

## PERSONALIZED ELDER LAW<sup>†</sup>

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*We live in a world of one-size-fits-all law. People are different, but the laws that govern them are uniform. From traffic commands to legal protections, from standards of care to inheritance rules, people's rights and duties are presently written and intended to apply identically to all. Everyone must satisfy the same criteria and cross the same thresholds to qualify for any legal treatment. Personalized law—rules that vary person by person—would change that. "A legal norm aimed for the "reasonable person" could be replaced by a multitude of personalized commands—each person with their own "reasonable you" standard. Under personalized law, better drivers would be free to drive faster, more skilled doctors would be held to higher standards of care, vulnerable employees would receive stronger protections, and age restrictions or accommodations for the young and the elderly would vary according to individual competence and need. This Essay introduces personalized elder law as a regulatory technique. It is a regime that uses age (among many other factors) to calibrate legal commands across a variety of legal areas. Personalized age-of-capacity rules would replace uniform ones, and rights and duties that are currently uniform would be personalized according, in part, to age. Like personalized elder medicine or physical training, which improve the treatment of individuals, personalized elder law could bring greater precision to legal commands. But unlike personalization in other sectors, personalized law raises fundamental questions about stigma, equality, and the rule of law.*

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## I. Introduction

Age is a critical factor in the design of many legal rules and social norms, as it should be. Young age is a decisive factor in denying legal capacity and conferring various paternalistic protections. In adulthood, some age milestones determine legal rights and duties. At old age, some legal norms are adjusted to fit the changing needs, capacities, and entitlements that come with later years.

Age is a factor in determining the content of various legal rules because it harbors information relevant to the advancement of the goals underlying these rules. For example, driving laws are not age laws; they are concerned primarily with unreasonable risks that drivers create. It is quite likely that a systematic prediction of people's propensity to create accident risks would employ age as one relevant factor. Statistical data would likely show that both young drivers and very old drivers have, on average, traits that are correlated with increased accident risk, like poor judgment and impulsivity (for youth)<sup>1</sup> or reduced spatial awareness and slower reflexes (for elders).<sup>2</sup> Insurers already use age as a factor in graduating premiums to reflect driving risks.<sup>3</sup> The law similarly adjusts some aspects of the standard of care or the conditions for driving to match the perceived risks.<sup>4</sup>

Age is also a decisive criterion under laws that identify and deal exclusively with problems unique to an age group. For example, the Child Online Privacy Protection Act addresses financial and data privacy risks that children face online and it uses a uniform age of thirteen as the threshold.<sup>5</sup> On the other end, the Indiana Senior Consumer Protection Act protects seniors—everyone above the age of sixty—from specific types of financial abuse.<sup>6</sup> These laws use age as a substantive

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1. Daniel Romer, *Adolescent Risk Taking, Impulsivity, and Brain Development: Implications for Prevention*, 52 DEVELOPMENTAL PSYCHOBIOLOGY 263, 264 (Feb. 19, 2010).

2. Diane B. Howieson, *Cognitive Skills and the Aging Brain: What to Expect*, DANA FOUND. (Dec. 1, 2015), <https://www.dana.org/article/cognitive-skills-and-the-aging-brain-what-to-expect/>; *A Quick Look at Reflexes*, UNIV. ROCHESTER MED. CTR., <https://www.urmc.rochester.edu/encyclopedia/content.aspx?ContentTypeID=1&ContentID=562> (last visited Oct. 27, 2020).

3. See Michael Evans, *How does age affect auto insurance rates?*, COVERAGE (May 22, 2020), <https://www.coverage.com/insurance/auto/age-and-auto-insurance-rates/>.

4. See generally *Teen Drivers: Get the Facts*, CDC, [https://www.cdc.gov/motorvehiclesafety/teen\\_drivers/teendrivers\\_factsheet.html](https://www.cdc.gov/motorvehiclesafety/teen_drivers/teendrivers_factsheet.html) (last updated Oct. 23, 2020).

5. 15 U.S.C. § 6501 (2018).

6. IND. CODE ANN. § 24-4.6-6-1-3 (2020).

criterion for their authority because age strongly correlates with the specific underlying protective goals they promote. In these statutes, the age criterion is stated as a bright-line uniform cutoff.<sup>7</sup> Other times, laws are drafted to have uniform non-age application but are enforced selectively to address problems afflicting specific age groups. For example, the Federal Trade Commission and state consumer protection agencies have specific enforcement programs to protect against financial scams (like home equity skimming) that primarily afflict elders.<sup>8</sup>

Treating people of a certain age group differently—either through the use of bright-line age criteria or through the selective application of legal standards where age is a useful proxy for relevant substantive differences—is a type of contextualized law. Across many legal fields, age is regarded as a relevant factor in the optimal calibration of legal commands, and we can often observe that different age groups are treated, on average, differently. This is true in law as much as in other areas of life. Health care is allocated differently to elders.<sup>9</sup> Housing and living communities offer different services according to the age group they serve.<sup>10</sup> Even moral and religious traditions endorse differential treatment of elders for some matters, via maxims like “stand up before the gray head, and honor the face of an old man.”<sup>11</sup>

Contextualized differential treatment of age may be controversial, even when it reflects relevant differences across the age groups. It elevates age to a salient differentiating factor, sometimes stigmatizing or branding people of certain age groups. Uneasiness with such salience could be addressed in two dramatically opposite ways. One solution would be to prohibit age discrimination by entirely ignoring age (especially old age) in the design of legal commands. Much has been said about this approach, and I have no contribution to offer to that debate. Another solution, not previously examined, is to do the opposite: make

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7. *See id.*; 15 U.S.C. § 6501 (2018).

8. Stephen Deane, *Elder Financial Exploitation: Why it is a concern, what regulars are doing about it, and looking ahead*, SEC (June 2018), <https://www.sec.gov/files/elder-financial-exploitation.pdf>.

9. *Caring For An Aging America: Meeting The Health Care Needs Of Older Adults*, ELDERCARE WORKFORCE ALL. (Nov. 2013), <https://eldercareworkforce.org/caring-for-an-aging-america-meeting-the-health-care-needs-of-older-adults/>.

10. *See generally What You Need to Know About Assisted Living*, COMPASS BY WEBMD, <https://www.webmd.com/healthy-aging/guide/assisted-living#1> (last visited Oct. 28, 2020).

11. *Leviticus* 19:32.

age relevant to the design of legal commands but do so in a personalized manner. Old age would no longer put people in a single “elder bin.” Instead, while age would be a relevant factor in finetuning legal commands in many regulatory contexts, it would be used in a nuanced way that could eliminate the stigma.

This Essay introduces personalized elder law as a regulatory technique. It is a regime that uses age to calibrate legal commands more often but less conclusively than its current use. Personalized elder law could consider age in the design of many more legal commands. For example, it could use age as one differentiating factor to differentiate the degree of consumer protection across people. Personalized elder law is a slice of a broader enterprise of personalized law, where rules vary across people. Legal rights, duties, disclosures, defaults, and any other rules that are currently designed in a uniform law could be individualized. In this enterprise, every factor that characterizes people could be used to personalize the commands. Age is one such factor.

While age will feature in the design of personalized commands in many areas, its use will be attenuated. Instead of using age in a uniform and crude manner, personalized law would use it differently across people. Presently, elder law — any law that takes old age into account — is uniform: if age is used as a factor under the law, it is used as a one-size-fits-all element (e.g., a protection applying to any “individual who is at least sixty years of age”).<sup>12</sup> Uniform elder law uses age as a generalization, based on the empirical premise that people older than the threshold age have *on average* different relevant attributes compared to people below this cutoff. These generalizations may be descriptively correct but imprecise and even undesirable and unfair in particular cases. For the purpose of consumer financial protection, for example, many, but not all, elders need protection against bad loans.<sup>13</sup> The cutoff age of sixty may be right for some, but it may be too low and unnecessary for other older borrowers with financial savvy.

Personalized elder law would not treat all elderly people alike. Every law that takes (or should take) age into consideration in calibrating the legal command would use different age thresholds for different people. Laws that use age explicitly but currently deploy a single cutoff

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12. See e.g. 29 U.S.C. § 623 (2018).

13. See generally *Protecting older adults from fraud and financial exploitation*, CFPB, <https://www.consumerfinance.gov/practitioner-resources/resources-for-older-adults/protecting-against-fraud/> (last visited Oct. 28, 2020).

would, under personalized elder law, use different age cutoffs for different people. And—even more ambitious—laws that currently do not take age into account (and thus treat all ages alike) might be able to deploy age information into the calibration of their specific, person by person, commands. For example, speed limit laws that currently apply in a uniform manner to all could be personalized according to drivers' individual skill and riskiness, and rely on age as one of many factors predicting skill and risk.

