design target to validating the final results.⁴⁰ Similarly, plain language focuses on the user perspective,

³⁴ Tversky, Kahneman 1981, 453.

³⁵ Sibony, Alemanno 2015, 3.

³⁶ E.g. Passera 2017, 62.

³⁷ Waller 2022, 63.

³⁸ OECD et al. 2023.

³⁹ Waller 2022, 59.

⁴⁰ Toivonen, de Francisco Vela 2024, 253.

aiming at reducing the cognitive overload related to information processing. When designing legal information, design strategies help capture users' attention and plain language helps keep that attention.⁴¹

Artificial intelligence offers a promising way to bridge the gap between the law and the needs of its users and provide personalized accessibility to legal information. When properly prompted, AI assistants can analyze vast amounts of data to inform individuals about the specific legal norms relevant to their situation, thereby reducing the information overload and facilitating law related decision-making. In addition, they can translate the content to forms people can easily comprehend. For instance, AI tools can be used to analyse consumer credit agreements based on the user's individual financial situation, explain critical yet difficult to understand legal and financial concepts in plain language, and thus support individual's efforts in overcoming debt problems and achieving better financial health.⁴²

However, integrating AI to the design and delivery of personalized legal information is not without its challenges. Among the many risks of using artificial intelligence in producing information are the potential for incorrect, misleading or outdated information (often called hallucinations), biases in training data and the lack of transparency in how the AI agent makes decisions.⁴³ Additionally, like humans, AI systems may struggle to identify all the rules that apply, or to interpret not only the visible rules but also the invisible default rules that are not explicitly stated but are critical in legal contexts. Regarding the collection and analysis of personal data, it must also be noted that AI tools can only make decisions based on the information provided to them. Many people may feel reluctant to share their data with AI agents, yet give them the power to make decisions for them.⁴⁴

To ensure lawful and responsible use of AI in personalization, it is essential to understand what AI can and cannot do, and how to navigate these challenges. Laws and regulations for AI are still evolving across jurisdictions. Some governments have already taken action to provide guidance on how to implement AI responsibly. For instance, the AI Playbook for the UK government outlines principles and strategies for safe and responsible use of AI in government organizations.⁴⁵

The biggest fairness concerns regarding the use of AI in personalizing legal solutions relate to non-discrimination, data privacy and security, and autonomous decision-making. Personalization requires not only gathering

⁴¹ Haapio et al. 2024.

⁴² Toivonen et al. forthcoming.

⁴³ Becher, Alarie 2025, 114.

⁴⁴ Casey, Niblett 2017, 1444.

⁴⁵ UK Government 2025.

and analyzing personal data, but also profiling individuals based on those analyses to tailor legal solutions according to their preferences. In visions of personalized law, such profiles would be primarily made by machines, posing risks of bias and manipulation. The European Union restricts the use of AI for purposes that bear such risks in the Artificial Intelligence Act (EU 2024/1689 2024). For instance, Article 5 of the Act prohibits AI practices that classify individuals based on social behavior, personality traits, or inferred characteristics to impose unjustified or disproportionate treatment. As the many fairness concerns limit the realization of – at least the most ambitious – visions of personalized law, it becomes essential to explore ways of developing solutions that uphold individual's autonomy over their privacy and consent. One prominent strategy to achieve this is self-personalization.

Supporting self-personalization in law by design

Ben-Shahar and Porat note that in the “shadows” of uniform legal rules people “self-regulate their behavior toward a distribution of personal guidelines that resembles personalized law”.⁴⁶ This means that despite the law's intention to regulate human behavior, regulation of behaviour is always self-regulation. The same view is shared in the system's theoretical understanding of law.⁴⁷ People are autonomous agents who decide for themselves whether to follow the law or not, although compliance or disobedience may also occur unconsciously, such as due to cognitive errors or lack of legal literacy. This explains why designing for policy incentives is so challenging and – as highlighted in the personalized law literature – why laws based on uniform standards sometimes fail.

Self-personalization of norms already happens in people's private relations. People tailor contracts and wills to meet their personal preferences, opting out for the uniform commands and replacing them with personalized ones where possible and desired.⁴⁸ Similar kind of self-personalization, or self- or co-regulation, happens in organizations. Businesses draft their Codes of Conduct, ethical policies and supply chain contracts to guide their internal operations and those of their business partners towards preferred outcomes. Legal design research recognizes the transformative potential of such forms of “self-personalization” in shaping behavior and causing change. In the area of sustainability, for example, supply chain contracts are increasingly used not only to co-regulate and impose obligations, but also to guide

⁴⁶ Ben-Shahar, Porat 2021, 34.

