

Notes:

This is a draft, and comments are welcome.

If you know of “experimental jurisprudence” research that is not cited, I would like to correct those omissions.

EXPERIMENTAL JURISPRUDENCE

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“Experimental jurisprudence” is a novel empirical approach to jurisprudence. This practice has grown into a movement, as scholars increasingly conduct experimental studies of legal language and concepts including causation, consent, intent, knowledge and reasonableness. Despite its progress, the approach’s justification is still surprisingly opaque. To put it most provocatively: Jurisprudence is the study of deep and longstanding theoretical questions about law’s nature, but “experimental jurisprudence” simply surveys laypeople. Experimental jurisprudence seems to miss the mark, twice. First, laypeople—with no legal expertise—are a strange population to survey about legal theory. Second, the is-ought fallacy: Even if surveys of laypeople tell us something about what law is, they do not tell us what law should be. This Article fills this justificatory gap, articulating and defending experimental jurisprudence. Experimental jurisprudence, appropriately understood, is not only consistent with traditional jurisprudence; it is an essential branch of it.

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I. WHAT IS EXPERIMENTAL JURISPRUDENCE?*

Experimental jurisprudence is scholarship that addresses *jurisprudential* questions with *experiments*.¹ This two-part definition is straightforward.² But its elaboration leads to surprising implications about the nature of jurisprudence and the research it calls for.³ This Article introduces experimental jurisprudence or “XJur” and proposes a framework to understand its contributions.⁴ It debunks several common myths about the movement and explains the crucial role XJur can play in two other modern jurisprudential movements: the rise of “ordinary meaning” in legal interpretation and the “new private law.”⁵ To unpack the two-part definition—“experiments” plus “jurisprudence”—it is helpful to reflect on the meaning of each term. This first Part begins with that background.

The meaning of “jurisprudence” is itself highly controversial.⁶ Consider some representative descriptions:

In the United States, jurisprudence is “mostly synonymous with ‘philosophy of law’.... [but there is also] a lingering sense of ‘jurisprudence’ that encompasses high legal theory ... the elucidation of legal concepts and

* [Thanks and acknowledgements]

¹ The term “experimental jurisprudence” nods to experimental philosophy, the related experimental approach to questions in philosophy. See EXPERIMENTAL PHILOSOPHY (Joshua Knobe & Shaun Nichols eds., 2008); Stephen Stich & Kevin Tobia, *Experimental Philosophy and the Philosophical Tradition*, A COMPANION TO EXPERIMENTAL PHILOSOPHY (2016). The first modern mention of “experimental jurisprudence” is in Lawrence B. Solum, *The Positive Foundations of Formalism: False Necessity and American Legal Realism*, 127 HARV. L. REV. 2426, 2464-65 (2014) (citing as examples John Mikhail, *ELEMENTS OF MORAL COGNITION* (2011); and Kenworthy Bilz, *Dirty Hands or Deterrence? An Experimental Examination of the Exclusionary Rule*, 9 J. EMP. L. STUD. 149 (2012)). Although new, the movement builds on important theoretical work in naturalizing jurisprudence, e.g. BRIAN LEITER, *NATURALIZING JURISPRUDENCE* (2007), and the role of social science in legal philosophy, e.g. Frederick Schauer, *Social Science and the Philosophy of Law*, in *CAMBRIDGE COMPANION TO THE PHILOSOPHY OF LAW* (2020). The term “experimental jurisprudence” has been used fifty years ago, in a very different way. See Frederick K. Beutel, *The Relationship of Experimental Jurisprudence to Other Schools of Jurisprudence and to Scientific Method*, 1971 WASH. U. L. Q. 385 (1971) (describing an experimental jurisprudence approach that requires “social engineering in government”).

² It is mostly straightforward. See Part III *infra* (on why “experimental jurisprudence” is better understood as “empirical jurisprudence”).

³ See Part III *infra*.

⁴ Parts I and II *infra*.

⁵ Parts III and IV *infra*. On ordinary meaning, see generally Richard H. Fallon, Jr. *The Meaning of Legal “Meaning” and its Implications for Theories of Legal Interpretation*, 82 U CHI. L. REV. 1235 (2015). On the new private law, see generally THE OXFORD HANDBOOK OF THE NEW PRIVATE LAW (Andrew Gold, John Goldberg, Daniel Kelly, Emily Sherwin & Henry Smith eds., 2021).

⁶ See, e.g., R.H.S. Tur, *What Is Jurisprudence?* 28 PHIL. Q. 149 (1978); see also Schauer, *supra* (“The word ‘jurisprudence’ is often used these days as a synonym for ‘philosophy of law.’ But given the longstanding existence of fields known as historical jurisprudence, sociological jurisprudence, and so on ... [the word] remains ambiguous. Nevertheless, it remains important to resist the notion that ... [jurisprudence] must necessarily be philosophical in method or focus.”).

normative theory from within the discipline of law.”⁷

Jurisprudence is “the most fundamental, general, and theoretical plane of analysis of the social phenomenon called law.... Problems of jurisprudence include whether and in what sense law is objective ... the meaning of legal justice ... and the problematics of interpreting legal texts.”⁸

The “essence of the subject ... involves the analysis of general legal concepts.”⁹

These each characterize jurisprudence broadly—and somewhat differently. As such, this Article understands jurisprudence inclusively. In the words of legal philosopher Julie Dickson, jurisprudence is a “broad church.”¹⁰ It is concerned with descriptive questions about legal concepts and interpretation, as well as normative questions about what law should be.¹¹ It approaches these questions from a broadly theoretical perspective, but it is not (in principle) committed to a particular methodology.¹²

Despite this inclusivity and breadth, if one were forced to identify the “core” of modern jurisprudence, many would point to analytical jurisprudence.¹³ A central part of analytic jurisprudence is examination of legal concepts, including the law itself,¹⁴ causation,¹⁵ reasonableness,¹⁶ punishment,¹⁷ and property.¹⁸ That project often involves “conceptual analysis,” the investigation of which features legal concepts have. Jurisprudence scholars reflect on legal concepts and attempt to articulate their features. Conceptual analysis can also raise questions about which features concepts *should* have.¹⁹ Some have expressed skepticism about this program, but it remains a central approach to jurisprudence. As Langlinais and Leiter put it, in “many areas of philosophy, doubts about the kind of conceptual and linguistic analysis . . . have become common [But] not so in

⁷ Lawrence Solum, *Legal Theory Lexicon: Legal Theory, Jurisprudence, and the Philosophy of Law* (2018), https://lsolum.typepad.com/legal_theory_lexicon/2005/05/legal_theory_le.html

⁸ Richard A. Posner, *THE PROBLEMS OF JURISPRUDENCE* xi (Harvard University Press 1990).

⁹ Tur, *supra*, at 152.

¹⁰ Julie Dickson, *Ours Is a Broad Church: Indirectly Evaluative Legal Philosophy as a Facet of Jurisprudential Inquiry*, 6 *JURISPRUDENCE*, 207 (2015); see also Dan Priel, *Evidence-Based Jurisprudence: An Essay for Oxford*, *ANALISI E DIRITTO* (2020).

¹¹ E.g. ROBIN WEST, *NORMATIVE JURISPRUDENCE: AN INTRODUCTION* (2011).

¹² Dickson, *supra*; Schauer *supra*.

¹³ Tur, *supra*, at 152.

¹⁴ H.L.A. HART, *THE CONCEPT OF LAW* 1 (1961).

¹⁵ H.L.A. HART & ANTONY HONORÉ, *CAUSATION IN THE LAW*. Oxford (1985).

¹⁶ E.g. John Gardner, *The Many Faces of the Reasonable Person*, *L. Q. REV.* 1 (2015).

¹⁷ E.g. GEORGE P. FLETCHER, *BASIC CONCEPTS OF CRIMINAL LAW* (1998).

¹⁸ E.g. 2 JOHN AUSTIN, *LECTURES ON JURISPRUDENCE OR THE PHILOSOPHY OF POSITIVE LAW* 795-99 (1885); Felix S. Cohen, *Dialogue on Private Property*, 9 *RUTGERS L. REV.* 357 (1954).

¹⁹ See, e.g., Brian Bix, *Conceptual Questions and Jurisprudence*, 1 *LEG. THEO.* 465 (1995); Aaron J. Rappaport, *On the Conceptual Confusions of Jurisprudence*, 7 *WASH. U. JURIS. REV.* 77 (2014).

legal philosophy.”²⁰

A common method to assess proposed conceptual analyses is to reflect on hypothetical test cases or “thought experiments.”²¹ These can provide some intuitive evidence about whether the proposed analysis is successful.²²

As an example, consider the legal concept of *reasonableness*. This concept is central to legal determinations from tort negligence,²³ open contract price terms,²⁴ and the line between murder and manslaughter.²⁵ The term “reasonable” appears in over one-third of modern published judicial decisions.²⁶ So, what is “reasonable”? Jurisprudential analysis of reasonableness often begin by reflecting on seemingly important properties.²⁷

As a toy example, consider that it might seem that an important feature is that what is reasonable is in some sense *good*. In the context of negligence law, we might consider a proposed analysis that reasonable care is what is expected to lead to the welfare-maximizing consequences. Next, one might assess this (toy) jurisprudential analysis against a thought experiment:

Life-Saving Negligence: A company produces and sells yachts, donating all profits to a high-impact charity. That donation saves five lives per yacht sale. Yacht production also creates pollution, which foreseeably kills one person in the nearby town per yacht produced. The company could cheaply install a new production mechanism, which would eliminate all pollution but increase production costs. That would eliminate all pollution deaths in the nearby town and decrease profits, reducing lives saved to only two per yacht produced. The company does not install the new mechanism, and a number of people die from the pollution, and more are saved by the donation.

This decision is welfare maximizing (five lives saved for each lost—plus the

²⁰ Alex Langlais & Brian Leiter, *The Methodology of Legal Philosophy*, in THE OXFORD HANDBOOK OF PHILOSOPHICAL METHODOLOGY.

²¹ *Id.*

²² Brian Leiter, *Beyond the Hart/Dworkin Debate: The Methodology Problem in Jurisprudence*, 48 AM. J. JURIS. 17, 43-44 (2003). (Jurisprudence “relies on two central argumentative devices—analyses of concepts and appeals to intuition.”)

²³ Restatement (Third) of Torts: Liability for Physical Harm § 3 (2005).

²⁴ Uniform Commercial Code § 2-305.

²⁵ MODEL PENAL CODE § 210.3(1)(b) (AM. LAW. INST. 1985) (reasonable provocation).

²⁶ Harvard University, *Caselaw Access Project Historical Trends v.1.0*, Graph of “reasonable,” <https://case.law/trends/?q=reasonable> (last visited June 20, 2019).

²⁷ *E.g.* George P. Fletcher, *The Right and the Reasonable*, 98 HARV. L. REV. 949, 949-50 (1985) (“We lawyers should listen to the way we talk... One of the most striking particularities of our discourse is its pervasive reliance on the term “reasonable.”... In my view, it is no accident that we pervasively rely upon the concept of reasonableness.”) Gregory Keating, *Reasonableness and Rationality in Negligence Theory*, 48 STAN. L. REV. 311, 311 (1996) (“Latent in our ordinary moral consciousness, and manifest in philosophical reflection, is a distinction between reasonableness and rationality).

benefits of yachts). But it might seem—*intuitively*—that the company has not acted with “reasonable care” by failing to install the pollution-free production mechanism.²⁸

Such a reaction to this thought experiment represents something like a legal-philosophical discovery. We might conclude that the proposed conceptual analysis needs revision. That intuition (if shared) suggests that reasonable care is not simply welfare-maximizing care, and we should refine the analysis, test that revision with more cases, refine the analysis in light of those, and so on.

The Life-Saving Negligence thought experiment attempts to elicit a shared response (i.e., the company’s care is not reasonable). This response is an “intuition.” A jurist describes some scenario (actual or hypothetical) and invites readers to consider some question about the scenario: Does the care seem *reasonable*; which action seems like the *cause*; or is that rule a *legal rule*? Classic thought experiments and corresponding intuitions in legal theory include Holmes’s Bad Man,²⁹ the criminality of Fuller’s Speluncean Explorers,³⁰ excuses for Kadish’s Mr. Fact and Mr. Law,³¹ and the meaning of rules like “no vehicles in the park”³² or “it is a misdemeanor to sleep in any railway station.”³³

Most legal theorists place *some* weight on intuitive evidence. Many give intuition *great* significance. As the philosopher and legal theorist Thomas Nagel puts it: “Given a knockdown argument for an intuitively unacceptable conclusion, one should assume there is probably something wrong with the argument that one cannot detect—though it is also possible that the source of the intuition has been misidentified.”³⁴

Of course, legal theorists rarely assume that shared intuitions simply *settle* jurisprudential debate. For one, different cases can give rise to conflicting intuitions. Jurisprudence scholarship takes care to understand and resolve those conflicts. In her seminal work on the concept of consent, Heidi Hurd proposes: “What should we do in the face of our conflicting intuitions...? One possible solution is to grapple with our intuitions some more in the hope that further thought experiments will help us to determinate which set of intuitions misleads

²⁸ Or maybe not. Perhaps some readers do not share the intuition. The aim here is not to analyze reasonableness, but to demonstrate a very familiar method of analysis. One other important possibility in thought experimentation is that the intuitions are not shared.

Ignoring unshared intuitions can lead to some problems. If those “who do not share the intuitions are simply not invited to the games,” Robert Cummins, *Reflection on Reflective Equilibrium*, RETHINKING INTUITION 116 (Oxford: Rowman & Littlefield, 1998), there is a danger that the process of conceptual analyses falls victim to groupthink and information cascades. The “shared” intuition takes on increasing strength as those with minority views leave the debate.

²⁹ Oliver W. Holmes, *The Path of Law*, 10 HARV. L. REV. 457 (1897).

³⁰ Lon L. Fuller, *The Case of the Speluncean Explorers*, HARV. L. REV. (1949).

³¹ MONRAD PAULSEN & SANDY KADISH, CRIMINAL LAW 485-86 (1962).

³² See Frederick Schauer, *A Critical Guide to Vehicles in the Park*, 83 N.Y.U. L. REV. 1109 (2008).

³³ Lon Fuller, *Positivism and Fidelity to Law: A Reply to Professor Hart*, 71 HARV. L. REV. 630 (1958).

