THOUGHT EXPERIMENTS IN THE LAW

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Our responses to thought experiments inform our understanding of, and our normative beliefs about, the law. Such thought experiments may involve, for example, the use of interrogational torture in the context of great public danger; desperately trapped amateur cave explorers; runaway trolleys, and other such scenarios. Law students and appellate advocates are invariably counseled, understandably, to accept, and thus not to fight, a posed hypothetical. As it turns out, though, for reasons explored herein, failing to intelligently fight the hypothetical at any point is generally a serious mistake.

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I. INTRODUCTION

The discussion of hypothetical scenarios is a familiar practice in law school classrooms,[1] in courtrooms,[2] and in legal scholarship.[3] At its simplest, a hypothetical scenario may involve merely a single adjustment to an assumed set of circumstances. For example, given the other relevant facts of a legal case, what, if anything, should change if we now assume that the plaintiff is a minor?

One might well think of a hypothetical scenario as synonymous with the idea of a thought experiment. Herein, though, the term 'thought experiment' is reserved for relatively elaborate, though inevitably still sparing scenarios. For our purposes, a thought experiment is roughly equivalent to what scientists call a gedankenexperiment.[4]

The nature, value, limits, and indeed the costs of thought experiments in the law and elsewhere are all unclear and contested to one degree or another. We often assume that through a legal or other thought experiment, "we can start from a position of ignorance, sit and think, and gain new knowledge, despite the input of no new empirical data."[5] Some thought experiments, within or beyond the law, are intended to amount to a form of argument.[6] But at least some thought experiments are intended not as arguments in themselves but merely as part of, or in preparation for, an argument.[7]

Whether thought experiments are, or aspire to be, arguments for some conclusion or not, academics normally believe they serve useful purposes. Thus, it has been said that in the law, "[h]ypotheticals are wonderful devices of great helpfulness."[8] In particular, legal hypotheticals "allow us to strip

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1. *See, e.g.*, Diana J. Simon, *Focused and Fun: A How-To Guide for Creating Hypotheticals for Law Students*, 19 SCRIBES J. LEGAL WRITING 161 (2020).

2. *See, e.g.*, E. Barrett Prettyman, Jr., *The Supreme Court's Use of Hypothetical Questions at Oral Arguments*, 33 CATH. U.L. REV. 555, 555 (1984) (distinguishing remote, complex, and unforeseeable hypotheticals from other kinds of hypotheticals).

3. *See, e.g.*, Lon L. Fuller, Jr., *The Case of the Speluncean Explorers*, 62 HARV. L. REV. 616 (1949), reprinted at 112 HARV. L. REV. 1851 (1999).

4. The term 'gedankenexperiment' is apparently owed to the physicist-philosopher Ernst Mach. *See* Roy Sorensen, *Thought Experiments*, 79 AM. SCIENTIST 250, 250 (1991).

5. Rachel Cooper, *Thought Experiments*, 36 METAPHILOSOPHY 328, 328 (2005). *See also* Tamar Szabo Gendler, *Thought Experiments Rethought—and Reperceived*, 71 PHIL. SCI. 1152, 1153 (2004).

6. *See, e.g.*, John D. Norton, *On Thought Experiments: Is There More to the Argument?*, 71 PHIL. SCI. 1139, 1139 (2004).

7. *See, e.g.*, Adrian Walsh, *A Moderate Defence of the Use of Thought Experiments in Applied Ethics*, 14 ETHICAL THEORY & MORAL PRAC. 467, 469 (2011). *See also* Michael A. Bishop, *Why Thought Experiments Are Not Arguments*, 66 PHIL. SCI. 534 (1999); Soren Hagqvist, *A Model for Thought Experiments*, 39 CAN. J. PHIL. 55, 57 (2009).

8. Paul H. Robinson, *Some Doubts About Argument by Hypothetical*, 88 CAL. L. REV. 813, 820 (2000).

the infinite complexity of real life and focus on a few isolated essentials."[9] Such thought experiments allow for the testing of legal theories,[10] and can facilitate the development of new theories.[11] As well, thought experiments may help "prove that certain theories or concepts involve contradictions";[12] "give supporting evidence for a theory or concept";[13] "illustrate a complex or abstract position";[14] or "detect vagueness or the borderline cases of the concept."[15]

Such is the promise of well-designed and well-interpreted thought experiments. But there is always a gap between how we intuitively respond to a thought experiment, and how such an intuitive response plays out when applied to the ongoing complexity of real-world circumstances.[16] A map that is as large as that which it charts is pointless. Likewise, a thought experiment loses its purpose unless it calls our attention to only a limited set of circumstances.[17]

The problem is that the best legal judgments of what to do and what policy to adopt, must generally take into account more circumstances than can be built into any convenient thought experiment.[18] Any judgment that we might reach on the basis of even a well-constructed thought experiment will be insensitive to missing but relevant considerations.[19] Or, perhaps even worse, each person addressing a thought experiment may consciously or subconsciously add to and creatively flesh out the thought experiment, in any number of idiosyncratic ways. In effect, there is then no single common thought experiment to be discussed, but a variety of partly unarticulated and largely unrecognized versions of a thought experiment.[20]

If we try as best we can to not personally supplement the thought experiment in some idiosyncratic way, we fare no better. An inevitably simplified and often bizarre or far-fetched thought experiment may not distinctively trigger any well-established judgments, principles, or intuitions.[21] If the thought experiment is not intentionally set up to virtually

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9. *Id.*
10. *See* Sara Kier Praem & Ashbjorn Steglich-Petersen, *Philosophical thought experiments as heuristics for theory discovery*, 192 SYNTHESE 2827, 2827 (2015).
11. *See id.*
12. Elke Brendel, *Intuition Pumps and the Proper Use of Thought Experiments*, 58 DIALECTICA 89, 92 (2004).
13. *Id.*
14. *Id.*
15. *Id.*
16. For background, see James Wilson, *Internal and External Validity in Thought Experiments*, 116 PROCEEDINGS OF THE ARISTOTELIAN SOCIETY 127, 127–28 (2016).
17. *See* Robinson, *supra* note 8, at 820.
18. *See id*.
19. *See id*. at 821.
20. *See id.*
21. *See* Brendel, *supra* note 12, at 106; Walsh, *supra* note 7, at 470 n.2.

dictate some preferred response,[22] we may well not have enough background experiences to construct a broad, distinctively defensible response to the hypothetical. Such a hypothetical may leave us cold or simply uncertain.

It is fair to conclude that whatever their value, thought experiments in the law and elsewhere involve risks to the judgment and policymaking process that are unlikely to be fully apparent. We should thus consider the proper role of thought experiments in the law in light of their value and risks, particularly in light of the value of our real-world lived experience.[23]

Ultimately, the socialization processes that we all undergo will inevitably be distortive, and must embody particular biases. But these distortions and biases equally, and inevitably, work their way into and through thought experiments and our responses thereto. In fact, it is easier to consciously or unconsciously bias a single thought experiment through omission or distortion than to exercise enough control over time to systematically bias a life's worth of experiences. By its very nature, a single thought experiment cannot begin to match the richness, nuance, and subtle variety of an immense number of even imperfectly remembered life experiences.