⁴⁷ Luhmann 1997, 43.

⁴⁸ Ben-Shahar, Porat 2021, 33; Becher, Alarie 2025, 95.

and incentivize responsible business practices, particularly in supply chains and loan agreements.⁴⁹

Providing people and businesses with the opportunity to personalize elements of the law for themselves can also help achieve the goals of the law. An approach called reflexive law proposes that law has the potential to transform from a control-and-command system to a system of mutual coordination, where the law does not take the regulatory responsibility over the outcomes of the social processes, but rather establishes democratic self-regulatory mechanisms.⁵⁰ Personalized law in the form of self-personalization could be such a mechanism. Similarly, the EESC Opinion on Proactive Law recognizes the need for “an optimal mix of regulatory means which best promote societal objectives and a well-functioning, citizen- and business-friendly legal environment”.⁵¹

Additionally, self-personalization can increase people’s agency and autonomy in law. This is also one of the aims of legal design and proactive law. They recognize that law is not only about risk assessments, rules and control, but also about possibilities, improvement and empowerment. Law has traditionally been seen as a reactive mechanism – one that steps in to resolve disputes and enforce compliance or remedies after a problem has led to a conflict and a legal dispute. Proactive law challenges this view by shifting the focus from reaction to anticipation and prevention, equipping individuals, businesses and institutions with the tools to achieve their goals while minimising risk and misunderstanding.⁵² Self-personalization adds a new layer to this proactive paradigm. Through self-personalization individuals can actively prepare, employ and engage with legal tools and resources, customizing them to fit their specific needs. For example, we can foresee a near future where AI assistants, expert systems or interactive platforms can allow users to input their personal information and receive reliable, tailored legal documents or advice in response. This not only enhances accessibility but also fosters a sense of ownership and engagement.

However, as mentioned above, the effectiveness of legal solutions – were they personalized, self-personalized or not personalized at all – relies on how they communicate their content to their users or those who are impacted. In the next chapter we will take a closer look at the elements of personalized accessibility that in our view play a role in increasing personalization in law.

⁴⁹ Kaave 2023; Haapio, Ketola forthcoming.

⁵⁰ Teubner 1983.

⁵¹ EESC 2009, sect. 2.2.

⁵² Haapio 2006; Berger-Walliser 2012.

Personalized accessibility

The mere existence of legal rules, personalized or otherwise, is insufficient if those they are intended to guide and govern remain unaware of their provisions. Legal literacy is essential to bridge this gap and ensure that legal rules are not just theoretical constructs or distant *speech acts* – utterances that not only convey information but also perform actions in the world and shape reality.⁵³ Plain legal language, by its nature, hinges on making legal rules accessible, actionable, and comprehensible to their users.⁵⁴

The challenge of legal accessibility

However, achieving legal literacy is no simple task. Legal systems are inherently complex, often alienating individuals through systemic barriers created by impenetrable language and poorly dozed information. These challenges hinder people's ability to engage with legal systems effectively, undermining the broader goals of justice. In the context of personalized law, complexity and opacity may increase due to reliance on norms that evolve dynamically based on individual circumstances. Regulatory complexity makes the legal rules harder to navigate and understand. Therefore, the challenge lies not only in simplifying legal communication or tailoring it to meet the diverse needs of individuals but also mitigating the difficulties of decision-making that stem from the complex legal landscape. This requires rethinking how legal information is constructed and presented, moving beyond traditional, generalized approaches to embrace tailored, user-centered methods.

As a critical link between legal literacy and making personalized law practicable, we introduce the concept of personalized accessibility: communication and information delivery that is tailored to meet the unique needs, abilities, and contexts of individuals engaging with law. It leverages the principles of user-centered design, clear communication, AI and other technological advancements to understand how individuals perceive, process, and act upon legal information. Personalized accessibility envisions a world where systems, particularly legal systems, proactively address and bridge barriers to understanding and participation, empowering individuals regardless of their starting point.

⁵³ Austin 1962; Searle 1969.

⁵⁴ ISO n.d.