³⁴ THOMAS NAGEL, MORTAL QUESTIONS, x (1979).

us.”³⁵ That process—discovering conflicting intuitions and elaborating theory to resolve the conflicts—is itself a central part of traditional jurisprudence.

Experimental jurisprudence provides an empirically grounded method of thought experimentation. As an example, consider an experimental study about *reasonableness*.³⁶ It began by considering two broad types of conceptual analyses.³⁷ On the first analysis, reasonableness reflects something about what is *good*; reasonableness is welfare maximizing, virtuous, or right.³⁸ On the second, reasonableness is about what is *common*: The reasonable is what is customary, average, or typical. The experimental jurisprudence study hypothesized that there is some truth in both sides of this debate. It predicted that the (ordinary) concept of reasonableness is informed by *both* prescriptive considerations (e.g. what is good) and statistical ones (e.g. what is average). This is a proposed conceptual analysis: The concept of reasonableness is a “hybrid” of what is average and ideal, much like our ordinary concept of what is “normal.”³⁹

As in a traditional jurisprudential analysis, this conceptual analysis makes predictions about how the concept applies. Experimental jurisprudence tests those predictions, supplementing thought experimentation with cognitive scientific experimentation. In this case, the proposed “hybrid” conceptual analysis holds that reasonableness reflects norms about what is average and norms about what is ideal (or good). That analysis predicts that, when the relevant average and ideal diverge, the reasonable quantity would be intermediate. For example if we understand the “average” restaurant tip as 15% and the “ideal” tip as 20% (or more), the hybrid account would predict that we would conceptualize the “reasonable” tip by drawing on both considerations; in this case, the hybrid account would predict that people’s estimate of a reasonable tip is intermediate (e.g. 18%).

Beyond comparing this proposed analysis to the author’s own intuitions about thought experiments, experimental jurisprudence proposes also conducting empirical study. In this study, participants were assigned randomly to three different groups. The first group made judgments about the “average” quantity of various domains. For example, they were asked to provide their estimate of the “average” number of hours of notice that a landlord provides before entering a rental unit. The second group made judgments about “ideal” quantities, for example the “ideal” number of hours’ notice provided. The third

³⁵ Heidi M. Hurd, *The Moral Magic of Consent*, 2 LEGAL THEORY 121, 143 (1996).

³⁶ Kevin P. Tobia, *How People Judge What Is Reasonable*, 70 ALA. L. REV. 293 (2018). The study assessed lay judgments, seeking evidence about the *ordinary* concept of reasonableness. In Part III the Article defends XJur’s focus on lay judgments. But for now, assume for the sake of illustration that these results arose in a study of legal experts

³⁷ See also Brian Sheppard, *The Reasonableness Machine*, B.C. L. REV. (forthcoming).

³⁸ See, Alan D. Miller & Ronen Perry, *The Reasonable Person*, 87 N.Y.U. L. REV. 323, 325 (2012).

³⁹ Adam Bear & Joshua Knobe, *Normality: Part Descriptive, Part Prescriptive*, 167 COGNITION 25 (2017); see also Adam Bear, Samantha Besinger, Julian Jara-Ettinger, Joshua Knobe & Fiery Cushman, *What Comes to Mind?*, 194 COGNITION (2020).

“reasonable” group, provided their estimates of the “reasonable” quantity. Across many different questions, the mean “reasonable” estimate was intermediate between divergent average and ideal quantities, at rates higher than chance. For example, the mean estimate of a reasonable number of hours’ notice (32) fell between the judged average (28) and ideal (35).

As this example suggests, there are complementarities between traditional and experimental jurisprudence. Traditional jurisprudence often articulates “shared” intuitions, claims about a shared response to a thought experiment. Experimental jurisprudence can help solidify the shared nature of those responses—by seeking responses from a larger set of persons, and also from persons who generally have less at stake in the theoretical debate.

Moreover, experimental jurisprudence can help assess some questions about intuitions that are hard to address from the armchair. For example, suppose we tried to test predictions of the “hybrid” analysis of reasonableness from the armchair. Perhaps some can intuitively discern that the “reasonable tip” falls between their conceptions of the average and ideal tip. But it might be hard to feel very confident about those individual intuitions; it requires faith in the precision of our individual estimates of average, ideal, and reasonable tipping. Other examples may be impossible to accurately assess from the armchair. Speaking just for myself, I find it very difficult to precisely estimate the ideal, average, and reasonable number of hours of landlord notice before entry. If I just relied on individual intuition, it might not be possible to even assess the hybrid prediction for that case. However, the experimental approach, which studies many different people, can help detect very subtle patterns of judgment, including ones that are not obvious or introspectively accessible to individual legal theorists.

Importantly, experimental jurisprudence does not take itself to simply compute answers to legal questions.⁴⁰ For example, the key takeaway from this empirical study is *not* that judges and juries should now hold that the reasonable number of hours’ notice is exactly thirty-two. That paper articulates a much more *jurisprudential* conclusion. These results are evidence about the (ordinary) concept of reasonableness; they suggest that concept is a “hybrid” informed by *both* prescriptive and statistical considerations.⁴¹

This is just one example of experimental jurisprudence. But with this first example in mind, the reader may already be warming to the idea that “experimentation” is not so unwelcome in jurisprudence. There is much in common between traditional jurisprudence and experimental jurisprudence: Both propose theories about legal concepts (e.g. reasonableness is welfare-maximization, or reasonableness is a “hybrid” of statistical and prescriptive norms); both test those theories with (thought) experiments; and both revise the conceptual analysis in light of the findings.

⁴⁰ See Part III *infra*.

⁴¹ Tobia, *supra*.

At the same time, there are some very important differences between the approaches. Traditional jurisprudence is normally conducted in the seminar room, or across the pages of law reviews, among professors and scholars with significant training and expertise. Experimental jurisprudence is normally conducted online, by surveying laypeople who know less about the law. In analyzing the concept of legal reasonableness, why should we think that the views of laypeople with no formal legal training are particularly helpful?

The remainder of the Article answers this question. Part II details some examples of recent experimental jurisprudence, proposing a framework to unify these diverse projects. Part III debunks “five and half” popular myths about experimental jurisprudence. In doing so, the Article distinguishes experimental jurisprudence from seemingly similar approaches to legal scholarship. Part IV continues to make the case, arguing that experimental jurisprudence is particularly well placed to contribute to two central modern debates, about “ordinary meaning” in legal interpretation and the “new private law.” Together these Parts clarify and justify the movement of experimental jurisprudence and conclude that it should be understood as a movement at the core of traditional jurisprudence.

II. EXISTING WORK AND AN EXPERIMENTAL JURISPRUDENCE FRAMEWORK

To understand the significance of experimental jurisprudence movement, it is instructive to study the work in that area. There are many recent examples of experimental jurisprudence, and this Part’s brief overview cannot do justice to all of those.⁴² This Part highlights experimental jurisprudence studies across several areas: studies of mental states (including *knowledge*, *recklessness*, and *intent*), *consent*, *reasonableness*, *causation*, *ownership*, *the self*, *law* itself, and interpretation.⁴³

The order of presentation reflects the breadth of experimental jurisprudence. Much of the best-known experimental jurisprudence studies concepts that are specifically referenced in law: *knowledge*, *intent*, *consent*, *reasonableness*. But experimental jurisprudence also studies concepts that are not *explicitly* referenced as an object of study in law, including the *self*, or the concept of *law* itself. Finally, experimental jurisprudence studies broader classes of concepts. For example, in addition to studying the specific concept of *causation* (e.g. relevant to the law of tort negligence citing the criterion of “cause”), it also studies a broader type of causal reasoning (e.g. relevant to employment law rules analyzing whether some act was performed “because of” X or whether some act “results from” X).

This Part concludes with some broader considerations about the nature of experimental jurisprudence, in light of this investigation. Although it often seems that experimental jurisprudence focuses on studying terms cited *explicitly* in law

⁴² For another list of experimental jurisprudence see Stefan Magen & Karolina Prochownik, *Legal X-Phi Bibliography*, <https://zrsweb.zrs.rub.de/institut/clbc/legal-x-phi-bibliography/>.

⁴³ [footnote omitted for anonymous review]

(e.g. “consent” or “reasonable”), this is not its primary criterion. Rather, experimental jurisprudence can study any ordinary concept that is counterpart to something of legal relevance. For example, it studies the ordinary concepts of *consent* or *reasonableness*, to inform legal theorizing about consent or reasonableness. But it also studies ordinary concepts that do not have a counterpart appearing prominently in jury instructions: *responsibility*, or *voluntariness*, or *personal identity* and *the self*. As such, the key question in identifying an area of potential experimental jurisprudential study is not whether the term is cited explicitly in some legal rule, but rather whether it refers to something of legal significance.

Mental states: knowledge, recklessness, intent

From criminal law *mens rea* to the distinction between intentional and non-intentional torts, mental states have great legal significance. What is knowledge, recklessness, or intent? Experimental jurisprudence has contributed to these legal questions by studying these ordinary concepts.

As a first example, consider the legal distinction between knowledge and recklessness. Vilares et al. sought to test whether there is an *ordinary* distinction between knowledge and recklessness. To do so, they ran a neuroscientific experiment, evaluating whether different brain states were associated with attributions of knowledge and recklessness.⁴⁴

They conducted an fMRI study involving a “contraband scenario.” Participants evaluated different scenarios in which they could carry a suitcase, which might have contraband in it, through a security checkpoint. The probability that the suitcase had contraband varied across different scenarios—in some scenarios participants were completely sure that the suitcase had contraband (“knowledge condition”) and in others, there was merely a risk that the suitcase had contraband (“recklessness conditions”).

The study found that participants’ evaluation of the two states (knowledge, recklessness) were associated with different brain regions. Moreover, the fMRI data predicted whether participants faced a knowledge or recklessness scenario (out of sample, at rates greater than chance). This provides evidence that the legal concepts are, in part, running parallel to an ordinary distinction. This finding suggests that the legal categories of knowledge and recklessness are actually founded on the ordinary notions.

Another set of recent studies have focused on the concepts of *intent* and *acting intentionally*.⁴⁵ As one example, experimentalists have found that ordinary

⁴⁴ Iris Vilares, Michael Wesley, Woo-Young Ahn, Richard Bonnie, Morris Hoffman, Owen Jopnes, Stephen Morse, Gideon Yaffe, Terry Lohrenz & P. Read Montague, *Predicting the knowledge-recklessness distinction in the human brain*, PROCEEDINGS OF THE NATIONAL ACADEMY SCIENCES (2017).

⁴⁵ E.g. Sydney Levine, John Mikhail & Alan Leslie, *Presumed Innocent? How Tacit Assumptions of Intentional Structure Shape Moral Judgment*, 147 J. EXP. PSYCHOL. GENERAL 1728 (2018).

people are sometimes sensitive to the severity of a side-effect when judging whether it was produced intentionally.⁴⁶ Recall the Essay's earliest hypothetical about the "life-saving negligence."⁴⁷ The company aimed to sell yachts, which would raise money for them and for charity, but that production decision had one bad side-effect: creating pollution that would kill some other people. Did the company intentionally pollute? Research shows that in these cases, people are more inclined to judge that pollution is more *intentionally* produced when it is deadly than when it is non-fatal (all else equal).⁴⁸

These studies about ordinary concepts raise a number of intriguing jurisprudential questions. In an approach similar to that of traditional jurisprudence, experimental jurisprudence scholars debate these possibilities: is severity sensitivity a performance error (or a "mistaken" intuition in response to the thought experiment); and *should* the legal criterion of intentional action reflect this "severity-sensitivity" feature of the ordinary concept? In response to this normative question, some argue no,⁴⁹ while others have raised considerations in favor of yes.⁵⁰ As in traditional jurisprudence, these debates are not easily resolved. But learning more about the ordinary concept raises new and important questions about how law should understand knowledge, recklessness, intent, and other mental states.

Consent

As a next example, consider the experimental jurisprudence study of *consent*. The groundbreaking work in this area comes from Roseanna Sommers, who has investigated the meaning of consent across a range of legal contexts. One important line of her work focuses on the relationship between deception and consent. Law often holds that material deception vitiates consent; when someone's agreement is gained through deception about a material fact, there is not valid consent. For example, imagine that I offer to sell you a car with "only 10,000 miles" and you agree. In reality, the car has 100,000 miles. Your agreement would not be "consensual" if you relied upon my misrepresentation.

Sommers's experimental jurisprudence of consent has found, however, that ordinary people often attribute "consent" in circumstances in which there has been significant deception.⁵¹ In one of Sommers's experimental hypotheticals, a

⁴⁶ Markus Kneer, *Guilty Minds and Biased Minds* (unpublished).

⁴⁷ Part I, *supra*.

⁴⁸ Kneer, *supra*; Markus Kneer & Sacha Bourgeois-Gironde, *Mens rea Ascription, Expertise and Outcome Effects: Professional Judges Surveyed*, 169 *COGNITION* 139 (2017); cf. Joshua Knobe, *Intentional Action and Side Effects in Ordinary Language*, 63 *ANALYSIS* 190 (2003).

⁴⁹ See, e.g., Kneer & Bourgeois-Gironde, *supra*.

⁵⁰ See, e.g., Kevin P. Tobia, *Legal Concepts and Legal Expertise* (unpublished).

⁵¹ Roseanna Sommers, *Commonsense Consent*, *YALE L.J.* (2020); see also Roseanna Sommers & Vanessa K. Bohns, *The Voluntariness of Voluntary Consent: Consent Searches and the Psychology of*

single woman does not desire to sleep with married men. The woman asks a potential partner about his marital status, and he lies and says he is not married. The woman then agrees to sleep with him. In this case, the overwhelming majority of participants judged that the woman *did* “give consent to sleep with [the man].”⁵² Despite deception regarding a very important fact (the man’s marital status), people attribute consent.⁵³

Given the crucial role that consent has across torts, criminal law, and contracts, these findings raise broad questions.⁵⁴ Is the legal notion of consent consistent with the ordinary concept? Of course, this experiment does not settle this complex jurisprudential question.

But it does provide the longstanding jurisprudential debate with new and unique insights. For example, Sommers’s further studies indicate that what drives this effect is something about what seems an “essential” part of the agreement.⁵⁵ If there is deception about the essence of the contract or arrangement, that vitiates consent; but deception about less essential features does not. Here again, this data does not settle the debate about how law should identify the right criteria of legal consent. But it provides important information for analysis; now knowing that our intuitions about what seems consensual depend on our view of what is “essential” to the agreement (and not what’s material), does *that* give us any reason to revise the *legal* notion of consent?