Crucially, we do not experience any actual consequences, whether individual or collective; intended or unintended; foreseen or unforeseen; or short or long-term, of our responses to even the best thought experiments. The world provides no feedback on the ultimate wisdom of our responses to thought experiments. Our immense treasury of real-world experiences also includes our imagined experiences and, vicariously, those of many other persons: novelists and filmmakers, to name two. These collectively give us a more reliable guide to legal policy and decision-making than our reactions to thought experiments. We may indeed misinterpret our lived experiences. But our lived experiences provide us, in particular, with a vivid sense of the crucial unanticipated long-term consequences of our individual and collective choices.

Before further pursuing such concerns, though, let us appreciate some of the initial problems inherent in even the most provocative and best-crafted thought experiments in the law.

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22. *See* Walsh, *supra* note 7, at 478 (referring in particular to experiments "forcing us to choose between the experimenter's favoured choice and some entirely unpalatable alternative"). *See also* Georg Brun, *Thought Experiments in Ethics*, *in* THE ROUTLEDGE COMPANION TO THOUGHT EXPERIMENTS 195, 195 (Michael T. Stuart, Yiftach Fehige & James Robert Brown eds., 2017) ("Glossing over crucial assumptions and selling gerrymandered questions as well-founded challenges can have morally bad consequences.").

23. Thus we must "ask about the relative importance of imagination and of real experience." JONATHAN DANCY, PRACTICAL THOUGHT: ESSAYS ON REASON, INTUITION, AND ACTION 63 (2021).

II. A CRITICAL LOOK AT SOME PROMINENT LEGAL THOUGHT EXPERIMENTS

A. The Torture and Ticking Bomb Scenarios

In legal circles, scholars and academics have widely discussed several thought experiments. Prominent among these are scenarios that discuss using interrogational torture to locate a hidden ticking bomb that will, it is assumed, shortly kill thousands of innocent persons. For the sake of brevity, this family of legal thought experiments can be called "ticking bomb scenarios."

The possibility of the morally, if not legally, justified use of torture for one reason or another has long been contested. The great Italian criminologist Cesare Beccaria rejected the use of torture as an instrument for eliciting judicial truth.[24] As might be expected, Jeremy Bentham declined to rule out the use of torture absolutely, despite its obvious disutility for the direct victim.[25] Contemporary international law prohibits the use of torture under any circumstances, including grave national emergencies.[26] At the same time, though, much of the general population apparently believes that torture can be effective in obtaining information about an impending terrorist attack.[27] And it has been said that for most people, it would be permissible "to torture one innocent person for a year if this were the only way to prevent a billion people from being tortured in an equivalent period."[28]

Suppose, then, we are confronted, in the abstract, with some version of the ticking bomb thought experiment. For the sake of concreteness, let us imagine a thought experiment in which a captured terrorist knows but refuses to disclose the location of a time bomb that will shortly explode, killing thousands of innocent persons who cannot be saved, except through the torture of the captured terrorist.

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24. *See* CESARE BECCARIA, ON CRIMES AND PUNISHMENTS 30-36 (Henry Paolucci trans., 1963) (1764).

25. Bentham's discussion of torture is reproduced in W.L. Twining & P.E. Twining, *Bentham on Torture*, 24 N. IR. L.Q. 305, 308 (1973).

26. *See, e.g.*, Jamie Mayerfield, *In Defense of the Absolute Prohibition of Torture*, 22 PUB. AFF. Q. 109, 109 (2008).

27. *See* Ron E. Hassner, *Persuasive and Unpersuasive Critiques of Torture*, https://www.cambridge.org/core/journals/perspectives-on-politics/article/persuasive-and-unpersuasive-critiques-of-torture/D01E3D4180E9DF607808CAD4E3059B43 [https://perma.cc/4PR6-SNP5] (March 21, 2022) (visited Aug. 20, 2022).

28. Jeff McMahan, *Torture in Principle and Practice*, 22 PUB. AFF. Q. 91, 98 (2008). For a critical view of comparing the numbers of persons injured under alternative policies, see John M. Taurek, *Should the Numbers Count?*, 6 PHIL. & PUB. AFF. 293 (1977).

We could, of course, tinker endlessly with this particular version of the thought experiment, to press those reflecting on the hypothetical toward one response or another. To push in one direction, we could assume that the person to be tortured is only loosely related to the bomb plot. Perhaps the tortured victim is the terrorist's innocent child, and the child will be tortured in front of the terrorist. Or we could simply stipulate, as part of the thought experiment, that this particular instance of torture will not set a legal precedent[29] and might not be generally publicized.[30] We could also fine-tune the nature, severity, and duration of the torture involved. Perhaps the torture takes the form merely of sustained loud music.[31]

More generally, our tinkering could lead us to question the difference between an action that barely rises to the minimum definition of torture, as distinct from an action that falls just barely below the threshold of 'torture?'[32] Is such a difference crucial?

Now, if any such ticking bomb scenario is posed, either in a classroom[33] or in a courtroom,[34] the expectation is for some directly accommodating response. In the classroom, the student compliantly applies what has just been discussed, given the student's perhaps updated intuitions. In the courtroom, the attorney responds to the judicial hypothetical by properly advancing the client's interests with due deference to the court. One does not fight the hypothetical.

Elsewhere, though, one should indeed, as a general rule, initially fight the hypothetical on as many fronts as may seem appropriate. Initially, any thought experiment should be resisted and exposed as inherently misleading, wherever possible. Perhaps we simply must obtain more information in order to make even a minimally responsible decision. To see this, let us return to the ticking bomb thought experiments.

The ticking bomb thought experiments are not universally greeted with enthusiasm. They have been deemed "badly misleading"[35] with regard to real-world cases,[36] and to be "built on a set of assumptions that amount to

29. *See* Daniel J. Hill, *Ticking Bombs, Torture, and the Analogy with Self-Defense*, 44 AM. PHIL. Q. 395, 395 (2007).

30. *See id*.

31. *See* John Kleinig, *Ticking Bombs and Torture Warrants*, 10 DEAKIN L. REV. 614, 621 (2005).

32. *See* McMahan, *supra* note 28, at 94. This scenario raises what is referred to as the Sorites Paradox. *See* Dominic Hyde & Diana Raffman, *Sorites Paradox*, STANFORD ENCYCLOPEDIA OF PHILOSOPHY, https://plato.stanford.edu/archives/sum2018/entries/sorites-paradox/ (rev. ed. March 26, 2018) (visited Aug. 20, 2022).

33. *See supra* note 1 and accompanying text.

34. *See supra* note 2 and accompanying text.

