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# Construal Level Theory and The Rule of Law: The Erosion of Biases by Abstract Rules

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## ABSTRACT

Evidence suggests that public sector decision makers are cognitively biased. Such biases can lead to poor public policy. This article explores the extent to which the traditional formal characteristics of the Rule of Law can debias decision makers. In particular, I claim that general abstract rules erode many biases. Construal level theory is used to support this claim.

**KEYWORDS** Behavioral economics; abstraction; construal level; rules

Insights from construal level theory (e.g., Trope et al., 2007) cast light on the relationship between the formal properties of the Rule of Law and the biases of legal and public policy decision makers. When judges and policy makers are constrained to adhere to these properties in the application and the creation of rules, cognitive biases that might otherwise affect them tend to be eroded. Cognitive biases, to the extent they exist in the political and legal realm, can lead to short-sighted decisions, neglect of opportunity costs, downplaying of moral values and other phenomena that are not appropriate in framework of a liberal polity.

This article is organized as follows. In sections ‘What is the rule of law?’ and ‘Construal levels and abstraction’ I set the stage with a brief general analysis of the rule of law and construal level theory. In sections ‘Policymakers, voters and experts are biased’ and ‘Empirical findings’ I consider the rationale for biases in the public sector and present supporting evidence. In section ‘Erosion of biases’ I discuss evidence pertaining to the erosion of biases by abstract construal. Finally, in section ‘Bias eroding rules’ I suggest some rules that may induce abstract construal and bias erosion, and offer some caveats to my analysis.

## Part one: setting the stage

### *What is the rule of law?*

While there are many controversies about the precise characteristics and implications of the Rule of Law (Waldron, 2020), it is possible to state a version of it that would attract widespread adherence. While the Rule of Law is a necessary ingredient in the framework of a liberal society, it is not sufficient to guarantee the usual liberal freedoms. By itself it cannot create a system in which human rights are respected, including the rights connected with economic liberalism. Nevertheless, it does place formal restrictions on law and policy that will prohibit some of the worst types of discrimination and arbitrariness characteristic of non-liberal societies.

The generally-accepted formal characteristics of the Rule of Law are: ‘the generality, clarity, publicity, stability, and prospectivity of the norms that [govern] a society’ (Waldron, 2020). For our purposes here, the most important function of the Rule of Law is to place formal constraints on law and public policy. In this regard, I will emphasize a particular interpretation of the rule of law derived from the work of F.A. Hayek, A.V. Dicey and David Hume, among others. This tradition stresses the importance of a rule-bound system of legal norms. Hayek (2007, p. 80) states the view concisely:

Stripped of all its technicalities, this means that government in all its actions is bound by rules fixed and announced before-hand – rules which make it possible to foresee with fair certainty how the authority will use its coercive power in given circumstances and to plan one’s individual affairs on the basis of this knowledge.

Hayek further focuses on the *generality* of the rules which bind actors within the system. Generality refers to the *abstraction* with which a rule is characterized either explicitly or implicitly. Abstract rules do not make reference to particular individuals or to acts at a particular time and place. In others words, they do not say, ‘John Smith’s dog may not enter a restaurant’ or ‘John Smith may not drive a car’. They rather say, ‘No dog may enter a restaurant’ or ‘No individual below the age of sixteen may drive a car’. The criterion of abstractness fits in well with the stability and prospectivity of law. Abstract rules are meant to apply to a relatively long future comprised of unknown other individuals in situations that cannot be precisely known now. Thus abstract rules are about *types* rather than *tokens*: the types ‘individual’ or ‘individual-below-the-age-of-sixteen’ or ‘dog’ and not the tokens John Smith or Fido. They also refer to types of actions or behavior prohibited or commanded. Not all entering and presence in a restaurant are exactly the same, nor is all driving. There are differences that are suppressed in the name of generality.<sup>1</sup>

### ***Construal levels and abstraction***

Events and actions can be represented in a concrete, low-level construal manner or in an abstract, high-level construal manner. For example, we can say of Jane in the library reading that she is underlining a book and taking notes, doing her homework, pursuing an education, or preparing for her future. These statements can refer to the same action but at increasingly abstract levels.<sup>2</sup>