Reasonableness

Experimental studies have also clarified the ordinary notion of what is *reasonable*. From the first year of American law school, torts classes ask what kind of precautions would be taken by “the reasonable person”; contracts classes estimate the “reasonable time” in which a contract offer remains open; criminal law considers what “reasonable provocations” would mitigate murder to manslaughter, and constitutional law elaborates “reasonable suspicions” and “reasonable expectations of privacy.” So what does it mean for something to be “reasonable?”

Compliance, 128 YALE L.J. (2019); Tess Wilkinson-Ryan, *A Psychological Account of Consent to Fine Print*, 99 IOWA L. REV. 1745 (2014).

⁵² *Id.*

⁵³ Note that the same finding arises for various types of deception and various question types: did the woman “autonomously authorize [the man] to have sex with her,” did she “give valid consent to have sex in this situation,” or did she “give [the man] permission to have sex with her.” *Id.* This relates to the discussion, *infra*, of classes of concepts. Many take experimental jurisprudence to focus primarily on concepts cited by law (e.g. consent). But experimental jurisprudence studies (correctly) a wide range of concepts and classes of concepts that have legal significance.

⁵⁴ Heidi M. Hurd, *The Moral Magic of Consent*, 2 LEGAL THEORY 121, 123 (1996) (consent “turns a trespass into a dinner party; a battery into a handshake; a theft into a gift; an invasion of privacy into an intimate moment; a commercial appropriation of name and likeness into a biography”).

⁵⁵ Sommers, *supra*.

Part I of this Essay introduced one of the experimental studies on reasonableness, which suggested that the ordinary notion of what is reasonable is a *hybrid*. In deciding if something is reasonable, we draw on our conception of what is typical and what is ideal or good. Reasonableness is not equivalent to either of those facts, but it is produced in some combined “hybrid” judgment—similar to the way in which we assess what is “normal.”⁵⁶

Other recent work has uncovered similar evidence about the ordinary concept. *Reasonableness* is distinct from (welfare-maximizing) *rationality*.⁵⁷ And while lay judgments of what is legally reasonable are affected by consideration of what most people *would* do in the circumstance,⁵⁸ they are not affected by consideration of what would be economically efficient in the circumstance.⁵⁹

Here it is worth commenting briefly on how some of this research emerged. The “hybrid” prediction about reasonableness arose from similar work on the cognitive science of normality.⁶⁰ This work in cognitive science, conducted without jurisprudential questions in mind, opened new possibilities in theorizing legal reasonableness. If legal criteria (e.g. the criteria of what is reasonable) are at sometimes connected to the corresponding ordinary notion (e.g. *reasonableness*), this inspiration from cognitive scientific theory may prove useful. If ordinary concepts are at the root of legal concepts,⁶¹ discoveries about ordinary concepts will facilitate discoveries useful to jurisprudential debates.

Causation

As a third example, turn to experimental jurisprudence of *causation*.⁶² Jurisprudence has long studied “the plain man’s notions of causation.”⁶³ Experimental jurisprudence has made new progress on that traditional inquiry.

When thinking about potential causes there are several plausible features of significance. One is the potential cause’s *necessity*: Would the outcome have occurred if not for the cause? A second is its *sufficiency*: Was the cause enough to

⁵⁶ Bear & Knobe, *supra*.

⁵⁷ Igor Grossman, Richard P. Eibach, Jacklyn Koyama & Qaisar B. Sahi, *Folk Standards of Sounds Judgment; Rationality Versus Reasonableness*, 6 SCIENCE ADVANCES (2020).

⁵⁸ Tobia, *supra*.

⁵⁹ Christopher Jaeger, *The Empirical Reasonable Person* 72 ALA. L. REV. (forthcoming 2021).

⁶⁰ Bear & Knobe, *supra*.

⁶¹ The view that ordinary concepts are *never* at the root of the corresponding legal notion seems extremely unlikely. That possibility would also call for a radical rethinking of traditional methods of jurisprudence. If legal criteria of consent, or causation, or reasonableness were *completely unrelated* to the corresponding ordinary notion, why does jurisprudence engage in the project of thinking about what *seems* consensual, causal, or reasonable?

⁶² See, e.g., James A. Macleod, *Ordinary Causation*, 94 IND. L.J. (2019); Lawrence M. Solan & John M. Darley, *Causation, Contribution, and Legal Liability: An Empirical Study* 64 L. & CONTEMP. PROB. 265 (2001); Barbara Spellman & Christopher Holland, *When Knowledge Matters to Causation*, 5TH ANNUAL CONFERENCE ON EMP. LEG. STUD. (2010).

⁶³ H.L.A. HART & TONY HONORE, *CAUSATION IN THE LAW* (1959).

bring about the outcome?

Studies in cognitive science have shown that the ordinary concept of causation is informed by both of these features.⁶⁴ James Macleod establishing this important branch of experimental jurisprudence by designing a seminal study to test whether this feature of the ordinary concept also manifests in people's judgments about cases of legal causation. He considered three legal examples: a scenario asking, did death "result from" a certain drug; a scenario asking, was an employee terminated "because of" his age; and a scenario asking whether someone was assaulted "because of" his religion.

Participants considered one of four types of cases, each of which varied whether the cause was necessary or sufficient to bring about an outcome:

- (i) necessary and sufficient;
- (ii) necessary but not sufficient,
- (iii) sufficient but not necessary, and
- (iv) not sufficient and not necessary.⁶⁵

For example, in the drug case, a protagonist buys three drugs from multiple dealers. The relevant drug may have been (i) the only drug potent enough to kill (alone), (ii) the only drug that is potent drug *in combination* either of the others, (iii) one of three drugs potent enough to kill (alone), or (iv) one of *several drugs potent in combination* with any other.

That experiment made two striking discoveries. First, people attributed causation in cases in which the cause was not a but-for cause (e.g. iii and iv). Second, *sufficiency* had an important effect on ordinary judgments of causation. These findings cohere with recent cognitive scientific findings that ordinary judgments of causation are influenced by both necessity and sufficiency.⁶⁶

Ownership

Experimentalists have also studied the concept of *ownership*. Here again, experimentalists draw on the rich field of cognitive science. Scientists have argued that children have a rich theory of ownership,⁶⁷ which may undergird a (lay) theory of legal ownership.⁶⁸ As one brief example of an experimental

⁶⁴ See Joshua Knobe & Scott Shapiro, *What Cognitive Science Can Teach Us About Proximate Causation*, U. CHI. L. REV. (forthcoming 2020).

⁶⁵ Macleod, *supra*.

⁶⁶ Recent cognitive scientific has also highlighted another significant factor in ordinary judgments of causation: (ab)normality. See generally Knobe & Shapiro, *supra*; see also Andrew Summers, *Common-Sense Causation in the Law*, 38 OXF. J. LEG. STUD. 793 (2018); Lawrence Solan, & John Darley, *Causation, Contribution, and Legal Liability: An Empirical Study*, 64 LAW & CONTEMP. PROBLEMS 265 (2001).

⁶⁷ Shaylene E. Nancekivell, Ori Friedman & Susan A. Gelman, *Ownership Matters: People Possess a Naïve Theory of Ownership*, 23 TRENDS IN COG. SCI. 102 (2019).

⁶⁸ Ori Friedman, Madison L. Pesowski & Brandon W. Goulding, *Legal Ownership Is Psychological: Evidence from Young Children*, in PSYCHOLOGICAL OWNERSHIP AND CONSUMER BEHAVIOR 19 (2018).

jurisprudence study of ownership, consider a recent paper. Experimentalists studied how people evaluate “finder versus landowner cases,” cases in which one person finds something on someone else’s land. They found that participants were more inclined to view the finder as the owner when the found object was in a public (rather than private) space.⁶⁹

The self

This next example serves as an important proof of concept. The preceding examples involve concepts that law *cites explicitly*. But experimental jurisprudence also studies some ordinary concepts that have a less obvious relation to law.

As one example, consider the concepts of *personal identity* and *the self*. These terms do not frequently manifest in legal texts or opinions. Nevertheless, experimental jurisprudential study of these concepts has advanced legal scholarship in a surprising way.

Drawing on a large literature in experimental psychology of the self,⁷⁰ Christian Mott investigated whether judgments about the self might explain the intuitiveness of criminal punishment or statutes of limitations.⁷¹ Broadly speaking, the hypothesis was that what makes statutes of limitations seem appropriate is something to do with our sense that people change over time.

To test this hypothesis, Mott presented participants with a scenario in which a person recklessly drives drunk. In eleven different versions of the scenario, police find a security camera video showing the person’s action and are able to identify him. The key difference is that in the first version, police find the video *the next day*, in the second, the police find the video *three years later*; in the third, *six years later*; in the fourth, *nine years later* . . . ; and in the last, *thirty years later*. Participants evaluated whether it is “right” for the person to be “arrested and

⁶⁹ Peter De Scioli, Rachel Karpoff & Julian De Freitas, *Ownership Dilemmas: The Case of Finders Versus Landowners*, 41 COG. SCI. 502 (2017).

⁷⁰ See, e.g., Dan Bartels & Lance Rips, *Psychological Connectedness and Intertemporal Choice*, 139 J. EXP. PSYCHOL. 49 (2010); Dan Bartels & Oleg Urminsky, *On Intertemporal Selfishness: The Perceived Instability of Identity Underlies Impatient Consumption*, 39 J. CONSUMER RES. 182 (2011); Brian Earp et al., *Addiction, Identity, Morality* (2018); Hal Ersner-Herschfield et al., *Don’t Stop Thinking About Tomorrow: Individual Differences in Future Self-Continuity Account for Saving*, 4 JUDGMENT & DECISION MAKING 280 (2009); Sarah Molouki, Dan Bartels & Oleg Urminsky, *A Longitudinal Study of Difference between Predicted, Actual, and Remembered Personal Change*, PROC. COG. SCI. SOC. 2748; Sarah Molouki & Daniel Bartels, *Personal Change and the Continuity of the Self*, 93 COG. PSYCHOL. 1 (2017); George Newman, Paul Bloom & Joshua Knobe, *Value Judgments and the True Self*, 40 PERS. & SOC. PSYCHOL. BULL. 203 (2014); Nina Strohminger & Shaun Nichols, *The Essential Moral Self*, 131 COGNITION 151 (2014); Kevin P. Tobia, *Personal Identity and the Phineas Gage Effect*, 75 ANALYSIS 396 (2015); Kevin P. Tobia, *Personal Identity, Direction of Change, and Neuroethics*, 9 NEUROETHICS 37 (2016). See generally David Shoemaker & Kevin P. Tobia, *Personal Identity*, in OXFORD HANDBOOK OF MORAL PSYCHOLOGY (forthcoming).

⁷¹ Christian Mott, *Statutes of Limitations and Personal Identity*, in 2 OXFORD STUDIES IN EXPERIMENTAL PHILOSOPHY 243 (2018).

punished” immediately after the video is found.

Unsurprisingly, agreement that the man should be arrested and punished decreased with the years passing. Participants evaluated that the man was most deserving of punishment when the video was found the next day, and agreement decreased as more time elapsed between the incident and time of arrest.

Mott also asked participants to evaluate three other questions. First was a “deterrence” question regarding whether the man would have been less likely to drive drunk if he knew he would be arrested and punished [the next day, three years later ... thirty years later]. Second was a “repose” question regarding whether the man has the right to be able to stop worrying about being arrested and punished [the next day, three years later, ... thirty years later]. Third was a connectedness question about whether the man who recklessly drove was “completely connected” or “completely disconnected” from the person he is when the police find the video [the next day, three years later, ... thirty years later]. A mediation analysis found that the effect of time on punishment was explained by connectedness and repose but not deterrence.

This is a very striking finding. Although many would think the ordinary justification of statutes of limitations is linked to intuitions about deterrence, Mott’s findings suggest that it is more closely connected to concerns about repose and *the self*. In this case, this finding raises a largely overlooked legal question. Should legal punishment take into consideration intertemporal connectedness? For example, is someone less deserving of punishment for a crime that they committed after they have undergone large personal change? As in the other examples, the experimental findings will not directly resolve these questions about punishment and responsibility. But they provide new insight into these topics and suggest questions that jurisprudence might consider asking.

Law itself

Consider the concept of *law* itself. Raff Donelson and Ivar Hannikainen examined how ordinary people understand *law*. In an important series of experiments, they tested whether ordinary people (and legal experts) endorsed Fuller’s conditions of the inner morality of law.⁷² For example, do people think that law has to be consistent, general, intelligible, public, and stable?

That study investigated two questions. First, are these conditions of law seen as necessary? Second, do laws in practice observe these principles? The results— from ordinary people and experts alike—are fascinating. There was strong endorsement of these as principles of law. That is, laws *must be* prospective, stable, intelligible, and general. Yet, participants also agreed that there are some laws that are (in fact) not prospective, stable, intelligible, or general.

⁷² Raff Donelson & Ivar Hannikainen, *Fuller and the Folk: The Inner Morality of Law Revisited*, in 3 OXFORD STUDIES IN EXPERIMENTAL PHILOSOPHY (2019).

As with the other experimental jurisprudential studies, the lesson here is not for the law to simply reflect the ordinary notion. Donelson and Hannikainen do not recommend that law have a self-contradictory nature. Rather, the experiment adds insight into traditional jurisprudential debates. What features do we believe laws must and do have, and what explains those judgments?

Interpretation

A final area of experimental jurisprudence is the study of legal interpretation. One example of experimental jurisprudence in this area is study related to the jurisprudential focus on “ordinary meaning.” In legal interpretation—of statutes, contracts, and constitutions—courts often look to the “ordinary,” “public,” or “plain” meaning of the legal text. There are important debates and disagreements about how to elaborate these concepts.⁷³ Yet, on a number of plausible views, plain, ordinary, and public meaning are closely linked to facts about how ordinary people understand language.

For example, one study used experiments to assess several possible sources of legal-interpretive evidence of ordinary meaning.⁷⁴ It assigned participants to one of three groups. The first made ordinary conceptual judgments (e.g. answering questions like “Is a car a vehicle?”, “Is a bicycle a vehicle?”, and so on). The next group made similar judgments, armed with just a dictionary definition. The other group made similar judgments, using data from “legal corpus linguistics.” The study found that the judgments of these three groups diverged dramatically.

