

Legal Rules as a Bias-Counteracting Device

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ABSTRACT

In this paper, I argue that one of the key aspects of law's conduct-guiding role is to serve as a corrective device against several systematic biases present in the settings of activity that law typically regulates. Following a few preliminary remarks (Section 1), I home in on the relevant problems of bounded rationality, drawing, inter alia, on empirical literature in psychology (Section 2). I highlight several systematic biases and explain how law is structurally suited to counteract some of their instantiations in social life. I discuss several doubts emerging from the fallibility of law and from the prospect of debiasing oneself of one's own accord (Subsection 2.2. and Section 3). Finally, I consider some of the implications of my claim (Section 4).

KEYWORDS

legal rules, systematic biases, law-making, legal normativity, practical reason and deliberation

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In his essay *Of the Origin of Government*¹, David Hume brings to light an intriguing link between the justificatory basis of government and the phenomenon nowadays called by social psychologists *systematic biases*². According to Hume, although people have an interest in «the maintenance of order in society», a natural propensity that springs up in their «circumstances and situation» often «hinders [them] from seeing distinctly» that interest and inclines them to act against it³. He argues further that, since the «circumstances and situation» of government do not prompt the above propensity, people can resort to government as an «expedient» against that propensity⁴. While Hume's primary focus is an actor's deliberation in view of his or her interest, the pattern observed by Hume is extendable to an actor's deliberation on how he or she ought to act from the perspective of equity and morality—an extension that, if valid, lends further significance to the observed pattern.

Since Hume's essay, however, systematic biases have generally not occupied a salient place in political and legal theory discourse about the justification, role, and normative significance of political and legal authority⁵. While I can surmise what has caused this omission, tracing its causes is not my aim here. My aim, instead, is to help rectify the omission. In doing so, I will focus particularly on the context of law and legal rules; I will seek to benefit from modern empirical work in psychology regarding biases; I will attempt to broaden the range of biases taken into account; and I will highlight some of the implications of the observed link between law and biases. I should add, without wishing to detract from my opening tribute to Hume, that notwithstanding my affinity with some of his intuitions, my argument hereunder is a self-standing argument that is put forward for independent consideration.

Stated more specifically, my purpose is to illustrate that one of the key functions of legal guidance of conduct (in its appropriate use and legitimate instantiations) is to serve as a corrective device against several systematic biases present in the settings of activity that law typically regulates⁶. I will begin with a few clarificatory comments essential for understanding my claim (Section 1). I will then bring into focus several relevant biases and explain how law—

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¹ HUME 2007 [1740], 324-345 [SB534-SB539].

² Instead of the term *bias*, Hume uses terms such as *propensity*, *propension*, or *inclination* (HUME 2007 [1740], 343-344 [SB535-SB537]).

³ HUME 2007 [1740], 344 [SB538].

⁴ HUME 2007 [1740], 344 [SB537].

⁵ That is not to suggest that no work has been carried out on the link between law and biases. Some notable work has been done, especially by scholars of regulation and behavioural economic analysis of law. See, e.g., FARNSWORTH 2003; JOLLS & SUNSTEIN 2006; ZAMIR 2015; THALER & SUNSTEIN 2021.

⁶ The word “serve” in the accompanying body text might evoke Joseph Raz's “service conception” of authority (RAZ 1986, 36-80). I have discussed Raz's service conception of authority and explained how my approach differs from it elsewhere (see, e.g., GUR 2018, 21-70, 127-130, 155-156, 213-218).

and, particularly, legal rules—is structurally suited to counteract some of their common instantiations in social life (Section 2). I will discuss possible doubts arising from several factors, such as the corrupting capacity of power, social injustice facilitated by law, law-generated errors, and the prospect of debiasing oneself of one’s own accord (Subsection 2.2. and Section 3). I will conclude with some remarks about the implications of my claim (Section 4).

1. *Preliminary comments*

I should first clarify that my claim will *not* be that law can counteract certain biases because law-making officials tend to be persons less amenable to them (which is, of course, not the case). Instead, law’s comparative advantage in this regard—though dependent for its realization on the reasonable personal competence of the law-makers involved—will be attributed to certain *structural* characteristics of legal norms and of the settings and mode of decision-making in which law-makers typically operate. I will explain shortly what these structural characteristics are. At this point, I only wish to emphasize that my claim does not revolve around a personal comparative advantage and that my analysis will recognize, and take into account, the fallibility of law-making officials.

The above comment must be complemented by a further important caveat. Nothing I will say in this paper should be read as a claim that all instances of law, or all legal systems, fulfil a bias-counteracting function⁷. Nor will I claim that legal officials or systems can fulfil this function without meeting certain prerequisites in addition to their being legal. Although the said bias-counteracting function owes its existence primarily to structural attributes of law, this function is not likely to be fulfilled if the relevant law-making officials fail to satisfy some prerequisites of competence and moral decency, or if the relevant legal system fails to pass a threshold of reasonable quality. Thus, for example, if the relevant officials have no regard for the interests of the law’s subjects, these officials are not likely to make good use of law’s potentially beneficial structural attributes. Nor are they likely to do so if they (or, as the case may be, the advisors on whom they rely) are not reasonably judicious and reasonably informed about the regulated domain of activity. These examples are not intended as an exhaustive list of the relevant prerequisites. They are merely intended as illustrations of the general caveat just entered. Before turning to the next comment, the conjunction of the last two points can be summed up thus: the bias-counteracting capacity highlighted herein is not *rooted* in system-specific or personal characteristics, but it does *depend for its realization* on the reasonable quality of a legal system and on the possession of certain personal attributes (e.g. reasonable degrees of knowledge, understanding, and judiciousness) by those involved in law-making.

A third clarificatory comment is about the conditions that warrant recourse to the bias-counteracting function of law (assuming that the legal officials and system involved meet the prerequisites noted in the previous paragraph). None of my arguments hereunder is intended to imply that the presence or influence of the relevant biases is *sufficient* to warrant the law’s intervention. Invoking the rather heavy machinery of law is a course of action that often implicates significant costs and adverse effects, such as the restriction of individual liberty⁸, the potential emergence of a legalistic culture⁹, and enforcement costs—all of which must be taken

⁷ “Legal” in the accompanying body text is meant to imply, *inter alia*, a requisite degree of compliance with the precepts of legality expounded by Lon Fuller, also associated with the label the *rule of law* (FULLER 1969, 33-38, 46-91). According to Fuller, a total failure to comply with any one of those precepts results in something that is not a legal system properly so called (FULLER 1969, 39).

⁸ Or, at least, what Isaiah Berlin called negative freedom (BERLIN 1969, 118-172). Relevantly, Berlin refers there to Hobbes’s characterization of law as a “fetter” (see HOBBS 1991a [1642], 274).

⁹ In this connection, see, e.g., Leslie Green’s discussion of what he calls the vices of legalism (GREEN 2008, 1058).

into account when legal intervention is considered in response to a problem, including the problem of bias-induced errors. Thus, to justify recourse to law as a bias-counteracting device in a given context of activity, it must be shown, not only that human decision-making in that context is influenced by bias, but also that the resulting errors are consequential or common enough (or both) to outweigh the negative effects of deploying the legal apparatus. Now, there is a further dimension to this calculus. Counter-bias regulatory action need not always take the form of rules that dictate the behaviour of biased actors. There are softer or less direct forms of regulatory intervention in response to bounded rationality problems¹⁰. Thus, an adequate assessment of regulatory intervention is not simply binary—i.e. intervention vs. non-intervention—but one that takes into account alternative types of regulatory action and their associated pros and cons. The balance of pros and cons may vary between alternative types of regulatory action because they may differ, for example, in terms of how costly, intrusive, restrictive, and effective they are. I will revert to this issue in due course.