35. Henry Shue, *Torture in Dreamland: Disposing of the Ticking Bomb*, 37 CASE W. RES. J. INT'L L. 231, 231 (2005).

36. *See id.*

intellectual fraud."[37] Thus, one might well concede that torture "might be justifiable in some of the rarefied situations which can be imagined."[38] But one might reasonably conclude that such abstract possibilities provide no reason to consider altering the law's generally absolute prohibition of torture.[39]

On such views, ticking bomb thought experiments are necessarily skewed, and are crucially deceptive. The alleged skewing and deception take various forms. First, it is suggested that realistically, the use of torture could, in practice, not be confined to the already remarkably vague category of 'ticking bomb' scenarios, whatever their scope.[40] Second, it is suggested that anything like a ticking bomb scenario is simply not a realistic possibility.[41] Professor Marcy Strauss, in particular, declared that "it is my strong belief that this hypothetical, almost certainly, will never happen."[42]

More concretely, it has been claimed that "when it comes to torturing suspects, the record of epistemic success is, at best, unpromising."[43] And more emphatically, it has been asserted that "in the long history of counter-terror campaigns there . . . has not been a verified incident that even comes close to the ticking bomb torture scenario."[44]

In general, the ticking bomb scenarios invite an unrealistic degree of certainty regarding how the real world operates. Their assumptions may include, for example, an exaggerated conviction of the captive's guilt.[45] Captives may also provide false information for any number of reasons. Any misleading information supplied by the torture victim plainly wastes resources.[46] The value of any 'true' information revealed under torture may be minimal if the terrorist's confederates have, in light of the capture, moved the bomb in question,[47] or if the torture process and the victim's response simply take too long.

The ticking bomb torture scenarios provide little guidance on how to characterize, and evaluate, the harms that are directly, and indirectly, inflicted by the torturers. Should the focus be primarily on the torture

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37. David Luban, *Liberalism, Torture, and the Ticking Bomb*, 91 VA. L. REV. 1425, 1427 (2005).
38. Henry Shue, *Torture*, 7 PHIL. & PUB. AFF. 124, 143 (1978).
39. *See id.*
40. *See, e.g.*, Mayerfield, *supra* note 26, at 110; Luban, *supra* note 37, at 1427.
41. *See, e.g.*, Mayerfield, *supra* note 26, at 110.
42. Marcy Strauss, *Torture*, 48 N.Y.L. SCH. L. REV. 201, 202 (2003).
43. Vittorio Bufacchi & Jean Maria Arrigo, *Torture, Terrorism and the State: A Refutation of the Ticking-Bomb Argument*, 23 J. APPLIED PHIL. 355, 368 (2006).
44. Mayerfield, *supra* note 26, at 111.
45. *See id.*
46. *See id.*
47. *See, e.g.*, Marcia Baron, THE TICKING BOMB HYPOTHETICAL, IN CONFRONTING TORTURE: ESSAYS ON THE ETHICS, LEGALITY, HISTORY, AND PSYCHOLOGY OF TORTURE TODAY 208, 223 n.33 (Scott A. Anderson & Martha C. Nussbaum eds., 2018).

victim's pain and suffering?[48] Or is the deliberate, calculated infliction of that suffering by the interrogators themselves important as well?[49] Where, beyond these initial considerations, does the obvious insult to everyone's dignity fit?[50] Are there genuine, realistic conflicts between some forms and degrees of indignity and the reasonable pursuit of the common good?[51]

As well, there may be unspecified, and unanticipated, harms that are unique to investigational torture that may not be articulated in the thought experiment. Torture may, for example, uniquely impair autonomy[52] through breaking, or seeking to break, the torture victim's will[53] for the sole purpose of serving the torturer's own purposes.[54] More elaborately, it has been claimed that torture aims at a distinctive form of "forced self-betrayal"[55] that extends beyond mere extreme cruelty.[56] In particular, it has been argued that "torture forces its victim into . . . colluding against himself through his own affects and emotions, so that he experiences himself as simultaneously powerless and yet actively complicit in his own violation."[57] At the extreme, one might even claim that "[i]n the most direct and literal sense, torture teaches us as individuals that we are all slaves to our bodies and that our beliefs, our values, and our moral obligations—in short, all that makes us human—count for nothing when our bodies are at stake."[58]

Of course, such interpretations of ticking bomb thought experiments may also be contested and controversial. For example, it has been suggested that the above-described direct harms of torture are not unique to torture. Many sorts of violent crimes involve cruelty, fright, shock, and indignity.[59] Consider the possible character of an armed robbery on the street. Thus

> [i]f a robber points a gun at a victim and threatens to kill him if the victim does not give his money to the robber, the robber, if successful, also turns the victim's agency against the victim himself. He makes the victim's fear express his, the robber's will, and the

48. *See, e.g.*, Jeremy Waldron, *Torture and Positive Law: Jurisprudence For the White House*, 105 COLUM. L. REV. 1681, 1749 (2005).
49. *See id.*
50. *See id.*; Ben Juratowitch, *Torture Is Always Wrong*, 22 PUB. AFF. Q. 81, 86 (2008).
51. *See* Juratowitch, *supra* note 50, at 86.
52. *See*, e.g., Mayerfield, *supra* note 26, at 118.
53. *See id.*
54. *See id.* at 118–19; Juratowitch, *supra* note 50, at 87.
55. David Sussman, *What's Wrong With Torture?*, 33 PHIL. & PUB. AFF. 1, 4 (2005).
56. *See id.*
57. *Id.*
58. Louis Michael Seidman, *Torture's Truth*, 72 U. CHI. L. REV. 881, 886 (2005).
59. Consider, in particular, a home intrusion and ensuing forceable rape. One might well choose to classify at least some such instances as a form of torture. But this sensible choice might then further blur the definition of 'torture' in other contexts.

> victim, in handing over the money for fear of death, is 'complicit' in his own violation.[60]

So, one could argue that without denying any of the direct harms of torture, other violently coercive acts are quite similar in essence. Perhaps some such state actions can even be justified. And to the extent that torture is successfully resisted, or false information is supplied, or the victim professes honest ignorance, the victim's agency is not turned against herself,[61] she does not express or comply with the torturer's will,[62] and she is not at all complicit in her own violation.[63]

Thus, overall, it is fair to say that outside the immediate contexts of classroom and court, the most sensible initial response to any form of the ticking bomb thought experiment is to distance oneself, to "fight" the hypothetical, and to object to the thought experiment's crucially misleading unrealism in specific respects. Later, at some remove, any thought experiment can then be judiciously picked over, and mined for any genuine insights. To reinforce the argument thus far, let us briefly consider a further classic legal thought experiment.

B. Lon Fuller's Speluncean Explorers

Professor Lon Fuller's classic legal thought experiment poses an unusually detailed and variously bizarre scenario, followed by five specified judicial responses to the scenario in question.[64] Fuller's thought experiment has been of broad and sustained interest.[65]

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60. Uwe Steinhoff, *Torture – The Case for Dirty Harry and Against Alan Dershowitz*, 23 J. APPLIED PHIL. 337, 340 (2006).