The benefit of personalized elder law is *precision*. It is part of a personalized law regime that accomplishes the goals of any law more tightly. But along with its technocratic achievements, personalized elder law raises profound questions of distributive justice and equal protection. It challenges long-standing justifications for uniform rules. I offer some preliminary thoughts on these issues.

I begin this Essay by explaining, in Part II, what personalized law is. Part III then describes personalized *elder* law and demonstrates the broad application of this concept across many legal areas. Part IV identifies the benefits of personalized elder law. Part IV then discusses various objections. Part V concludes.

## II. What is Personalized Law

Personalized law is a form of “precision” law characterized by two features: individualization of legal commands and generation via machine-sorted information. Individualization of commands is an intense form of tailoring. Many laws currently tailor legal commands on the basis of prominent relevant circumstances. Negligence standards, for example, depend on the concrete risks, both external and actor-generated. Drivers have to take extra care in stormy weather and doctors may not deploy certain treatments unless fully trained in them. But standards of care do not differentiate between different actors on the basis of their innate characteristics. Personalized law expands the tailoring of commands and focuses on all the relevant differences between individuals. In the same external circumstances, one person may face a stiffer standard of care than another.<sup>14</sup> Under personalized law, for example, drivers are subjected to different traffic rules, each tailored with individual duties and restrictions that reflect their relevant attributes.

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14. For a general description and analysis of personalized standards of due care see Omri Ben-Shahar & Ariel Porat, *Personalizing Negligence Law*, 91 N.Y.U. L. REV. 627 (2016) [hereinafter *Personalizing Negligence Law*].

There is no “reasonable person” standard; a “reasonable you” command would apply to everyone. On the same road in the same external conditions, some drivers will be permitted to drive up to 35 mph, others up to 50 mph, and so forth—each fitted with the optimal individualized limit.

Intense customization based on every relevant individual trait is the primary defining feature of personalized law. Implementing it requires information about the ways people differ, and thus the second defining feature of personalized law is algorithmically sorting large datasets of personal information. To tailor good personalized commands, we need data about people’s physical and cognitive skills, preferences, income and wealth, experience and habits—any personal feature that is correlated with the desired calibration of the command. More literate people would get more complex disclosures; lower-income people would get stronger consumer protections; people with strong emotional investment in a transaction would get emotional distress damages when breached; and so on. We could, for example, learn from Big Data that Mac users prefer longer product warranties than PC users, and thus personalize the implied warranty rule based in part on this feature. (The qualifier “in part” is imperative: the system would rely on many predictors, each accorded its incremental weight.) Once the list of relevant factors for calibrating the commands is set, the personalization algorithm will use inputs about these factors to distribute different commands across the population. A speed limit algorithm could, for example, instantaneously communicate personalized limits to people’s cars.<sup>15</sup> The commands could reflect data inputs about drivers’ eyesight (from medical records), reaction instincts (from online gaming data), driving experience and past violations (from DMV records), insurance coverage (from insurers), and even levels of fatigue measured in real-time (from Fitbit).

In a series of earlier articles and in our forthcoming book, Ariel Porat and I examine personalized law across various legal areas.<sup>16</sup> We

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15. See Anthony J. Casey & Anthony Niblett, *The Death of Rules and Standards*, 92 IND. L.J. 1401, 1418 (2017) (identifying “microdirectives” as a form of algorithm generated commands).

16. *Personalizing Negligence Law*, *supra* note 14, at 659; see Omri Ben-Shahar & Ariel Porat, *Personalizing Mandatory Protections in Contract Law*, 86 U. CHI. L. REV. 255, 257 (2019) [hereinafter *Contract Law*]; OMRI BEN-SHAHAR AND ARIEL PORAT, *DIFFERENT RULES FOR DIFFERENT PEOPLE: PERSONALIZED LAW IN THE AGE OF BIG DATA*, OXFORD UNIV. PRESS (forthcoming 2021) [hereinafter *DIFFERENT RULES FOR DIFFERENT PEOPLE*].

look at personalized consumer protections, negligence standards, default rules, mandated disclosures, and much more. We discuss what types of personal data would be used to tailor the commands, where it would come from, and how the personalized commands will be communicated to individuals. We ask whether such a regime—different rules for different people—would promote the goals of the law, and we go on to discuss various objections based on equal protection, distributive justice, practical implementation, privacy, and more.

The fundamental idea underlying personalized law is the one motivating any system of personalized treatment, like personalized medicine, nutrition, education, insurance, or marketing: precision. It is the same reason that a tailor-made suit fits better than single size. Uniform rules and commands, even if optimal on average, are a poor fit for people with diverse preferences, characteristics, histories, and means. If we easily accept the idea that doctors should prescribe drugs and treatments to reflect each patient's unique circumstances (as much as those are known or predicted) and that it might be malpractice not to do so, why not also require personalized drug warnings? Why not personalize malpractice law to also be based on differences between physicians? The unifying premise underlying all systems of personalization is that granularity in treatment has obvious benefits. Personalized law thus begins by applying this premise to law, showing how differentiating commands by individual differences could improve the function of specific laws. It then asks if law is different than other institutions in ways that justify forgoing these benefits so as to preserve other system-wide values.

Personalized law depends on information. A designer of any personalized regime needs data about people's differences and costly technology to assess the information and to disseminate the personalized treatment instructions. The optimal level of personalization is therefore a balance between its precision benefits and the information and technological costs of implementation. Digital technology brought down the cost of storing and processing information and has thus enabled the proliferation of new personalized platforms. The information cost rev-

olution has begun to ripple through some legal realms, with the occasional use of predictive algorithms to support legal decisions.<sup>17</sup> If information allows a more sweeping algorithmic design of legal commands, it is urgent that we ask how far this revolution should go.

A difficult challenge for personalized law is what constraints should be placed on the data analysis. Perhaps the most burning question is whether some predictive factors should be excluded as inputs—whether some differences among people should *not* be considered in customizing legal commands. Many factors could potentially be used to personalize rules, some obvious, others not. Eyesight score would surely affect personalized driving law, but Mac versus PC use—to the extent that an artificial intelligence model identifies it as a relevant factor in personalizing consumer warranty law—is a less obvious input.

In this Essay, I want to examine the case for personalized law's use of age as an input for customized legal commands. It is both an obvious factor, relevant to many laws, and also a sensitive factor meriting special care. Various laws already use age classifications for differential treatment. Prominent examples are age-of-capacity laws, which mandate entry into and exit from certain activities. But they use age *uniformly*, applying the same threshold age for all people (e.g., “everyone under the age of twenty-one” or “everyone over the age of sixty-five”).<sup>18</sup> Personalized law would change that; it would replace a uniform age threshold with personalized ones. Age is also used, sometimes implicitly, as a relevant factor in tailoring rights and duties. For example, standards of care could reflect the age of the potential victim.<sup>19</sup> Personalized law would bolster such practices, potentially using age as one of many factors that vary the legal commands across people. Such robust use of age, specifically when focusing on old age as an input, is what I call personalized elder law. I will now illustrate how it would operate across all of law.

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17. See, e.g., Jon Kleinberg et al., *Discrimination in the Age of Algorithms*, 10 J. LEGAL ANALYSIS 113, 151–58 (2019). For a fascinating study of the use of predictive algorithms in criminal justice, see Jon Kleinberg et al., *Human Decisions and Machine Predictions*, 133 Q. J. ECON. 237 (2017).

18. Nina A. Kohn, *Rethinking the Constitutionality of Age Discrimination: A Challenge to a Decades-Old Consensus*, 44 U.C. DAVIS 213, 215 (2010).

19. *Personalizing Negligence Law*, *supra* note 14, at 630.

### III. Personalized Elder Law

In this Part, I examine two roles of age in the personalization of rules. The first role, addressed in Section A, is age as an input in tailoring any legal command—a standard of care, a protective right, a default rule—where age could be one factor among many that determine the specific treatment each person receives. Age plays a role as an input, sometimes a central one, in other areas of personalized treatment, like insurance and marketing: insurers set personalized premiums, and advertisers target personalized ads based, in important part, on their policyholders' and customers' ages.<sup>20</sup> Even the federally regulated health insurance market permits age to affect premiums.<sup>21</sup> Can the law do the same? Part III, Section A explores the potential use of age as a factor in calibrating legal commands in a host of areas where it is currently (largely) ignored.