Construal-level theory tells us that there is a systematic relationship between psychological distance and the level at which people construe events. Psychological distance encompasses temporal, spatial, hypothetical and social distance. The greater the distance on these dimensions the more likely people will construe events abstractly. This may be at least in part a function of the unavailability of information for distant events. The more distant, the less information we have and thus there is a tendency to represent an event more abstractly. Importantly, this relationship is *bidirectional*. In other words, if individuals are prompted to think in abstract terms they will psychologically distance themselves, in any or all of the ways mentioned, from the events or actions described.<sup>3</sup>

The connection between construal levels and moral values has also been explored. Values, moral principles, and rules tend to be activated when people are thinking abstractly about events and actions. Each of these have in common a trans-situational perspective. They are meant to be applicable over a variety of situations that are defined by their superordinate and essential features while suppressing their subordinate and incidental features. When considering events and actions abstractly, their moral qualities tend to become emphasized or more evident.

When a rule is being formulated or applied, especially if in accordance with the Rule of Law stricture that it govern all individuals equally, rule-makers and decision makers will think of people and events as distant temporally, socially, spatially and hypothetically.<sup>4</sup>

## **Part two: the problem situation**

### ***Policymakers, voters and experts are biased***

A presumption I hold in this article is that the key decision makers in the legal and public policy sectors are subject to cognitive biases. Because decision makers differ and because there may be institutions that correct for the biases of individuals, this is not a universal claim. Indeed, if the basic thesis of this article is correct then a rule-governed polity will be less subject to decision biases even if the individuals comprising it are not special exceptions to my presumption.

Those who, unlike the present author, believe that biases are rife in private decision making should be amenable to my presumption, at least on behavioral symmetry grounds. The individual behavioral propensities should be the same in both the private and public sector absent some persuasive contrary argument. However, in my case, I believe that biased decision making is far more likely in the public rather than the private sector. The fundamental reason for this is that voters, especially, but also politicians and experts face very attenuated feedback (Rizzo & Whitman, 2020, pp. 329–348). Voters do not individually bear the consequences of biased decisions. Therefore there is no reliable mechanism to debias their mental representations or actions. Politicians are in a similar situation, especially with regard to long-run consequences. They have short time horizons due to the relatively short terms in office. Even with respect to short-run consequences, voter ignorance about the causal connections between policies and results as well as the collective nature of much policymaking, attenuate the feedback mechanisms that might serve to erode biases over time.

### ***Empirical findings***

The evidence presented here will be far less than ultimately should be required. There have not been anywhere near the number of studies documenting cognitive biases in the public sector as in the private sector and the evidence that does exist is sometimes not of the highest quality. Nevertheless, what we do have, in conjunction with our reasonable presumption, is quite suggestive. The reader should also be aware that the experimental evidence discussed below reveals only the *propensities* of actors to make biased decisions.<sup>5</sup> However, these propensities suggest the need for debiasing mechanisms. Rules are one.

As a rough generalization, many biases are rooted in a form of narrow framing or narrow consideration of the various aspects of a problem or policy. I begin with perhaps the most obvious of narrow-framing effects: opportunity cost neglect.

### ***Opportunity cost neglect***

Persson and Tinghög (2020) conducted experiments in which members of the general public in Sweden and (separately) experts were asked whether they approved of a public health program. The individuals were divided into two treatments. The first (control) were simply asked whether they approved of the program while the second were reminded of a possible unspecified alternative in the health area. Those in the opportunity-cost treatment were less likely to approve the program by about a statistically significant 6 percentage points. Importantly, the results for the experts drawn from the International Society on Priorities in Health were more substantial. The

opportunity-cost treatment group was 10 percentage points less likely to approve the program. The authors interpret these overall results as revealing opportunity cost neglect when programs are simply proposed without salient alternatives (which is generally how they are proposed). In contrast, neither of these groups exhibited opportunity cost neglect with regard to private spending.