The foundations of personalized accessibility

At its core, personalized accessibility ensures that information – particularly in complex domains like law – is not only comprehensible and actionable but also equitable and inclusive, and that it enables diverse audiences to effectively engage with and navigate systems that impact their lives.

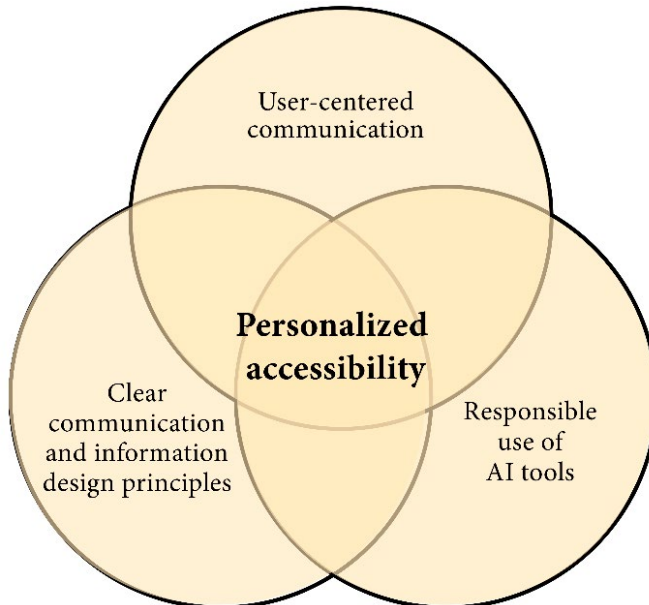
This concept operates at the intersection of three critical pillars:

User-centered communication: Designing communication strategies that are empathetic and responsive to the diverse cognitive, cultural, and situational needs of users.

Clear communication and information design principles: Using plain language and information design techniques, for example organizing information logically and employing multimodal methods to enhance clarity and comprehension for all audiences.

Responsible use of AI tools: Utilizing advanced technologies to adapt information dynamically based on individual profiles, ensuring accessibility across varying literacy levels, languages, and sensory abilities, within the limits of AI regulation and guidelines.

Figure 1. (C) 2025 Nina Toivonen, Anne Ketola & Helena Haapio.
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The three elements personalized accessibility is based on: User-centered communication, clear communication and information design principles and the responsible use of AI tools.

Together, these pillars create a framework for legal communication that is efficient, empathetic, and empowering: User-centered communication prioritizes understanding the audience's context, needs, and preferences. AI tools can bring these principles into actionable, real-world applications by dynamically tailoring content to individual users based on their cognitive abilities, cultural backgrounds, and situational requirements. Clear communication and information design principles act as the bridge that connects these conceptual and practical aspects of personalized accessibility by ensuring that the personalization adaptations remain comprehensible, concise, and actionable. These interconnections are visualized in Figure 1.

Focus on the user

User-centered communication has long been a cornerstone of effective interaction design, focusing on tailoring information and communication methods to the needs, preferences, and contexts of individuals. User-centered communication is rooted in disciplines such as human-computer interaction, information design, and usability studies, and it focuses on how communication can be made accessible and meaningful to individuals.⁵⁵

User-centered communication is a specific focus area within the broader framework of user-centered design. While user-centered design focuses broadly on designing systems, interfaces, and products that align with user needs and tasks,⁵⁶ user-centered communication concentrates on how information (text, visuals, and so on) is crafted, delivered, and interpreted to ensure clarity and accessibility. It zooms in on the content itself, rather than the overarching system.

The most important principle of user-centered communication is communicating with an understanding of the user's perspective, especially those with diverse abilities, cultural backgrounds, and experiences. Examining communication from a user-centered perspective emphasizes that the reader is not a passive receiver of information: the reader makes sense of information in order to *use* it for a specific purpose.⁵⁷ This, in turn, emphasizes the need to make communication actionable.

The idea of making different versions of the same piece of information for users with different needs with the help of AI also echoes theories of user-centered translation. User-centered translation refers to gathering as much information as possible about the future users of a text through vari-

⁵⁵ Kainulainen 2023.

⁵⁶ E.g. Abras et al. 2004, 763.