61. *See id.*

62. *See id.*

63. *See id.*

64. Lon L. Fuller, Jr., *The Case of the Speluncean Explorers*, 62 HARV. L. REV. 616 (1949), reprinted at 112 HARV. L. REV. 1851 (1999).

65. For a merely fragmentary sampling of the responsive literature, see, for example, Naomi R. Cahn, *The Case of the Speluncean Explorers: Contemporary Proceedings*, 61 GEO. WASH. L. REV. 1755 (1993); Frank Easterbrook, *The Case of the Speluncean Explorers: Revisited*, 112 HARV. L. REV. 1913 (1999); William N. Eskridge, Jr., *The Case of the Speluncean Explorers: Twentieth Century Statutory Interpretation in a Nutshell*, 61 GEO. WASH. L. REV. 1731 (1993); Alex Kozinski, *The Case of the Speluncean Explorers: Revisited*, 112 HARV. L. REV. 1876 (1999); Geoffrey C. Miller, *The Case of the Speluncean Explorers: Contemporary Proceedings*, 61 GEO. WASH. L. REV. 1798 (1993); Jeremy Paul, *The Case of the Speluncean Explorers: Contemporary Proceedings*, 61 GEO. WASH. L. REV. 1801 (1993); Daniel L. Shapiro*, The Case of the Speluncean Explorers: A Fiftieth Anniversary Symposium Foreword: A Cave Drawing For the Ages*, 112 HARV. L. REV. 1834 (1999); Cass R. Sunstein, *The Case of the Speluncean Explorers: Revisited*, 112 HARV. L. REV. 1883 (1999); Robin West, *The Case of the Speluncean Explorers: Revisited*, 112 HARV. L. REV. 1891 (1999). As of August 13, 2022, a search of the Westlaw Law Review and Journals database for the phrase "speluncean explorers" returned 392 hits.

Fuller's thought experiment is too long and detailed to bear quotation in full. It anticipates and defuses many potential ambiguities. The hypothetical loosely recalls actual, rare, and tragic case patterns.[66] As a thought experiment, it has been judged to be a "breathtaking legal accomplishment."[67] One distinguished academic has declared that "as one who has often faltered in the effort to construct a flawless hypothetical, I think that Fuller's comes about as close to perfection as one can get."[68]

For the sake of having at least a minimal sense of Fuller's elaborate thought experiment, we can say the following: five apparently competent and experienced cavers set out to explore an elaborate limestone cave and cavern system.[69] They became trapped when the apparent sole entry and exit passage was blocked by a first and then a second cave-in or landslide.[70] The elaborate and expensive ongoing rescue attempt cost the lives of ten rescuers.[71] The rescue process was successful on its thirty-second day.[72]

Fuller's thought experiment involves minimal food provisions that were either brought into or were available inside the cave system.[73] The thought experiment provides for radio-like communication between the trapped cavers and various personnel: rescuers, medical experts, judges, government officials, and clergy.[74] The experts informed the miners that they would be unlikely to survive ten days without food.[75]

The cavers themselves explicitly raised the question of whether they would be likely to survive if they "consumed the flesh of one of their number."[76] The expert physician answered in the affirmative.[77] But the physician, judge, government official, or clergy member were unwilling to answer whether it would be advisable for the cavers to draw lots to determine which of their party should be sacrificed, with or without advance consent.[78]

One of the cavers then proposed the casting of lots—dice had been brought into the cave—but the caver that would have been sacrificed withdrew his own consent before the dice turned up against him. He withdrew his consent because he believed the cavers should instead wait an

66. See the casebook perennial, Regina v. Dudley and Stephens, 14 Q.B.D. 273 (1884) (cannibalism under extreme circumstances).
67. Eskridge, *supra* note 65, at 1732.
68. Shapiro, *supra* note 65, at 1837.
69. See Fuller, *supra* note 64, at 1851.
70. *See id.* at 1851–52.
71. *See id.* at 1851.
72. *See id.*
73. *See id.*
74. *See id*. at 1851–52.
75. *See id.* at 1852.
76. *Id.*
77. *See id.*
78. *See id.* at 1852–53.

additional week for rescue.[79] The tragic human sacrifice took place on the cavers' twenty-third day of confinement, nine days before the rescue party arrived.[80]

After treatment for malnutrition and shock,[81] the four surviving cavers were tried, found guilty, and sentenced to be hanged.[82] The relevant statute read simply: "Whoever shall willfully take the life of another shall be punished by death."[83] This statute provided for no applicable exceptions or for sentencing discretion, apart, presumably, from executive clemency or pardon.[84]

Affirmatively cooperating with this thought experiment understandably leads to a wide range of jurisprudential responses.[85] The problem, though, is that cooperating with this thought experiment leads us to miss, or unduly downplay, important ethical and legal considerations. Let us, in this spirit, uncooperatively 'fight' the hypothetical. When we do, we find two especially important lessons that fighting this hypothetical can provide. First, even under extreme circumstances, there are likely to be alternative options that substantially affect how the hypothetical should unfold and how we should react to it. Perhaps the participants can and should seek to reduce the scarcity, and the tragedy, that the hypothetical implies. Perhaps our broader legal policies should recognize and incentivize that possibility. Second, there is the more fundamental problem of the hypothetical's violating what we might call the inescapable assumption of moderate scarcity and the necessary circumstances of law and justice.

Of course, no thought experiment of this sort can be entirely realistic, even within its own constricted universe. Trivially, for example, it is unlikely that all five cavers would have survived for 23 days,[86] scant food and nutrition aside, without access to water to which the hypothetical does not refer.[87] This elemental fact shortens the relevant timeline rather dramatically. The range of creative responses is thereby constricted. We might assume, instead, a functioning water line that either can, or cannot, accept nutrient-infused water supplies. Or, perhaps, a functioning well. Meanwhile, real-world cavers, and certainly outsiders, should be expected to exercise reasonable creativity in seeking to mitigate their circumstances.

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79. *See id.*
80. *Id.*
81. *See id.* at 1853.
82. *See id.*
83. *Id.* at 1853.
84. *See id.*
85. *See, e.g.*, the authorities cited *supra* note 65.
86. *See supra* note 80 and accompanying text.
87. Three days might be a more realistic limit. *See* Elaine K. Luo, *How long you can live without water*, MEDICAL NEWS TODAY (May 14, 2019), https://www.medicalnewstoday.com/articles/325174 [https://perma.cc/3K7Q-DSPQ].

The thought experiment appears to assume that neither food nor water can be delivered by any means not involving simultaneous rescue. Does it really require 23 days to run a drill and water-bearing tube through several feet of solid rock? Perhaps so. But that is, of course, hardly the point. Instead, the point is to require not just the cavers, but especially their would-be rescuers, to exercise a reasonable degree of creativity before, during, and after the cave-in.