This finding has several implications. Some are more straightforward practical implications about how courts are likely to use certain sources of evidence in assessing a text’s “ordinary meaning.” But it also raises *jurisprudential* questions. For example, if a dictionary and legal corpus linguistics methods provide dramatically different evidence about the “ordinary meaning” of the same terms, does this give us reason to rethinking the legal concept of ordinary meaning, or the success of certain versions of textualism and originalism?⁷⁵

A Framework for Identifying Experimental Jurisprudence

This summary, although not entirely brief, has only scratched the surface.

⁷³ See generally Richard H. Fallon, Jr., *The Meaning of Legal “Meaning” and Its Implications for Theories of Legal Interpretation*, 82 U. CHI. L. REV. (2015).

⁷⁴ Kevin P. Tobia, *Testing Ordinary Meaning*, 134 HARV. L. REV. 726 (2020).

⁷⁵ Another study evaluated how ordinary people evaluate ordinary rules. The results suggest that people’s judgment of a rule is informed both by its text and its perceived purpose Noel Struchiner, Ivar R. Hannikainen & Guilherme da F.C.F. de Almeida, *An Experimental Guide to Vehicles in the Park*, 15 JUD. & DECISION MAKING 312 (2020).

Other work is not covered here, including experimental jurisprudence of *contract*,⁷⁶ *disability*,⁷⁷ *evidence*,⁷⁸ *punishment*,⁷⁹ and the experimental jurisprudential study of balancing tests⁸⁰ and legal rules.⁸¹

Before turning to the next Part, it is worth articulating what connects these very diverse projects. One common view is that XJur studies ordinary language and concepts that are invoked explicitly in law. Where the law invokes “consent” or “reasonable”, XJur studies the ordinary concept of *consent* or *reasonable*.

XJur does study those concepts, but not because of their explicit legal citation. A more useful criterion is whether the *legal* object of study has an ordinary language counterpart. This difference is clarified in Figure 1 below.

	Is the object of experimental study invoked explicitly in law?		
		Frequently	Rarely
Does the legally significant object of study have an ordinary counterpart?	Yes	Cause; consent; intent; reasonable	The self; the concept of law
	No	Parol evidence rule; stare decisis; Hand formula	Legal positivism; soft law; Kaldor-Hicks efficiency

Figure 1. A heuristic for identifying experimental jurisprudence

Many assume that the most important objects of XJur’s study are just those that are invoked explicitly in law: *consent*, *reasonableness*, *intent*. This is partly a result of the (mistaken) view that experimental jurisprudence is principally

⁷⁶ Tess Wilkinson-Ryan & David Hoffman, *The Common Sense of Contract Formation*, 67 STAN. L. REV. 1269 (2015); Meirav Furth-Matzkin & Roseanna Sommers, *Consumer Psychology and the Problem of Fine Print Fraud*, 72 STAN. L. REV. (2020).

⁷⁷ E.g. Doron Dorfman, *Suspicious Species*, U. ILL. L. REV. (2021); Doron Dorfman, *[Un]Usual Suspects: Deservingness, Scarcity, and Disability Rights*, 10 U.C. IRV. L. REV. (2020).

⁷⁸ E.g. Andreas Glockner & Christoph Engel, *Can We Trust Intuitive Jurors? Standards of Proof and the Probative Value of Evidence in Coherence-Based Reasoning*, 10 J. EMP. LEG. STUD. 230 (2013); Avani Mehta Sood, *Cognitive Cleansing: Experimental Psychology and the Exclusionary Rule*, 103 GEO. L.J. 1543 (2014);

⁷⁹ E.g. PAUL H. ROBINSON, *DISTRIBUTIVE PRINCIPLES OF CRIMINAL LAW: WHO SHOULD BE PUNISHED, HOW MUCH?* (2008); Eyal Aharoni & Eddy Nahmias, *Communicative Theories of Punishment and the Impact of Apology*, in *RETHINKING PUNISHMENT IN THE ERA OF MASS INCARCERATION* 152 (2017); John Darley, K. Carlsmith & Paul Robinson, *Incapacitation and Just Deserts as Motives for Punishment*, 24 LAW & HUMAN BEHAV. 659 (2000); James Dunlea & Larisa Heiphetz, *Childrens’ and adults’ understanding of punishment and the criminal justice system*, 87 J. EXP. SOC. PSYCHOL. (2020).

⁸⁰ E.g. Christoph Engel & Rima-Maria Rahal, *Justice is in the Eyes of the Beholder-Eye Tracking Evidence on Balancing Normative Concerns in Torts Cases* (unpublished manuscript 2020).

⁸¹ See, e.g. Christoph Engel & Rima-Maria Rahal, *Justice is in the Eyes of the Beholder-Eye Tracking Evidence on Balancing Normative Concerns in Torts Cases* (unpublished manuscript 2020); Ivar R. Hannikainen & Guilherme da F.C.F. de Almeida, *An Experimental Guide to Vehicles in the Park*, 15 JUD. & DECISION MAKING 312 (2020).

concerned with predicting how lay juries will decide cases.⁸² Of course, many experimental jurisprudence studies have focused on those concepts. Unsurprisingly, many important legal concepts also appear with regularity in real legal texts.

However, this criterion—what terms and phrases appear legal texts—will not direct us to every useful experimental jurisprudential project. There are a number of other notions that are rarely or never invoked *explicitly* in law, but which nevertheless are crucial jurisprudential (and more broadly, legal) concepts. This includes concepts of personal identity and the self, (moral) responsibility, and even the concept of law itself.

To take just one example, consider the concept of *numerical identity*. This is a crucial legal concept. It is implicated as a necessary criterion of most interesting diachronic legal relations. When are *you* bound by that contract? Only when you are the same person as one of the parties who originally agreed to it. When does *he* deserve criminal punishment? Only when he is the same person as the one who committed the crime. Yet, “numerical identity” is hardly ever cited explicitly by courts.⁸³

The same is true of other important legal concepts: although courts discuss “law”, it is rare to refer to the concept of law, or the concept of soft law, or concepts like Kaldor-Hicks efficiency. That said, there is not much to learn from studying the ordinary concept of the *parol evidence rule* or *soft law*, insofar as it has no ordinary language counterpart.⁸⁴ The better criterion for identifying useful experimental jurisprudential inquiries is whether the legal object has a corresponding ordinary language counterpart. Because experimental jurisprudence focuses specifically on ordinary cognition,⁸⁵ these ordinary concepts are the most valuable to study.

The crucial criterion is whether a counterpart of some ordinary concept plays (or might play) an important role in the law. This is true of ordinary concepts whose counterpart is cited (e.g. the ordinary notion of what is reasonable, consensual, self-defense, or retribution) but also ones that are not explicitly cited (e.g. the ordinary notion numerical identity or of the concept of law itself).

Before turning to the next Part, there is one final wrinkle. XJur often focuses on *specific* legally significant concepts (e.g. *ownership*). But sometimes it focuses

⁸² See Part III *infra* (Myth 2).

⁸³ A Westlaw search returns ten cases.

⁸⁴ Of course, if these legal concepts are composed of concepts that have ordinary counterparts, then studying the lay view of *those* might prove useful. A good example here is the Hand Formula. Although most ordinary people do not speak about or even know the “Hand Formula,” there may be useful experimental jurisprudential work in the study of its components (studying how ordinary people weigh burdens of prevention against probability and severity of harm). This reflects an important feature of Figure 1. The top row (reflecting that the legal concept has an ordinary counterpart) is most instructive in finding experimental jurisprudential projects, but it is not a necessary requirement.

⁸⁵ See Part III *infra*.

on broader classes of concepts, for example studying how law treats concepts that admit of a broad range of potential category members.⁸⁶

One example is James Macleod's work on "causation."⁸⁷ Those studies examine lay judgments of vignettes using different phrases—such as "because of" and "result from"—that are taken to reflect ordinary causal reasoning. Another example is Roseanna Sommers's work on "consent"⁸⁸ Those experiments study judgments about "consent," but also about whether "permission" was granted or whether an act was "autonomously authorize[d]."⁸⁹

These experiments report similar patterns of judgment across vignettes using these varied terms, and are taken to reveal something more general about ordinary causal or consensual reasoning—rather than only something about some more specific concept (e.g. the concept of *because of*).

III. EXPERIMENTAL JURISPRUDENCE: 5 ½ MYTHS

Building upon the proposed framework of experimental jurisprudence (Parts I and II), the Article now defends this approach. It begins by considering a series of critiques of experimental jurisprudence—objections, concerns, and claims of the movement's insignificance. This Section's "five and a half myths" framing takes inspiration from a seminal piece on legal positivism by John Gardner.⁹⁰ Debunking each myth helps clarify the nature of experimental jurisprudence; and collectively, these explanations justify XJur's aims and methods.

The first two and a half myths challenge XJur's significance: It has no normative implications; it is misguided in its focus on laypeople rather than legal experts; and it is an impoverished form of jury psychology. The next two myths are apparent truisms: Any given empirical data is either "experimental jurisprudential" or not; and XJur scholarship must conduct experiments. Understanding why these are myths further clarifies the nature and aims of experimental jurisprudence and its deep connection to traditional jurisprudence.

These first four and half myths provide the groundwork for debunking the final myth: Experimental jurisprudence is not really jurisprudence. XJur is surprisingly consistent with the aims and methods of traditional jurisprudence. Moreover, the Article argues, traditional jurisprudential questions call for the work conducted within experimental jurisprudence. As such, experimental jurisprudence should be understood as not merely consistent with jurisprudence, but a movement at its core.

⁸⁶ E.g. Tobia, *supra*.

⁸⁷ E.g. Macleod, *supra*.

⁸⁸ E.g. Sommers, *supra*.

⁸⁹ *Id.*

⁹⁰ John Gardner, *Legal Positivism: 5 1/2 Myths*, 46 AM. J. JURISPRUDENCE 199 (2001).

A. *The ½ Myth: Experimental Jurisprudence Has No Normative Implications*

First consider the half-myth: experimental jurisprudence has no normative implications. The method of surveying laypeople might provide insight into what law *is*, but cannot provide insight into what law *ought* to be. To say otherwise is to derive an ought from an is. Or so it might seem.

This statement is a “myth” because it is often false; it is a “half” myth because it is sometimes true. Some experimental jurisprudence has no normative implications, as it has no normative ambitions. The same is true, of course, of much legal scholarship—many important works provide only descriptive findings, with no further normative ambitions. This is true of some doctrinal analyses, legal histories, descriptive economic modeling, and political-scientific predictions of legal decision making.

The same is also true of some (non-experimental) jurisprudence. Not all jurisprudential works conclude with a set of recommendations for legal reform, or statements about what law should be. Arguably, much traditional jurisprudence is non-normative. Analyses of legal concepts often aim to articulate what law *is*, not what it should be.⁹¹

However, some experimental jurisprudence, like some traditional jurisprudence, does ambitions to make a normative contribution. This raises a crucial point that sits at the root of this first half-myth. Sometimes a “normative contribution” is (mistakenly) understood as a contribution that *settles* some question of what we should do or law should be. But this is a mistake. Another (much more honest) normative contribution is to *inform* a normative debate with reasons and arguments. Experimental studies, coupled with normative bridge principles, provide new reasons and arguments for normative conclusions. Given the complex jurisprudential debates with which experimental jurisprudence engages, these questions may not be settled in a simple and straightforward manner. But that comes with the territory of addressing the theoretical questions of jurisprudence.

The broader point is the Humean one: No empirical study will *by itself* deliver normative conclusions. To derive the normative conclusion (“N”), the empirical finding (“E”) must be coupled with some normative bridge principle (e.g. “If E, then N”). Some XJur does take this normative step. This is why this first myth is indeed partly myth; experimental jurisprudence often involves normative argumentation. For example, scholars have argued that legal reasonableness *should* reflect discovered features of the ordinary concept,⁹² legal intent *should not* reflect discovered features of the ordinary concept,⁹³ legal cause

⁹¹ Veronica Rodriguez Blanco, *The Methodological Problem in Legal Theory: Normative and Descriptive Jurisprudence Revisited*, 19 *RATIO JURIS* 26 (2006).

⁹² Kevin P. Tobia, *How People Judge What Is Reasonable*, 70 *ALA. L. REV.* 293 (2018).

⁹³ Markus Kneer & Sacha Bourgeois-Gironde, *Mens rea Ascription, Expertise and Outcome Effects: Professional Judges Surveyed*, 169 *COGNITION* 139 (2017).

should reflect discovered features of the ordinary concept,⁹⁴ and interpretation of terms' "ordinary meaning" *should* reflect facts about lay understanding of language.⁹⁵ Other experimental jurisprudence studies defend other normative conclusions; such as conclusions about how legal scholars and interpreters *should* use dictionaries and corpus linguistics in identifying the "ordinary meaning" of legal terms and phrases.⁹⁶ Experimental jurisprudence does not always carry normative implications, but the claim that it *never* does is entirely myth.

Perhaps, one might worry, this argument proves too much. Can the mere addition of a bridge principle and normative conclusion transform otherwise purely descriptive scholarship into normative scholarship? Yes. Legal scholarship often connects descriptive work to normative conclusions in precisely this way. Psychological evidence of implicit bias in the judiciary supports the conclusion that judges could compensate for those biases, *insofar as* implicit bias is understood as antithetical to legal process;⁹⁷ a descriptive linguistic analysis of the Restatement of Torts supports that tort law should embrace the cited values, *insofar as* values cited in the Restatement reflect what tort law should be;⁹⁸ economic analysis of possible rules' efficiency reveal which one law should adopt, *insofar as* efficiency is the decisive legal value.⁹⁹ As the previous examples make clear, some "bridge premises" connecting descriptive findings to normative ones are very plausible; others are more controversial.

In experimental jurisprudence, these bridge principles operate in a similar way, connecting empirical findings to normative jurisprudential conclusions. For example, a number of experimental jurisprudence papers have suggested that legal concepts should generally reflect ordinary concepts, to promote law's publicity and notice values.¹⁰⁰ Empirical discoveries that an ordinary concept differs from the corresponding legal one, plus this bridge principle, supports normative conclusions about how law should reconceptualize the legal concept. For example, experimental findings that the ordinary notion of cause differs from the legal one have been taken to support normative conclusions about the legal conceptualization of cause.¹⁰¹

⁹⁴ James Macleod, *Ordinary Causation: A Study in Experimental Statutory Interpretation*, 94 IND. L.J. 957 (2019).