These results are reinforced by Cohen-Blankshtain and Sulitzeanu-Kenan (2021). They conducted an experiment in Israel in which members of the public were asked if they supported increased government investment in rail infrastructure. The participants were divided into a control group and an opportunity-cost prompting treatment group. The results were similar to those of the previous study. The opportunity cost prompting reduced the level of strong support from about 70 per cent to about 58 per cent. However, among those who were subject to *impact bias* the debiasing of opportunity cost prompting seem to have no statistically significant effect. This was a group that never had a railroad link in their small communities and were differentially optimistic about the benefits of the project. Among those not subject to impact bias, the effect was substantial.

### *Availability bias*

Availability bias is another feature of public policy making. Krause (2006) studied macroeconomic forecasts by three U.S. federal agencies for the period 1976–2002. He found that forecasts of aggregate variables (indicating relevant policy conditions) were typically biased. This was the case whenever the variables were not close to their mean or median values, that is, under ‘abnormal’ conditions. The forecasts systematically exaggerated both the excellent and poor policy conditions when they occurred. This was interpreted as availability bias and lends support to the claim that policymakers are likely to make over-reaction errors much of the time.

Availability bias has also been observed in the signing and ratification of bilateral investment treaties by developing countries (Poulsen & Aisbett, 2013). These treaties provide a measure of security to investors in developing countries by granting them rights to file arbitration claims with an international agency. In the event of disputes between the investors and the host country, the host country is liable for large payments to investors as well as litigation costs. Up until the mid-1990s there were few such disputes and so, according to interviews, most nations ignored such risks. Subsequently, especially in the 2000s, claims were being filed and payments made. However, rather than learning from the experience of other nations, this experience did not affect the number of treaties signed by a country unless *they themselves* had been subject to a claim. The finding of a substantial effect of own experience and no effect of other experience led the authors to conclude that this was a case of availability bias. Until the claim was

directly in front of them, there was no effect on a country's signing and ratification. Obviously, the bias is important because if the costs of such treaties are not properly incorporated in decision making, many will be ratified that should not have been in terms of the country's own interests.

### *Sunk cost bias*

Members of parliament in Belgium, Canada and Israel were administered experimental tasks to determine their susceptibility to various decision biases (Sheffer et al., 2018). In particular, the authors were interested in the degree to which the elected politicians differed from citizens. For our purposes, I will concentrate on the decisions of members of parliament only with regard to *sunk cost bias* (that is, the *escalation of commitment* in the face of sunk costs).

Participants were presented with a hypothetical scenario of a small business loan program which had been expected to return its \$500 million investment by the end of a five-year period. It fell short by either \$200 or \$50 million (depending on the particular treatment). The question to be decided was whether extending the program is worthwhile at an increased cost of \$100 million. The participants were told that the new expectation was that the program will return the original investment plus the increased cost by the end of one year. The MPs supported the extension of the program by a very high 83.7 per cent across all conditions.<sup>6</sup>

### *Discount rates*

Sheffer et al. (2018) also found that politicians apply very high discount rates to the benefits of government projects. The experiment put two alternatives against each other: either a \$10 million center opening in six months or a series of higher valued centers opening in two years. The mean amount for which MPs were willing to wait two years corresponds to a center with a value of \$14.3 million. The annual discount rate for the MPs is 18 per cent.<sup>7</sup> This is far higher than investment discount rates of individuals in the private sector indicating, as may be expected, a shorter time horizon for public investment.

### *Gain-loss framing*

Finally, Banuri et al. (2019) examined the susceptibility of policy professionals to framing biases. These were full-time civil servants of professional grade level working for the World Bank and for the UK Department for International Development. In particular, they were given the classic 'Asian disease problem' in describing the effects of a drug that could save lives in two ways. In the gain frame, the respondents could choose between a safe option (4000 people saved) and a risky option (1/3 probability of 12,000 saved and 2/3 probability of none saved). In the loss frame, they could

choose between safe option (8000 people die) and a risky option (1/3 probability that no one will die and a 2/3 probability that 12,000 will die). The gain frame and the loss frame are mathematically equivalent, but in the gain frame the professionals more often chose the safe option and in the loss frame they more often chose the risky option. Thus, the professionals were risk averse in gains and risk seeking in losses.