A fourth comment concerns the non-exclusivity of the said function of law. As indicated by my wording at the outset (i.e. “one of the key functions”)¹¹, by no means do I intend to suggest that counteracting biases is the only, or the only important, function of law. Nor is it my claim that the problems addressed by law when it counteracts biases are *sheer* problems of bias. I readily acknowledge that law has other important functions, such as correcting for informational deficiencies, facilitating social coordination, extricating actors from prisoner’s dilemma-type situations, upholding schemes of social cooperation, and generating common normative frameworks in the face of ideological and moral disagreements. And I also acknowledge that such functions are often performed in conjunction with the bias-counteracting function. In other words, the problems that law addresses when it counteracts biases are, for the most part, problems wherein other difficulties (e.g. difficulties of coordination, cooperation, and deficient information) are *entwined with* systematic biases. This entwinement will be made visible through some of my illustrations in Section 2.

Given the cognitive-science focus of this volume, a final preliminary word should be devoted to the relationship between biases and cognition. Are biases a cognitive phenomenon? They are a cognitive, but not purely cognitive, phenomenon. At least some biases (including some of those I will discuss here) are linked with both cognitive and motivational factors¹². They have cognitive effects, such as their influence on how we perceive and interpret relevant factual information and reasons for or against an action. But the sources and triggering conditions of these biases are partly motivational—as is the case, for example, when self-interest motivations manifest themselves in the form of a self-serving bias. Thus, biases can be classified as a partly cognitive and partly motivational phenomenon. The dual character of biases has significant implications, *inter alia*, for law’s normativity—implications that I will highlight in Section 4 below and have discussed at greater length elsewhere¹³.

¹⁰ See, e.g., JOLLS & SUNSTEIN 2006 (distinguishing between, on the one hand, debiasing strategies that insulate outcomes from the effects of bounded rationality and, on the other hand, strategies that alter the bias-triggering situation or environment in an attempt to steer people in more rational directions, which they call *debiasing through law*); THALER & SUNSTEIN 2021 (advancing the notion of *nudge*, namely the design of choice environments in (not restrictive or incentive-based) ways that facilitate better decisions).

¹¹ In the third paragraph.

¹² See, e.g., PYSZCZYNSKI & GREENBERG 1987; KUNDA 1990; DITTO & LOPEZ 1992; DUNNING 2001; DAWSON et al. 2002; BALCETIS & DUNNING 2006; DUNNING 2015.

¹³ GUR 2018, 121-130, 163, 165, 215-216.

2. Systematic biases and legal guidance

Before turning to the relevant biases, notice should be taken of two distinctions that will inform the discussion. These are, more specifically, two structural differences between the typical environment and mode of decision-making of subjects in everyday activity on the one hand, and of law-makers operating in their capacity as such on the other. The qualifier “typical” is important because the differences I am about to highlight mark no more than approximate tendencies, ones that shade into each other in more than one way. But they are tendencies that nonetheless have significant implications for our discussion. The two distinctions are as follows. (1) In the course of everyday activity as ordinary citizens, many (though not all) of our decisions are, in the operative sense, decisions about *our* actions. Law-makers operating in their capacity as such, on the other hand, typically decide about actions of a general class of people. There is, if you like, a directional difference between these modes of decision-making: the former often consists in a decision whose operative content is first-personal, whereas the latter’s operative content (e.g. a rule drafted or voted on) is paradigmatically addressed to a general class comprised almost entirely of other actors¹⁴. (2) Private decision-making, especially in the course of everyday activity, is often (though, again, not always) *particularistic* in character. Decisions made by a citizen in the practical settings of day-to-day life are often decisions about how to act here and now. The private decision-maker in these settings is therefore placed in relatively close proximity to situational stimuli. On the other hand, the type of decision-making in which legislative and regulatory authorities are engaged is primarily *non-particularistic*. Decisions made by legislators and regulators are characteristically general (not only in the aforementioned sense of their class of addressees, but also regarding the class of circumstances encompassed)¹⁵ and prospective in application—they are intended to apply to future action¹⁶. Such public officials are placed in decisional settings that are relatively distant from the specificities of each and every case that falls within the purview of their decisions. These distinctions provide relevant background for the argument below, as they will make it easier to appreciate how, in certain contexts of activity where individual decision-making tends to be affected by certain types of bias, legal modes of regulation offer a suitable remedy.

2.1. Self-enhancement bias

The directional difference highlighted above between modes of decision-making—i.e. decisions directed at self/others—brings into play two types of bias with special pertinence to this inquiry. They will be discussed in turn in this and the following subsection. The first type, known to psychologists as the *self-enhancement bias*¹⁷, tends to emerge when people evaluate their

¹⁴ There is an obvious sense in which a law-maker’s decision is also self-personal, in that it can be framed in terms such as: “should I (i.e. the law-maker) put forward this or that rule?” or “how should I vote in a parliamentary proceeding?” However—and this is the sense in which it is not self-personal—the rule he or she is putting forward or voting on is addressed to a general class comprised almost entirely of other actors. This latter fact has significant implications for our purpose.

¹⁵ See, e.g., ARISTOTLE 1984, 1795-1796 [1137b]; HART 2012, 21; FULLER 1969, 33-34, 46-49. The case of judicial decisions is more complicated in this respect. Unlike private decisions, they are exclusively addressed to others; but unlike typical legislative and regulatory acts, they are particularistic in that they are primarily addressed to specific, named individuals (or corporations) and concern specific disputes. However, to the extent that judicial decisions have binding force as precedents for future cases, their function bears some resemblance to that of legislative or regulatory acts. Another relevant difference between judicial and private decision-making is that the former is paradigmatically about past events. In this sense, it takes place in conditions more conducive to careful and reflective decision-making than are the normal conditions in which daily decisions on immediate actions are made.

¹⁶ See, e.g., FULLER 1969, 35, 51-52.

¹⁷ See, e.g., BAUMHART 1968, 20-25; LARWOOD & WHITTAKER 1977; SVENSON 1981; BROWN 1986; KRUGER & DUNNING 1999; ZHAO 2021. See also CROSS 1977, 8-12.

own performance and skills in comparison with those of others. In this context, more often than not, judgement seems to be compromised by inner motives for upholding one's self-esteem¹⁸, resulting in a pattern documented in several empirical studies under the label the *better-than-average effect*: most people rate their performance and skills as better than those of the average person, with a disproportionately large percentage placing themselves towards the top end of the comparative scale¹⁹. Thus, for instance, experimental evidence suggests that the majority of drivers consider themselves to be more skilful and less dangerous than most other drivers²⁰. And a similar pattern of self-appraisal inflation has been identified through surveys pertaining to other personal traits and skills, and different domains of activity, such as self-assessment of ethical conduct in business²¹, managerial abilities²², academic teaching performance²³, and logical reasoning²⁴.