⁹⁵ Kevin P. Tobia, *Testing Ordinary Meaning*, 134 HARV. L. REV. (2020).

⁹⁶ E.g. Shlomo Klapper, Soren Schmidt & Tor Tarantola, *Ordinary Meaning from Ordinary People*.

⁹⁷ E.g. Jeffrey J. Rachlinski, Sheri Lynn Johnson, Andrew J. Wistrich & Chris Guthrie, *Does Unconscious Racial Bias Affect Trial Judges*, 84 NOTRE DAME L. REV. 1196 (2009).

⁹⁸ E.g. Christina Carmody Tilley, *Tort Law Inside Out*, 126 YALE L.J. 1320 (2017).

⁹⁹ E.g. MAKING LAW AND COURTS RESEARCH RELEVANT: THE NORMATIVE IMPLICATIONS OF EMPIRICAL RESEARCH (Brandon Bartels & Chris Bonneau eds., 2015).

¹⁰⁰ See generally Kevin P. Tobia, *Law and the Cognitive Science of Ordinary Concepts*, in MIND & LAW (Cambridge University Press, forthcoming).

¹⁰¹ See, e.g. James Macleod, *Ordinary Causation: A Study in Experimental Statutory Interpretation*, 94 IND. L.J. 957 (2019) (demonstrating that legal determinations of "cause" do not reflect ordinary ones, and arguing that the former should reflect the latter).

B. *Myth 1: Experimental Jurisprudence Should Study Legal Experts, Not Laypeople*

Now we turn to the full myths. The first is a very popular claim: Experimental jurisprudence is misguided in its choice of population. Jurisprudence is a field for legal experts, who have acquired legal knowledge. Yet, experimental jurisprudence surveys lay populations, with no legal expertise.

Is XJur just young, dumb, and broke?¹⁰² Perhaps the movement is in its infancy; its experimentalists have not yet realized the implications of relying on lay populations as substitutes; and they have no access to expert ones. On this view, the best version of XJur would study *only* legal experts—lawyers, judges, legislators, legal theorists—but for now these populations are difficult and costly to access, so experimentalists have settled for a cheaper alternative.

This is a cynical view of the movement, and it is also a very common one. However, this view fundamentally misunderstands experimental jurisprudence. What makes this first myth mythical is the idea that for any experimental jurisprudential study, the best population would be an expert one. Most experimental jurisprudence *deliberately* studies laypeople.

There are many experimental jurisprudence studies of only laypeople, but it is much less common to find studies of only experts.¹⁰³ It is true that for some experimental jurisprudential questions, an expert population can be instructive. However, it is intriguing that when experimental jurisprudence does recruit expert populations, they are analyzed as *comparisons* to lay populations.¹⁰⁴ And in those few studies that have recruited only legal experts, the results of experts are analyzed in relation to *other* findings about laypeople.¹⁰⁵

This suggests something surprising about the role of the lay population in experimental jurisprudence. That population is actually more fundamental to the central XJur project than the population of legal experts. The cynical speculation that XJur recruits lay populations to reduce cost is inconsistent with the practice. After all, it is cheaper to recruit a lay population than an expert one, but studies of laypeople are not *free*. So why do experimental jurisprudence projects that have successfully recruited legal experts also recruit laypeople? The answer is that experimental jurisprudence is principally concerned with jurisprudential debates that are informed by facts about *lay* cognition.

Why might facts about lay cognition bear on jurisprudence? Scholars have identified several persuasive reasons. One is that laypeople engage with the law (and *should* engage with the law). As Roseanna Sommers convincingly explains,

¹⁰² Khalid, *Young Dumb & Broke*.

¹⁰³ This is an important distinction between experimental jurisprudence and other legal psychology, such as Chris Guthrie, Jeffrey J. Rachlinski & Andrew J. Wistrich, *Blinking on the Bench: How Judges Decide Cases*, 92 CORNELL L. REV. 1 (2007).

¹⁰⁴ E.g. Tobia, *supra*.

¹⁰⁵ Kneer & Bourgeois-Gironde, *supra* (studying judgments of intent in a population of judges, based on paradigms and prior results in studies on laypeople, such as Joshua Knobe, *Intentional Action and Side Effects in Ordinary Language*, 63 ANALYSIS 190 (2003)).

laypeople serve in legal roles including deciders, subjects, and victims.¹⁰⁶ Laypeople serve on juries, they sign contracts, and they are affected by laws. If we seek understanding of the legal concept of *consent* or *reasonableness*, part of our inquiry involves studying the potential jurors who apply those concepts. We might also look to the laypeople who take themselves to be bound or protected by those concepts in contracts or statutes. Insofar as theories of jurisprudence are partly concerned with what is happening “on the ground”, there is reason to look to all the people who create and participate in that law.

These concerns are loosely connected to another set of important theoretical reasons: rule of law values. Many theories of legal legitimacy claim that law should be *public* (to laypeople and experts alike), that it should provide *fair notice*, or that it should be applied *consistently* (e.g. as applied by lay juries or expert judges). As James Macleod persuasively argues, these rule of law values play an important role in *traditional* jurisprudence: “Hart and Honoré, for example, appealed to rule of law values” like publicity and fair notice in their jurisprudential analyses.¹⁰⁷

A similar line of justification comes from consideration of the “democratic” nature of law. On some theories, law should reflect ordinary judgments and concepts, to allow citizens to have democratic input into the legal system.¹⁰⁸ This view is most associated with the democratic view of criminal law,¹⁰⁹ but it might supply reasons more broadly. Insofar as these democratic considerations are relevant, they would tend to provide reasons in favor of using ordinary concepts—those accessible to the demos. If that’s right, we have to learn what—in fact—the ordinary concepts are.

C. *Myth 2: Experimental Jurisprudence Aims to Model Legal Decision Making*

The next myth is that experimental jurisprudence aims to model legal decision making. On this view, experimental jurisprudence’s studies are at their core “mock jury” (or “mock judging”) studies, aiming to help predict what is most likely to happen in the real world: How will a judge or juror decide a case, or how will a layperson react to a contract provision or criminal code?

It is very tempting to draw this conclusion about experimental jurisprudence. After all, the approach focuses specifically on *lay* judgments. So it is reasonable to think that experimental jurisprudence aims to speak some of the most ways in which laypeople’s judgments impact the law, such as through their role as jurors. However, experimental jurisprudence does not generally aim to *model* legal

¹⁰⁶ Sommers, *supra*.

¹⁰⁷ Macleod, *supra*, at 981.

¹⁰⁸ See, e.g., PAUL H. ROBINSON & JOHN M. DARLEY, JUSTICE, LIABILITY & BLAME: COMMUNITY VIEWS AND THE CRIMINAL LAW (1995); Paul H. Robinson, *Democratizing Criminal Law: Feasibility, Utility, and the Challenge of Social Change*, 111 NW. U. L. REV. 1565 (2017).

¹⁰⁹ See, e.g., Joshua Kleinfeld, *Manifesto of Democratic Criminal Justice*, 111 NW. U. L. REV. 1367 (2017).

decision making. And as a consequence, experimental jurisprudence is generally not very good at modeling legal decision making.

As a comparison, consider the very sophisticated branch of legal psychology that does specifically aim to model legal behavior and decision making, such as experimental studies of the behavioral effect of contract provisions to jury decision making.¹¹⁰ In those studies, experimentalists employ rich multi-paragraph vignettes, with generous background and legal context.¹¹¹ To best model lay decision making, the best studies would provide important procedural details and example jury instructions.¹¹²

In contrast to those approaches, experimental jurisprudence generally uses *deliberately short and abstract* scenarios, ones that shed many complications of real legal decision-making contexts. Studies often use vignettes of just one paragraph,¹¹³ or a series of extremely short questions.¹¹⁴

Moreover, experimental jurisprudence typically studies lay judgments arising in a deliberately *non-legal* context. Very few XJur studies begin with the prompt, “Imagine that you are a juror...”. Nor are participants invited to deliberate with others (as they might on a jury). In fact, participants not always told that they are evaluating a specifically *legal* question. Rather, experimental jurisprudence studies often provide participants with a story about ordinary life, interrogating how the *ordinary* concept (e.g. of intent, cause, consent, or reasonableness) applies.

The myth that XJur focuses on modeling legal decision making leads to much confusion. That is not its aim, and to assume that it is creates the impression that experimental jurisprudence is some form of impoverished legal psychology.

This impression also overshadows experimental jurisprudence’s true aims. Because experimental jurisprudence is *jurisprudence*, it is typically entering a theoretical conversation, not an applied one. For example, in an experimental study of some concept, say *reasonableness*, the principal experimental-jurisprudential goal is never to predict how *in fact* jurors will apply the New York jury instruction for negligence. Rather, the aim is gain insight into the ordinary concept of *reasonableness*; how do *we* think about what is reasonable—and should those features also characterize the legal concept? There is of course some overlap between XJur’s questions and those of more traditional legal psychology. XJur studies may contribute some evidence to question about jury modeling (e.g. insofar as the jury instruction relies heavily on the term

¹¹⁰ E.g. Tess Wilkinson-Ryan, *Do Liquidated Damages Encourage Breach: A Psychological Experiment*, 108 MICH. L. REV. 633 (2009).

¹¹¹ *Id.*

¹¹² E.g. Shari Diamond, *Illuminations and Shadows from Jury Simulations*, 21 LAW AND HUMAN BEHAV. 551 (1997); see generally NEIL VIDMAR & VALERIE HANS, *AMERICAN JURIES: THE VERDICT* (2009).

¹¹³ E.g. Kneer & Bourgeois-Gironde, *supra*; Tobia, *supra* note 41.

¹¹⁴ E.g. Tobia, *supra* (“what is a reasonable interest rate for a loan” vs. “what is an average interest rate for a loan”).

“reasonable”).¹¹⁵ But there are various complexities of the real world jury decision that the experimental jurisprudence study simply does not seek to address: How jurors will apply New York state negligence law is an important practical question, but it is not a *jurisprudential* one.

As another example, consider experimental jurisprudence of legal interpretation. Recall *Testing Ordinary Meaning*, which studied how laypeople, law students, and judges used dictionaries and legal corpus linguistics data to assess the “ordinary meaning” of terms like “vehicle.”¹¹⁶ Participants received either very brief questions (e.g. “Is an airplane a vehicle?”) or a dictionary definition or legal corpus linguistics dataset, followed by very brief questions. It would be a mistake to interpret that project as a precise model of *actual* judging behavior. In the real world, there are many other complicating factors. Judges would be able to look through more than one dictionary, they could reflect more thoroughly, they could speak to their clerk(s), they would also be aware of the political valence of the case at hand, which may affect their use of the dictionary, and so on.¹¹⁷

That project does not understand itself as a model of how judges would likely decide some particular case. Rather it sets out to address *jurisprudential* questions including: Do dictionary definitions reliably measure ordinary meaning? To do this, it employs a very abstract methodology. It provides the judge participants *only* the definition. This allows assessment of very different questions, such as: If a judge were to rely on just the information provided by a dictionary, how would they interpret a legal text?

Here again, both sorts of questions are interesting and important. It is useful to predict how judges will decide cases, and various empirical studies within the “New Legal Realism” focus on that question.¹¹⁸ But the project of realist *prediction* is a different project from that of jurisprudence. The other type of question—is a dictionary definition a reliable measure of ordinary meaning—is a *jurisprudential* one, about the nature of legal interpretation.

D. Myth 3: Experimental Data is Either “Experimental Jurisprudential” or Not

Pick any set of experimental data. Now consider this apparent truism: That study is either “experimental jurisprudence” or it is not. It seems clear, perhaps even logically necessary, that this statement is true.

However, this too is a myth. Whether a particular study or finding is “experimental jurisprudence” depends on more than the raw data itself. The

¹¹⁵ Some experimental jurisprudence pieces make this claim. E.g. Roseanna Sommers, *Commonsense Consent*, 129 YALE L.J. 2232, 2303 (2020); Tobia, *supra* at 346.

¹¹⁶ E.g. Tobia, *supra*.

¹¹⁷ James J. Brudney & Lawrence Baum, *Oasis or Mirage: The Supreme Court’s Thirst for Dictionaries in the Rehnquist and Roberts Eras*, 55 WM. & MARY L. REV. 483, 492–93 (2013).

¹¹⁸ See generally Thomas J. Miles & Cass R. Sunstein, *The New Legal Realism*, 75 U. CHI. L. REV. 831 (2008).

very same set of empirical data may be “experimental jurisprudential” in one context but not another. The reason is that the same data might serve a number of purposes; but data only becomes “experimental jurisprudential” when it serves as evidence *in jurisprudence*. Understanding this process—how data can be transformed into experimental jurisprudence—is crucial to understanding the approach and how it differs from other forms of empirical legal scholarship.

As an illustration, consider a common type of empirical finding. These are findings related to the so-called “ordinary meaning” or “plain meaning” of legal texts.¹¹⁹ Empiricists conduct experiments to assess how ordinary people understand some term or phrase in a legal text, in an effort to provide evidence about the term or phrase’s ordinary meaning.

Recently, one such survey studied the ordinary meaning of the phrase “carries a firearm”¹²⁰ That survey was motivated by *Muscarello v. United States*,¹²¹ a case concerning a criminal statute, which held that the ordinary meaning of the phrase “carries a firearm” includes conveying a gun in the locked glove compartment of a vehicle.

The experimentalists provided survey participants with the following scenario and question:

The law requires certain mandatory minimum penalties be imposed on anyone who “during and in relation to any drug trafficking crime, uses or carries a firearm.”

Suppose a person keeps a gun in the locked glove compartment of their car during a drug deal, just in case it was ever needed, but doesn’t ever take it out.

How much do you agree with the following statement: That person’s conduct qualifies for the mandatory minimum penalties.

Participants rated their agreement on a six point scale, from strongly disagree to strongly agree. Seventy-three percent of participants agreed (“agree strongly,” “agree,” or “agree somewhat”), while twenty-seven percent disagreed (“disagree strongly,” “disagree,” or “disagree somewhat”). The authors interpret these results as supporting the holding in *Muscarello*; the ordinary meaning of “carrying a firearm” includes conveying a gun in the locked glove compartment of a vehicle.

