Chapter 2
The Next Generation of Behavioural Law and Economics

Avishalom Tor

Abstract The paper examines some of the important tasks awaiting the next generation of scholarship in behavioural law and economics. Some of these tasks reflect the need for expanding the breadth of the behavioural approach to law while others involve the mission of increasing its depth. The following sections examine each category in turn.

2.1 Introduction

Behavioural law and economics (BLE) seeks to inform legal analysis by drawing on both the methods and the extensive findings of behavioural decision research, the psychology of judgment and decision-making, and related fields.1 In terms of both impact and potential, together with the empirical legal studies movement, the behavioural approach to law and economics is perhaps the most significant development in legal scholarship in recent decades.2 Legal scholars by now have examined at least some of the behavioural lessons for the law in most legal fields, though the systematic application of this methodology is still in its early stages.3 Indeed, two early programmatic articles that outlined some key features of BLE are heavily cited: Jolls, Sunstein, and Thaler’s “A Behavioural Approach to Law and Economics,” published in 1998, had over 2000 citations in Google Scholar by the end of 2013;4 Similarly, Korobkin and Ulen’s “Law and Behavioural Science: Removing the Rationality Assumption from Law and Economics,” published 2 years later, had over 1000 Google Scholar citations by the same time.5 More significantly,

---

1 Jolls et al. 1998; Korobkin and Ulen 2000; Tor 2008.
2 Ulen 2011.
3 Langevoort 1998; Zamir and Teichman 2014.
4 Google Scholar 2013a.
5 Google Scholar 2013b.
however, a formal citation study from late 2011 counted the former article among the 100 most-cited law reviews of all time, with 783 citations in the law review literature alone. The same study also ranked the latter article 25th among all law review articles since 1990, with 424 citations. Thus, regardless of the precision of different citation measures, beginning in the late 1990s, the scholarly impact of these articles and, by extension, of behavioural law and economics in general, has been substantial.

Furthermore, the impact of the behavioural approach has not abated. Scholars continue to engage in behavioural analyses of legal questions, increasing both the sophistication of their analyses and the range of legal fields they study. Perhaps even more telling, signs of the growing awareness of behavioural law and economics can be found outside the domain of pure scholarship: In the United States, Cass Sunstein, a prominent behavioural scholar, served as the administrator of the Office of Information and Regulatory Affairs throughout most of the first term of the Obama administration. As one magazine colourfully described, this position “[is] an obscure but exceedingly powerful perch that enabled Sunstein to put his imprint on everything from fuel efficiency standards and the redesign of the food pyramid to the rules for the landmark health care and Wall Street overhauls.”

Given the nature of the present volume, moreover, it is important to note that regulatory interest in behavioural law and economics is not limited to the United States. In the United Kingdom, the “Behavioural Insights Team” in the Cabinet Office “applies insights from academic research in behavioural economics and psychology to public policy and services.” In the same vein, behavioural studies—both empirical and theoretical—were undertaken by the Office of Fair Trading in the areas of consumer protection and competition law. The European Commission and the OECD exhibit a similar interest in the behavioural approach: The former organized a series of conferences and issued reports on the policy implications of behavioural findings with an emphasis on consumer markets and suggested environmental initiatives on the same basis. The latter also focused on the consumer policy implications of behavioural economics.

Notwithstanding these accomplishments, however, my remarks here will focus on some of the important tasks awaiting the next generation of scholarship at the “frontiers” of behavioural law and economics. Some of these tasks reflect the need for expanding the breadth of the behavioural approach to law while others involve the mission of increasing its depth. The following sections examine each category in turn.

---

6 Shapiro and Pearce 2012, 1491.
7 Newmyer 2013.
8 Government of the United Kingdom Cabinet Office 2014. The unit’s website also states that “[i]n addition to working with almost every government department, we work with local authorities, charities, NGOs, private sector partners and foreign government, developing proposals and testing them empirically across the full spectrum of government policy.” (emphasis added).
9 Armstrong and Huck 2010; Bennett et al. 2010; Huck et al. 2011.
2.2 Breadth

2.2.1 Legal Systems

This volume embodies one area of necessary and important development in the breadth of BLE—namely, the application of behavioural insights and methods to jurisdictions beyond that of the United States, in Europe and elsewhere. The study of behavioural applications in a broader range of legal systems is important since both the specific legal rules and institutions of different countries and their respective cultures can vary dramatically. Thus, different legal systems both differently shape human behaviour and are differently shaped by it, therefore meriting closer scholarly scrutiny at the level of specific jurisdictions.