One important implication of these findings is that they help explain why legal systems need to regulate some of the matters they commonly regulate. The fact that most drivers tend to overestimate their driving skills and underestimate their dangerousness as drivers, for example, is part of what makes it sensible to have the road traffic safety laws that we find in so many jurisdictions. If no legal speed limit, overtaking restrictions, drink-drive limitations, rules about multitasking while driving, tailgating prohibition, and other similar rules were in force, and drivers were to individually decide on these matters, they would frequently fail to take into account the full extent of their shortcomings and the actual limits of their abilities as drivers. In such a state of affairs, there would be too many wrong decisions on the part of too many drivers²⁵. This problem can be overcome by recourse to legal regulation, partly because the judgement exercised by law-makers will turn on how *they* estimate the driving skills of *other people* (i.e. the ordinary driver), rather than on how any given driver estimates his or her own skills. This is not to suggest that the self-enhancement bias—or biases more generally—fully explain the recourse to traffic regulation or that other factors are insignificant. The explanation features other important considerations, including, notably, the need for coordination between road-users. This illustrates my preliminary comment that the biases countered by law are typically entwined with other difficulties. Now, reverting to the self-enhancement bias, its role in the traffic rules example can be generalized. It is applicable to other contexts of regulation wherein significant stakes are attached to the manner in which people perform an activity and their the manner of performance is thought to depend on characteristics such as skills, knowledge, or understanding—including, for example, regulations concerning safety in work environments, product safety, construction standards, hygiene standards for food businesses, the positioning of outdoor electricity lines and cellular base stations, domestic use of substances such as pesticides and herbicides, storage and disposal of hazardous materials, and so on.

¹⁸ Along with other, cognitive and situational factors—see DUNNING et al. 1989; ALICKE et al. 1995; KRUGER & DUNNING 1999; KRUGER 1999; DUNNING et al. 2003.

¹⁹ See citations in fn. 17.

²⁰ SVENSON 1981. See also PRESTON & HARRIS 1965; DELHOMME 1991; HORSWILL et al. 2004; WAYLEN et al. 2004; DOGAN et al. 2012; STEPHENS & OHTSUKA 2014.

²¹ BAUMHART 1968.

²² LARWOOD & WHITTAKER 1977.

²³ CROSS 1977.

²⁴ KRUGER & DUNNING 1999, 1124–1125. This may evoke Hobbes's remark that «such is the nature of men, that howsoever they may acknowledge many others to be more witty, or more eloquent, or more learned; Yet they will hardly believe there be many so wise as themselves: For they see their own wit at hand, and other mens [*sic*] at a distance» (HOBBES 1991b [1651], 87).

²⁵ On the influence of the better-than-average effect/self-enhancement bias on driving decisions and behaviour, see, e.g., MÁIREAN & HAVÁRNEANU 2018.

2.2. *Self-serving bias*

The second type of relevant bias—self-serving bias—tends to emerge when people exercise judgement about questions of equity that bear on their own interest. In these situations, more often than not, people perceive relevant facts and principles in a manner somewhat beneficial to themselves²⁶. Thus, even if the decision stems from a process of reasoning that is not wittingly egoistic, excessive weight is nonetheless likely to be assigned to those considerations that coincide with the deliberating actor's needs and wants at the expense of other relevant considerations. As Albert Venn Dicey succinctly described it: «[M]en come easily to believe that arrangements agreeable to themselves are beneficial to others. A man's interest gives a bias to his judgment far oftener than it corrupts his heart»²⁷.

Consider, as relevant evidence, the results of an experiment in which students were asked to make fair judgements about the remuneration that should be given to them and to others for different amounts of working hours as exam readers²⁸. The questionnaires administered to one group of participants premised that they had worked seven hours, whereas another student had worked ten hours (Self=7, Other=10). The questionnaires administered to another group of participants premised the reverse, namely that they had worked ten hours, whereas another student had worked seven hours (Self=10, Other=7). The results revealed a clear bias towards overpayment to self. For instance, there was a significantly higher rate of participants in the former (Self=7, Other=10) group than in the latter (Self=10, Other=7) group who consistently replied that fairness requires that equal payments be made to themselves and to the other student (despite the difference in working hours)²⁹. Moreover, among participants who did not consistently opt for an equal payments outcome as the fairest, the gap between payment to self and payment to other was significantly larger in the latter (Self=10, Other=7) group than in the former (Self=7, Other=10) group³⁰.

The tendency reflected in such findings ties in with some of the central roles law fulfils in social life. Consider, for example, the regulation of conduct pertaining to common resources or goods such as fresh water, pasturage, parks, beaches, rivers, and other parts of the environment. Or think of laws levying taxes to finance the provision of public or common goods such as national defence, sanitation, roads, and railways. If such matters were left unregulated and each citizen were to decide what he or she ought to do in the way of protecting those goods or resources, and how much to contribute to their sustenance, there would arise, among various other problems³¹, the problem of self-serving bias³². That is, many citizens, even those who would not act in a deliberately selfish way, would tend to perceive the facts and to balance reasons for actions in a manner somewhat overly sensitive to their individual circumstances and needs, and would thus tend to exempt themselves too often from sharing collective burdens³³.

²⁶ MESSICK & SENTIS 1979; MESSICK 1985, 94-100; THOMPSON & LOEWENSTEIN 1992; BABCOCK & LOEWENSTEIN 1997; DAWSON et al. 2002. See further POGARSKY & BABCOCK 2001.

²⁷ DICEY 1914, 15.

²⁸ MESSICK & SENTIS 1979.

²⁹ MESSICK & SENTIS 1979, 428, 432.

³⁰ MESSICK & SENTIS 1979, 428-29, 432.

³¹ For example, coordination difficulties, lack of information about collective needs, and deliberate egoism.

³² There is, of course, an extent to which self-serving bias may operate even after regulation has been introduced, namely as a cause of non-compliant behaviour. But, notwithstanding this limitation, the role played by law in diminishing and attenuating the operation of self-serving bias remains significant and crucial. In Section 4, I will refer to a conception of legal normativity that I consider to be integral to law's ability to fulfil this role.

³³ Cf. John Locke's comment that in the state of nature «though the law of nature be plain and intelligible to all rational creatures; yet men being biased by their interest . . . are not apt to allow of it as a law binding to them in the application of it to their particular cases» (LOCKE 2003 [1689], 325 [ch. IX, para. 124]).

Legal regulation suggests itself as a suitable measure of solving, or significantly attenuating, this problem³⁴, not least because of its typically generic character—that is, because the paradigmatic mode of decision associated with it is decision directed at the public at large couched in general rules, rather than a decision about this or that person³⁵.

I should add, parenthetically, that the use of common resources may also involve what Garrett Hardin famously labelled the *tragedy of the commons*³⁶, namely situations where unrestricted access to such resources is destined to result in their depletion or ruin. However, the range of situations that elicit the self-serving bias is wider than the tragedy of the commons-type situations³⁷. Moreover, these two problems are associated with different modes of deliberation: the tragedy of the commons, as characterized by Hardin, focuses on self-interested rational deliberation, whereas self-serving bias occurs in deliberation that is not wittingly selfish, such as judgement of morality or equity³⁸.

A possible challenge to the above claim should be mentioned and addressed at this point. Law-makers and other legal officials, it may be argued, are themselves susceptible to certain forms of bias associated with their position and power. As Lord Acton famously noted, «power tends to corrupt»³⁹, and, as various critical legal theorists argued, there are patterns of legal thought and practice that facilitate social injustice through their tendency to preserve or reinforce the domination of traditionally powerful groups in society (e.g. in terms of economic class⁴⁰, gender⁴¹, or race⁴²). Now, I do not deny that such ill patterns exist, to a varying extent, in legal and political systems⁴³, and can interfere with law's proper functioning against individual self-serving bias. But they do not invalidate my foregoing argument about law's ability to correct for this bias, for the following combination of reasons.