Consider the general problems of guilt, culpability, mens rea, and legal responsibility of the obviously draconian local homicide statute. The statute requires only a showing of willfulness,[88] with the death penalty then being the sole possible penalty.[89] Perhaps such a statute and penalty on their face violate some foundational moral principle. Perhaps the cavers should bear some responsibility for not merely waiting for one of their numbers to die of natural causes. But on the other hand, when the cavers raised the idea of a lottery-based selection process, the available officials, legal authorities, and clergy members plainly chose to decline the opportunity to provide tentative advice or any legal or moral cautions.[90]

Perhaps the local authorities were concerned by fear of complicity, and of what is called the problem of having "dirty hands."[91] But consider that judges and other public officials are more likely than ordinary citizens to be aware of the absence of any exceptions to a statutory death penalty that must follow upon conviction for any 'willful' killing. Would relaying that crucial bit of information have been ethically questionable? Or, would it have had any relevant effect on the cavers' course of action? Could one or more of the cavers have, under their remarkably stressful circumstances, reasonably read the official silence as tacit consent, or at least as an unwillingness to judge?

As well, how much responsibility should the cavers bear for the fact that only one entrance and exit was available for a system of caves routinely utilized by amateur cavers? Should the cavers have agreed to provide for the dependents of the loser of the dice roll? Should the cavers deserve some credit for not lying about the loser's having withdrawn his initial consent to the dice roll?[92] What happens to the problem of *mens rea*, in general, under the cumulating excruciating stresses?

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88. *See supra* text accompanying note 83.

89. *See id.*

90. *See supra* text accompanying note 78.

91. *See* C.A.J. Coady, *The Problem of Dirty Hands*, STANFORD ENCYCLOPEDIA OF PHILOSOPHY, https://plato.stanford.edu/archives/fall2018/entries/dirty-hands/ (rev. ed. July 2, 2018) (visited Aug. 20, 2022).

92. *See supra* text accompanying note 79. We can assume, apparently, that the cavers had saved some means of illuminating the dice roll on the twenty-third day of their entrapment.

More fundamentally, though, the thought experiment, and the judicial responses thereto,[93] ignore or mishandle the crucial underlying assumption of what we might call moderate necessity and the minimum required circumstances of justice. Concisely put, social systems, law, justice, and even morality have certain inescapable material and social prerequisites. Where what the law inescapably presupposes is absent, the law in that circumstance, is itself absent.

That basic idea is traceable to David Hume.[94] Let us consider Hume's own account of the matter:

> Suppose a society were to fall into such want of all common necessaries, that the utmost frugality and industry cannot preserve the greater number from perishing, and the whole from extreme misery; it will readily, I believe, be admitted, that the strict laws of justice are suspended, in such a pressing emergence, and give place to the stronger motives of necessity and self-preservation.[95]

To support this, Hume has his distinguished commentators and successors.[96]

For our caver thought experiment, it might initially seem that all we can draw from Hume at this point is that the surviving cavers may have a necessity defense. [97] Perhaps the local law recognizes such a defense, as distinct from an absence of the element of willfulness. And perhaps the surviving cavers can qualify for such a defense, despite the obvious problem of their having arguably contributed, in some way, to their own predicament.[98]

But on reflection, the logic of Hume's argument may be much more fundamental, and more broadly sweeping, than is involved in merely a necessity defense. Fuller's thought experiment, as duly assessed by his five distinct judges, may illegitimately assume the existence of 'moderate' scarcity and other requisites of any legal justice system, where they do not in fact exist. We might then say that no court holds proper jurisdiction over the distinctly immoderate scarcity in the circumstances Fuller presumes.

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93. *But see* the paradoxical opinion of Foster, J., *in* Fuller, *supra* note 64 at 1854–59.

94. DAVID HUME, ENQUIRIES CONCERNING THE HUMAN UNDERSTANDING AND CONCERNING THE PRINCIPLES OF MORALS sec. III, part I, at 186 (L.A. Selby-Bigge 2d ed.) (1972) (1777).

95. *Id.*

96. *See, e.g.*, JOHN RAWLS, A THEORY OF JUSTICE § 22, at 110 (rev. ed. 1999) ("The Circumstances of Justice") (referring to "the circumstances of moderate scarcity"). For broader discussion, see Robert E. Goodin, *Toward a More Political Theory of Justice*, 11 PHIL. ISSUES 202 (2001); Donald C. Hubin, *Scarcity and the Demands of Justice*, 18 CAP. U.L. REV. 185 (1989); Adam J. Tebble, *On the Circumstances of Justice*, 19 EUR. J. POL. THEORY 3 (2020).

97. *See, e.g.*, *Necessity Defense in Criminal Cases*, JUSTIA, www.justia.com/criminal/defenses/necessity [https://perma.cc/766G-DH9N] (last reviewed Oct. 2021) (visited Aug. 20, 2022).

98. *See id.*

It would be a stretch to say that every successful necessity defense means that the defendant was, at the time, in some sense in a state of nature.[99] But consider what is distinctive, and insufficiently moderate in the Humean sense, about the crucial circumstances of the cavers. For an extended and potentially limitless time, they find themselves under immense stress of various sorts, with no reliable prospect of drawing upon the indispensable resources of the broader society. In that respect, they are essentially severed, in crucial respects, from the broader society.

They do indeed form, involuntarily or voluntarily, something of a mere proto-'society' of their own. They can futilely attempt to continue to rely on the familiar social institutions of a viable conventional society, as in the familiar societal practices of promising, agreeing, retracting agreements, seeking procedural fairness, and such.

However, more fundamentally, their ongoing 'society' is tragically not one of Humean 'moderate' scarcity. The extreme severity of their scarcity means that they can approach,[100] but not reach, the material and social conditions required for a minimal system of law and justice. Any legal opinions later issued by outsiders may be insightful. But they are inescapably the opinions of outsiders to the cavers' desperate proto-'society.' In that sense, any later legal pronouncements, favorable or unfavorable, sympathetic or unsympathetic, are jurisdictionally defective because it would be inappropriate for any court to pass legal, as distinct from moral, judgment on the crucial choices made by the spelunkers.

Thus, Fuller's extreme thought experiment tells us nothing about how to proceed, jurisprudentially, within any genuine system of law. The thought experiment is thus not about which theory of the law within a functional legal system is descriptively best or most normatively attractive. Fuller's hypothetical can indeed be mined for insights.[101] But each insight would then require a transition from what might be true of pre-law circumstances into an ongoing viable legal system. We miss this necessary transition if we simply accommodate and do not resist the hypothetical.

In this regard, the remarks of Fuller's hypothetical Judge Foster, in particular, are of interest. Judge Foster irrelevantly discusses the theory that the broader, ongoing society is firmly based in a social contract, or on a morally binding original societal compact.[102] But Judge Foster,

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99. *See, e.g.*, THOMAS HOBBES, LEVIATHAN 86–91 (Richard Tuck rev. ed., 1996) (1651).

100. See the reference to inescapably vague boundary conditions as discussed in the context of the Sorites Paradox, *supra* note 32.