⁵⁷ Kainulainen 2023, 103.

ous methods, and revising (*translating*) the text based on this information.⁵⁸ User-centered translation typically involves creating a single text for a group of users. This can mean, for instance, gathering information about the typical user-needs of tenants in student housing, and revising a tenancy agreement based on these approximations of the target group's preferences. As illustrated in personalized law literature, AI would enable focusing on the specific communicational needs and preferences of individuals, such as individual tenants.

Addressing cognitive needs in personalized accessibility

Readers engage with text through diverse cognitive processes shaped by their abilities, backgrounds, and contexts. In the realm of personalized accessibility, understanding and accommodating these cognitive differences is crucial to ensuring effective communication. There are various factors that influence readers' ability to process and act upon information, and understanding these factors forms the basis for communicating in a genuinely user-centered way.

Readers' cognitive needs can vary significantly due to differences in literacy levels, cognitive processing styles, and working memory capacity. Cognitive load theory posits that individuals have a finite capacity to process information at any given time.⁵⁹ Texts with dense language, complex syntax, or excessive jargon increase cognitive load, overwhelming readers and impairing comprehension. Readers with limited working memory – common, for instance, among those with learning disabilities – are especially vulnerable to these challenges.⁶⁰

The differences in the readers' working memory capacity are further influenced by linguistic, cultural, and situational factors. Readers with lower literacy levels or limited proficiency in the language of the text face significant barriers to comprehension. As repeatedly demonstrated in research, readers with limited literacy benefit from simplified text, clear structures, and explicit headings.⁶¹ Similarly, non-native speakers require additional scaffolding, such as glossaries or visual aids, to bridge linguistic gaps.

Neurodivergent individuals, such as those with dyslexia, ADHD, or autism spectrum disorder, often process text differently. For example, dyslexic readers may struggle with traditional font styles and line spacing but benefit

⁵⁸ Suojanen et al. 2014, 1.

⁵⁹ Sweller et al. 1998.

⁶⁰ Paas et al. 2003.

⁶¹ E.g. Doak et al. 1996.

from specialized fonts and increased white space.⁶² Similarly, readers with ADHD may require shorter, visually segmented text to maintain focus.

In addition to these more or less permanent factors, there are also situational factors that affect an individual's ability to process information. Temporary cognitive challenges, such as stress, fatigue, or distractions, can greatly impair readers' ability to comprehend text. These factors are particularly relevant in high-stakes situations, such as understanding legal contracts or medical instructions. Texts designed to minimize cognitive demands and provide clarity can mitigate the effects of these situational barriers.

Principles for clear and adaptable communication

As argued above, the idea of personalized accessibility requires that communication resonates with individuals of varying literacy levels and cognitive abilities. In this section, we explore key strategies in information design that can be used to accommodate diverse cognitive needs and ensure that individuals can comprehend, engage with, and act upon their rights and obligations. In the past, the greatest challenge for using these individually accommodating techniques has been limited production resources. With the emergence of AI tools and other technological advancements, the techniques listed below can now be executed automatically.

Among the foundational techniques in information design are shortening sentences and using familiar vocabulary. These strategies reduce cognitive load and make information accessible to wider audiences, including individuals with limited literacy or those processing content under stress.⁶³ Personalization techniques could include adapting vocabulary and sentence complexity to match the reader's language proficiency, ensuring comprehension without oversimplification. Techniques such as providing previews of key concepts, dynamically generated glossaries or definitions and personalized examples help scaffold comprehension. For instance, a personalized tenancy agreement might begin with a short guide explaining typical terms and scenarios based on the reader's profile. Such scaffolding methods ensure that users have the foundation needed to engage with their personalized legal obligations.

For readers to be able to navigate personalized norms without confusion, clear organization of content is key. This can be achieved with techniques such as descriptive headings, numbered lists, and bullet points.⁶⁴ These structures allow users to locate relevant information quickly, particularly in long,

⁶² Rello, Baeza-Yates 2013.

⁶³ E.g. Kimble 1994–95.

⁶⁴ Redish 2007, 227–8

complex documents. Personalization techniques could refine this approach by dynamically reordering sections based on the user's priorities, for example, highlighting critical obligations for first-time users.