The second role of age in personalized law is as an output, where the legal command already incorporates age-based treatment, primarily by setting rules that explicitly differentiate people by age.<sup>22</sup> Such age rules are common: age-of-capacity to enter into (or exit from) some activities, minimum age rules to qualify for benefits or accommodations, or tax-according-to-age rules.<sup>23</sup> Common to all these age laws is their uniformity: they apply to “everyone over or under the age of X years,” with X held fixed across people. Section B examines how laws that already factor in age would be reshaped under personalized elder law. It shows that age rules would vary across people: “X”—the cutoff age for special treatment—would be personalized based on a multitude of factors tailored to reach an individually optimal threshold.

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20. Alexandre de Cornière, *Search Advertising*, 8 AM. ECON. J.: MICROECONOMICS 156 (2016).

21. See 42 U.S.C. § 300gg(a)(1)(A)(iii) (2018) (allowing for variation in premiums based on age not to exceed a ratio of 3:1 when compared to other adults).

22. See OKLA. STAT. tit. 37, §§ 241, 245 (repealed 2016) (allowing differential treatment for men and women in age for purchasing alcohol).

23. See, e.g., 40 ILL. COMP. STAT. 5/16-132 (denoting retirement annuity eligibility); see also 750 ILL. COMP. STAT. 5/301(3) (providing age requirement to enter marriage); CONN. GEN. STAT. § 12-170v(a) (codifying lower real property tax rates for elders over seventy years of age).

## A. Age as Input for Personalized Legal Commands

### 1. CONSUMER PROTECTIONS

Consider a rule granting a non-disclaimable contractual protection for consumers. For example, recognizing that people sometimes enter transactions in haste or under pressure, the law might mandate a minimum-duration withdrawal right from certain consumer contracts. Federal law grants such protections in door-to-door sales or for various loan contracts, typically mandating a seventy-two hour withdrawal period.<sup>24</sup> European law mandates a fourteen-day withdrawal period for consumer sale transactions concluded remotely and online.<sup>25</sup> These laws are uniform: all consumers receive exactly the same rights, regardless of their (varying) true needs for that protection or the duration that would make the right meaningful for each.

A uniform rule may be good on average, but it misfires in individual cases. Personalized law would replace it with a distribution of rules, one for each consumer, so that each is entitled to a different mandatory withdrawal duration. If data are available to identify the consumers whose need for protection is greatest and differentiate them from others who need it less, protection could be granted selectively only to the neediest. A one-size-fits-all mandate would thus be split into a dichotomous treatment, with people allocated into one of two bins, recipients and non-recipients. The uniform treatment could be partitioned more finely, along a continuum. All consumers would get some withdrawal right, but not the same duration. Those able to complete the reevaluation of an imprudent purchase quickly need only a short withdrawal period. A seventy-two-hour cooling-off period might suffice for the expeditious; a longer period would be needed for the sluggish. The personalized withdrawal duration could vary according to the differential need of consumers and the utility it affords them, but also according to the cost that different consumers inflict on vendors when returning products. Some consumers are “return-aholics” who purchase with the intent to withdraw,<sup>26</sup> or they may be more careless in

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24. See, e.g., 16 C.F.R. § 429.1(a) (2020) (requiring that a buyer who is engaged in a “door-to-door” sale have a right to cancel the sales contract within three business days of the transaction).

25. Council Directive 2011/83, art. 40, 2011 O.J. (L 304) 64, 69 (EU).

26. See Kristin Colella, *Returnaholics, Beware: You Could Get Blacklisted By Your Favorite Stores*, STREET (Mar. 16, 2015, 6:45 AM), <http://perma.cc/T4YW-3F4Q>.

protecting against depreciation and should thus receive a shorter, stingier, right. In short, the various reasons for granting withdrawal rights—helping correct consumers' bad decisions without imposing excessive costs on firms—would justify personalized protections. Shifting away from a uniform regime would increase the value of each contract as well as the incidence and efficiency of trade as a whole.

Age, among other factors, could be counted in personalizing consumer protections. Ideally, the formula that calculates the personalized withdrawal duration would use information about the value of the protection to each consumer and the cost they each impose on the seller. Yet it might be hard to measure value and cost directly, and thus various factors correlated with the value and the cost could operate as proxies. Income, for example, might be a good proxy for the value of the protection. Low-income consumers need stronger protections because they are more likely to make urgent decisions without the luxury of comparison shopping and informed contemplation, and they are less likely to have the financial cushions that soften the harm of a misguided purchase.<sup>27</sup> Income would be an important, but not the sole, criterion. Among people of similar income, variation occurs along cognitive dimensions, experience, familiarity with online shopping, and more. Age is likely to be correlated with these additional relevant factors and could therefore be used in tailoring personalized rights.

Age is correlated with some of the factors that affect the need for consumer protection. For example, it is thought that older people are more often targeted by doorstep sellers (perhaps because they spend more time at home).<sup>28</sup> Such sale techniques are known to lead to rash, regrettable decisions, justifying a more robust withdrawal right.<sup>29</sup> Indeed, some lawmakers have already taken age into account in designing tailored solutions to undue influence.<sup>30</sup> Illinois state law grants a

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27. *Contract Law*, *supra* note 16, at 273.

28. *Senior Fraud*, OFF. OF THE IND. ATT'Y GEN., <https://www.in.gov/attorneygeneral/2389.htm> (last visited Oct. 19, 2020) ("Door-to-door sales of home improvements and repairs are notorious for targeting seniors who may physically need help with maintaining their homes and who may be intimidated by a door-to-door contractor who comes to their door.").

29. Jeff Sovern, *Written Notice of Cooling-Off Periods: A Forty-Year Natural Experiment in Illusory Consumer Protection and the Relative Effectiveness of Oral and Written Disclosures*, 75 U. PITT. L. REV. 333, 337 (2014).

30. See 815 ILL. COMP. STAT. 513/20, 22 (2020); Illinois Home Repair and Remodeling Act, 815 ILCS 513/20, 513/22 (2019). For further examples of state law protections for elders, see WIS. STAT. ANN. § 100.264 (2016) (increasing the fine for consumer protections violations against senior citizens); CA INS. § 10127.13 (2016)

minimum three-day cooling-off period in any solicited home repair or remodeling contracts, but increases the minimum period to a full fifteen-day term when the consumer is over sixty-five years old.<sup>31</sup> In general, it is likely that seniors, like low-income people, are more exposed to abusive sales,<sup>32</sup> requiring not only a longer and more robust cooling-off period, but also applying it to more types of transactions and alerting individuals to these rights through more effective methods (more on this in the discussion of personalized disclosures below).<sup>33</sup>

Procedural protections against fraud and financial abuse are another area in which consumer protections could be personalized with regard to age. Laws often stop short of outright prohibition of certain categories of transactions, instead requiring greater formalities and precautions before parties enter into them. For example, wills, real estate transactions, powers of attorney, and guardianship or conservatorship transactions may require special forms of consent and monitoring to prevent undue influence.<sup>34</sup> Here too, there is a prevalent recognition that older people are often more vulnerable to such influence.<sup>35</sup> A personalized protection could focus on the requirements for the formation of a binding obligation. As people age and face more predatory marketing techniques, the law could require increased prudence in signifying assent. Currently, for example, taking loans by giving security in one's own assets may sometimes be done simply by signing the lender's forms, but in especially vulnerable circumstances (like reverse mortgages of homes) only after receiving financial counseling provided by state-authorized agencies. Rather than using a one-size-fits-all age threshold for placing people in the protected group, personalized law

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(establishing disclosure requirements for insurance contracts specifically with elder citizens).

31. See 815 ILL. COMP. STAT. 513/20, 22 (2020); Illinois Home Repair and Remodeling Act, 815 ILCS 513/20, 513/22 (2019). For further examples of state law protections for elders, see WIS. STAT. ANN. § 100.264 (2016) (increasing the fine for consumer protections violations against senior citizens); CA INS. § 10127.13 (2016) (establishing disclosure requirements for insurance contracts specifically with elder citizens); Sid Kirchheimer, 6 *Common Door-to-Door Scams*, AARP, <https://www.aarp.org/money/scams-fraud/info-10-2012/common-door-to-door-scams.html> (last visited Oct. 28, 2020).

32. *Sovern*, *supra* note 29, at 333.

33. See A. Frank Johns, *Ten Years After: Where Is the Constitutional Crisis with Procedural Safeguards and Due Process in Guardianship Adjudication?*, 7 *ELDER L.J.* 33, 36 (1999).

34. See *id.* at 71.

35. See *id.* at 76.

could customize the criterion and use age as one factor in the customization formula.