This is a very interesting finding with important practical implications; for example, it could help us predict jury decisions in future litigation. But this data

¹¹⁹ Omri Ben-Shahar & Lior Jacob Strahilevitz, *Interpreting Contracts via Surveys and Experiments*, 92 N.Y.U. L. REV. 1753, 1765 (2017); Klapper, Schmidt & Tarantola, *supra*; Tobia, *supra*.

¹²⁰ Klapper, Schmidt & Tarantola, *supra*.

¹²¹ 524 U.S. 125 (1998).

is not in itself *experimental jurisprudence*. To be clear, this is in no way a criticism of that study or its method. As it happens, that paper also presents a second study and analysis, which make an important contribution within experimental jurisprudence.¹²² A key purpose of this Article is to define “experimental jurisprudence,” and this study is simply an instructive example of a type of finding that is commonly (but wrongly) associated as a prototype of the movement.

The reason that this finding is not experimental-jurisprudential is *not* because it makes no contact with normative argument.¹²³ In fact, the authors seem to endorse a normative argument and conclusion. Broadly speaking, the argument is: (1) If most laypeople endorse this statement, *Muscarello* correctly determined the “ordinary meaning” of the language and *Muscarello* should not have been decided differently; (2) most laypeople endorse this statement; so (C) *Muscarello* correctly determined the ordinary meaning and should not have been decided differently.

The reason that this data is not “experimental jurisprudential” is that the argument to which it is attached is not *jurisprudential*. There is no broader theoretical implication drawn from the experimental finding. This finding is not taken to evince something about the concept of ordinary meaning, the nature of legal interpretation, or even the concept of *carrying* or *carrying a firearm*. The survey of laypeople plays a very different role; it functions as a calculator to compute the answer to the specific legal dispute in *Muscarello*.

As a comparison, imagine a different piece of scholarship analyzing *Muscarello*, or another legal interpretative dispute. The scholar argues that the court actually relied on the wrong sources of interpretive evidence; rather than relying on *these* dictionaries, the court should have relied on *those* dictionaries. And relying on those dictionaries would have changed the outcome. This too is an important argument, but it is not a jurisprudential one. This is very different from jurisprudential scholarship grappling with the meaning of legal justice, or even “*the problematics* of interpreting legal texts.”¹²⁴ Ordinary meaning surveys are more straightforward applications of experimental survey methods to legal problems, more aptly described as something like “applied ordinary meaning analysis.” Given certain background assumptions about ordinary meaning, new survey tools can help us to compute the answer.¹²⁵

It is important to distinguish this type of applied surveying from experimental jurisprudence because many critics associate this kind of surveying as the paradigmatic form of experimental jurisprudence. Perhaps the most common misconception of experimental jurisprudence is that it is the method of *surveying* laypeople to provide answers about how law should be applied. This

¹²² Klapper, Schmidt & Tarantola, *supra*.

¹²³ Also recall that experimental jurisprudence need not imply normative conclusions.

¹²⁴ Richard A. Posner, *THE PROBLEMS OF JURISPRUDENCE* xi (Harvard University Press 1990).

¹²⁵ See also, e.g., Ben-Shahar & Strahilivetz, *supra*.

misconception is the product of several myths (including the first half myth and this one). However, any survey of laypeople about some legal topic is not necessarily experimental jurisprudence.

At the same time, what is fascinating about many of these surveys is that, many can be *transformed* into experimental jurisprudence. Recall the other study that employed similar experimental “survey” questions about ordinary terms, such as “Is an airplane a vehicle?”¹²⁶ The empirical finding is yes, about 70% of people today say an airplane is a vehicle. That could be understood as “applied ordinary meaning analysis,” for example, helping us predict how future courts will interpret contracts referring to “vehicles.” But that result was elaborated in a very different way. For one, it was embedded within a broader experimental framework. One group of participants answered those questions (Is a car a vehicle; Is a bicycle a vehicle; etc.), another answered the same questions using a dictionary, and the third using legal corpus linguistics. This kind of broader experimental framework is usually a sign of experimental jurisprudence, as opposed to applied surveying.¹²⁷

But the key feature that makes data “experimental jurisprudential” is that there is also a set of jurisprudential questions in the vicinity. Here, the questions include: Do all of these methods provide reliable evidence about “ordinary meaning,” and if they diverge, what does that imply about the concept of *ordinary meaning*, the prospects of textualist and originalist theories, and the nature of interpretation? The study did find some dramatic divergence among those methods, which supports *jurisprudential* implications about all of these questions.

The key point is that this common type of survey data—what do ordinary people think law X means—is not necessarily itself experimental jurisprudence. But it could be. To become experimental jurisprudence, the experimental work must engage some jurisprudential questions, ones that are often reflected in the experimental design. Since this “jurisprudential engagement” comes from the data analysis and interpretation, the very same data could either be experimental jurisprudence—or not.

The same is true of all experimental jurisprudence studies. Each study could be taken to only address some more straightforward, applied questions:

- What do most people believe is the *reasonable* number of days to return a product ordered online when there is no warranty?¹²⁸

¹²⁶ Tobia, *supra*.

¹²⁷ Although it is not sufficient. For example, here all of that data might be understood in a merely applied way: We now have more data (surveys, dictionary use, corpus linguistics use) to predict some specific court determinations of ordinary meaning or assess some past determinations.

¹²⁸ Tobia, *supra*.

- What do most people say about the key question in *Burrage* (a case concerning liability under the Controlled Substance Act),¹²⁹ did death “result from” the drug sold?¹³⁰
- Do most people judge that this case of sex-by-deception is consensual?¹³¹

Any of those findings could be taken in a (merely) applied way, helping us predict how juries might decide this case, or evaluate whether that case was decided correctly. In other words, it is a category error to describe *data* as experimental jurisprudence.

What makes papers experimental jurisprudence is that they develop and grapple with jurisprudential implications of data. Often the data is analyzed to provide evidence about the ordinary and legal concepts of *reasonableness*, *causation* (e.g. “results from”), and *consent*—not just evidence about how some particular case was or should be decided. And the papers raise jurisprudential questions, such as: Should this feature of the ordinary concept (that the experiment has discovered) be reflected in the legal criteria? For example, now that we learn that sex-by-deception is compatible with the ordinary notion of consent, *should* the legal criteria of consent be compatible with sex-by-deception? And how does our new understanding of *why* the ordinary notion of consent has this feature enrich that debate about the legal criteria?¹³²

The examination of this myth might seem somewhat pedantic. Is this merely a terminological debate over what we call “experimental jurisprudence” and what we call something else?¹³³ I contend that this categorization is significant: If something is experimental jurisprudence, it is jurisprudence,¹³⁴ and that categorization matters. Insofar as jurisprudence seeks the truth about its theoretical questions, it is worthwhile to correctly identify what is, and what should be, part of that discussion.

At the same time, a clear understanding of experimental jurisprudence makes clear that there is also value in attending to data this is not yet experimental jurisprudence. The next section takes up this theme.

¹²⁹ *Burrage v. United States*, 571, U.S. 204 (2014).

¹³⁰ Macleod, *supra*.

¹³¹ Sommers, *supra*.

¹³² *Id.*

¹³³ Maybe, but the practice of defining new legal scholarship approaches is a shared and important one. E.g. Jedediah Britton-Purdy, David Singh Grewal & Amy Kapczynski, *Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis*, YALE L.J. (forthcoming); Robert Alexy, *The Nature of Legal Philosophy*, 17 *RATIO JURIS* 156 (2004); ROBERT COOTER & THOMAS ULEN, 6 *LAW AND ECONOMICS* 2012.

¹³⁴ See Myth 5 *infra*.

E. Myth 4: Experimental Jurisprudence Requires Conducting Experiments

This is a myth for two reasons. First, “experimental” jurisprudence is a slight misnomer. The better name would be “empirical jurisprudence,” as the movement should include work of scholars who conduct non-experimental empirical studies in the service of jurisprudence. For example, scholars have used (empirical, not experimental) corpus linguistics methods to study the ordinary concept of causation.¹³⁵ As XJur emerges, the “big data” and law movement also grows.¹³⁶ And some of those projects have jurisprudential aims or potential. The Article’s considerations about experimental jurisprudence would also apply to “empirical jurisprudence.”

If that were the whole problem with this myth, it would become a true statement with one modification: Experimental Jurisprudence Requires Conducting *Empirical Studies*. Yet, that too, is a myth. The second error is less obvious and its correction more interesting.

Although experimental jurisprudence does not require running experiments, it seems it must at least require some empirical study or data collection. However, some XJur does not proceed in this way. For example, consider *Proximate Cause Explained: An Essay in Experimental Jurisprudence*.¹³⁷ Despite that Article’s self-categorization as “experimental jurisprudence,” readers might be surprised to find that it does not report new experimental data. It is co-authored by one of the founders of “experimental philosophy” and the coiner of the phrase “experimental jurisprudence,” who are undoubtedly right in the categorization of their project as “Experimental Jurisprudence.” But it presents no new experiments. So why, exactly, is it *experimental* jurisprudence?

The answer is that experimental jurisprudence requires *data*, not *data-collection*. So authoring experimental jurisprudence requires interrogating data. But the author need not themselves generate those data. Moreover, whoever originally collected the data (e.g. performed an experiment) need not have intended that it would ultimately play some role in experimental jurisprudence.

This last point carries an intriguing implication. If experimental jurisprudence data need not be collected *as* experimental jurisprudence data, it is possible that much of that data already exists, despite the novelty of the XJur movement. These would be extant data with untapped potential, ripe for jurisprudential analysis. One area full of such studies is the cognitive science of ordinary concepts; experimental work concerning lay notions of intent, cause, knowledge, and responsibility. An important branch of experimental jurisprudence could analyze these empirical results, from a jurisprudential

¹³⁵ E.g. Justin Systma, Roland Bluhm, Pascale Willemsen, & Kevin Reuter, *Causal Attributions and Corpus Analysis*.

¹³⁶ E.g. LAW AS DATA: COMPUTATION, TEXT & THE FUTURE OF LEGAL ANALYSIS (Michael Livermore & Rockmore eds., 2019).

¹³⁷ Joshua Knobe & Scott Shapiro, U. CHI. L. REV. (2020).

perspective, for example asking what these findings about ordinary concepts (e.g. the ordinary concept of *intent*) suggest about the legal concepts.¹³⁸

The Knobe and Shapiro Article, “*Proximate Cause Explained*”, is a model of this version of XJur.¹³⁹ There is a wealth of extant experimental data about the ordinary concept of causation. The authors analyze this data, with *jurisprudential* questions in mind, resulting in an extremely important experimental jurisprudential contribution—even without running any new experiments.

At first it seems paradoxical that “experimental jurisprudence” does not require experimentation. But experimental jurisprudence takes *jurisprudential* questions and addresses them with *experiments* (or empirical work). One way to participate is to conduct a new empirical study and evaluate the jurisprudential implications, but another way is to interrogate extant empirical studies.

F. *Myth 5: Experimental Jurisprudence is Not Really Jurisprudence*

The boundaries of “jurisprudence” are debated,¹⁴⁰ but the term calls to mind a certain picture. That standard picture seems to diverge sharply from the standard picture of *experimental* jurisprudence.

The image of jurisprudence: A group of learned legal experts debate law’s deepest theoretical questions, in an effort to determine what law should be.

The image of experimental jurisprudence: Some punk takes a longstanding jurisprudential question about what law should be and claims to settle it by asking laypeople on online platforms like “MTurk.”¹⁴¹

How can this latter approach possibly be part of the field of *jurisprudence*?

Debunking the previous four and a half myths lays the groundwork to

¹³⁸ See, e.g., Julia Kobick, & Joshua Knobe, *Interpreting Intent: How Research on Folk Judgments of Intentionality Can Inform Statutory Analysis*, 75 BROOK. L. REV. 409 (2009); Julia Kobick, *Discriminatory Intent Reconsidered: Folk Concepts of Intentionality and Equal Protection Jurisprudence*, 45 HARV. CIV. R.-CIV. LIB. L. REV. 518 (2010).

¹³⁹ For other examples, see Mihailis Diamantis, *Limiting Identity in Criminal Law*, 60 B.C. L. REV. 2011 (2019); and James A Macleod, *Belief States in Criminal Law*, 68 OKLA. L. REV. 497 (2016).

¹⁴⁰ See notes 4-7 *supra*.

¹⁴¹ “MTurk” (Amazon’s Mechanical Turk) is a platform commonly used in experimental jurisprudence studies. See Adam J. Berinsky et al., *Evaluating Online Labor Markets for Experimental Research: Amazon.com’s Mechanical Turk*, 20 POL. ANALYSIS 351, 366 (2012); Gabriele Paolacci et al., *Running Experiments on Amazon Mechanical Turk*, 5 JUDGMENT & DECISION MAKING 411, 412–13 (2010); see also Michael Buhrmester, Tracy Kwang & Samuel D. Gosling, *Amazon’s Mechanical Turk: A New Source of Inexpensive, Yet High-Quality Data?*, 6 PERSP. ON PSYCHOL. SCI. 3, 5 (2011). There are some critiques of MTurk. See generally Gabriele Paolacci & Jesse Chandler, *Inside the Turk: Understanding Mechanical Turk as a Participant Pool*, 23 CURRENT DIRECTIONS PSYCHOL. SCI. 184, 187 (2014); Richard N. Landers & Tara S. Behrend, *An Inconvenient Truth: Arbitrary Distinctions Between Organizational, Mechanical Turk, and Other Convenience Samples*, 8 INDUS. & ORGANIZATIONAL PSYCHOL. 142, 152–53 (2015).

understand why this common image of experimental jurisprudence is flawed. Experimental jurisprudence does not always claim to address normative questions (see the 1/2 myth); and it does not recommend “mock juries for jurisprudence,” seeking to settle jurisprudential questions with simple polling—of laypeople or experts (see myth 2). Rather, it necessarily grapples with fundamentally jurisprudential questions, typically ones making claims about ordinary cognition (see myths 2 and 3), and interrogates them with empirical methods that are well-suited to addressing those questions (see myth 4).

Given the ambiguity of “jurisprudence,” it can be difficult to prove that any project falls within it. But recall some of those common characterizations. Jurisprudence is “mostly synonymous with ‘philosophy of law’.... [and also] the elucidation of legal concepts and normative theory from within the discipline of law,”¹⁴² it studies problems like “the meaning of legal justice ... and the problematics of interpreting legal texts,”¹⁴³ and the “essence of the subject ... involves the analysis of general legal concepts.”¹⁴⁴

Now that experimental jurisprudence has been elaborated, it should be clear that the practice is not merely consistent with these aims of traditional jurisprudence; it is actually at the core of traditional jurisprudence. Jurisprudence has long included the interrogation of ordinary notions corresponding to legal concepts: What is the ordinary notion of cause, consent, intent, knowledge, recklessness, and reasonableness? Traditional jurisprudence notes that these facts about the ordinary notion should inform both descriptive and normative discussions about what legal criteria are and should be.