One familiar example of cultural-legal differences is the different role assigned to common law courts compared to civil law courts. The adversarial nature of common law systems defines the role of judges as adjudicators who decide between the different presentations of the law and the evidence offered by the litigating parties’ advocates. Within this framework, therefore, the judge is not responsible for finding the truth in any absolute sense. In civil law countries, on the other hand, judges determine both the facts of the case and the applicable law and, indeed, are charged with deciding the truth of the legal matter at hand. And though such formal distinctions are subject in practice to many caveats, they still generate substantial differences in the ultimate legal rules of evidence and procedure and the resulting conduct of the relevant legal actors—judges, advocates, and the parties—in common law versus civil law jurisdictions.12

Most importantly for present purposes, however, these differences in legal culture may have further behavioural consequences beyond those directly commanded or incentivized by the law. To illustrate, it would be of interest to test whether common law judges, who view their role as adjudicators, are influenced more strongly than civil law judges by the sentencing or damages anchors offered by prosecutors and plaintiffs, respectively.13 Similar behavioural differences between the two legal families may be found for other legal actors as well. For instance, litigating parties who hold different perceptions of the role of the courts and the judicial process are also likely to hold different views of what constitutes a fair trial.14

Yet it is not only the law that can differently shape the behaviour of legal actors, but also the broader social and cultural institutions it is embedded in. Specifically, a significant and growing literature documents systematic cross-cultural differences in different areas of judgment and decision-making, from probability judgments, through risk perceptions, to risk preferences and beyond.15 Researchers also find substantial variation across cultures in individuals’ economic behaviour in common

13 Guthrie et al. 2001; 2007; Wistrich et al. 2005. This is not to say, however, that civil law judges are expected to exhibit no anchoring effects, since behavioural studies show that even completely irrelevant anchors can still impact legal decisions.
15 Weber and Hsee 2000.
economic games that reveal people’s social preferences for cooperation, reciproc-
ity, and more, such as the ultimatum game, public goods games, and the dictator
game. Naturally, we should expect such systematic cross-cultural differences to
impact both the nature of a given culture’s legal institutions and the ways in which
these institutions, in turn, affect individuals’ behaviour.

2.2.2 Legal Fields

Besides increasing the geographic and cultural breadth of BLE research, scholars
are beginning to tackle important legal fields that, until recently, received little be-
avourial study. For example, the first behavioural study of intellectual property
law—examining the question of copyright duration—was published in 2002, but
almost none followed until the last few years. Similarly, besides one early precur-
sor, the first law review article that started developing a behaviourally-informed
approach to competition law was also published in 2002. Despite a few early
follow-ups, however, the legal community—both scholars and enforcement offi-
cials—had only started addressing behavioural antitrust in earnest in the late 2000s,
as I discuss in detail elsewhere. At any rate, BLE research in intellectual property
and competition law—much like in many other fields that received more intense
study already earlier on—requires much further development.

2.3 Depth

As important as is its increasing breadth, the mission of increasing the depth of BLE
scholarship—in terms of both methodology and substance—is even more signifi-
cant to the long-term success and impact of the behavioural approach to law and
economics.

2.3.1 Methodology

The most common methodology in behavioural law and economics involves draw-
ing on the large extant body of empirical behavioural research and applying its
findings to legal questions. This strategy is both economical and effective, using

17 Tor and Oliar 2002.
18 Buccafusco and Sprigman 2010, 2011; Feldman 2006; Garcia 2014; Johnson 2012; Newman
2013; Sprigman et al. 2013.
19 Gerla 1985; Tor 2002.
20 Tor 2014a.
21 Tor 2008.
well-established findings that often have broad legal ramifications. However, many of those questions that are particularly important to lawyers find no straightforward answers in the existing empirical literature, as extensive as it is. Behavioural decision researchers in the basic disciplines of psychology, economics, and related fields are primarily concerned with identifying general patterns of human judgment and decision behaviour and understanding their genesis. From the perspective of these researchers, questions of how behavioural phenomena apply in a particular legal context, how they interact with one another, how they are shaped by legal and market institutions, and so on, generally are of limited interest, involving merely applied science of secondary significance.²²