Personalization of consumer protections raises a concern that is particularly relevant to age. If firms recognize that a specific group of consumers is more strictly (and expensively) protected, they might charge them more or—if price discrimination is impossible—refrain from dealing with them. Age is a factor that vendors may easily identify upfront, and more than other classifications it makes such reactive conduct feasible. Sometimes, chilling of firms would be the intended effect of personalized law, protecting vulnerable people from overzealous actors that woo them into regrettable deals. Other times, the chilling effect is undesirable, particularly when the vulnerable elder population is excluded from a primary market. Laws might prohibit firms from declining to deal with the elder, but it would be hard to enforce against selective marketing techniques.<sup>36</sup>

## 2. MANDATED DISCLOSURE

Another natural (and relatively uncontroversial) application of age-factored personalized treatment is to mandate warnings and disclosures. Numerous laws require that certain information be given to people before they decide to engage in an act. These mandated disclosure laws are usually uniform, prescribing the same dosage of information to all. In my prior work with Carl Schneider, we have written extensively about the failure of one-size-fits-all disclosures, explaining that many of the decisions people make are complex and could not be meaningfully informed by the ceremonial inundation of the deciders in legally mandated disclosures.<sup>37</sup> That work convinced me that lawmakers should turn their attention to legal techniques other than mandated disclosure, and I am therefore hesitant to offer new cures to the problem of failed disclosures, especially solutions that have not been tested and have not been proven effective. But there is at least a twinkle of hope that personalized disclosures would sometimes be more useful to people, avoiding some of the pitfalls of our existing landscape of uniform disclosures, and so it is worth exploring this outside chance.

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36. Jordan M. Barry et al., *To Thine Own Self Be True? Incentive Problems in Personalized Law*, SAN DIEGO LEGAL STUD. PAPER NO. 20-439, 46 (2020).

37. See generally OMRI BEN-SHAHAR & CARL E. SCHNEIDER, *MORE THAN YOU WANTED TO KNOW: THE FAILURE OF MANDATED DISCLOSURE* (Princeton Univ. Press 2014).

Consider, for example, the design of product warnings. These mandated disclosures are typically voluminous, recording all the known risks of a product. They do so because tort law would consider a failure to warn actionable. Tort law (and, for that matter, other branches of anti-deception law) does not consider excessive warning a problem, despite the widely known fact that overload obscures the content of the warnings.<sup>38</sup> Imagine, instead, a product warning that gives each person only individually relevant information, focusing on the risks and side-effects likely to affect them. Elders, for example, need not be told about pregnancy-related drug risks, and seniors living in assisted-living communities need not be warned about small parts of household goods that toddlers can break off and swallow. Older people take more drugs, and it would be particularly useful for each to receive the personalized warning about dangerous drug interactions occurring within the specific portfolio of medications prescribed to each of them.<sup>39</sup> Warnings that are based on information about individual afflictions, prescriptions, and restrictions could be tailored in this fashion.

Because age is often used as a proxy for other underlying relevant characteristics, some personalized disclosures need not use age, even if the risks that matter to people of old age are typically different.<sup>40</sup> When the actual risks each person faces are known directly, proxies are not needed. For example, drug interaction risks could be based on the actual drugs prescribed to each person, not on some predictive approximation of medication usage. Often, each individual's risks have to be statistically predicted through indirect factors.<sup>41</sup> For example, a person's likelihood of suffering an adverse reaction to a drug is a statistical assessment, and age could be a significant predictive factor.<sup>42</sup> Whether

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38. *Int'l Harvester, Co.*, 104 F.T.C. 949 (1984).

39. See Mia DeFino, *Drug-Drug Interactions in the Era of Personalized Medicine*, INTERDISCIPLINARY ASS'N POPULATION HEALTH SCI., <https://iaphs.org/drug-drug-interactions-era-personalized-medicine/> (last visited Oct. 28, 2020).

40. See Jorge Juarez Vieira Teixeira et al., *Potential Drug-Drug Interactions in Prescriptions to Patients over 45 Years of Age in Primary Care, Southern Brazil*, 7 PLOS ONE 1, 1 (Oct. 2012), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3468464/pdf/pone.0047062.pdf>.

41. See Holly Janes et al., *Assessing the Value of Risk Predictions Using Risk Stratification Tables*, 149 ANNALS OF INTERNAL MED. 1, 1 (2008), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3091826/pdf/nihms285092.pdf>.

42. Amanda Hanora Lavan & Paul Gallagher, *Predicting risk of adverse drug reactions in older adults*, 7(1) THERAPEUTIC ADVANCES IN DRUG SAFETY 11, 11 (2016), [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4716390/pdf/10.1177\\_2042098615615472.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4716390/pdf/10.1177_2042098615615472.pdf).

age is a treatment factor or not, it is likely to be correlated with the information people receive.<sup>43</sup> In a personalized elder law regime, older people (like any other age cohort) will be warned about, and informed of, different risks.

There is some budding enthusiasm in the legal literature about personalized disclosures, and while I don't entirely share this buoyancy it is only fair to paraphrase it.<sup>44</sup> Our era has witnessed a transformation of many forms of information from a uniform format into data-driven interfaces that deliver personalized messages. Prominent among these are personalized news and personalized ads. The commercially proven premise of this transformation is that personalized information has more value to recipients. Mandated disclosures are, like news and advertisements, information devices. If the mandated information is personalized, and if it is delivered to each person in a manner, format, time, and complexity that fits their individual cognition and capacity, the hope is that such intervention will have greater success. Any improvement relative to the existing failure of mandated disclosures would be a historical breakthrough.

### 3. STANDARDS OF CARE

Consider another prominent legal device for which age could serve as a relevant input: the duty to take care when one's behavior creates risks. In the Introduction, I suggested that standards of due care applying to driving cars—including highway speed limits—could optimally depend on age. Indeed, some laws already recognize that older people pose a greater risk when driving.<sup>45</sup> Illinois requires all people over the age of seventy-five to take renewed driving tests to keep their

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43. See Baruch Fischhoff et al., *Communicating Risks and Benefits: An Evidence-Based User's Guide*, U.S. FOOD & DRUG ADMIN. (2011), <https://www.fda.gov/media/81597/download>; Fantaye Teka et al., *Potential drug–drug interactions among elderly patients admitted to medical ward of Ayder Referral Hospital, Northern Ethiopia: a cross sectional study*, 9 BMC RES. NOTES 431 (2016), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5009535/>.

44. Ariel Porat & Lior Jacob Strahilevitz, *Personalizing Default Rules and Disclosure with Big Data*, 112 MICH. L. REV. 1417, 1471 (2014); Christoph Busch, *Implementing Personalized Law: Personalized Disclosures in Consumer Law and Data Privacy Law*, 86 U. CHI. L. REV. 309 (2019).

45. See Katherine Mikel, *Drivers Licenses and Age Limits: Imposition of Driving Restrictions on Elderly Drivers*, 9 MARQUETTE ELDER'S ADVISORY 359, 363–65 (2008).

drivers' licenses.<sup>46</sup> Other states condition license renewal for older people on more frequent vision tests.<sup>47</sup> The premise underlying these rules is that old people drive less safely, and this premise has some basis in the data (although the risk posed by very young drivers is orders of magnitude greater).<sup>48</sup>

These rules, however, operate in a *uniform* manner: they do not differentiate people along other factors and thus treat all people of the same age alike. Personalized elder law would individualize these standards by considering a multitude of other factors. While it would take elder status into account, personalized law would do so in a differentiated manner. Older people may, on average, be subject to stiffer standards of care, but not uniformly so. Each person's standard of care would be set according to the predicted risk they individually pose, as calculated from a long list of additional factors. For example, the standard of care could be tied to information the Department of Motor Vehicles receives from physicians and hospitals about the particular medical conditions of each driver.<sup>49</sup> There is nothing novel in adjusting the standards of care by age. Age is commonly used as a primary factor in tailoring the standards of care of children, including their standard of comparative care.<sup>50</sup> But even when the law carves out an age category for specific age-appropriate standards of care, it does so uniformly, whereby all children are expected to behave as the "reasonable child." In personalized age law, people within the same age group would be subject to different duties, because age would be only one of a host of other factors that characterize them.

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46. 625 ILL. COMP. STAT. ANN. 5/6-109(b) (2020).

47. FLA. STAT. ANN. § 322.18(5)(a) (2020); IND. CODE ANN. § 9-24-12-5(b)(8) (2020); ME. REV. STAT. ANN. tit. 29-A, § 1303(1) (2017).