101. See the five appellate opinions in Fuller, *supra* note 64, as well as the various responses cited *supra* note 65.

102. Presumably, any viable theory of legal authority, whether based on a social contract or not, might suffice. *See* Fuller, *supra* note 64, at 1856–57. Judge Foster then separately, if not self-contradictorily, argues for acquittal on the merits, on grounds of the principles of criminal statutory interpretation. *See id.* at 1857-59.

intriguingly, also raises the idea of a state of nature that falls short of the necessary elements of any ongoing civil society.[103]

Oddly, Judge Foster then assumes that the trapped cavers, being set apart from the broader civil society,[104] then "drew, as it were, a new charter of government appropriate to the situation in which they found themselves."[105] But this claim ignores Judge Foster's earlier apparent recognition that the cavers simply did not fall within the minimally necessary circumstances of law and justice.[106] The desperate, shocked, resourceless, dehydrated, and starving cavers were in no position to act as anything like free and voluntary social contractors able to set up their own legal system, as though a foreign embassy within the territory of a broader society.

If we are to insist on an appropriate legal response to Fuller's thought experiment, then on Judge Foster's best logic, the result should not be Judge Foster's judgment on the merits of not guilty,[107] but a denial of jurisdiction. This result should follow, on the classical state of nature logic, until it is shown that the surviving cavers, before, during, or after their hospital recuperation,[108] posed a contemporary threat to the broader civil society. Whatever objectionable acts the cavers performed were, on this view, performed outside of the broader civil society's mandate in an insufficiently societal state of nature.

In sum, 'fighting' Fuller's scenario, as a first step, rather than cooperating with it, has two important advantages. First, imagining how, on entirely realistic terms, the 'sting' could be drawn from the hypothetical emphasizes the value of reasonable creativity, of all parties, in avoiding or mitigating the need to make tragic choices.[109] Concretely, what could realistically have been done, before or during the course of the incident, by any party to reduce the sense that any surviving caver deserves the death penalty?

Passively accepting Fuller's thought experiment leaves us with a distorted public policy focus. This should hardly be a surprise, though. The

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103. *See id.* at 1854–55.

104. *See id.* at 1855.

105. *Id.*

106. *See id.* at 1854–55.

107. *See id*. at 1854, 1855, 1859. For a sense of how those in a society might regard those outside their society in the absence of consent, see, for example, THOMAS HOBBES, LEVIATHAN 202 (C.B. MacPherson ed. 1971) (1651) ("where there is no common-wealth, there nothing is unjust"); John Locke, *Second Treatise*, *in* TWO TREATISES OF GOVERNMENT § 7, at 312 (Peter Laslet rev. ed., 1963) (~1678) (In the State of Nature, "the Execution of the Law of Nature is . . . put into every Mans hands, whereby every one has a right to punish the transgressors of that Law to such a Degree as may hinder its Violation."). More elaborately, see ROBERT NOZICK, ANARCHY, STATE, AND UTOPIA 10–12 (1974).

108. *See supra* text accompanying note 81.

109. See, classically, the unfortunately non-hypothetical cases discussed in GUIDO CALABRESI & PHILIP BOBBITT, TRAGIC CHOICES (1978).

ticking bomb thought experiments above[110] suggested a similar lesson. We should not passively accept the ticking bomb scenarios as any meaningful guide to public policy on the use of interrogational torture. We are instead more likely to develop optimal policies by appreciating the unrealism and distortions inherent in such thought experiments, including all variants of Fuller's thought experiment.

Second, passively accepting Fuller's scenario as a difficult but fully legitimate problem in jurisprudence, and in deciding judicial cases, is to allow oneself to be crucially distracted. One is distracted from Fuller's casual sweeping aside of the essential 'moderate scarcity' assumption on which any functioning system of legal rules must rely. There would be little point in a legal system if all persons necessarily, and unvaryingly, immiserated one another. Nor would there be much point in a legal system if we could not at all meaningfully affect one another. More broadly, there are, limits to what counts as merely moderate scarcity, and as thus within the broad circumstances of legal justice. The law should not be pressed beyond where it can logically extend.

C. GETTING OFF THE TROLLEY:

THE ROLE OF HABIT AND VIRTUE

Thought experiments in the law may confer benefits. But they also impose unanticipated costs. These costs may be revealed if we choose, uncooperatively, to initially 'fight' the hypothetical.

In addition to the two aforementioned thought experiments, consider another well-regarded class of thought experiments known collectively as the Trolley Problem.[111] In the simplest version of the Trolly Problem, we

110. *See supra* Part II.A.

111. For merely a start on the substantial literature, see Philippa Foot, *The Problem of Abortion and the Doctrine of Double Effect*, 5 OXFORD REV. 1 (1967) (emphasizing the distinction between doing and allowing harm more than the distinction between intending and merely foreseeing the harmful consequences of one's acts); Judith Jarvis Thomson, *The Trolley Problem*, 94 YALE L.J. 1395, 1395 (1985) (describing a basic version of the broader set of Trolley Problems); Judith Jarvis Thomson, *Turning the Trolley*, 36 PHIL. & PUB. AFF. 359 (2008). *See also* DEREK PARFIT, ON WHAT MATTERS 218–19 (Samuel Scheffler ed., 2011); Barbara H. Fried, *What Does Matter? The Case for Killing the Trolley Problem (Or Letting it Die)*, http://ssrn.com/abstract=1781102 (March 23, 2011) (visited Aug. 20, 2022); F.M. Kamm, *Lecture I. Who Turned the Trolley? Lecture II. How Was the Trolley Turned?*, https://tannerlectures.utah.edu/_resources/documents/a-to-z/k/Kamm%20Lecture.pdf [https://perma.cc/4RHB-H9W4] (2013) (visited Aug. 20, 2022). Versions of the Trolley Problem also arise in deciding how to program driverless or autonomous street vehicles. *See, e.g.*, Karinna Hurley, *How Pedestrians Will Defeat Autonomous Vehicles*, SCIENTIFIC AMERICAN (March 21, 2017) https://www.scientificamerican.com/article/how-pedestrians-will-defeat-autonomous-vehicles/

are asked to imagine the choice faced by the driver of "a runaway tram which he can only steer from one narrow track on to another"[112] if he chooses to do so. As it happens, five people are working on the track as the tram speeds towards them.[113] If the driver of the trolley chooses to continue down this track, all five workers will inevitably be killed.[114] On the other hand, if the driver so chooses, he can divert the trolley down a second track, which will inevitably result in the death of only one worker.[115]

In just this version of the Trolley Problem, most respondents recommend that the driver affirmatively steer the trolley onto the second track to reduce the number of lives lost.[116] The tougher questions arise with variations of the problem where we may be far more reluctant to intentionally sacrifice one innocent person in order to save the lives of several equally innocent persons, and where the overall explanation of our various such judgments may be unclear.

In the trolley cases, there arises again a mostly superficial psychological tendency to fight the hypothetical. Shouting in an attempt to warn the endangered parties is always a possibility. But it is easy to respond that such reactions miss the point, and the potential value, of the thought experiment. Fighting the hypothetical should not be motivated merely by our raw empathetic distress.