In this very brief survey we have found evidence in political decision making of opportunity cost neglect, impact bias, availability bias, escalating commitment in the face of sunk costs, high rates of discounting and loss aversion. Obviously, this is not a comprehensive survey and it does not do justice to the full array of possible biases. Nevertheless, I do believe that it is suggestive of an important feature of decision making in the public sector. These biases produce poor decisions because costs are not fully recognized, policy responses are exaggerated, good money is thrown after bad, and public projects are initiated with a very short time horizon.<sup>8</sup>

### Part three: impact of abstraction on biases

#### *Erosion of biases*

In this section, I provide evidence of the *erosion* of the general biases discussed in the previous section by abstract construal of actions, events and problems. By erosion I mean two things: first, the abstract mode of thinking leads to a reduction in the probability that individuals will display biased cognition; and second, the requirement that policies be stated as rules reduces the scope for biases to manifest in actual decisions.

Ideally, I would like to show that abstract construal can erode the biases found in the precise contexts discussed previously. However, this is not possible because the data are not available. What I can show is that there is evidence that the generic biases found in the previous cases are indeed eroded when construals are abstract.

#### *Availability bias*

Almost by definition, the availability bias seems incompatible with abstract construal. Since availability involves the accessibility or ease with which *specific instances* are brought to mind (Tversky & Kahneman, 1973) it is unlikely to be activated when individuals are thinking about types or abstract characterizations of phenomena. In global information processing, specific or concrete examples do not become salient; they do not dominate the inferences individuals make. Therefore, it is not surprising that Braga et al. (2015) found that participants were less likely to use the availability heuristic in the abstract construal treatment than in the low-level construal treatment (54 per cent compared to 79 per cent). Somewhat surprisingly, they found an

increase in the representativeness heuristic (that is, a decrease in the use of base rates). Most previous studies, however, have found a decrease in the use of this heuristic when construals are abstract.<sup>9</sup>

### **Sunk costs**

Since abstract construals focus on the primary purposes of an action or plan while downplaying the subordinate aspects, our presumption is that abstraction should erode sunk-cost bias. Trope et al. (2007) report an experimental study in which participants were asked to commit new resources to the production of a plane that, based on new information, would be unlikely to be completed profitably. The abstraction manipulation was made by spatial distance (this scenario was happening far away) and then later by temporal distance (this was happening in the future). Both forms of psychological distance caused a reduction in the sunk-cost error.<sup>10</sup>

### **Intertemporal preferences**

Fujita et al. (2006) in a series of experiments found that abstract construal of choices increased self-control by a number of measures. In particular, for our purposes, one measure is important: impatience. Participants were asked how much they would be willing to pay for several items either immediately or delayed in time. The difference between the immediate payment and the delayed payment was the measure of impatience. A larger difference indicates greater preference for immediate over delayed rewards. Those participants who had been primed to think abstractly showed a reduced tendency to prefer present rewards. This result makes sense in terms of construal level theory. To the extent that the utility of the item itself is more important than its timing we would expect abstract construal of the choice to place more weight on its primary feature and less on its secondary immediacy.

In an experiment in which half of the participants were primed with a prior task that encouraged abstract thinking and the other half concrete reasoning, the former group exhibited statistically – and substantively – significantly lower present bias (Malkoc et al., 2010). In other words, although the difference between what people were willing to accept per day (week or month) in compensation for a delay in the delivery of a camera was always greater for short delays than for long, in the abstract construal it narrowed considerably. On the basis of construal level theory we should thus expect a more inclusive and less localized (immediate) consideration of options.

### **Opportunity cost neglect**

The effect of abstract construal on opportunity cost neglect is not straightforward. As originally *conjectured* by Liberman et al. (2007) the effect might depend on the precise nature of the opportunities foregone. For those which are of *different type* from the focal option (say, savings alternatives

to insurance) a greater range may be considered in an abstract construal of the options than in the concrete construal. But concrete construal may activate the consideration of a greater number of the same type.