48. See David S. Loughran et al., *What Risks Do Older Drivers Pose to Traffic Safety?*, RAND CORP. (2007), <https://doi.org/10.7249/RB9272> (stating from a Rand Corporation study estimate that people older than 65 are 16 percent more likely than adult drivers to cause an accident, while the youngest drivers are 188 percent likelier than adult drivers to cause a crash).

49. See Jeffrey T. Berger et al., *Reporting by Physicians of Impaired Drivers and Potentially Impaired Drivers*, 15 J. GEN. INTERNAL MED. 667, 668 (2000); see also *infra* Part II.

50. *Cleveland Rolling-Mill Co. v. Corrigan*, 20 N.E. 466, 469 (Ohio 1889); *Dellwo v. Pearson*, 107 N.W.2d 859, 860 (Minn. 1961) ("a child not being held to the same standard of conduct as an adult"); RESTATEMENT (SECOND) OF TORTS § 283A (AM. LAW INST. 1965).

Negligence law could use elder age (along with a host of other factors) to personalize standards of care for medical professionals. Doctors vary by their skills and the risks that they create and personalized standards could account for these variations, reducing the overall incidence of harm (as well as the overall cost of precautionary medicine). As doctors age, they usually have greater experience, knowledge, and discretion, and sometimes they have greater technical skill. The model of optimal personalized negligence standards would prescribe an *increase* in the standard of care upon those with greater skills.<sup>51</sup> At the same time, some medical knowledge may become stale, and some mechanical skills may erode, with older age, especially where new and advanced methods are introduced. Perhaps because of that, some studies show that older doctors pose a heightened risk to their patients—even after controlling for the possibility that sicker patients are assigned to more experienced physicians.<sup>52</sup> It is possible “that physicians further from training are less likely to adhere to evidence-based guidelines, might use newly proved treatments less often, and might more often rely on clinical evidence that is not up to date.”<sup>53</sup> Among surgeons, for example, some functional capacities may decline or erode, requiring added precautions like more frequent screening and peer assessment, physical exams, and cognitive screenings.<sup>54</sup> Indeed, medical institutions are already implementing heightened precautions for late-career practitioners, based on the data showing declining cognitive functions, inductive reasoning, spatial orientation, perceptual speed, numeric ability, verbal ability, and verbal memory; although such programs are applied uniformly.<sup>55</sup> Rather than establish a uniform age threshold (say, seventy-five) such programs could be personalized, taking into account additional factors. Any elevated risks posed by elder doctors would be better addressed by *personalized*, rather than uniform, precautions.

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51. *Personalizing Negligence Law*, *supra* note 14, at 659.

52. Yusuke Tsugawa et al., *Physician age and outcomes in elderly patients in hospital in the US: observational study*, 357 *BMJ* 1, 8 (2017), <https://www.bmj.com/content/357/bmj.j1797>.

53. *Id.* at 7; see Mark A. Hlatky et al., *Adoption of thrombolytic therapy in the management of acute myocardial infarction*, 61 *AM. J. CARDIOLOGY* 510 (1988).

54. *The Aging Surgeon Program*, LIFEBRIDGE HEALTH, <http://www.agingsurgeonprogram.com/AgingSurgeon/AgingSurgeon.aspx> (last visited Oct. 28, 2020).

55. Ann Weinacker, *Stanford to Implement a Late Career Practitioner Policy*, STANFORD HEALTH CARE, <https://stanfordhealthcare.org/health-care-professionals/medical-staff/medstaff-update/2012-august/stanford-to-implement-a-late-career-practitioner-policy.html> (last visited Oct. 28, 2020).

Other occupations are subject to similar patterns, whereby aging workers might perform at a less-safe level, requiring more frequent screening and monitoring. Commercial airline pilots, for example, must undergo regular health screenings starting at age forty and must retire at sixty-five.<sup>56</sup> This precaution tightening by age reflects the (perceived) declining *average* cognitive and physical skills, but even if the generalization is true it misfires in individual cases.<sup>57</sup> Different pilots experience the effects of aging differently. As one survey of airplane safety concludes, “in many studies, individual differences between pilots of the same age were significantly larger than the differences between age groups themselves.”<sup>58</sup> Personalized aviation safety law would recognize that age is only one factor among many that determines a pilot’s competence. It would also use a variety of aspects by which the standard of care may be varied, beyond age of retirement. It could personalize the frequency of health screenings, the frequency and intensity of simulator training, or the rest-time requirements—all based on measurements of individual pilots’ risk and skill, measures that in part would depend on age.

#### 4. DEFAULT RULES

Like mandatory rules and standards of care, default rules could be personalized in a manner that takes age into account. In prior work, Ariel Porat and Lior Strahilevitz examined the case for personalized default rules. They provided a dramatic illustration of personalized default rules by proposing a personalized intestate succession rule.<sup>59</sup> Recognizing that different people have different bequest preferences, as manifested in the different wills they write (or would optimally want to write), Porat and Strahilevitz proposed a personalized inheritance law. Rather than using a uniform succession rule (e.g., fifty-fifty division between spouse and children), why not fit each person with their own algorithmically predicted optimal division rule? A personalized

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56. Memorandum from the Federal Aviation Administration about Fair Treatment of Experienced Pilots Act (May 9, 2019) (on file with author).

57. *See id.*; *see also* AOPA AIR SAFETY INST., AGING AND THE GENERAL AVIATION PILOT, available at <https://www.aopa.org/-/media/Files/AOPA/Home/Pilot-Resources/Safety-and-Proficiency/Accident-Analysis/Special-Reports/1302aging-pilotreport.pdf> (last visited Oct. 19, 2020).

58. *See id.*

59. Porat & Strahilevitz, *supra* note 44, at 1419–20; *see also* Cass Sunstein, *Choosing not to Choose*, 64 DUKE L. J. 1, 38 (2014).

intestate succession rule would create a default will for each individual.<sup>60</sup> Such a customized rule would save many from the expense of writing an explicit will (including the cost of acquiring advice on its optimal design), and for others the cost of failing to write a will and falling back on a crude, one-size-fits-all division.<sup>61</sup> As a default rule, it will of course allow opt-outs. But except for the few with truly idiosyncratic preferences and stakes, who would want to opt out?

Of all legal devices, default rules should be particularly suitable for personalization. The widely accepted underlying objective of default rules is to mimic the preferences of those they govern so as to save people the cost of opting into an express command. When people have homogenous preferences, a uniform default rule is desirable. But people's preferences and goals often vary widely, as they should in a free society. Personalized default rules, like the intestate succession rule, would recognize and accommodate such heterogeneity by tailoring to each individual her own desired default rule. This enterprise—like any other legal personalization—would be based on the multitude of information indicating the optimal arrangement for each person. An optimal succession would likely vary by sex because there is ample evidence that men bequeath to their spouses a different (larger) fraction of the estate than women do (women tend to give more to the children).<sup>62</sup> It could be based on wealth, marital history, family cohesion, philanthropic commitments, and much more. Other default rules—an organ donation default, a retirement saving contribution rate, and a host of contract law gap-fillers—would be personalized based on other sets of predictors. Privacy protection default rules, for example, would accord greater protection of personal data to people whose online behavior follows more privacy-sensitive patterns.

One of the factors that could inform the personalized default rule is age. Consider again the intestate succession default. There are good reasons for people to change and adjust their bequest preferences and rewrite their wills over the course of their lives. As they grow older, the needs of a surviving spouse often become smaller, while the needs of

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60. Porat & Strahilevitz, *supra* note 44, at 1420.

61. *See id.*

62. Daphna Hacker, *The Gendered Dimensions of Inheritance: Empirical Food for Legal Thought*, 7(2) J. EMPIRICAL LEGAL STUD. 322, 330 (2010).

the children and their offspring grow.<sup>63</sup> A personalized inheritance rule that accounts for age would not only prescribe a different allocation for different people, but it would also adjust for any given person over the course of their life.<sup>64</sup> Importantly, like any other personalized rule that uses age as an input, it will not be the same across all people of an age cohort. Since many other factors affect the personalized rule, each person will have a default rule different than that prescribed to others, and potentially different than the one tailored to them in previous years.

##### 5. ALTERING RULES

Not only the content of the default rule, but also the mechanism for opting out could be personalized, in part according to age. Legal regimes currently subscribe to uniform “altering rules” — rules that determine the procedure necessary to change a default arrangement.<sup>65</sup> Sometimes all that is needed is to click “I Agree” or provide a signature; other times specific warnings or other heightened mechanical rituals must accompany the invitation to opt out. Altering rules vary by context, but they do not vary by person (other than crude variations, for example between consumers and merchants).<sup>66</sup> Personalized altering rules would require different opt-out procedures for different people. For example, people with repeat experience in some aspect of trade should be fitted with a less demanding altering rule. Or, people who are known to make poor decisions may be subject to more demanding altering rules, intended to slow down and even eliminate undesirable opt-out.