To advance their research agenda, therefore, behavioural-legal scholars must also engage in empirical studies, using both observational tests with real-world data of legal significance and experiments structured to examine specifically-legal questions. These two empirical methodologies complement both one another and the theoretical applications of existing behavioural findings that are more commonly found in the BLE literature. Observational tests of legal questions, the cornerstone of the empirical legal studies movement, are becoming increasingly popular among legal scholars. Yet these studies, which possess the important advantage of bringing new data from the field to bear on legal debates, rarely address behavioural questions. Observational scholars typically study empirical regularities in data on legal institutions or decision makers. These studies are valuable, though subject to familiar limitations, such as dependence on the availability of relevant observational data and on the nature of that data when available. More pertinently, however, only occasionally do observational studies examine the impact of psychological variables on legally-relevant judgment and decision behaviour.²³ Indeed, most empirical scholars have limited psychological training or behavioural interests, and they are generally unconcerned about the behavioural foundations of the empirical patterns they observe. The effects of empirical scholars’ limited interest are compounded, moreover, by the objective difficulty of discerning the psychological antecedents of behaviour through observational methods.²⁴

For these reasons, experimental methods often are a necessary complement to observational studies. The basic logic of a controlled randomized experiment is straightforward, and not unique to behavioural decision research.²⁵ Researchers randomly assign participants to groups, administering treatment to the experimental group but not to the control group and then statistically analysing the data to determine whether the treatment had any effect.²⁶ The controlled randomized experiment

---

²² Tor 2008.
²³ Marotta-Wurgler 2011; Marotta-Wurgler 2013.
²⁴ Gazal-Ayal and Tor 2012.
²⁵ Note there are other kinds of experiments that are not discussed here. See: Rosenthal and Rosnow 1991. Field experiments that study decision-making in the specific context of interest, for instance, seek to retain experimental control, while increasing the external validity of the subject pool. See, e.g., Feldman 2006.
possesses some advantages over observational studies in which randomization and control usually are not possible. Yet experiments are inevitably removed from the natural legal environment—participants often differ from the legal actors of interest, and the laboratory design cannot (and should not) replicate the full richness of the real-world—and so are subject to concerns regarding their external validity. Over time, however, experimental researchers have developed various means for addressing external validity problems, using different types of participants, infusing experimental designs with greater realism, and more. There is also significant evidence that even simulation or survey studies using no monetary incentives for performance largely correspond with the findings of field studies, where available, or of experiments using monetary incentives. Indeed, a growing number of scholars now conduct experimental legal studies, though such research still is not widespread.

Nonetheless, given the relative novelty of experimental research in law, a distinct experimental-legal methodology is yet to develop. Most studies of this type employ the traditional methods of experimental psychology, which are also those typically used by judgment and decision researchers and behavioural economists. Nearly all of the remaining studies, comprising a non-negligible minority of experimental research in law, adopt instead those somewhat different methods developed by experimental economists in recent decades. In the longer term, however, the behavioural approach to law would benefit greatly from developing its own variant (or variants) of experimental methods, adopting the conventions of psychologists or economists to its own needs and preferences.

For instance, some experimental economics conventions may be useful for behavioural-legal scholarship, at least occasionally, though the practices of experimental psychology and behavioural economics often will be better suited for the task. Motivating participants with monetary incentives for performance—as experimental economists do—may be beneficial, for instance, when studying legally-relevant phenomena in economic settings. Many other legal questions, however, involve situations where non-monetary factors—such as social norms, fairness, or other social preferences—play a pivotal role, so that extensive reliance on monetary incentives may distort rather than improve experimental results. Similarly, the more abstract designs, which aim to avoid specific context, that experimental economists favour may be less productive for the study of behaviour within concrete legal and social institutions. BLE scholars, on the other hand, are interested primarily in questions in which the law and related institutions play a pivotal role shaping social behaviour, so their research will benefit often from the employment of somewhat richer, legally-embedded experimental designs.

---

27 McAdams 1999.
28 Anderson et al. 1999; Camerer and Hogarth 1999; Tor 2008.
30 Tor 2007.
31 Rachlinski 2000; Tor 2007.
2.3.2 Substance

To advance its mission, behavioural law and economics also needs to address some foundational questions that concern the behavioural study of legal questions across the board. A number of distinct questions comprise this category, and some of these—like the degree to which behavioural insights justify different forms of paternalism—already have received substantial scholarly attention, if not always a thorough analysis.32 Other issues—such as the role of legal and market institutions in facilitating and inhibiting more rational behaviour—have not been subjected to any systematic study until recently.33 Besides the important task of further exploring the above and similar issues, however, the next generation of behavioural law and economics scholarship will also need to tackle additional foundational questions that so far have received little or no legal analysis. The remainder of my remarks here will therefore focus on one challenge in the latter category—namely, the impact of individual differences in rationality on the analysis and design of legal rules and institutions—explaining its significance and offering some initial guidance on how to account for it in future BLE scholarship.