Certainly, we can understand that having "further information about the six potential victims might make a difference in our views about what the [driver] may do."[117] Perhaps the five workers on the first track have been richly compensated in advance for running a risk, the magnitude of which they vividly appreciate. Or perhaps they quite maliciously failed to repair the trolley in question. Or they chose, in violation of their own rules, to unnecessarily wear noise-cancelling headphones. This kind of distress-motivated quibbling is, however, ultimately of no great value.

More disturbing, instead, are the remarkably artificial and distortive assumptions built into the entire family of Trolley Problems. Consider Professor Barbara Fried's observations in this respect:

> The consequences of the available choices are stipulated to be known with certainty ex ante; the [drivers] are all individuals (as opposed to institutions); and the would-be victims . . . are generally identifiable individuals in close proximity to the would-be actor(s). In addition,

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[https://perma.cc/VX8L-XJUW] (noting the role of game theory, games of chicken, bluffing, and precommitment).

112. Foot, *supra* note 111, at 3.
113. *See id.*
114. *See id.*
115. *See id.*
116. *See* authorities cited *supra* note 111.
117. Thomson, *Turning the Trolley*, *supra* note 111, at 361.

> agents face a one-off decision about how to act. That is to say, readers are typically not invited to consider the consequences of scaling up the moral principle by which the immediate dilemma is resolved to a large number of . . . cases.[118]

For the moment, let us merely note Professor Fried's important reference to the one-time only nature of these thought experiments. For both the individual actors in the scenarios and for those responding to the scenarios, the incidents and choice-problems are not repeated, let alone scaled up through repetition.[119] There is no feedback over time. Contrary to most trolley problem assumptions, crucial real-world moral problems must account for gross uncertainties; for varying degrees of relationship and proximity; for repeated and sometimes reciprocal interaction; and gradually accruing evidence of consequences. Our intuitions and moral responses to tragic dilemmas rightly build on such cumulating experiences. But all of these elements are absent from the major trolley problem scenarios.

Crucially, this means that the Trolley Problem, like the Ticking Bomb Thought Experiments, and Professor Fuller's Spelunking Explorers, must inevitably miss the vital role of experiences and of gradually accruing feedback and habituation in our cultivation of the essential epistemic and moral virtues that impact our moral and legal decision making.[120]

More generally, thought experiments in the law minimize the role for our acquired individual and collective experiences, our sensitive and critical habits, and our reliance on these essential epistemic and moral virtues.[121]

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118. Fried, *supra* note 111, at 2.

119. *See id.*

120. *See infra* Part III. Intriguingly, the role of virtues and of virtue ethics has indeed been briefly referred to in the context of 'robocar' interactions with pedestrians in light of the Trolley Problem. *See* Ian Bogust, *Enough With the Trolley Problem*, THE ATLANTIC (March 30, 2018), https://www.theatlantic.com/technology/archive/2018/03/got-99-problems-but-a-trolley-aint-one/556805/.

121. *See, e.g.*, Judith Jarvis Thomson's personally dependent violinist hypothetical, as discussed in Judith Jarvis Thomson, *A Defense of Abortion*, 1 PHIL. & PUB. AFF. 47, 48-49 (1971), as later concisely formulated in Frances M. Kamm, *Abortion and the Value of Life*, 95 COLUM. L. REV. 160 (1995) and in Mark Kelman, *Intuitions*, 65 STAN. L. REV. 1291, 1302 (2013). Also discussed is Professor Bernard Williams' 'Jim and the Indians' execution scenario, presented in Bernard Williams, *Consequentialism and Integrity*, *in* J.J.C. Smart & Bernard Williams, UTILITARIANISM: FOR AND AGAINST 20, 34, 35 (1973), and then responded to in Martin Hollis, *Jim and the Indians*, 43 ANALYSIS 36 (1983). There is also Robert Nozick's fascinating thought experiment in which we may choose to plug into an Experience Machine that produces sensations we find subjectively indistinguishable from real life. See, as a start, NOZICK, *supra* note 107, at 42–44, as well as ROBERT NOZICK, THE EXAMINED LIFE 104–05 (1989). The psychologist Jonathan Haidt poses the "Julie and Mark" brother/sister consensual incest thought experiment in Jonathan Haidt, *The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment*, 108 PSYCH. REV. 814 (2001). That hypothetical is discussed in Edward B. Royzman, Kwanwoo Kim & Robert F. Leeman, *The Curious Tale of Julie & Mark: Unraveling the Moral Dumbfounding Effect*, 10 JUDGMENT & DECISION MAKING 296 (2015). More broadly, John Rawls's classic veil of ignorance-based Original Position was intended precisely as a thought experiment. *See* JOHN RAWLS, JUSTICE AS FAIRNESS: A RESTATEMENT 17 (Erin Kelly ed. 2001); SAMUEL FREEMAN, RAWLS 142 (2007). Then there is the Desert-Island Deathbed Promise

Legal thought experiments typically, whether intentionally or not, imply the irrelevance of any judgments that are based on hard-won experience, reasonable mental habits, and any associated basic virtues.

Whatever their value in other respects, the ticking bomb and torture scenarios,[122] the Spelunking Explorers,[123] and other such scenarios[124] do not draw upon our best understandings of our diverse individual and shared accumulated moral experiences. Few readers will have any moral experiences even remotely comparable, in any significant way, to any version of the ticking bomb scenario. This is truer with respect to Professor Fuller's desperate spelunkers and trolley victims. We simply cannot consider such scenarios from evenly loosely relevant experiences, and then sensitively and critically apply those varied experiences to the unique scenarios in question.

In general, our moral practices, beliefs, and judgments have their foundation in our own or vicariously shared experiences, including the unforeseen, indirect, and crucial long-term consequences of choices and actions. At a similarly general level, some combination of experiences, consequential feedback, and habit formation is necessary for developing the basic epistemic and moral virtues,[125] without which we cannot consistently judge well.

Thus, a crucial step in addressing any moral and legal problem, in practice, involves, as Aristotle observed, drawing upon moral experience, moral examples, and upon sustained reflection and habituation.[126] The

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scenario raised in Jan Narveson, *The Desert-Island Problem*, 23 ANALYSIS 63 (1963). As well, Amartya Sen asks whether a flute should be given to the producer of the flute, or to the only flute player, or to the child who has no other toys. *See* AMARTYA SEN, THE IDEA OF JUSTICE 12–14 (2009). Most fundamentally, consider the story of the invisibility Ring of Gyges, and the Allegory of the Cave, as discussed respectively in PLATO, REPUBLIC books II & VII (C.D.C. Reeve trans., 2004) (~380 BCE). *See also* ST. THOMAS AQUINAS, TREATISE ON THE VIRTUES 52 (John A. Oesterle trans., 1966) (1984 ed.) (Summa Theologica, I-II, qu. 55, art. 2, respondio); Bonnie Kent, *Habits and Virtues*, *in* THE ETHICS OF AQUINAS 116, 116 (Stephen J. Pope ed., 2002).