To begin with, it should be borne in mind that a respectable legal and political system will have in place several safeguards that mitigate the fallibilities associated with legal and political power. And in my preliminary comment at the outset regarding requisite conditions for the law's ability to counter biases, I envisaged, as one of the relevant prerequisites, the presence of such safeguards⁴⁴. These include, for example, constitutional protection of civil and political rights (including rights that facilitate social and political change, such as freedom of speech and assembly), institutional checks and balances between separate branches of government, a

³⁴ I use the more qualified wording “significantly attenuating”, because, as noted in fn. 32 above, law cannot entirely avert all relevant manifestations of self-serving bias. In this connection, it should also be noted that the use of law must be accompanied by other means such as the cultivation of civic awareness and conscientious attitudes among members of society.

³⁵ This is not to deny that, in some contexts, “the invisible hand” of the market can effectively operate so that self-interested individual behaviour will incidentally promote collective welfare. The above discussion, however, focuses on other types of situation, in which a regulatory vacuum is not likely to produce collectively desirable results.

³⁶ HARDIN 1968. Among other resources, Hardin notably draws on LLOYD 1883. For a relevant literature review, see MESSICK, BREWER 1983. On the operation of self-serving bias in this context, see, e.g., WADE-BENZONI et al. 1996. And on additional biases in this context, see THOMPSON 2000.

³⁷ The former, unlike the latter, is not limited to situations wherein the potential risk is of depletion or ruin of a common resource.

³⁸ Hardin does consider and rules out the possibility of averting the tragedy of the commons through «an appeal to conscience» (HARDIN 1968, 1246-1247). But this is a merely subsidiary element of his argument, and it is discussed with a rather narrow focus on evolutionary considerations.

³⁹ In his letter to Bishop Mandell Creighton, 5 April 1887 (DALBERG-ACTON 1949, 364). But cf. DECELLES 2012.

⁴⁰ See, e.g., HORWITZ 1977; TUSHNET 1978; ABEL 1998.

⁴¹ See, e.g., TAUB & SCHNEIDER 1998; MACKINNON 1983; MACKINNON 1987; MOSSMAN 1987. Cf. HUNTER 2012.

⁴² See, e.g., BELL 2008; CRENSHAW et al. 1995; DELGADO & STEFANCIC 2013.

⁴³ Though it should also be kept in mind that law can play an important role in combating such patterns through equality laws, both directly and by means of its expressive effect. For a recent relevant study, see ALBISTON & CORRELL 2023.

⁴⁴ Though I was only partly explicit about it (in fn. 7 above).

reasonable degree of adherence by officials to “the rule of law” constraints on the exercise of power, and a reasonable level of compliance with rules of due process, transparency, and accountability. However, such safeguards, and rights in particular, have themselves been a target of critique by several CLS scholars⁴⁵, in the light of which it becomes especially important to delineate my modest claim in this regard: it is readily conceded that such safeguards are effective only up to a point, and may even have certain negative effects (e.g. insofar as their associated rhetoric can work to conceal or blind us to existing patterns of social injustice). It is only claimed here that, on balance, such safeguards make a beneficial contribution towards constraining and reducing the possibility for power abuse. Or, to put the point differently, if I had to choose between living with these safeguards or living without them, I would emphatically choose to live *with* them, despite their shortcomings.

What about the remaining extent of inequity that even worthwhile legal and political systems (with the above safeguards in place) may harbour? There is a risk that this measure of inequity will work its way into law’s envisaged operation against self-serving bias. But this risk does not *negate* law’s ability to correct for self-serving bias. Nor does it mean that society should, or reasonably can, dispense with this function of law. For a state of affairs wherein matters such as the use of common goods, the allocation of collective burdens, and the trade-off between mutually incompatible individual liberties would all be left unregulated by law hardly appears a palatable option—and is, at any rate, worse than having such matters regulated by a reasonably well-designed legal system that attains a significant, albeit deficient, level of social justice. To try to address the shortfall in social justice by renouncing law’s regulatory role would be, as the idiom goes, to throw the baby out with the bathwater. A better way forward is to advance the law towards a higher attainment of social justice through a combination of political, legal, and civil action, employing either conventional tools or, insofar as necessary, tools that lie «at the outer edge»⁴⁶ of fidelity to law, such as (non-violent) civil dissent⁴⁷.

2.3. *The availability heuristic and its biasing effect*

Another pertinent type of bias emanates from a cognitive mechanism labelled by Amos Tversky and Daniel Kahneman the *availability heuristic*⁴⁸. These two renowned psychologists have shown that people’s intuitive estimations of the probability of events are influenced by availability, that is, the ease with which instances or associations of the relevant event come to one’s mind⁴⁹. Availability is indicative of the probability of events, since frequently occurring events have, *ceteris paribus*, better chances to be noticed than infrequent ones, and, to this extent, they are likely to be better recalled and easier to imagine⁵⁰. Availability, therefore, can function as a heuristic device that reduces complex tasks of probability computation to simpler mental operations⁵¹. However, despite its general utility, the availability heuristic is subject to significant limitations⁵². First, there is an obvious sense in which the connection between frequency of occurrence and availability is merely probabilistic and less than conclusive: while a frequently occurring event is likely to be discerned by people and register in their minds, it is always possible that some individuals have never, or rarely, or not recently, experienced or witnessed it, which means that it

⁴⁵ See, e.g., TUSHNET 1993.

⁴⁶ RAWLS 1999, 322.

⁴⁷ RAWLS 1999, 319-323, 326-331.

⁴⁸ TVERSKY & KAHNEMAN 1973; TVERSKY & KAHNEMAN 1974.

⁴⁹ TVERSKY & KAHNEMAN 1973, 207-208.

⁵⁰ TVERSKY & KAHNEMAN 1973, 208; TVERSKY & KAHNEMAN 1974, 1127.

⁵¹ TVERSKY & KAHNEMAN 1974, 1124. This may be especially useful in everyday dealings where people only have a limited amount of time and energy for investigation prior to action and may not have relevant statistical data on hand.

⁵² TVERSKY & KAHNEMAN 1974, 1124.

may have low availability from their perspective⁵³. For example, young people may have relatively little exposure to the occurrence of diseases linked with age⁵⁴. If availability exerts powerful influence on probability judgements, it may render them, as it were, prisoners of their own experience who underestimate the likelihood of developing such diseases in the future⁵⁵. Second, availability is affected by additional factors not related to frequency of occurrence, such as how vivid and salient the relevant event is⁵⁶. For example, terrorist attacks are more dramatic and tend to make more of a news item than do road accidents, and thus may well have increased cognitive availability⁵⁷. By allowing such attributes to impinge on how we perceive the likelihood of events, the availability heuristic leads to systematic deviations from correct statistical assessment⁵⁸. It has, in other words, a biasing effect.

That these biases permeate people's evaluations of probability has been demonstrated in several experimental studies. In one experiment, for example, participants were presented with one of the letters K, L, N, R, V in each trial, and were asked whether randomly selected words from a standard English text are likelier to be words beginning with that letter or words wherein that letter appears third⁵⁹. Each of the above letters is, in fact, likelier to appear as the third letter in a word. However, it is easier to think instantly of words that begin with these letters, which is to say that they have greater cognitive availability. The results attested to a biasing influence of this factor: of 152 participants, 105 thought that the majority of the above-listed letters are likelier to appear at the beginning of a word⁶⁰. In another experimental study, in which participants were asked to estimate the frequency of different fatalities⁶¹, significant over- and underestimations, many of which seem to mirror a biasing effect of availability, were made by the participants⁶². Overestimations often pertained to fatalities by dramatic and vivid causes—for example, floods, tornadoes, and venomous bites or stings—whereas underestimations often pertained to “quiet killers” that hardly attract public attention—for example, death from leukaemia, emphysema, diabetes, and heart disease⁶³.