A later empirical study was conducted by Blaywais and Rosenboim (2022), which clarified many of the issues. They found that when decisions were made in a temporally or spatially distant manner (that is, for the future or for people far away), the abstract construal that was activated did involve greater awareness of opportunity costs. In other words, opportunity cost neglect was eroded. However, in the cases where abstract construal was activated by social (deciding for other people's benefit) or hypothetical (low probability of occurrence) distance, there was no effect on opportunity cost neglect. Why? Those in the socially and hypothetically distant group exerted considerably less cognitive effort in their task. They cared less and so they did not pay more attention to opportunity costs as those in the temporally and spatially distant treatment arms did. Nevertheless, it might be fair to conclude that holding effort constant, abstract construal decreases opportunity cost neglect.<sup>11</sup>

### *Gain-loss framing*

Raue et al. (2015) examined whether abstract construal would lessen the gain-loss framing effect. The participants were faced with the 'Asian disease problem' illustrated above. There were four treatment groups: loss frame, gain frame and low-level, high-level construal. In the gain frame, high-level construal led to more risk taking while low-level construal led to more risk avoidance. In the loss frame there was no effect of construal levels. But taking the two results together we find that abstract construal brought the risk response of the gain frame closer to the risk response of the loss frame. From this, the authors conclude that framing effects are weaker in a high-construal level than in a low.

### *Bias eroding rules*

A fundamental property of rules is that they do not always produce optimal decisions in any given case. Sometimes they are over-inclusive and other times under-inclusive relative to their stated or implicit rationale. However, the benefits of certainty in each case may outweigh whatever advantages are brought about by fine-tuning. Fine-tuning capabilities may be exaggerated because regulators may not have enough knowledge or may overdo their responses in one direction or another. The purpose of this article has been to emphasize another possible advantage of rules compared to case-by-case discretion. This is the erosion of certain biases in judgements and decisions. In my view, these biases are more likely in public policy decision making than in private decision making. But even if this is not so (since an

overall empirical comparison has not been made), it still is the case that when biases affect third parties they are more serious than when they affect only the individual decision maker. In the former case, the biases result in *externalities*. My value judgment is that involuntary imposition of costs upon others is worse than self-imposed costs.

Based on the arguments and evidence presented here, it would seem that to the extent that public sector agents make choices in a rule-bound and therefore in an abstract construal frame, their propensity toward biased decision making will be eroded. When I say rule-bound I mean to contrast this with both case-by-case application of general standards and an intuitive means of processing judgments.

The precise rules that would induce abstract construal of problems and options obviously depends on the area of public decision making under discussion. It would also depend on what other institutional constraints are in place that might also erode biases. A full discussion of these appropriate rules must be the subject of further research. However, here I can suggest some possibilities.

In environmental law, clear and relatively simple administrative rules such as, for example, a carbon tax would be preferred to a case-by-case judgment of 'justifiable' carbon emissions. In circumstances where, for whatever reason, case-by-case decision making is desirable, decisions made through rigorous and formal cost-benefit analysis is preferred to a more casual balancing of costs and benefits. The formal structures of cost-benefit analysis help decision makers construe a particular case in more abstract and impersonal terms and thus induce a more comprehensive or holistic frame. Longer-run consequences should be considered as well as comparisons with the cost-benefit profile of other regulations.<sup>12</sup> For example, a high-level construal would ask, 'How much do 'we' value a statistical life in other areas? Is this consistent with that?'

In monetary policy, something like the Taylor Rule would be preferred to discretion.<sup>13</sup> Without going into details, it should be clear that this construes any current situation as an instance of a long-term pattern or an instantiation of a rule. In banking policy, formal equally-applied capital requirements are preferable to individual case risk management by the regulators. This avoids all sorts of availability and other risk-related biases.

Finally, in judicial contexts, abstract and general rules like those prevailing in free-speech jurisprudence are preferable to a case-by-case evaluation of the worth of speech, especially when public passions are inflamed.

Before concluding, several caveats are in order. First, as the reader may have surmised, this article should not be construed as making the case for a minimal-intervention state. Instead, it focuses on limits to the *manner* of intervention: rules rather than discretion. Second, the erosion of biases is not the only value that should be pursued in the law and public policy.