As a final example, consider a passage from Antony Honoré and John Gardner’s introduction to a handbook entry on “Causation in the Law”:

The basic questions dealt with in this entry are: (i) whether and to what extent causation in legal contexts differs from causation outside the law, for example in science or everyday life, and (ii) what are the appropriate criteria in law for deciding whether one action or event has caused another.¹⁴⁵

This description identifies two of the most central questions of jurisprudence:

- i. What is *the relationship between ordinary and legal concepts*? (e.g., is the legal concept of causation different from the ordinary one?)
- ii. What are *the criteria* of legal concepts? (e.g., what is the appropriate criterion for deciding when something is a legal cause?)

¹⁴² Lawrence Solum, *Legal Theory Lexicon 044: Legal Theory, Jurisprudence, and the Philosophy of Law* (2018), https://lsolum.typepad.com/legal_theory_lexicon/2005/05/legal_theory_le.html

¹⁴³ Richard A. Posner, *THE PROBLEMS OF JURISPRUDENCE* xi (Harvard University Press 1990).

¹⁴⁴ Tur, *supra*, at 152.

¹⁴⁵ Antony Honoré & John Gardner, *Causation in the Law*, *Stanford Encyclopedia of Philosophy* (2010), plato.stanford.edu/archives/fall2019/entries/causation-law/.

These are examples of two of the most central jurisprudential questions, from two of the most central figures in modern jurisprudence. Part II's examples of experimental jurisprudence provide direct evidence about (i) and grapple seriously with (ii) on the basis of those empirical discoveries.

There is sometimes skepticism from traditional jurisprudence about what experimental studies of *ordinary people* can contribute to debates about legal concepts. But I agree with Honoré and Gardner: Many central jurisprudential questions, like their question (i) about causation, are both *jurisprudential* and empirical. To best interrogate that question requires studying both ordinary and legal concepts, looking to the law as well as facts from "everyday life." It would be a mistake to focus exclusively on ordinary life, language, and concepts, but would be an equally large mistake to ignore them.

Some might still hold that experimental jurisprudence is not jurisprudence. For those, these are the two key questions: Is jurisprudence entirely untethered from our ordinary language and concepts? If not, are we (legal theorists) certain that we know all there is to know about our ordinary language and concepts?

Traditional jurisprudence is replete with claims and questions that are simultaneously jurisprudential and partly empirical. Recognizing this fact clarifies that XJur is not mistakenly *replacing* jurisprudence with new social science. It is contributing something new, but that contribution is made to an entirely traditional jurisprudential conversation.

IV. APPLICATIONS

The preceding Parts have introduced experimental jurisprudence, summarized its projects, and debunked central misconceptions about it. In doing so, the Article has also articulated several broad justifications for the approach, including that experimental jurisprudence can assess intuitions and other empirical claims made by legal theories and raise new challenges to those theories;¹⁴⁶ clarify the relationship between ordinary and legal concepts;¹⁴⁷ and identify new jurisprudential questions and possibilities.¹⁴⁸

This Part turns to two more concrete applications, identifying areas in which further XJur work could be particularly useful. The first concerns the rise of "ordinary meaning" in legal interpretation, particularly in originalist and textualist legal theory. The second concerns the "New Private Law." These serve

¹⁴⁶ See, e.g. Part II *supra* (summarizing a study that suggests that different sources of evidence of "ordinary meaning" provide systematically different verdicts, raising questions about some theories' conceptualization of "ordinary meaning.").

¹⁴⁷ *Id.* (summarizing studies that have discovered previously unknown features of the *ordinary* concepts of *consent* and *cause*, raising new theoretical questions about the relationship between those concepts and their legal counterparts).

¹⁴⁸ *Id.* (summarizing a study on reasonableness that provided evidence of a "hybrid" ordinary concept of reasonableness).

as a useful pair of illustrations: one associated with public law, one with private law; one focused on interpretation of legal texts, one participating in a broader common law tradition; one debated frequently in the courts, one debated largely in legal theory circles; but both of tremendous jurisprudential impact and importance. The closer study of these two areas reveals important and diverse ways in which experimental jurisprudence offers unique insights into the most important modern jurisprudential debates.

A. Ordinary Meaning

One of the most significant trends in legal theory—and practice—is the growing significance of “ordinary meaning” in interpretation.¹⁴⁹ When interpreting legal texts, scholars and courts look to the “ordinary meaning” or “public meaning” of the language.¹⁵⁰ This approach is strongly associated with textualist and originalist theories of statutory¹⁵¹ and constitutional interpretation,¹⁵² but ordinary meaning also plays a significant role within a broad range of interpretive theories¹⁵³ and in the interpretation of other legal texts, including contracts¹⁵⁴ and treaties.¹⁵⁵

Ordinary meaning’s significance varies across different legal theories. For example, new textualist theories typically understand a text’s communicative content to be a strict constraint on interpretation.¹⁵⁶ More pluralistic theories might treat ordinary meaning as one of several interpretive considerations, alongside intent, purpose, and even the consequences of interpretation.

There is debate about what role ordinary meaning should play in interpretation, and what exactly “ordinary meaning” means.¹⁵⁷ But many agree that ordinary meaning is closely connected to *empirical* facts about how ordinary people understand language.¹⁵⁸ That is, a legal text’s ordinary meaning is not

¹⁴⁹ See generally BRIAN G. SLOCUM, *ORDINARY MEANING: A THEORY OF THE MOST FUNDAMENTAL PRINCIPLE OF LEGAL INTERPRETATION* (2016).

¹⁵⁰ See, e.g., Lawrence B. Solum, *The Constraint Principle: Original Meaning and Constitutional Practice* (Apr. 3, 2019) (unpublished manuscript); Victoria Nourse, *Textualism 3.0: Statutory Interpretation After Justice Scalia*, 70 ALA. L. REV. 667, 681 (2019).

¹⁵¹ Nourse, *supra*.

¹⁵² Solum, *supra*.

¹⁵³ See, e.g., SLOCUM, *supra*; Kevin P. Tobia, *Testing Ordinary Meaning*, 134 HARV. L. REV. 726 (2020).

¹⁵⁴ See, e.g., Stephen C. Mouritsen, *Contract Interpretation with Corpus Linguistics*, 94 WASH. L. REV. 1337 (2019).

¹⁵⁵ See, e.g., Brian G. Slocum & Jarrod Wong, *The Ordinary Meaning of International Law*, YALE J. INT’L LAW. (forthcoming).

¹⁵⁶ Solum, *supra*.

¹⁵⁷ See, e.g., Fallon, *supra*.

¹⁵⁸ See, e.g., Kevin P. Tobia, *Testing Ordinary Meaning*, 134 HARV. L. REV. 726 (2020); see also Randy E. Barnett, *Interpretation and Construction*, 34 HARV. J.L. & PUB. POL’Y 65, 66 (2011) (“It cannot be overstressed that the activity of determining semantic meaning at the time of enactment required by the first proposition is *empirical*, not *normative*.” (citing KEITH E. WHITTINGTON,

necessarily the meaning its drafters intended it to have, or the meaning that would allow the text to achieve the best results. Rather, investigation into a text's ordinary meaning is an investigation into facts about how ordinary people would (in fact) understand the language.

The empirical aspect of "ordinary meaning" is closely connected to the most common justifications for an ordinary meaning interpretive criterion. There is, of course, great debate about whether and *why* ordinary meaning should be a legal-interpretive constraint or consideration. But one of the most common justifications invokes rule of law values.

These rule of law values took center stage in the recent *Bostock v. Clayton County* (2020), a landmark decision protecting LGBTQ persons from employment discrimination under Title VII.¹⁵⁹ Justice Gorsuch's majority opinion was grounded in a textualist analysis of ordinary meaning, holding that Title VII's prohibition against adverse employment actions taken "because of ... [an individual's] sex" prohibits adverse employment actions taken against persons for being gay or transgender. Consider Justice Gorsuch's discussion of "ordinary public meaning" in *Bostock*:

This Court normally interprets a statute in accord with the ordinary public meaning of its terms at the time of its enactment. After all, only the words on the page constitute the law adopted by Congress and approved by the President. If judges could add to, remodel, update, or detract from old statutory terms inspired only by extratextual sources and our own imaginations, we would risk amending statutes outside the legislative process reserved for the people's representatives. And we would deny the people the right to continue relying on the original meaning of the law they have counted on to settle their rights and obligations.¹⁶⁰

Here Justice Gorsuch appeals to ordinary meaning as an interpretive criterion that promotes notice and reliance values. Interpreting a legal text in line with its "ordinary meaning" helps ensure that ordinary people can rely on law. Importantly, these rule of law justifications reinforce the significance of understanding ordinary meaning *empirically*. There are facts about what ordinary people would take from statutory language, and interpretation grounded in reliance interests and fair notice should be concerned with how ordinary people would *in fact* rely or be notified by the legal text.

Moreover, these rule of law justifications are shared among many textualist judges. Consider Justice Kavanaugh's *Bostock* opinion: "Judges adhere to ordinary meaning for two main reasons: rule of law and democratic

CONSTITUTIONAL INTERPRETATION: TEXTUAL MEANING, ORIGINAL INTENT AND JUDICIAL REVIEW 6 (1999))).

¹⁵⁹ *Bostock v. Clayton County, Inc.*, 140 S. Ct. (2020).

¹⁶⁰ *Id.*

accountability.”¹⁶¹

However, a shared commitment to “ordinary meaning” does not necessarily resolve all interpretive debate. In *Bostock*, Justices Gorsuch and Kavanaugh both interpreted Title VII in line with its ordinary meaning, but Justice Gorsuch wrote for the majority and Justice Kavanaugh in dissent. That disagreement is the subject of much scholarly debate.¹⁶² This Section does not propose a resolution to that debate, but it does use the *Bostock* scholarship as an illustration of what experimental jurisprudence can contribute to jurisprudential study of ordinary meaning.

The key interpretive question in *Bostock* concerned the language of Title VII, which prohibits adverse employment actions taken “because of...an individual’s race, color, religion, sex, or national origin,”¹⁶³ One plaintiff employee was fired for being gay, and another for being transgender. So *Bostock*’s interpretive question was whether each gay and transgender employees was fired “because of ... [that individual’s] sex.”

Justice Gorsuch’s majority opinion held that yes, each employee was fired “because of ... [that individual’s] sex.” The reasoning turns on the interpretation of “because of.” Gorsuch argues that the ordinary meaning of Title VII’s “because of” language reflects a but-for test:

[T]he “ordinary meaning of ‘because of’ is ‘by reason of’ or ‘on account of.’” In the language of law, this means that Title VII’s “because of” test incorporates the “simple” and “traditional” standard of but-for causation. That form of causation is established whenever a particular outcome would not have happened “but for” the purported cause. In other words, a but-for test directs us to change one thing at a time and see if the outcomes changes. If it does, we have found a but-for cause.¹⁶⁴

According the Justice Gorsuch, an intuitive application of this test seems to suggest that the gay and transgender employees were fired “because of” their sex. Take for example a transgender woman employee: A person assigned a male

¹⁶¹ *Id.*

¹⁶² See, e.g., Robin Dembroff, Issa Kohler-Hausmann & Elise Sugarman, *What Taylor Swift and Beyoncé Teach us About Sex and Causes*, U. PA. L. REV. (forthcoming); Anuj Desei, *Text is Not Enough: Semantic Meaning and Social Meaning in the Interpretation of Title VII* (unpublished manuscript); William N. Eskridge, Brian G. Slocum, and Stefan Gries, *The Meaning of Sex: Dynamic Words, Novel Applications, and Original Public Meaning*, 119 MICH. L. REV. (forthcoming); Tara Leigh Grove, *Which Textualism?* HARV. L. REV. (forthcoming); Andrew Koppelman, *Bostock, LGBT Discrimination, and the Subtractive Moves*, MINN. L. REV. HEADNOTES (forthcoming); James Macleod, *Original Public Meanings* (unpublished manuscript); Kevin Tobia & John Mikhail, *Two Types of Empirical Textualism*, BROOK. L. REV. (2021).

¹⁶³ 42 U.S.C. §2000e-2(a)(1).

¹⁶⁴ *Id.* at 1740 (citations omitted).

sex at birth,¹⁶⁵ who identifies as a woman. An anti-transgender employer fires her. Now, “change one thing at a time and see if the outcome changes.” Suppose the employee had instead was assigned a female sex at birth and (still) identified as a woman. In this case, the anti-transgender employer would not fire her. The anti-transgender firing turns entirely on the employee’s sex; that is, the employee’s sex was a but-for cause of the firing. Thus, argues Gorsuch, firing an individual for being transgender is to fire them “because of” their sex.

Justices Kavanaugh and Alito wrote separate dissenting opinions. Each agreed with Justice Gorsuch’s starting point—a textualist inquiry into the ordinary meaning of Title VII—but disagreed with details of the analysis. Specifically, both Justices Kavanaugh and Alito suggest that the ordinary meaning of Title VII does not prohibit firing a gay or transgender employee. As Justice Alito put it: “Suppose that, while Title VII was under consideration in Congress, a group of average Americans decided to read the text of the bill with the aim of writing or calling their representatives in Congress and conveying their approval or disapproval. What would these ordinary citizens have taken “discrimination because of sex” to mean? Would they have thought that this language prohibited discrimination because of sexual orientation or gender identity?”¹⁶⁶ Justice Alito assumes the answer is no. Ordinary citizens would not understand anti-gay or anti-transgender employment actions to be ones taken “because of [the individual employee’s] sex.”

There are tremendous similarities between Justice Gorsuch’s majority and Justice Kavanaugh and Alito’s dissents. All are committed to “ordinary meaning,” and all justify that approach via rule of law values like fair notice and publicity. All are also committed to an empirical conception of ordinary meaning. For each Justice, the key question is one about what ordinary people would (in fact) understand.