The notion of availability-related bias can offer further insight into the type of practical difficulties law aims to overcome in various domains of regulation. We often rely in daily reasoning on subjective assumptions or intuitive estimations regarding the likelihood of desirable outcomes, potential ramifications, and possible harms associated with alternative courses of

⁵³ There are, of course, also indirect means of communication by which impressions can be conveyed, e.g., television and social media. But it is not clear how much these do to correct the potentially distorting influence of availability, and it is possible that they sometimes even reinforce it. For one thing, frequency of occurrence does not seem to be one of the leading criteria by which television broadcasters select their reported items (see body text accompanying fn. 57). And it is also conceivable that some of the phenomena observed in the context of social media, such as the so-called echo chamber effect, have availability-limiting/distorting effects.

⁵⁴ LICHTENSTEIN et al. 1978, 575.

⁵⁵ LICHTENSTEIN et al. 1978, 575; TVERSKY, KAHNEMAN 1973, 230; SUNSTEIN 2002, 33. The availability heuristic can, to some extent, affect even the clinical judgement of physicians (see, e.g., LY 2021). See further on availability and the perception of disease likelihood, SHERMAN et al. 1985.

⁵⁶ TVERSKY & KAHNEMAN 1973, 228-229; TVERSKY & KAHNEMAN 1974, 1127.

⁵⁷ SUNSTEIN 2002, 50-52. See more generally SUNSTEIN 2002, 33-35, 78-98.

⁵⁸ TVERSKY & KAHNEMAN 1973, 209; TVERSKY & KAHNEMAN 1974, 1127.

⁵⁹ TVERSKY & KAHNEMAN 1973, 211-212.

⁶⁰ TVERSKY & KAHNEMAN 1973, 212. Furthermore, each of these letters was thought by a majority of the participants to be likelier to appear at the beginning of a word than as the third letter in it. The study included additional experiments denoting a similar tendency.

⁶¹ LICHTENSTEIN et al. 1978. See discussion in SLOVIC 2000, 106-107; SUNSTEIN 2002, 34.

⁶² LICHTENSTEIN et al. 1978, 562-571; SLOVIC 2000, 106-107.

⁶³ LICHTENSTEIN et al. 1978, 562-567; SLOVIC 2000, 107. A corresponding tendency appeared when participants were given pairs of lethal events and were asked which is the more frequent event in each pair: the bulk of them, for example, incorrectly judged road accidents to be a more frequent cause of death than stroke, and homicide to be more frequent than suicide (LICHTENSTEIN et al. 1978, 553-559).

action. So it should be clear in light of the above discussion that bias linked with the availability heuristic can readily find its way into practical decision-making and lead us to sub-optimal action. And when the subject of our decision or the setting in which we make it is highly susceptible to such bias, this may significantly strengthen the case for regulatory intervention⁶⁴. Thus, for example, a miner, builder, technician, or factory worker may be continually exposed in the course of their work to noise, dust, radiation, or other unhealthy agents that, although not causing immediately noticeable harm, have detrimental effects in the long term. Given their gradual and unspectacular *modus operandi*, the risks associated with such physical or chemical agents may have low cognitive availability from the perspective of the worker and their employer⁶⁵. So, if left to their own devices to freely determine what precautions to take or whether to purchase a related insurance policy, the worker and their employer are prone to overlook or underweight the above types of risk, and thus fail to take the appropriate measures⁶⁶. Legal regulation often provides a suitable way to avert such failures, partly because the normal design of law-making systems and procedures allows scope for less visceral probability evaluations, which are thus less vulnerable to the biasing influence of the availability heuristic. Law-making officials who contemplate occupational safety and health requirements, or compulsory insurance schemes for certain work environments, will be expected, and will normally have the time and resources, to initiate a methodical risk assessment that relies on statistical evidence⁶⁷.

2.4. *Intertemporal choice and hyperbolic discounting*

The fourth type of bias worth considering is the tendency to overvalue imminent rewards at the expense of long-term rewards, also known in behavioural science as *myopic* or *hyperbolic discounting*⁶⁸. Daily life manifestations of this tendency are ubiquitous. «Imagine», as Richard Herrnstein writes, «that we could always select meals for tomorrow, rather than for right now. Would we not all eat better than we do? We may find it possible to forgo tomorrow's chocolate cake or second helping of pasta or third martini»⁶⁹. When it comes to the meal at hand, however, this becomes harder, and often the temptation of such instant gratifications prevails over concerns for our health and figures. As Hume put it:

«In reflecting on any action, which I am to perform a twelve-month hence, I always resolve to prefer the greater good ... But on my nearer approach ... [a] new inclination to the present good springs up, and makes it difficult for me to adhere inflexibly to my first purpose and resolution. This natural infirmity I may very much regret, and I may endeavour, by all possible means, to free myself from it»⁷⁰.

⁶⁴ This is not to suggest that people could or should generally dispose of the availability heuristic. The point, instead, is that this heuristic should not be settled for in specific situations where (1) it predictably produces errors that are consequential or common enough (or both), and (2) more accurate assessment methods can be relied upon with comparatively small costs and minimal adverse effects.

⁶⁵ Of course, there are additional sources of difficulty in the foregoing situation. Importantly, the employee is often less able than is the employer to finance measures such as safety adjustments to the work environment and an adequate insurance coverage, or to insist that such measures be taken. And the employer's interest in taking such measures is often not equal to that of the employee.

⁶⁶ There are also cases in which availability produces the opposite effect. For example, a recent experience of an accident, or overly dramatic news reports about a certain peril, may lead to exaggerated fears and unduly deter people from engaging in a normal activity (SUNSTEIN 2002, 33-35, 50-52, 78-98).

⁶⁷ The availability heuristic is not the only source of errors in people's intuitive perception of risks and probabilities. For a discussion of related error-producing cognitive and emotional phenomena, see SUNSTEIN 2002, 28-49. See also GUTTEL & HAREL 2005.

⁶⁸ See, e.g., AINSLIE 1975; HERRNSTEIN 1990; WINSTON & WOODBURY 1991; KIRBY & HERRNSTEIN 1995; KIRBY 1997.

⁶⁹ HERRNSTEIN 1990, 359.

⁷⁰ HUME 2007 [1740], 343-344 [SB536].

This tendency has been tested empirically with quantifiable rewards, such as monetary payments. In this context, the mere observation that people discount value from delayed monetary payments is not regarded as evidence of irrational tendencies⁷¹. For this behaviour is sometimes justifiable by factors like the risk of future frustration or default (due to the debtor's death, bankruptcy, forgetfulness, etc.) and the prospect of interest gains on capital in one's possession⁷². However, the fashion in which people discount confirms that irrational tendencies are also at work here. Experiments have shown that the fashion of discounting usually approximates hyperbolic curves⁷³, which is to say that the rate of discounting diminishes with time⁷⁴. By way of illustration, hyperbolic discounters situated at a given point in time (t) discount more for the time interval between t and $t + 2$ than for the time interval between $t + 2$ and $t + 4$, and more for the time interval between $t + 2$ and $t + 4$ than for the time interval between $t + 4$ and $t + 6$, although all these intervals are of equal length. This manner of discounting results in incidents of choice inconsistency such as this: people who, at time point t , make a rational choice between future rewards—e.g. opting for some (sufficiently) larger reward payable at $t + 6$ instead of a smaller reward payable at $t + 4$ —would often fail to make such a choice when they are at, say, $t + 3$ ⁷⁵. Such experimental findings help explain how, when we express a preference or form an intention as to a future course of action, temptations pulling in an opposite direction may become harder to resist as the relevant occasion approaches, and we sometimes find ourselves departing from what we earlier held to be, and what may indeed be, the optimal course of action⁷⁶.