Therefore, this is not a complete analysis of the advantages of rules. Nevertheless, it adds to those. Third, it may be the case that abstract construal will make certain other biases more prevalent or that important case-by-case information will be lost. An evaluation of the problems relating to specific decision making areas and institutions would need to be made. Fourth, adhering to the rigor of rules, especially during crises, may not be easy for the policymaker.<sup>14</sup> Nevertheless, failure to do so can generate over-reactions to abnormal events thus exacerbating negative outcomes. Fifth, as alluded to above, there may be other methods of debiasing public sector decision makers – like transparent discussion, answering devil's advocate questioning and possibly group decision making. My emphasis on abstraction is not meant to disparage those. It is simply to add to our understanding of rules and their benefits in the erosion of certain biases. However, since rules have many other advantages as well, such as ensuring equality, certainty, the facilitation of private ordering and so forth, they may occupy a privileged place in decision making in the public sector.

## Notes

1. For a detailed analysis of rules, see Schauer (1991).
2. Thus construal levels are a matter of *degrees* of abstraction or, equivalently, of concreteness.
3. The replication 'crisis' in psychology affects all research on biases (Rizzo & Whitman, 2020, pp. 198–201). However, there is no reason to suppose that it particularly or differentially affects the results of construal-level research. The consequences of psychological distance on construal levels has been supported by a meta-analysis of various studies. Soderberg et al. (2015, p. 525) summarize, 'Across 106 papers containing a total of 267 experiments, our results showed a reliable medium-sized effect of psychological distance on both the level of abstraction in mental representation and the downstream consequences of abstraction. Importantly, these effects replicate across time, researchers, and settings.'
4. With respect to 'hypothetical' I mean to include rules of the form 'If a person drives at greater than 60 mph, that person will be fined.' There is no certainty about when or where the factual predicate will occur.
5. Two exceptions are discussed in section 4 (ii) below. These are cases where the bias propensity manifested itself in actual decisions.
6. Citizens favored the extension of this government project by a smaller, though substantial, 71.1%.
7. The discount rate in this public investment for ordinary citizens was 19%.
8. For a discussion of how biases among policy makers increase slippery slope tendencies, see Rizzo and Whitman (2020, pp. 349–397).
9. See the sources cited in Braga et al. (2015, p. 224.)
10. For compatible findings see Arkes and Blumer (1985).
11. For a contrary argument that concrete construal increases consideration of opportunity costs, see Waites et al. (2021).

12. For an argument that the rationality benefits of cost-benefit analysis are overstated, see Chen and Libgober (2021).
13. The Taylor Rule relates the Fed's target short-term interest rates to the equally-weighted difference between actual and desired inflation and the difference between real GDP growth and a constant long-term growth rate.
14. On the tendency to depart from rules, see Rizzo (2008, 2016).

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## References

- Arkes, H., & Blumer, C. (1985). The psychology of sunk costs. *Organizational Behavior and Human Decision Processes*, 35(1), 124–140.
- Banuri, S., Dercon, S., & Gauri, V. (2019). Biased policy professionals. *The World Bank Economic Review*, 33(2), 310–327. <https://doi.org/10.1093/wber/lhy033>
- Blaywais, R., & Rosenboim, M. (2022) The different effect of psychological distances on neglected opportunity costs. SSRN: <https://ssrn.com/abstract=4043723> or <http://doi.org/10.2139/ssrn.4043723>.
- Braga, J. N., Ferreira, M. B., & Sherman, S. J. (2015). The effects of construal level on heuristic reasoning: The case of representativeness and availability. *Decision*, 2(3), 216. <https://doi.org/10.1037/dec0000021>
- Chen, B., & Libgober, B. (2021). Making regulators reasonable: Do procedural rationality requirements fix cognitive biases?. University of Hong Kong Faculty of Law Research Paper No. 2021/040, August 15, SSRN: <https://ssrn.com/abstract=3918091> or <http://doi.org/10.2139/ssrn.3918091>.
- Cohen-Blankshtain, G., & Sulitzeanu-Kenan, R. (2021). Foregone and predicted futures: Challenges of opportunity cost neglect and impact bias for public participation in policymaking. *Journal of European Public Policy*, 28(5), 677–697. <https://doi.org/10.1080/13501763.2021.1912152>
- Fujita, K., Trope, Y., Liberman, N., & Levin-Sagi, M. (2006). Construal levels and self-control. *Journal of Personality and Social Psychology*, 90(3), 351. <https://doi.org/10.1037/0022-3514.90.3.351>
- Hayek, F. (2007). *The Road to Serfdom: Texts and Documents – The Definitive Edition*, Caldwell, B. (Ed.). University of Chicago Press.
- Krause, G. A. (2006). Beyond the norm: Cognitive biases and the behavioral underpinnings of US federal agency macroeconomic forecasts. *Rationality and Society*, 18(2), 157–191. <https://doi.org/10.1177/1043463106063322>
- Liberman, N., Trope, Y., & Wakslak, C. (2007). Construal level theory and consumer behavior. *Journal of Consumer Psychology*, 17(2), 113–117. [https://doi.org/10.1016/S1057-7408\(07\)70017-7](https://doi.org/10.1016/S1057-7408(07)70017-7)
- Malkoc, S. A., Zauberman, G., & Bettman, J. R. (2010). Unstuck from the concrete: Carryover effects of abstract mindsets in intertemporal preferences. *Organizational Behavior and Human Decision Processes*, 113(2), 112–126. <https://doi.org/10.1016/j.obhdp.2010.07.003>
- Persson, E., & Tinghög, G. (2020). Opportunity cost neglect in public policy. *Journal of Economic Behavior & Organization*, 170, 301–312. <https://doi.org/10.1016/j.jebo.2019.12.012>