It is easy to exaggerate the importance of altering rules in general, and of personalized altering rules in particular. The great majority of default rules in our system are disclaimed by the speed of a click. Entire areas of law — contract default rules, sales law, privacy law, and copyright fair use (to name a few) — are being “deleted” by documents that firms draft and then invite their customers to accept, thereby replacing

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63. Kim Parker & Eileen Patten, *Financial Support Across Generations*, PEW RES. CTR. (Jan. 30, 2013), <https://www.pewsocialtrends.org/2013/01/30/financial-support-across-generations/>.

64. See Porat & Strahilevitz, *supra* note 44, at 1433.

65. Ian Ayres, *Regulating Opt-Out: An Economic Theory of Altering Rules*, 121 *YALE L. J.* 2032, 2036 (2012).

66. See, e.g., *id.* at 2112; see also Porat & Strahilevitz, *supra* note 44, at 1433–34 (discussing a situation where altering rules would vary context rather than by person).

the legally enacted “optimal” defaults.<sup>67</sup> Personalized defaults may be optimal for individuals but not for the firms that transact with these individuals. By getting people to accept the firm-drafted terms, the personalized default rules are de-personalized, replaced by standard (uniform) contract terms. Altering rules may try to slow down this opt-out enterprise, but the experience is not very encouraging so far.

Perhaps some hope lies in the personalization of altering rules. For example, if a lawmaker determines that the warning “by opting out you are waiving an important protection. Think again!” is necessary in some contexts, these contexts could be determined in a personalized manner. An older person may need more of these warnings, perhaps in stronger and more assertive language. Some people may need such warnings for online purchases, others for credit transactions, and others yet for investment decisions. Altering rules could try to be more ambitious, requiring more than “heightened disclosures”—for example, mandating cooling-off periods, pre-opt-out advice, and even costly mechanical rituals.<sup>68</sup> This might make them more effective, but also costlier to those who ultimately opt out. Using such “harsh” altering rules in a selective, personalized way, could bolster their effectiveness and reduce their cost.

## 6. SUMMARY

A march through legal and regulatory techniques demonstrates the various applications of personalized law and the ubiquity of scenarios in which age could be a factor in customizing the legal commands. This exercise in surveying a landscape could quickly become tedious. Hopefully, I stopped it in time before fatigue had set upon the reader. It should now be clear how intensive and extensive this branch of personalized elder law could be. People’s age and other traits of aging already factor into some legal rules, but only sporadically and only in a uniform, one-size-fits-all, manner. Personalization would increase the use of the age factor and bring it into many other legal rules, while measuring the magnitude of its effect more subtly, varying its impact across people.

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67. Oren Bar-Gill & Omri Ben-Shahar, *Rethinking Nudge: An Information-Costs Theory of Default Rules*, U. CHI. L. REV. (forthcoming 2020) (analyzing the phenomenon of uninformed opt out).

68. *See id.*

This exercise already revealed—perhaps inadvertently—how impoverished elder law currently is. Age is factored into shaping legal commands only in a small and eclectic number of contexts. An occasional consumer protection or standard of care may be subject to crude age-treatment. Age may carry valuable information for the optimal implementation of a great many legal rules, information that is presently neglected. Recognizing personalized elder law as a regulatory method, by looking at the range of circumstances in which age could be a tailoring input, is a core contribution of this Essay.

### **B. Age as an Output for Personalized Legal Commands**

The brief trans-substantive survey above examined how personalized rule would utilize age as a factor in calibrating the scope of various legal commands. In this Part, I turn to look at age not as an input into other laws but rather as the legal rule itself. The most important category of such age rules is age-of-capacity laws, which use age as the primary or sole criterion for entry into and exit from an activity. I also look at rules that grant particular accommodation or protection based solely on age.

Unlike the age-as-input facet of personalized law, where age plays a subtle and often behind-the-scenes role in shaping legal commands, age of capacity rules are a blunt form of age law. People simply cannot participate in some activities—such as driving, buying liquor, or serving as president—if they are too young.<sup>69</sup> In other activities—flying commercial planes, firefighting, or acting as an air traffic controller—people cannot participate if they are too old.<sup>70</sup> There is no nuance in these threshold rules. Unless, of course, they are personalized. Personalized law would replace a uniform age barrier with individualized ones, varying across citizens.

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69. U.S. CONST., art. II § 2; National Minimum Drinking Age Act, 23 U.S.C. § 158 (2018); see, e.g., *Graduated Driver License*, IL. SEC'Y STATE, [https://www.cyber-driveillinois.com/departments/drivers/teen\\_driver\\_safety/gdl.html](https://www.cyber-driveillinois.com/departments/drivers/teen_driver_safety/gdl.html) (last visited Oct. 28, 2020).

70. See, e.g., Fair Treatment for Experienced Pilots Act, 49 U.S.C. § 44729 (2018); *Can I Become A Firefighter At 30/40/50? Am I Too Old?*, FIREFIGHTER INSIDER, <https://firefighterinsider.com/can-i-become-a-firefighter-at-30-40-50/> (last visited Oct. 28, 2020); *How to Become an Air Traffic Controller*, U.S. BUREAU LAB. STAT., <https://www.bls.gov/ooh/transportation-and-material-moving/air-traffic-controllers.htm#tab-4> (last updated Sept. 1, 2020).

Consider, first, young age laws like the prohibition against the sale of alcoholic beverages to young people. What if the law used instead of a uniform command—the age of twenty-one for all, was a personalized command reflecting the idiosyncratic risk of engaging in socially dangerous consumptions of alcohol (e.g., by driving drunk)? The idea of tailoring age commands is not entirely novel. Some jurisdictions have tried in the past to enact crude differentiation through statutes that vary the cutoff ages between men and women.<sup>71</sup> The premise underlying such sex-differentiation of age was sound: it is a personal feature that carried important predictive information regarding the maturity needed for safe driving.<sup>72</sup> Insurance companies have ample data supporting this sex-based differentiation of age premise, and indeed they personalize insurance premiums to reflect the differences.<sup>73</sup> But why stop with sex? If other individual features are known to be correlated with the level of maturity, they too should be used to personalize the age-of-capacity law.

A personalized age-of-capacity law would likely rely on a myriad of additional attributes shown to be correlated with the risk the age barrier seeks to reduce. For liquor laws, the personalization algorithm would regard “male” as a factor that pushes the personalized legal age upwards.<sup>74</sup> But this would not be the only factor. People would be identified by other factors known to be associated with the risk. Married people, for example, or those who do not own cars (and thus pose a lower risk for drunk driving) would be subject to a more lenient cutoff age.<sup>75</sup> People’s low-risk score on a host of other measures correlated

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71. OKLA. STAT. tit. 37, §§ 241, 245 (1958 & Supp. 1976) (allowing differential treatment for men and women in age for purchasing alcohol); IDAHO CODE §§ 15-312, 15-314 (repealed 1972) (giving differential treatment to men in appointment as administrator of an estate); 10 U.S.C. § 1072 (1970) (amended 1980) (allowing automatic support for wives of servicemen while requiring servicewomen to prove their husbands’ dependency).

72. See *Craig v. Boren*, 429 U.S. 190, 213 n.5 (1976) (Stevens, J., concurring) (discussing the underlying purpose of OKLA. STAT. tit. 37, §§ 241, 245).

73. See Perry C. Beider, *Sex Discrimination in Insurance*, 4 J. APPLIED PHIL. 65 (1987).

74. See *Alcohol and Public Health*, CTRS. DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/alcohol/fact-sheets/mens-health.htm> (last visited Oct. 28, 2020) (“About 4.5% of men and 2.5% of women met the diagnostic criteria for alcohol dependence in the past year.”).

75. See G Whitlock et al., *Motor Vehicle Driver Injury and Marital Status: A Cohort Study with Prospective and Retrospective Driver Injuries*, 10 INJ. PREVENTION 33, 33 (2004) (“After taking age, sex, and other variables into account, never married people had a substantially higher risk of driver injury than married people.”).

with excessive alcohol consumption, including personality traits like impulsivity, depression, and risk-seeking, will receive additional marginal offsets.<sup>76</sup> Credit card purchases, geo-location records, and driving metrics from car tracking devices could be aggregated and analyzed to further inform the personalized drunk driving prediction.<sup>77</sup> In the end, each citizen will have their own idiosyncratic “report card” and qualify for a different, individualized, age of capacity for purchasing liquor. Moreover, if a person’s score on any of the factors changes—for example, if they buy a car, join the military, or get married—their age of capacity might shift. Indeed, some people who pass their individualized age-of-capacity threshold may subsequently be notified that their threshold shifted upwards as a result of changed circumstance, so much that they might (temporarily) be barred from the purchase of alcohol. In a personalized law regime, a person might have one personalized age-of-capacity cutoff for activity A (alcohol purchase) and a different personalized cutoff for activity B (driving).