Hyperbolic discounting tendencies, and the resulting phenomenon of preference reversal, have key pertinence for law's bias-counteracting role. Private decision-making in the course of everyday activity, as was noted earlier, is to a large extent particularistic, in the sense that the actor often decides about how to act here and now. Decisions of legislative or regulatory authorities are structurally different in that here it is not the immediate actor but someone else who makes the decision, and who does so prospectively. These differences render the latter decisions structurally less prone than the former to hyperbolic discounting. And, in turn, they help explain the role played by rules of law, with their relative persistence through time, in countering this bias. This role is performed, in different ways and to different degrees, by a large variety of legal rules, but, for illustrative purposes, one domain in which it is particularly evident can be mentioned: pension and social security policy. Human patterns of hyperbolic discounting suggest that many young adults tend to underestimate the importance of saving money for old age, as it comes at the expense of presently available payoffs. Policymakers are placed at a vantage point that allows them more easily to appreciate the full picture of people's changing earning capacities through a lifetime and their old age needs, and to formulate adequate responses, this being part of the reason why in many different jurisdictions pension matters are not left wholly unregulated and certain funds for retirement are insured by statutory social security schemes.

In this and the previous subsections, the operation of four types of bias—i.e. self-enhancement, self-serving, availability, and myopic discounting bias—has been discussed separately. It should be noted, however, that law's bias-counteracting function is often at work in situations where more than one of these biases operate simultaneously in a mutually reinforcing manner. Take, for

⁷¹ HERRNSTEIN 1990, 358; KIRBY 1997, 54-55 and fn. 2.

⁷² KIRBY 1997, 55 fn. 2.

⁷³ KIRBY 1997, 59-68; AINSLIE 1975; HERRNSTEIN 1990, 359; KIRBY & HERRNSTEIN 1995.

⁷⁴ HERRNSTEIN 1990, 360; KIRBY & HERRNSTEIN 1995, 83-84; KIRBY 1997, 54-55.

⁷⁵ See KIRBY & HERRNSTEIN 1995 (reporting a series of experiments in which individuals were presented with choices of the above form) and HERRNSTEIN 1990, 358 (discussing a similar example). See also SOLNICK et al. 1980; AINSLIE & HAENDEL 1983; MILLAR & NAVARICK 1984, 213-217.

⁷⁶ KIRBY 1997, 54-55; KIRBY & HERRNSTEIN 1995, 83.

example, France's recent anti-waste laws that limit the commercial use of plastic packaging and single-use tableware. The practical decisions to which these laws apply—i.e. decisions of whether to stop using packaging and tableware that are quite possibly more convenient and cheaper in the short term, but are less environmentally sustainable—are prone to be affected by both self-serving bias and myopic bias⁷⁷. In addition, since the effects of climate change (e.g. global warming) occur incrementally and are not *equally* felt throughout the world, availability-related bias is also likely to be at work here⁷⁸. Examples of this sort can be multiplied.

3. Responding to further doubts: law-generated errors; cognitive self-debiasing

Earlier on I considered relevant doubts arising from the corrupting capacity of power and from the extent of social injustice that legal and political systems harbour⁷⁹. I now wish to consider two further sources of doubt. The first is the possibility of incidental errors generated by some of the same structural attributes that I associated with law's bias-counteracting capacity. I am referring here especially to the fact that legal rules tend to be comprised of relatively coarse-grained categories with limited revisability in response to particularistic features of individual cases. For ease of reference, this might be called the generic character of legal rules⁸⁰. Their generic character renders them a somewhat blunt instrument. It means, in other words, that legal rules are to some degree both over- and under-inclusive in relation to their underlying justifications—which is to say that, on some occasions of their application, legal rules yield suboptimal outcomes⁸¹. Now, if the generic character of legal rules can, on the one hand, work to avert errors in the ways highlighted in Section 2, but, on the other hand, generates suboptimalities in the way just noted, one might wonder if its overall effect is positive.

I will point out three factors that, I believe, address this query. The first is that rules produced by reasonably competent legislators and draftspersons are likely to be couched in a manner that moderates their *degree* of over- and under-inclusiveness. This can be attained by several techniques, such as linguistic choices that introduce *some* degree of granularity into the rule; considered selection between terminological alternatives that vary in scope, vagueness, and elasticity; the provision of legal definitions for terms used in the rule; the incorporation of exceptions; or a combination of several such techniques⁸². Second, if a given aspect of human activity simply does not lend itself to prescriptive generalizations that approximately match underlying justifications—not even with the aid of the above draftsmanship techniques—then this could well be a compelling reason to avoid using legal rules *to that extent*. And the third and final factor is judicial interpretation. Judicial interpretation can bring further refinement to statutory provisions, and thereby limit their over- and under-inclusiveness—with an effect that, insofar as the court decision binds as precedent, extends to the future⁸³. The foregoing three

⁷⁷ On hyperbolic discounting in the environmental context, see, e.g., VISCUSI et al. 2008; HARDISTY, WEBER, 2009; MEYER 2013; KAPLAN et al. 2014; BERRY 2017; SARGISSON & SCHÖNER 2020.

⁷⁸ Furthermore, there is evidence that the better-than-average effect is also involved in assessment of environmental behaviour. See, e.g., LEVISTON & UREN 2020. And finally, error-inducing factors other than biases, such sheer deficiency of knowledge, may also be involved in this context.

⁷⁹ In Section 2.2.

⁸⁰ These attributes may be evocative of Frederick Schauer's characterization of rules as *entrenched generalizations* (SCHAUER 1991, 47-52).

⁸¹ See in this regard, e.g., SCHAUER 1991, 31-34; ALEXANDER & SHERWIN 2001, 34-36.

⁸² My reference to reasonable competence here reinvokes an earlier-mentioned prerequisite for the fulfilment of law's bias-counteracting function (see Section 1 above).

⁸³ This point is compatible with my argument in GUR 2018, 57-67—for my argument there was not that the scope of legal rules cannot be delineated through interpretation, but rather that in some of the situations considered there

factors—i.e. reasonably competent draftsmanship, attention to the generalizability of the matter, and judicial interpretation of statutory enactments—do not eliminate the phenomenon of over- and under-inclusiveness altogether. However, the limited degree to which over- and under-inclusiveness persist when these factors are in play is likely to be a price worth paying for the potential benefits of law’s generic character⁸⁴.

A second type of doubt about my argument might arise from the possibility of self-debiasing. If self-debiasing is possible widely and to a full or nearly full degree, one might wonder if it does not render the bias-counteracting function of law redundant. To place this issue in a somewhat sharper focus, suppose a society-wide educational scheme about biases that would render at least the bulk of people adequately informed about the foregoing biases. And, for the moment, let us set aside questions about the cost and feasibility of such a scheme⁸⁵. Cannot people with such information detect and correct for the above biases in their own practical reasoning simply by means of their cognitive capacities, namely through self-reflection? The answer to this is a *qualified* “yes”, and the attendant qualification has key significance for present purposes. Let me explain. It is possible that information about the above biases can improve people’s ability to recognize their own biases in retrospect or even reduce their effect in the future. However, this possible improvement is, first, not easy to attain or sustain even assuming adequately informed individuals and, second, likely to be limited—namely, it is doubtful that people generally can eliminate those biases altogether, or to anywhere near that extent, by means of knowledge and reasoning alone⁸⁶. Why so? Mainly because of the following factors.