- Poulsen, L. N. S., & Aisbett, E. (2013). When the claim hits: Bilateral investment treaties and bounded rational learning. *World Politics*, 65(2), 273–313. <https://doi.org/10.1017/S0043887113000063>
- Raue, M., Streicher, B., Lerner, E., & Frey, D. (2015). How far does it feel? Construal level and decisions under risk. *Journal of Applied Research in Memory and Cognition*, 4(3), 256–264. <https://doi.org/10.1016/j.jarmac.2014.09.005>
- Rizzo, M. J. (2008). Justice versus benevolence: A modern human view. *Minn. J. L. Sci. & Tech.*, 9 (2), 883–898.
- Rizzo, M. J. (2016). Abstract morality for an abstract order: Liberalism's difficult problem. *Supreme Court Economic Review*, 23(1), 7–34. <https://doi.org/10.1086/686470>
- Rizzo, M. J., & Whitman, G. (2020). *Escaping Paternalism: Rationality, Behavioral Economics, and Public Policy*. Cambridge University Press.
- Schauer, F. (1991). *Playing by the Rules: A Philosophical Examination of Rule-Based Decision-Making in law and in Life*. Clarendon Press.
- Sheffer, L., Loewen, P. J., Soroka, S., Walgrave, S., & Sheafer, T. (2018). Nonrepresentative representatives: An experimental study of the decision making of elected politicians. *American Political Science Review*, 112(2), 302–321. <https://doi.org/10.1017/S0003055417000569>
- Soderberg, C. K., Callahan, S. P., Kochersberger, A. O., Amit, E., & Ledgerwood, A. (2015). The effects of psychological distance on abstraction: Two meta-analyses. *Psychological Bulletin*, 141(3), 525. <https://doi.org/10.1037/bul0000005>
- Trope, Y., Liberman, N., & Wakslak, C. (2007). Construal levels and psychological distance: Effects on representation, prediction, evaluation, and behavior. *Journal of Consumer Psychology*, 17(2), 83–95. [https://doi.org/10.1016/S1057-7408\(07\)70013-X](https://doi.org/10.1016/S1057-7408(07)70013-X)
- Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, 5(2), 207–232. [https://doi.org/10.1016/0010-0285\(73\)90033-9](https://doi.org/10.1016/0010-0285(73)90033-9)
- Waites, S. F., Farmer, A., & Esmark Jones, C. L. (2021). Building toward a solid foundation: The effect of thinking concretely about the future. *Journal of Consumer Affairs*, 55(1), 254–273. <https://doi.org/10.1111/joca.12344>
- Waldron, J. (2020). The rule of law. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Summer 2020 Edition) 1–41. <https://plato.stanford.edu/archives/sum2020/entries/rule-of-law/Metaphysics Research Lab, Stanford University>.