In addition to improving textual content, there are several other information design techniques that can be used to accommodate varying reader needs. Accessible design techniques such as using sans-serif fonts and high-contrast color schemes ensure that documents are visually clear and easy to read.⁶⁵ Personalization techniques allow users to customize visual settings, for example, adjust font size or toggle between light and dark modes based on their preferences or visual needs (such procedures are, of course, already offered by most smart devices). Visual aids can also be instrumental in transforming abstract legal concepts into actionable insights. Research underscores the role of visuals in reducing comprehension barriers, particularly for individuals with lower literacy or non-native language proficiency.⁶⁶

Illustrations, flowcharts, diagrams and icons provide alternative means of communication that complement personalized text. For example, a personalized contract might include a timeline of key deadlines or a diagram showing the parties' responsibilities. These examples and more are presented in the WorldCC Contract Design Pattern Library.⁶⁷

Finally, some individuals benefit greatly from audio aids: text being read to them as opposed to presented in writing. Text-to-speech technology can be integrated into AI tools to provide audio versions for, for example, illiterate and low-literate individuals. For even more accessible results, audio can also be combined with visuals to facilitate the comprehension of complex text such as contracts.⁶⁸

The concept of personalized accessibility positions effective communication as the linchpin of increasing personalization in law, ensuring that the tailored legal solutions envisioned by this paradigm are not just technically feasible but also practically actionable and empowering. By addressing diverse cognitive needs and leveraging AI to dynamically adapt content, personalized accessibility offers a framework for developing personalized legal solutions that are both inclusive and transformative. This approach also complements the broader goals of personalized law by reducing systemic barriers stemming from uniform, standardized law and enhancing individuals' ability to understand and act on their legal rights and obligations.

⁶⁵ Rello, Baeza-Yates 2013.

⁶⁶ Mayer 2001; Kaatra, Ketola 2023.

⁶⁷ WorldCC Foundation et al. n.d.

⁶⁸ Ketola et al. 2024.

Conclusions

Personalized law seeks to tailor legal norms to individual circumstances, promising greater fairness, improved autonomy and efficiency, with the help of advanced technologies, Big Data and AI. However, although different forms of personalization are increasingly shaping our lives, personalization of law is still a futuristic vision rather than lived reality. The fundamental challenges related to personalized law hinder the development of personalized law. Treating each individual according to their own rules is likely to increase regulatory complexity and uncertainty, offend equality, hinder social coordination and the shared sense of citizenship, as well as make planning and decision-making more burdensome. The use of artificial intelligence in tailoring legal commands comes also with numerous ethical and legal challenges. Despite the fascinating advancements in AI technology, the world may not be ready for AI agents that profile people based on their individual traits to decide their legal treatment.

Nevertheless, as pointed out in this article, there are alternative strategies to personalize law that can avoid the constraints of the most ambitious visions yet achieve some of the benefits of personalization. Through the lenses of legal design, proactive law and plain language, personalized legal communication and self-personalization of law appear as the practicable and readily accessible means to increase personalization in the law. Both of them hold the potential of improving individuals' agency and autonomy and supporting the achievement of the goals of the law, while aligning with the critical function of law in maintaining stability and certainty. Legal design, proactive law and plain language offer methods to support this endeavour by ensuring that the users of the law are engaged in the personalization process, have the right tools and clear comprehension to act upon their own rights.

In this article we have highlighted the role of personalized accessibility to legal information in increasing personalization in law. The effectiveness of a personalized (or any) legal system relies heavily on how the norms are communicated. Without clear and accessible delivery, even the most well-intentioned laws risk alienating those they are designed to serve. Drawing from information design and plain language literature, we propose that personalized accessibility should build on three elements: 1) user-centered communication, 2) clear communication and information design principles and 3) the responsible use of AI tools. By tailoring communication to individual cognitive needs, personalized legal solutions are not only equitable but also actionable and comprehensible. From incorporating visuals to employing dynamic personalization, these tools create a framework for delivering legal

information that empowers users to act upon their rights and obligations based on comprehension and agency.

Whether the vision of personalized law is worth pursuing is yet to be determined. However, advanced technologies are transforming law, and personalization is likely to play a role in this transformation in one form or another. Therefore, it is necessary for research to continue exploring the challenges and potential of personalized law. Building on the topic of this article, future research could study, for example, how personalized legal information affects individuals' perception of legal certainty, clarity and comprehension, what opportunities and risks arise from using AI to tailor legal communication to individuals' cognitive profiles, and which interfaces in law might benefit from incorporating self-personalization. Although law may never fit you as perfectly as the shoe on your foot, it can always be improved to fit a bit better.

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