First, recall the partly-cognitive-and-partly-motivational character of some of the biases involved⁸⁷. As described at the outset⁸⁸, this dual character means that, while these biases manifest themselves in the form of systematic cognitive error, their precursors are partly motivational. Thus, for example, part of what underlies hyperbolic discounting tendencies is the motivational lure that some gratifications obtain through their imminence and our frequently felt motivational difficulty to make present or proximate sacrifices in pursuit of remote goods. Such motivational factors have a persistent manner of regaining access to our reasoning in the form of biases—which is part of what makes biases hard to defend against by cognitive means alone.

Second, in some of the situations considered in the previous section, the *same* type of bias that tends to influence the actor’s judgement of the action on its merits is liable to compromise his or her assessment of whether, and to what extent, he or she is biased. Take, for example, an actor’s judgement of what and how much he or she ought to do in the way of upholding certain common goods, in terms of restricting his or her own action or shouldering positive burdens. The actor is supposed not simply and only to judge the matter by reference to substantive

it cannot be delineated by means that are consistent with Raz’s pre-emption thesis, i.e. without recourse to the balance of first-order reasons.

⁸⁴ I should, perhaps, add another qualification to the above proposition. It is likelier to hold true insofar as we treat the normative force of law as *overridable* by highly compelling contrary reasons that might crop up in particular contingencies. The overridability contained in this attitude to law—which I have advocated elsewhere (GUR 2018, chs. 7-9) and will touch upon in Section 4 below—is a type of safety valve, so to speak, apt to avert the harshest potential consequences of law’s relative bluntness. On overridability, see also SCHAUER 1991, 113-118, 196-206. For a relevant discussion that foregrounds the psychological aspects of rule-application and reconsideration, see BRIGAGLIA & CELANO 2017.

⁸⁵ I am not certain as to whether setting up and operating a scheme of this type and scale is a realistic possibility.

⁸⁶ Similarly, though somewhat more categorically, Hume writes about an attempt to free oneself from one’s «inclination to the present»: «I may have recourse to study and reflection within myself; to the advice of friends; to frequent meditation, and repeated resolution: And having experience’d how ineffectual all these are, I may embrace with pleasure any other expedient, by which I may impose a restraint upon myself, and guard against this weakness» (HUME 2007 [1740], 344 [SB536-SB537]).

⁸⁷ See citations in fn. 12.

⁸⁸ Body text accompanying fn. 12.

factors that bear directly on its merits, but also to take into account his or her own epistemic limitations, including the possibility and extent of his or her self-serving bias. But the actor's assessment of such epistemic factors is itself an assessment that bears on his or her own interest in this case, because it may tip the balance in his or her deliberation for or against adherence to the contemplated restrictions and burdens—so it, too, may be affected by a self-serving bias.

Third, and more generally, it is part of the nature of biases that they tend to operate at an unconscious or not fully conscious level. They tend to work, in other words, below our cognitive radar—colouring our perception of things while leaving us under the impression that we see things as they are. And, thus, in situations where individuals are affected by biases, they tend not to recognize the fact that, or the degree to which, they are thus affected. This much is not only implied by the very notion of bias; it is also a pattern that finds empirical support in relevant experimental studies, where the tendency for people to overlook their own biases or underestimate their extent has been borne out and given the name the *bias blind spot*⁸⁹.

4. Implications

Finally, what are the implications of my claims heretofore? Rather than enumerating all the implications, I will only flag up some of the principal ones, which I divide into two types: implications for law-making and implications for legal normativity.

4.1. Implications for law-making

The first type of implication is internal to a legal system, in the sense that it pertains directly to the work of law-makers and their auxiliaries (e.g. policy advisors and draftspersons). That is, the notion that law is structurally suited to counteract certain common biases importantly informs (even if it does not conclusively or exclusively determine) the answer to questions such as what sort of social problems law is apt to solve and, in the light of this, when it is desirable to introduce legal regulation. The answer to these questions obviously has direct bearing on the content of law. This general point, however, should be supplemented by a couple of comments. First, some notes of caution. When seeking to use law as a bias-counteracting device, law-makers should exercise vigilance and restraint. They should refrain from overbearingly extensive or indiscriminate recourse to regulatory action. In particular, they should bear in mind that the relevant structural advantage of law pertains to *specific* biases and that only *some* instantiations thereof ultimately merit legal intervention, not least because, for all its potential benefits, recourse to the legal apparatus also carries notable risks and adverse effects⁹⁰.

Furthermore, law-makers should be conscious of the *variety* of counter-bias regulatory tools at their disposal. Rather than thinking exclusively of rules that mandate outcomes and limit choice, they should be alive also to other regulatory means which are often less intrusive or restrictive and are sometimes more cost-effective. Notably, these include what might be described as light-touch regulatory tools expounded by scholars such as Cass Sunstein, Christine Jolls, and Richard Thaler—which, instead of removing bias-induced outcomes from the range of legally permissible options, redesign the decision-making environment in (not

⁸⁹ PRONIN et al. 2002; PRONIN et al. 2004; EHRLINGER et al. 2005; MCPHERSON-FRANTZ 2006. See also FRIEDRICH 1996. Note that the observation is not that people never acknowledge their biases or always underestimate the extent of those biases. Rather, what has been observed is a general tendency: a pattern that characterizes most people's self-perception in most of the cases where they show biases.

⁹⁰ As noted in one of my preliminary comments in Section 1.

incentive-based) ways that contribute to better decisions⁹¹. While in some key instances of law's counter-bias operation the latter tools cannot substitute for the more traditional forms of regulation, they are nonetheless an important part of the regulatory toolkit.

Another, related comment concerns legal paternalism⁹². Does law's bias-counteracting function necessarily involve paternalism? The answer is negative. The exact definition offered for paternalism varies between theorists, but for present purposes paternalism can be broadly described as interference with a person, against their will, that is motivated or defended by «a claim that the person interfered with will be better off or protected from harm»⁹³. Now, there *can* be instances of law's bias-counteracting operation that correspond with the above description. The use of law in such instances should be assessed, inter alia, through the prism of normative arguments for and against paternalism⁹⁴. But many instances of law's bias-counteracting operation are *not* subsumable under the above description. To see this, it suffices to identify the intended class of persons protected by the relevant laws. This class includes persons other than the actor whose behaviour is constrained by a given application of these laws. This is the case, for instance, regarding many traffic laws, environmental laws, child welfare laws, building safety regulations, financial regulations, and product safety laws, to list but a few examples. Some of these instances featured in my illustrations in Section 2, which need not be reproduced at this point. To conclude the present comment, then, law's bias-counteracting function should not be seen as bound up with paternalism.