Elder age cutoff laws would be subject to the same methodology of personalization for the purpose of computing the mandatory age of exit from an activity or for the imposition of additional screening and supervision for continuing an activity. I mentioned that old age triggers new statutory restrictions on driving or on engaging in various risky occupations. Like young-age rules, presently these age laws employ uniform lines. Personalizing these lines would increase the precision of risk regulation by using predictive factors to identify the subset of riskier older people and placing greater limits only when they are truly necessary.

Age is featured as a legal criterion not only for restrictions, but also for entitlements. A consumer protection law (like the Illinois statute discussed above) could grant specific elevated rights only to people over a certain age, say sixty-five.<sup>78</sup> The statute is a uniform law that treats two populations (those older than sixty-five and those younger than sixty-five) differently, but within each group all are treated alike. Age is the sole factual criterion used to classify the groups. I argued above that personalized law would not need to use age as the single

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76. See *Young Adult Drinking*, NAT’L INST. ON ALCOHOL ABUSE & ALCOHOLISM (Apr. 2006), <https://pubs.niaaa.nih.gov/publications/aa68/aa68.htm>.

77. See Antti Impinen et al., *The Association between Social Determinants and Drunken Driving: A 15-Year Register-based Study of 81,125 Suspects*, 46 ALCOHOL & ALCOHOLISM 721 (2011) (investigating behavioral determinants of drunk driving).

78. See 815 ILL. COMP. STAT. 513/22.

test determining the entitlement and that it could more accurately tailor the protection by also looking at other personal traits. But let us assume that age remains the sole criterion: a person's advanced age accords them the specific privilege. A personalized version of this law would vary the age line across people. Not all sixty-five-year-old consumers need the same cooling-off period for imprudent purchases. A few need it earlier, many need it later. An algorithm calculating an individualized age criterion would use various inputs to differentiate people's needs. An older person with financial training and affluence, paying by credit card (and thus insured against some types of fraud), subscribing to Consumer Reports, who makes repeat purchases, will be fitted with a different age of entitlement (likely older) than one without some of these traits.

In short, the question "what is old age" for the purpose of specific legal treatment need not be given a one-size-fits-all answer. The question is asked in the first place because age is thought to be informative of particular needs and abilities. It is indeed informative, but only crudely. The advent of data analytics could greatly refine the answer to "what is old age," by providing answers that vary by person and by context.

The constitutionality and legality of differential age rules, especially ones directed at older age and requiring mandatory exit from activities—has been increasingly questioned.<sup>79</sup> In the next Part, after briefly reiterating the functional benefits of such differentiation, I turn to examine some prominent objections to personalized age rules, including constitutional questions of equal protection.

#### **IV. The Case for Personalized Elder Law**

Part III described the concept of personalized elder law: a legal system that takes a person's age into consideration in tailoring a specific command. In Part IV, I replace the descriptive lens with a normative one and offer some preliminary thoughts about the value of this legal system. I begin with a synopsis of the advantage of personalized elder law. I then turn to examine some of the possible objections.

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79. See Kohn, *supra* note 18, at 215–38; see generally Govind Persad, *Evaluating the Legality Of Age-based Criteria in Health Care: From Nondiscrimination and Discretion to Distributive Justice*, 60 B.C. L. REV. 889 (2019).

### A. The Advantage of Personalized Elder Law

Personalized treatment is a type of *precision* treatment that could be greatly beneficial in environments in which heterogeneity is deemed relevant. Personalized boots fit better, personalized meals taste better, and personalized holiday cards touch deeper than their one-size alternatives. If we care about fit, taste, or gratification, we should value these improvements. Law is a type of treatment—guiding people’s conduct and resolving their disputes—and it too benefits from precision. Uniform rules and commands, even if optimal on average, are a poor fit for people with diverse preferences, characteristics, histories, and means. The reasonable person standard is a useful imagined benchmark but what is reasonable for one person may not be reasonable for another. Abiding by uniform standards is too costly for some, and too easy for others. It squanders the ability of the skilled to meet higher standards, and it requires wasteful and unproductive efforts by the unskilled.

Age is widely accepted as a relevant and sometimes critical factor in the personalization of various treatments, outside the law. Homes are more useful if personalized to reflect the varying needs of age—from childproofing for the young to installing bathroom grab bars for elders. Entertainment is more appealing when it is age-appropriate and matches generational variations in interests, memories, and tastes. Financial advice is more useful if it accounts for the future needs of the advisee, which of course depend on age. And diets are healthier when adjusted to the slowing metabolism and the systematic changes in bodily activity that occur as we age.<sup>80</sup> In these and endless other areas, it is undeniable that age-tailored treatment is valuable. Ignoring it and treating everyone the same would greatly reduce human welfare, and in many contexts such neglect would be malpractice and even criminal.

In our book *Different Rules for Different People*, Ariel Porat and I demonstrate how personalized rules, including ones personalized by age, improve social welfare.<sup>81</sup> For example, in examining negligence law, we show that adjusting the standard of care to reflect the specific skills and risks of a potential injurer would reduce the costs of accidents. It would also syphon people in and out of dangerous activities

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80. Marie-Pierre St-Onge & Dympna Gallagher, *Body composition changes with aging: The cause or the result of alterations in metabolic rate and macronutrient oxidation?*, 26 *NUTRITION* 152, 152–55 (2010).

81. DIFFERENT RULES FOR DIFFERENT PEOPLE, *supra* note 16.

better than uniform standards. We raise the concern, however, that personalized standards might chill people's incentives to increase their human capital and skills. If a doctor who trains to acquire novel medical skills is then charged with a higher personalized standard of care, they may not make the upfront investment. This concern, we argued, works against some types of personalization but not others. We further caution against relying on factors that people can control and manipulate. People can control their level of skill, and it would therefore be unwise for personalized rules to "punish" them (i.e., treat them more harshly) for training and improving their skills.

This chilling problem does not arise in personalized elder law. Using people's ages to personalize the legal commands, like the standard of care they face, does not create a problem of manipulation because age—like almost no other factor—is immutable. You may decide not to act your age, but you cannot decide not to be your age.

In short, taking age into account in tailoring commands would promote the goals of a law—of any law. It improves negligence law by inducing better levels of care and activity; it improves consumer protection law by allocating rights to those who need them most; it improves default rules by giving people better fallback options and saving transaction costs, and so on. In many areas, these could be massive improvements. We must ask, then, if there are sufficiently weighty reasons to forgo such value. In the next two sections, I examine two of the most profound objections: distributive justice and equal protection.

## B. The Distributive Fairness of Personalized Elder Law

Personalized elder law is *not* age discrimination. It is different from discrimination due to the quantitative magnitude of the differentiating factors used. Both personalization and discrimination prescribe unequal treatment, and statistical discrimination does it—like personalization—on the basis of empirically measured differences. But there is a critical difference. Age discrimination treats people differently on the sole basis of age.<sup>82</sup> Personalization, by contrast, does not differentiate on the basis of a single trait. Personalized law takes age into account, as well as numerous inputs other than age that are statistically relevant. Age discrimination deploys the age factor disproportionately, elevating

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82. *Age Discrimination*, U.S. EQUAL EMP. OPPORTUNITY COMMISSION, <https://www.eeoc.gov/age-discrimination> (last visited Oct. 19, 2020).

its impact and salience. Personalized law may use age as one of the factors—for example, to raise the standard of care imposed on older (or very young) drivers—but it does not treat people of certain age identically. Each is profiled according to multiple other factors.

Still, treating people as individuals in a nuanced personalized manner, based on a multi-factor profile that includes age, does not guarantee that the treatment is just. It is critical that the criteria by which people are differentiated are not only statistically relevant but also morally and politically acceptable. Consider again the distribution of legal duties. Is it fair to raise the standard of care on people based on age, for the very young as well as for the very old, to reflect the different statistical harm that people of a certain age group cause? On corrective justice grounds, it could be entirely appropriate to require people who create higher risks to take higher levels of care.<sup>83</sup> Actors whose conduct imposes relatively high risk to others owe a greater duty to their potential victims. But what about distributive justice? Between different potential injurers, is the unequal distribution of standards justified?