To date, the legal literature largely has neglected to examine the implications of individual differences in rationality for the law.34 Yet those robust deviations from rationality that behavioural studies document at the population level are the product of substantial individual-level heterogeneity in judgment and decision behaviour, rather than the individual-level uniformity that most legal scholarship implicitly assumes.35 Thus, different legal actors deviate from rationality to different degrees with respect to different behavioural phenomena. Some are more overoptimistic, for instance, while others are less so; some exhibit more biased judgments in hindsight, others show a greater degree of loss aversion, still others are more susceptible to framing effects than their peers are, and so on.36

The behavioural evidence reveals some systematic individual differences variables that explain a portion of variance in deviations from rationality. Factors such as cognitive ability,37 thinking style,38 risk-taking propensity,39 personality traits40 and more explain some of the individual differences with respect to some behavioural phenomena, but ultimately account only for a small fraction of the overall observed heterogeneity in rationality. The correlation within individuals among many of the

32 Camerer et al. 2003; Klick and Mitchell 2006; Rachlinski 2006; Sunstein and Thaler 2003; Thaler and Sunstein 2008; Zamir 1998.
33 Tor 2014a, b. Some aspects of this important issue have captured the attention of scholars in the narrower debate regarding the merits and demerits of a behavioural approach to competition law.
34 Mitchell 2002; Prentice 2003; Rachlinski 2006.
36 Tor 2014c.
37 Cokely and Kelley 2009; Stanovich and West 1998.
38 West et al. 2008.
39 Mahoney et al. 2011.
40 Lauriola and Levin 2001; Levin et al. 2002.
familiar deviations from rationality is small as well.\textsuperscript{41} Altogether, therefore, the current state of the art does not offer us an effective means for identifying ex-ante individuals’ degree of rationality on the basis of their personal characteristics. It is also apparent that the behaviour of most legal actors, most of the time, cannot be classified into stable categories of the “rational” and “boundedly rational” across the board.

What then do these individual differences in rationality mean for legal analysis? Intuitively, such heterogeneity would appear generally to weaken or “dilute” behavioural-legal arguments, which often take the form of “people exhibit behaviour X that deviates from the assumptions of rationality and, therefore, the legal rule should be (or is) Y instead of the Z that would have been appropriate if the world were populated by rational actors.” After all, insofar as the “if” portion of BLE arguments is recast as a more diluted “some people exhibit behaviour X some of the time,” perhaps the legal “then” conclusion that follows should be more modest as well.

However, a closer evaluation of the dilution claim reveals that even while some behavioural-legal arguments indeed lose force once substantial individual differences in rationality are acknowledged, many other analyses remain compelling. Behavioural analyses of law may or may not be robust to heterogeneity in rationality depending on a number of behavioural and legal processes. On the basic behavioural level, processes of both dilution and selection may take place. Then, once the law comes into play, legal trade-offs and legal selection may impact the ultimate robustness of the specific BLE argument at hand further.

On the behavioural level, heterogeneity in rationality and thus the degree of dilution can vary greatly. In some cases, a dramatic majority of decision makers exhibits the relevant behavioural phenomenon (e.g. the hindsight bias) to a substantial degree. Yet, in other cases only a smaller fraction of the population substantially deviates from rationality (e.g. preferences reversals due to framing effects). Behavioural dilution is therefore more of a concern for the legal analyst in the latter than in the former case. Moreover, legally-relevant behaviour takes place in specific contexts, which may select for or against rationality and thereby inhibit or facilitate behavioural dilution. This is often the case, for example, with overoptimism and related phenomena: Decision makers exhibit different degrees of optimistic bias in judging their ability, performance, or prospects, but those who are more biased naturally tend to select for different behaviours from those chosen by their less-biased counterparts. One consequence of this dynamic is that the optimistically biased tend to be overrepresented among those who engage in activities that require a greater degree of risk-taking.\textsuperscript{42} However, while processes of behavioural selection can diminish the significance of behavioural dilution, (i.e. diminishing the proportion of the boundedly rational in a particular context) they can also have the opposite effect of facilitating dilution, such as where a limited number of more and less biased actors repeatedly compete with one another in an environment where better judgment is associated with better outcomes (e.g. a skill-based tournament).\textsuperscript{43}