4.2. Implications for legal normativity

The second type of implication relates to the interface between law and its subjects⁹⁵. It pertains, more specifically, to two—interconnected and partly overlapping—questions. First, what mode of practical reasoning should legal subjects use when faced with legal requirements? And, second, what kind of reasons can law constitute or generate? I will comment on the relation between these two questions shortly. But let me first point out what implications my observations have for the first question. The fact that one of law's key functions is to counteract biases strongly militates against subjects' recourse to a particularistic mode of reasoning whereby they act simply on weight assessments of the reasons for and against compliance with the law as applicable to the case at hand. For, as I have explicated at greater length elsewhere⁹⁶, this mode of reasoning is fully exposed and highly susceptible to the biases highlighted in Section 2—biases that are often part of what made it necessary and justified to invoke legal forms of regulation in the first place. Since action through this mode of reasoning requires assessments by the actor of whether, and to what extent, the benefits of the rule apply to the particularities of each situation of his or her daily activity, this mode of reasoning clearly runs the risk of eliciting, instead of restraining, human propensities such as short-sightedness and self-favouritism. So this mode of reasoning with legal rules is, in effect, likely to hinder the actor's prospect of making optimal use of the potential benefits of legal conduct-guidance. And if we zoom out from the mode of decision-making of an individual agent and consider the dynamic of interacting agents, the possibility of an even worse

⁹¹ JOLLS & SUNSTEIN 2006 (advocating some such irrationality offsetting strategies under the label *debiasing through law*); THALER & SUNSTEIN 2021 (advancing choice environment architecture methods of this type under the label *nudge*).

⁹² I thank an anonymous referee for bringing to my attention the need to clarify how my argument relates to paternalism.

⁹³ DWORKIN 2020.

⁹⁴ A discussion of which is not possible within the scope of this paper. For relevant surveys, see, e.g., DWORKIN 2020; HUSAK 2003. See also DWORKIN 1972; SARTORIUS 1983; FEINBERG 1989; GOODIN 2002; ENOCH 2016.

⁹⁵ By the word "subjects" in the above sentence, I mean non-legal actors to whom the law is addressed.

⁹⁶ GUR 2018, 121-127, 131, 163.

state of affairs comes into view. For each agent's recognition that other agents are less than disposed to comply with legal requirements may itself operate as an impetus to non-compliant behaviour, which would, in turn, further deepen and reinforce a disinclination to comply⁹⁷. It thus seems highly questionable whether orderly social life and the essential goods that hinge on it would be attainable if the above mode of reasoning were to dominate the interface between law and its addressees⁹⁸.

Elsewhere I have set out what I believe to be a desirable mode of reasoning to be employed by subjects of a (reasonably just and well-functioning)⁹⁹ legal system¹⁰⁰. Their mode of reasoning, I have argued, should be shaped by a relatively settled (but overridable) disposition to comply with the system's requirements. I have elaborated there on the properties of the envisaged disposition and how its associated mode of reasoning differs from the particularistic mode of reasoning disapproved above. Here I will only briefly mention one set of properties that makes the disposition auspicious to law's bias-counteracting function. The disposition I am referring to has a degree of deep-seatedness in the actor's attitudinal profile. As a relatively embedded disposition, it enjoys, in turn, motivational persistence or, in slightly more figurative terms, motivational stickiness or grip. This means that—although it is overridable by other motivational forces—its *activation* is not conditional on an assessment of whether the reasons for its adoption extend to the case at hand or on an assessment of the merits of the legally prescribed action. In other words, even if the disposition does not always “win” in the sense of determining the agent's eventual action, it makes its motivational force felt in a manner not conditional on reasons for action applicable to a particular situation or directive, and on how the agent assesses them. That is why a disposition of this sort has limited susceptibility to the biases discussed above, and deliberation shaped by this disposition is apt to facilitate law's bias-counteracting function.

As noted above, the preceding question—concerning modes of practical reasoning—intimately connects to, and partly overlaps with, a second question—namely, the question of what kind of reasons law can constitute or generate. What is the connection and overlap between these two questions? The answer lies in the following fact. The range of practically relevant reasons generated by law includes, apart from reasons for or against an action, reasons that pertain directly to the choice between alternative modes of reasoning: if you like, reasons about how to reason¹⁰¹. Thus, for instance, suppose that certain attributes of law mean that, when a legal system passes a certain quality threshold, reasoning with its directives through mode of reasoning X tends to be more conducive to correct decisions than using alternative modes of reasoning in response to its directives. If so, the existence of such a legal system is a reason for its subjects to employ mode of reasoning X, rather than alternative modes of reasoning. A similar inference can be made from my foregoing argument about the relationship between law's bias-counteracting function and a disposition to comply with the law. The inferential move, in a very rough and abridged form, is this: since a legal system's capacity to fulfil its bias-counteracting function (and thereby optimize our action) depends for its realization on there being a disposition to comply with the system's requirements, the existence

⁹⁷ In a somewhat similar vein, Hume notes: «You are ... naturally carried to commit acts of injustice as well as me. Your example both pushes me forward in this way by imitation, and also affords me a new reason for any breach of equity, by shewing me, that I should be the cully of my integrity, if I alone shou'd impose on myself a severe restraint amidst the licentiousness of others» (HUME 2007 [1740], 343 [SB535]).

⁹⁸ In this context, I have also considered and rejected the thought that legal sanctions and law-independent moral dispositions could suffice to adequately prevent or solve the problem envisaged above (GUR 2018, 100, 170-178).

⁹⁹ I explain more specifically what is meant by the above parenthetical prerequisite in GUR 2018, 135-136, 138, and 179.

¹⁰⁰ That mode of reasoning features in what I have called the *dispositional model* (GUR 2018, chs. 7-9), but it is not synonymous with the dispositional model and does not fully encompass the set of claims put forward in this model.

¹⁰¹ Or reasons that have a necessary entailment for the question of how to reason.

of a legal system that meets all other prerequisites for bias-counteracting¹⁰² is a reason to adopt a disposition to comply with its requirements. The latter proposition—concerning a reason to adopt a disposition to comply with the law—is a central element of a normative model I have advocated elsewhere under the label the *dispositional model*¹⁰³.

As a final note, it is worth stressing exactly why the normative implication of biases, as I see it, is *distinctive*. The explanation lies partly with the previously indicated fact that biases are characteristically hard to self-detect and to correct for through cognitive means alone. As was pointed out, biases tend to operate below our cognitive radar and often exercise a type of persistence in finding their way into our judgement. These characteristics of biases reflect, in turn, on the set of tools needed to effectively solve problems of bias. They mean that the required set must include, inter alia, tools from outside the cognitive toolbox. What is needed, in other words, is a mental mechanism that is not confined to knowledge and reasoning alone, and that enjoys a type of inherent persistence capable of countering the tenacity of biases. Before this line of thought is continued, it should be linked to a more specific aspect of biases. As highlighted earlier, some of the relevant biases have a partly-cognitive-and-partly-motivational character—in the sense that they have cognitive effects but partly motivational roots (as clearly exemplified by the self-interest motivational roots of a self-serving bias). The partly motivational roots of such biases call for a means of response that itself holds some motivational purchase. In other words, since the *problem* is partly motivational, its *solution* must be one that incorporates a motivationally resistant mechanism.

The foregoing specifications can all be found in a law-abiding attitude that I have characterized elsewhere¹⁰⁴, and that consists, inter alia, of a (relatively settled, but overridable) disposition to comply with the law, as partially described above. And this, as I have further argued, leads to the idea of reasons vis-à-vis attitudes and, more specifically, reasons to adopt a disposition to comply with the law. Here then lies part of the distinctive normative significance of law's structural ability to counter biases: it points to the above-stated nexus between reasons and attitudes. By so doing, it supports an approach to legal normativity that might be dubbed *attitudinal rationalism* and that I consider to be a helpful alternative to a purely rationalist normative framework.

¹⁰² As pointed out in Section 1 above, although law's bias-counteracting function owes its existence primarily to structural attributes of law, this function is not likely to be fulfilled when the system in question fails to pass a threshold of reasonable quality.

¹⁰³ GUR 2018, chs. 7-9.

¹⁰⁴ GUR 2018, chs. 7-9.

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