Raising the standards of care on dangerous people may be profoundly problematic if their riskiness score results from poverty or diminished access to primary goods like healthcare, employment, or education. Sometimes people's physical impairments, which make them more "dangerous" (and require, in the personalized law model, heightened standards of care), arise from social and economic deprivation. It would then be unfair to disproportionately burden them with stricter personalized standards, raising their costs of liability insurance, blocking their entry into the activity, and overall aggravating the inequality that already exists and brought them into the "riskier" category.

It is a methodological mistake, however, to evaluate the distributive justice of personalized elder law rule by rule. Personalized rules operate across a multitude of legal areas, and the troubling distributive inequity they cause in one domain could well be offset by their desirable distributive impact in other areas. People of lower economic status may face higher standards of care for some activities, but at the same time they may be entitled to higher personalized consumer protections, more lenient procedural rules, lower traffic fines, and more generous personalized accommodations. Elders may face stricter driving rules and professional qualifications, but these restrictions will be accompanied by many accommodations and privileges.

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83. *Personalizing Negligence Law*, *supra* note 14.

This “global” perspective is particularly compelling in the context of personalized elder law. Treating people differently due to age is not a differentiation *across* people but rather *within* each person. Unlike other factors—sex, income, education, or health—age is a “characteristic” that afflicts everyone. A treatment that varies by age means that any given individual will experience both the upside and the downside of age-differentiation. They will reach an age in which the treatment is less forgiving, but they will also reach an age in which it is more beneficial. Many parents, for example, explain to their young children why an older sibling is subject to a more permissive bedtime rule, or receives a larger allowance, by assuring that in due time the young ones will qualify for the same privileges. The conception of fairness the parents invoke is equality of the *dynamic formula* applied to the siblings. The fact that the formula prescribes graduated commands, and that at any static moment it issues non-uniform treatment, does not make it an unjust scheme. Distributive justice is concerned with treatment across *different persons*, and not across each person’s different *temporal persona*.<sup>84</sup> In this light, taking age into account in personalized elder law is just.

### C. Personalized Elder Law and Equal Protection

The Fourteenth Amendment prohibits the enactment of laws that deny persons “the equal protection of the laws.”<sup>85</sup> Personalized rules distribute different duties and protections to different people, and thus might seem to conflict with this directive. That they may be justified under various conceptions of distributive justice does not suffice to pass constitutional scrutiny.<sup>86</sup> We must ask whether our constitutional system permits differentiation of legal commands based on age. Does it allow, for example, for statutes or regulations to set different age-of-capacity commands for different people? Does it permit such differentiation to be based in part on various sensitive classifications, like sex?

In the past, some states tried to enact laws with a differentiated age of capacity across the sexes. A primary example is alcohol purchase laws that set a higher age threshold for men based on the (empirically

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84. See Omri Ben-Shahar, *A Bargaining Power Theory of Default Rules*, 109 COLUM. L.REV. 396 (2009); Busch, *supra* note 44; Porat & Strahilevitz, *supra* note 44.

85. U.S. CONST. amend. XIV, § 1.

86. See Persad, *supra* note 79.

documented) premise that they pose a greater risk of drunk driving.<sup>87</sup> When Oklahoma enacted such a statute in the 1970s, setting the statutory age at twenty-one for men and eighteen for women based on evidence that young men were almost twenty times more likely to drive drunk, the Supreme Court—in the landmark case *Craig v. Boren*—struck it down, holding that such statistics-based differentiation is forbidden under the Equal Protection Clause of the Constitution.<sup>88</sup> The problem, the Court explained, is pooling all men into the same bin. The law applied the same strict age restriction to all males, even though many of them do not pose the heightened risk. “It does not seem to me,” said Justice Stevens, “that an insult to all of the young men of the State can be justified by visiting the sins of the 2% on the 98%.”<sup>89</sup>

It might seem, upon first reflection, that a personalized age-of-capacity system would aggravate the equal protection concern. In the Oklahoma case, the Court worried about a statistics-guided rule that implements a binary treatment of men and women.<sup>90</sup> The Court may be all the more opposed to a statistics-based rule that implements personalized treatment. The so-called “sin” of differentiating people along one dimension (sex) would be compounded when more dimensions are used to differentiate the treatment, where each dimension is thought to be relevant solely on the basis of an a priori average correlation with the activity’s risk. This opposition will only intensify when some of the added dimensions used for the differentiation are strongly correlated with suspect classifications.

It is hard to imagine that constitutional constraints would block a full-blown personalized elder law, limiting both the use of age as an input in personalizing legal commands as well as using other classifications in personalizing age commands. The Supreme Court has allowed laws to address “the threat of deterioration” in older age, noting that the “unfortunate fact of life that physical and mental capacity sometimes diminish with age” justifies, for example, a mandatory retirement age for certain professions.<sup>91</sup> Still, even if in a particular context a statute or the Equal Protection Clause prohibits age-specific treatment, I argue—counterintuitively—that personalization does not

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87. See, e.g., OKLA. STAT. tit. 37 §§ 241, 245 (repealed 2016) (allowing differential treatment for men and women in age for purchasing alcohol).

88. *Craig v. Boren*, 429 U.S. 190, 197 (1976).

89. *Id.* at 214.

90. See *id.* at 200.

91. *Gregory v. Ashcroft*, 501 U.S. 452, 473 (1991).

heighten equal protection concerns but rather resolves them. Personalization is not the *problem* but rather the *solution* to the Supreme Court's disapproval of statistical treatment.

In *Craig v. Boren*, the Court explained the concern as unfairly pooling all males into one bin. Yes, men are on average more dangerous.<sup>92</sup> But an average is not the proper basis for treatment because it fails to capture the variance: not all men are the same. This is precisely where personalization differs from statistical discrimination. Under a personalized age-of-capacity regime, people are *not* pooled into over-inclusive classes, such as “all young males” or “all people over sixty-five.” For the purpose of alcohol laws, males might (on average) be treated more restrictively than females. But they will no longer be treated *uniformly* harsher. Each male will be characterized by other factors as well and receive an individualized rather than group-based treatment. There is no male “bin”; each person is a bin of one. A data-rich predictive regime, which considers a host of social, behavioral, biological, and experiential data, will come closer to accurately singling out only the subset of young men who need to be restricted by a stiffer age rule. It avoids the “false positives”—the problem of visiting their sins on their fellow harmless males.

Old age laws that treat all people above a certain age in a uniform singled-out manner may raise equal protection concerns, despite the fact that age is not a suspect classification under the Equal Protection Clause.<sup>93</sup> But if they do so in a non-uniform manner—if the age restriction is established not based on average capacity but rather to reflect the best data-rich prediction of personal capacity—the concern of unfairly pooling people into over-inclusive and stigmatizing categories would be diminished. The Supreme Court permits the use of suspect classifications if they are narrowly tailored and part of a holistic approach that classifies people based on more than a yes or no membership in a particular class.<sup>94</sup> It is hard to think of a more holistic approach, using the relevant factors in any narrower manner, than algorithmic personalized law.

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92. See *Craig v. Boren*, 429 U.S. at 200.

93. See *Mass. Bd. of Retirement v. Murgia*, 427 U.S. 307 (1976); *Lerner v. Corbett*, 972 F. Supp. 2d 676 (M.D. Pa. 2013) (showing an attempt to bring an age discrimination claim under the Fourteenth Amendment).

94. See *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003).

## V. Conclusion

Treating people differently by age is a treacherous business. It may lead to stigma and entrench negative attitudes, especially if the differential treatment of elders signals weakness. Requiring older people to drive slower, giving them more consumer protections, or changing the disclosures that they receive—might insinuate impairment and cause shame.<sup>95</sup>

Personalized elder law uses age more, but causes stigma less, than current age-based rules in our legal system. It uses age more—in a dramatic manner. Whereas presently age is used to vary only certain commands (primarily age of capacity rules), under personalized elder law, age could be used to calibrate any legal rule. Part III, Section A surveyed the entire spectrum of legal techniques and showed how each could be transformed into a personalized scheme that takes age into account. But while it uses age more, it causes less stigma, because the role of age is subtle and cumulative, not definitive. Elder age could affect every legal rule, but only marginally so. Unlike current age rules, elders will not be put into one salient bin.

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95. Jennifer A. Richeson & J. Nicole Shelton, *A Social Psychological Perspective on the Stigmatization of Older Adults*, in *WHEN I'M 64*, at 179 (National Academies Press, 2006).