\textsuperscript{41} Appelt et al. 2011.
\textsuperscript{42} Tor 2002.
\textsuperscript{43} For a more systematic discussion of how market environments, for instance, can facilitate rationality or inhibit it, see Tor 2014a.
Beyond the basic processes of behavioural dilution and behavioural selection, some legal policies that benefit less rational actors impose costs on their more rational counterparts—thereby generating potentially significant tradeoffs—while other policies do not exert such effects. Indeed, concerns about the potential trade-off costs of behaviourally-motivated policies have been voiced by commentators in the ongoing debate over “soft” paternalistic interventions, in areas such as consumer protection, public health and safety, personal finances, and more. Yet the design of legal rules outside the domain of the familiar paternalism debate—that is, rules that do not seek to impact the rationality of individuals’ behavior or exploit their bounded rationality—nevertheless may entail similar trade-off costs for which BLE analyses should account. To illustrate, a legal rule that is hostile to liquidated damages clauses due, say, to concerns about contracting parties’ biased judgments has the effect of penalizing some less-biased parties by distorting their agreed-upon allocation of contractual risks. Notably, however, policy makers sometimes can eliminate or at least reduce legal trade-off costs by designing appropriate rules. The trade-off costs of a rule that applies greater scrutiny to liquidated damages clauses may be reduced somewhat, for example, by permitting courts to override such clauses only in the limited circumstances in which clear indicia of biased judgments at the time of contract are available.

Besides generating possible trade-offs, legal rules themselves may further select for or against rationality, thereby additionally diminishing the importance of behavioural phenomena for the law or instead making them more legally-relevant. Notably, selection effects are distinct from instances in which the law aims to “debias” individuals—improving the rationality of their judgments or decisions—or to “nudge” them towards behaviours that better approximate rationality. Some selection effects may occur in the latter instances as well, but such effects are not limited to those cases in which the law seeks specifically to align behaviour with rationality. Indeed, selection effects are more broadly relevant for legal design because they may occur any time a legal rule differentially affects decision makers depending on their degree of rationality. To illustrate, some jurisdictions allow attorneys to offer plaintiffs contingent fee (CF) arrangements, so that plaintiffs bear no fees if they lose but pay a substantial fraction of their winnings if they win the case. Many plaintiffs find contingent fee arrangements attractive, in part due to loss aversion; they are willing to forego a significant portion of the claim’s expected value to avoid the risk of a smaller, painful loss, because the pain of a potential loss is greater than the pleasure of a comparable gain. Even if CFs serve an important function for loss averse plaintiffs, however, they also tend to generate significant social costs and harm some plaintiffs who end up overpaying for legal services.

44 Camerer et al. 2003; Rachlinski 2006.
45 Hillman 2000
46 This is not to say, of course, that such a rule would be more efficient overall, only to illustrate the relative malleability of tradeoffs.
47 Jolls and Sunstein 2006; Thaler and Sunstein 2008.
48 Bubb and Pildes 2014.
49 Zamir and Ritov 2010.
50 Brickman 2003.
Hence, the smaller the proportion of plaintiffs that is substantially loss averse, the more limited the benefits of CF arrangements overall. Yet even if not all plaintiffs are loss averse, contingent fee arrangements create some legal selection effects: Among plaintiffs who resemble one another in all respects except their degree of loss aversion, the more loss averse find CFs more attractive than their less loss-averse counterparts. Consequently, the ultimate pool of plaintiffs who end up with contingent fees rather than alternative fee structures includes more of the loss averse compared to the ex-ante pool of plaintiffs overall. In this way, the tendency of CF arrangements to select for loss aversion renders the initial heterogeneity in rationality of the plaintiff population less relevant when evaluating the respective benefits and costs of this particular fee structure.

### 2.4 Conclusion

Despite its young age, behavioural law and economics already has accomplished much. Its impact on the legal and policy discourse is significant in the United States and, more recently, in Europe as well. Nevertheless, substantial challenges still await the next generation of BLE scholarship in its mission of increasing both the breadth and depth of its legal methodology. Additional jurisdictions and legal fields are in need of exploration and much further analysis is required even in more familiar legal territories.

Empirical and experimental tools will also benefit from their gradual adaptation to the interests and queries peculiar to legal scholars, as distinct from those favored by their psychological or economic predecessors. And overarching questions that affect many disparate behavioural-legal inquires demand additional systematic study. Indeed, this is an exciting time for those involved in behavioural law and economics, with abundant opportunities for meaningful scholarly contributions to the field in particular and to the law more generally.

**Acknowledgements** This essay is based on my opening remarks at the third Law and Economics Conference in Lucerne on “Behavioural Law and Economics: American and European Perspectives” and benefited from the comments of conference participants. Christina Brunty and Dean Nickles provided excellent research assistance.

**Bibliography**


European Perspectives on Behavioural Law and Economics
Mathis, K. (Ed.)
2015, XV, 271 p. 11 illus., 10 illus. in color., Hardcover
ISBN: 978-3-319-11634-1