122. *See supra* Part II.A.

123. *See supra* Part II.B.

124. *See supra* notes 111–121 and accompanying text.

125. *See, e.g.*, HEATHER BATTALY, VIRTUE 150 (2015) (on practice and the imitation of others). There are apparent skeptics as to the existence, and therefore to the significance, of character and virtue. *See, e.g.*, Gilbert Harman, *Moral Philosophy Meets Social Psychology: Virtue Ethics and the Fundamental Attribution Error*, 99 PROCEEDINGS OF THE ARISTOTELIAN SOCIETY 315, 316 (1999) ("[I]t may even be the case that there is no such thing as character, . . . none of the usual moral virtues and vices."); John M. Doris, *Persons, Situations, and Virtue Ethics*, 32 NOUS 504, 506 (1998) ("To put things crudely, people typically lack character."). For additional research and a good place to begin learning about this topic, see MARK ALFANO, CHARACTER AS MORAL FICTION (2013). More precisely, though, the claim is not that no one is, say, more friendly than someone else, but that displays of friendliness, at least in some contexts, vary depending on various situational factors and circumstances. For a critical response to Professors Harman and Doris, see Gopal Sreenivasan, *Errors Abouts Errors: Virtue Theory and Trait Attribution*, 111 MIND 441 (2002).

126. *See* ARISTOTLE, THE EUDEMIAN ETHICS book I, at 3 (Anthony Kenny trans., 2011) ("human beings acquire many characteristics . . . by habituation -- bad characteristics by bad habituation and good characteristics by good habituation"). Even more simply, "it is by habituating ourselves to

development of virtue is certainly not a matter of mere rote repetition. Trial and error, and meaningful inquiry and reflection, are essential as well.[127] The aim is, in part, to make it easier for us to judge and choose rightly, under loosely similar circumstances, when the stakes and the emotional pitch may be high.[128] Together, practice, inquiry, and reflection are, according to Aristotle, "the way we learn what is noble or just."[129]

Habits, after all, can indeed reflect not merely acceptance, but a critique of, the examples set by and the understandings of the persons around us.[130] Of course, gradual, feedback-sensitive learning through our own experiences and those of others cannot preclude the possibility of systematic indoctrination, biasing, repression, and coercion,[131] more than other possible means of arriving at any moral beliefs, attitudes, and judgments.

In contrast, properly formed habits can broaden and deepen our intelligent moral concerns and desires as reflected in our legal judgments.[132] Habits need not merely constrain but can also "free the agent for special achievement on a higher level."[133] Immanuel Kant, the great champion of principle[134] in moral judgment, recognizes the value of habit and of judging and choosing rightly:

> [W]hen once we have acquired a habitus in virtue, we love it in that we think well of our good conduct, we recognize its inner worth without coercion or judicial authority, and this awakens an

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make light of alarming situations and to face them that we become brave." ARISTOTLE, THE ETHICS OF ARISTOTLE: THE NICOMACHEAN ETHICS book II, at 95 (J.A.K. Thomson trans., 1953) (1976 ed.).

127. *See* NANCY SHERMAN, THE FABRIC OF CHARACTER: ARISTOTLE'S THEORY OF VIRTUE 160, 179 (1989); Steve Matthews, *The Significance of Habit*, https://brill.com/view/journals/jmp/14/4/article-p394_394.xml?rskey=nYe6V3&result=1 (Aug. 14, 2017).

128. *See* JAMES A. VANSLYKE, MORAL PSYCHOLOGY, NEUROSCIENCE, AND VIRTUE: FROM MORAL JUDGMENT TO MORAL CHARACTER, IN VIRTUES AND THEIR VICES 459, 466 (Kevin Timpe & Craig A. Boyd eds., 2015).

129. M.F. Burnyeat, *Aristotle on Learning to Be Good*, *in* ARISTOTLE'S ETHICS: CRITICAL ESSAYS 205, 209 (Nancy Sherman ed. 1999).

130. *See* Kristjan Kristjansson, *Habituated Reason: Aristotle and the 'Paradox of Moral Education'*, 4 THEORY & RES. IN EDUC. 101, 115 (2006); Julia Annas, *Applying Virtue to Ethics*, 32 J. APPLIED PHIL. 1, 5 (2015).

131. *See* Kristjansson, *supra* note 130, at 115.

132. *See* ROBERT C. ROBERTS & W. JAY WOOD, INTELLECTUAL VIRTUES: AN ESSAY IN REGULATIVE EPISTEMOLOGY 22 (2009).

133. SARAH BROADIE, ETHICS WITH ARISTOTLE 109 (1991).

134. For moral particularism as a challenge to Kantian maxim universalization, see Jonathan Dancy, *Moral Particularism*, STANFORD ENCYCLOPEDIA OF PHILOSOPHY, https://plato.stanford.edu/archives/win2017/entries/moral-particularism/ (rev. ed. Sept. 22, 2017) (visited Aug. 20, 2022); Jennifer Flynn, *Recent Work: Moral Particularism*, 70 ANALYSIS 140 (2009); Simon Kirchin, *Moral Particularism: An Introduction*, 4 J. MORAL PHIL. 8 (2007); Michael Ridge & Sean McKeever, *Moral Particularism and Moral Generalism*, STANFORD ENCYCLOPEDIA OF PHILOSOPHY, https://plato.stanford.edu/archives/win2020/entries/moral-particularism-generalism/ (rev. ed. Nov. 29, 2016) (visited Aug. 20, 2022). On particularist views especially, one's judgment about one unusual set of circumstances may indeed affirmatively mislead one about more typical cases.

> attachment to the law, so that no outer ceremonial exhortations are needed in order to adhere to it.[135]

The sensitive and critical exercise of habit-based moral and epistemic virtues, including a disciplined sense of the need for additional information, need not exhaust how we should respond to complex legal problems. But we can hardly expect to reasonably address difficult legal problems unless we are guided by those habit-based fundamental moral and epistemic virtues. Unfortunately, the classic legal thought experiments discussed above are designed, intentionally or not, through their extreme artificiality, to render those cultivated virtues irrelevant or unattractive in their content and implication.

In this crucial respect, then, the major legal thought experiments unfortunately steer reader reactions into channels lacking theoretical and practical value. As the philosopher Julia Annas quite aptly says in a related context, "[w]e . . . need virtue to be what we apply in ethical decisions to help us make hard choices in the real world."[136] To the extent that legal thought experiments distort or underplay the role of cultivated epistemic virtues, they disserve us.

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135. IMMANUEL KANT, LECTURES ON ETHICS 446 (Peter Heath trans.) (reprint ed. 2001) (Vigilantius notes from 1793) (emphasis in the original). More broadly, see IMMANUEL KANT, THE METAPHYSICS OF MORALS 165 (Mary Gregor trans., 1996) (1797).

136. Annas, *supra* note 130, at 2.