Now, one could proceed by intuition alone, making the best guess about what most ordinary people would say. But those working in experimental jurisprudence have begun to address these empirical questions about ordinary meaning with empirical studies. For example, James Macleod has studied how ordinary people today understand language like “because of.”¹⁶⁷

One of Macleod’s more recent studies provided participants with the very question in *Bostock*.¹⁶⁸ Participants received a series of questions concerning anti-

¹⁶⁵ Or a person assigned male at birth. The *Bostock* opinions—majority and dissenting—characterize sex as “biological sex.”

¹⁶⁶ *Bostock v. Clayton County*. Here Justice Alito’s remarks are ambiguous between referencing the original public meaning and the public’s original expected applications. Most new originalists and new textualists are concerned with original public meaning, which is not limited to original expected applications. As such, this Section interprets Justice Alito’s opinion in line with the (more common) modern theory focused on public meaning.

¹⁶⁷ James A. Macleod, *Ordinary Causation: A Study in Experimental Statutory Interpretation*, 94 IND. L.J. 957 (2019).

¹⁶⁸ James Macleod, *Ordinary Public Meanings* (draft).

gay and anti-transgender employers who fired gay or transgender employees. The survey asked: was the employee fired “because of his sex?” Macleod found that the majority of participants actually agreed in both cases: Firing the gay and transgender employee was firing because of their sex.

That experiment tests the empirical question raised by Justices Kavanaugh and Alito. Those dissenting opinions suggested that the answer is “no” — ordinary people do not understand the language that way, certainly not in 1964 and probably not today.¹⁶⁹ Justice Kavanaugh’s dissent notes that there is likely no difference in the ordinary meaning of Title VII between 1964 and today. Macleod’s survey suggests that here, the Justices’ individual intuitions may not be a perfect guide to ordinary meaning.

A second experimental study provides further support against the empirical assumption of Justices Kavanaugh and Alito.¹⁷⁰ That study presented participants with similar scenarios to those used in Macleod’s study. It also included two other hypotheticals with a similar structure: Is someone fired for being in an interracial marriage fired “because of his race”; and is someone fired for being pregnant fired “because of her sex”? For example, the sexual orientation (gay) scenario began:

Mike was an employee at an Italian restaurant. Mike had worked there for ten years. Mike was a gay man, who was married to another man. One day, Mike’s boss learned that Mike is gay. Two days later, Mike’s boss fired him, saying “I’m sorry Mike, I just don’t think having gay employees is good for business.”

In one version, participants were presented with a question following Alito and Kavanaugh’s suggestion. The question for the sexual orientation (gay) case was:

Statement: Mike was fired because of his sex. [Yes or No]

This question also clarified that “sex” referred only to “biological sex.”¹⁷¹

The study replicated Macleod’s findings: The majority of participants endorsed that anti-gay and anti-transgender firings were *because of sex*.¹⁷²

¹⁶⁹ The originalist aspect of this interpretation problem raises many more interesting issues, which cannot be addressed here. It is worth noting, however, that some scholarship actually suggests the opposite: “sex” may have had a *broader* meaning in 1964 than today. See Eskridge, Slocum & Gries, *supra*.

¹⁷⁰ Tobia & Mikhail, *supra*.

¹⁷¹ “Please read the scenario and tell us whether you agree (“yes”) or disagree (“no”) with the following statement. For the purpose of this question, “sex” should be understood to mean biological sex, per Merriam-Webster’s dictionary: “either of the two major forms of individuals that occur in many species and that are distinguished respectively as female or male especially on the basis of their reproductive organs and structures.” *Id.*

¹⁷² *Id.*

However, results were more mixed for the other cases: the majority endorsed that anti-interracial marriage and anti-pregnancy firings are *not* “because of” race and sex, respectively.

That study presented other participants with a case following Justice Gorsuch’s framing. Do ordinary people agree that sex is a but-for cause of anti-gay and anti-transgender firings? For example, the sexual orientation scenario concluded instead with this question:

Question: Imagine that the above scenario were different in exactly one way: Mike was not a man but was instead a woman named “Michelle,” who is married to a man. Imagine that everything else about the scenario was the same. *Would Michelle still have been fired?* [Yes or No]

Here, participants were overall more inclined to attribute Title VII discrimination (i.e. endorse “No”). Across all four cases: sexual orientation, transgender, interracial marriage, and pregnancy, the majority of participants chose “No”, implicitly identifying the Title VII factor (e.g. sex or race) as but-for cause.

The Article has included the details of this experiment to help make a key point. One function of experiments is to help evaluate empirical claims implicit in legal theory. The experimental evidence supports Justice Gorsuch’s assumption: Ordinary people understand sex as a but-for cause of sexual orientation discrimination. The evidence does not so strongly support Justice Kavanaugh and Alito’s assumptions: Ordinary people do not agree that anti-gay and anti-transgender firings are not firings “because of [the individual’s] sex.”

However, the studies offer something beyond this contribution. They help clarify a broader, jurisprudential point. For example, the authors of the second experimental study argue that these empirical results support the significance of “a distinction between two types of empirical textualism.”¹⁷³ One is “ordinary criteria” textualism, which is reflected in Kavanaugh and Alito’s approach to *Bostock*. That view equates ordinary meaning with ordinary understanding. However, as the experiments suggest, the ordinary understanding of Title VII’s language may differ from what Kavanaugh and Alito assume. But Gorsuch’s textualism in *Bostock* reflects a different theory, “legal criteria textualism.” On that view, textualism combines ordinary understanding of statutory terms “with both their previously-established legal meanings and their legal entailments.”¹⁷⁴ This is simply a different type of “empirical textualism.” And it is one supported by empirical evidence: Justice Gorsuch’s assumption about ordinary people’s application of a but-for test is supported by the data.

This distinction—between ordinary and legal criteria textualism—is a possibility that could be contemplated and elaborated from the armchair, without empirical evidence. But the experimental work helps crystallize the

¹⁷³ *Id.*

¹⁷⁴ *Id.*

significance of the distinction. Ordinary criteria textualism and legal criteria textualism are both theories committed to ordinary meaning in legal interpretation, and both make empirical claims about ordinary people's understanding. It is (in theory) possible that these theories could lead to divergent results. And in the *Bostock* case, the two approaches do diverge. That fact—their divergence—is best illuminated and supported by empirical data.¹⁷⁵

This legal theory distinction, supported by experimental study, is also one that could inform broader jurisprudential debates. Recall that textualists often appeal to fair notice and reliance values as justifications of an ordinary meaning approach to interpretation. By demonstrating the possible divergence of “ordinary criteria” and “legal criteria” textualism, the experimental study can also be seen as one that raises the question about the concept of (e.g.) publicity and other rule of law values.

Specifically, does publicity (as a rule of law value) require that law reflects ordinary people's understanding of the language in the text; or does publicity (as a rule of law value) require that legal criteria are applied consistently with ordinary people's understanding of the application of those criteria? Experimental study itself provides no answer to this question, but it helps articulate it.

Surveys offer a very attractive tool in ordinary meaning debates. As courts and commentators continue to interrogate the “ordinary meaning” of legal texts, it may become even more tempting to outsource legal interpretation to surveys. But experimental jurisprudence avoids such an incautious use of surveys: Experiments will not tell us in simple terms what the law should be. But they can provide insight into the truth of empirical claims made by legal theories. Moreover, experimental methods can make jurisprudential contributions, calling attention to new theoretical distinctions of practical and jurisprudential significance.

B. *The New Private Law*

Like the rise of “ordinary meaning,” the “New Private Law” is an influential and impressive movement in modern legal theory.¹⁷⁶ A central theme of the New Private Law is the rejection of reductive, purely instrumental private law theory. John Goldberg articulates this vision, a private law theory that chooses:

“[T]o stick close to everyday practices and to be wary of concepts, categories,

¹⁷⁵ Specifically, the empirical data suggests that *both* approaches favor the plaintiffs in *Bostock*. However, the two approaches are not equivalent. For example, Gorsuch's legal criteria textualism more strongly supports the gay employee. Both approaches strongly support the transgender employee. *Id.*

¹⁷⁶ THE OXFORD HANDBOOK OF THE NEW PRIVATE LAW (Andrew Gold, John Goldberg, Daniel Kelly, Emily Sherwin & Henry Smith eds., 2021).

or methods that claim for themselves a certain kind of essential validity or primacy.... [This view] supposes that reality is complex and that it will not advance the cause of knowledge to assume that one comes to understand reality by stripping away superstructure to get to base... [It] calls for a patient exploration of the many facets of a phenomenon or problem."¹⁷⁷

Some might see experimental jurisprudence as a reductive force, one in opposition to this vision of the new private law. On that picture, experimentalists simply use surveys to compute answers to private law theory questions.¹⁷⁸ Part III debunked this picture as a caricature.¹⁷⁹ Experimental jurisprudence does not typically endorse such reductive analysis. To the contrary, XJur work shares the New Private Law's appreciation of law's complexity. XJur does not take psychology as the discipline with primacy; nor is legal history; nor is economics; nor is moral philosophy. And it does not take experimentation as the only essentially valid tool; nor is cost-benefit analysis; nor is moral theory.

A second central theme of the New Private Law is that it "takes private law concepts and categories seriously."¹⁸⁰ It works to appreciate the nuanced "conceptual structure of the law,"¹⁸¹ rejecting the realist critique that law's central concepts are "fictions, nonsense."¹⁸² This conceptualism also takes seriously people's *ordinary* concepts. Central figures in the New Private Law even suggest that legal concepts *should* generally reflect features of ordinary concepts. As Andrew Gold and Henry Smith put it: "The set of legal concepts benefits from its congruence with relatively simple local forms of conventional morality... Certainly contract law can diverge from the morality of promising, just as legislation can go beyond corrective justice. Nevertheless, the ability to draw on simple local morality is an important starting point."¹⁸³

Experimental jurisprudence entirely agrees. Descriptively, many legal concepts share features of the ordinary concept.¹⁸⁴ It would be bizarre for law's *good faith*, *reasonableness*, *cause*, *duty*, or *wrong* to be entirely untethered from corresponding ordinary concepts. Some theorists working in experimental jurisprudence also endorse Gold and Smith's normative suggestion: Legal concepts benefit from reflecting features of the corresponding ordinary one; thus, the fact that an ordinary concept has a feature provides a (defeasible) reason that the corresponding legal concept *should* share that feature.¹⁸⁵

¹⁷⁷ John Goldberg, *Introduction: Pragmatism and Private Law*, 125 HARV. L. REV. 1640 (2012).

¹⁷⁸ See, e.g., Omri-Shahar & Strahilivetz, *supra* (proposing experiments to solve problems of contract interpretation).

¹⁷⁹ See Part II, *supra*.

¹⁸⁰ Andrew Gold, *Introduction*, in THE OXFORD HANDBOOK OF THE NEW PRIVATE LAW xvi (2021).

¹⁸¹ Goldberg, *supra*, at 1652.

¹⁸² *Id.*

¹⁸³ Andrew S. Gold & Henry E. Smith, *Sizing Up Private Law*, 70 U. TOR. L.J. 489, 504-505 (2020).

¹⁸⁴ See Tobia, *Law and the Cognitive Science of Ordinary Concepts*, *supra*.

¹⁸⁵ See e.g., Part II *supra*.

So, there is some common ground between experimental jurisprudence and the New Private Law. What experimental jurisprudence can *contribute* to the New Private Law is a richer set of data and questions for jurisprudential debate. As Part II's experimental studies reveal, ordinary concepts and moral reasoning are not always "simple,"¹⁸⁶ intuitive, or obvious. What the legal theory seminar room agrees is "ordinarily wrongful" may not reflect what, in fact, all ordinary people understand to be wrongful.

XJur shares the New Private Law's general commitment to understanding ordinary and legal concepts and the fact that such study is truly *complex*. For example, in assessing the relationship between contract and promise, there is still much to learn about both (legal) contract *and* (ordinary) promise. Experimental methods have uncovered important insights about lay intuitions of contract,¹⁸⁷ as well as ones about *ordinary* promising—many of which are not simple or obvious from the armchair.¹⁸⁸

Here again, the New Private Law might be skeptical of empirical approaches to legal scholarship, which are often more reductive, infused with legal realism, focused on predicting how judges *really* decide cases and how things *really* work when "getting down to brass tacks."¹⁸⁹ Some empirical and psychological studies support critique of traditional assumptions of reductive and instrumental approaches. For example, legal psychology can illuminate behavioral realities that conflict with standard assumptions of law and economic models.¹⁹⁰

Experimental jurisprudence takes a very different approach, moving in a different direction from the "New Realism,"¹⁹¹ and departing also from psychological literature on heuristics and biases. XJur does not primarily study laypeople as "potential jurors" or "decision-makers" with choices to model, biases to correct, and decisions to nudge. Instead, and like the New Private Law, XJur sees the study of ordinary concepts as central to *legal theory*. As the New Private Law puts it, laypeople are not merely jurors, but also "norm articulators... often charged with interpreting ... [what] counts as 'reasonable.'" The two movements conceptualize laypeople not as objects, but as central members of *our* legal community, poised to contribute meaningfully to legal theory.¹⁹²

¹⁸⁶ Gold & Smith, *supra*, at 505.

¹⁸⁷ See e.g., Tess Wilkinson-Ryan & David Hoffman, *The Common Sense of Contract Formation*, 67 STAN. L. REV. 1269 (2015)..

¹⁸⁸ See e.g., Christoph Vanberg, *Why Do People Keep Their Promises? An Experimental Test of Two Explanations*, 76 ECONOMETRICA 1467 (2008); Dorothee Mischkowski, Rebecca Stone & Alexander Stremitzer, *Promises, Expectations, and Social Cooperation*, 62 J. L. & ECON 687 (2019); Florian Ederer & Alexander Stremitzer, *Moral Intuitions of Promise Keeping*, 65 PRINCIPIA 5 (2018); Rebecca Stone & Alexander Stremitzer, *Promises, Reliance, and Psychological Lock-In*, 49 J. LEG. STUD. 33 (2020).

¹⁸⁹ Goldberg, *supra*. For an example of empiricism and realism, see Miles and Sunstein, *supra*.

¹⁹⁰ For a helpful example, see Tess Wilkinson-Ryan, *Psychology and the New Private Law*, in OXFORD HANDBOOK OF THE NEW PRIVATE LAW, *supra*.

¹⁹¹ *Id.*

¹⁹² Goldberg, *supra*, at 1656.

Experimental Jurisprudence and the New Private Law both agree “that there is often at least a family resemblance between legal and extralegal concepts and norms that bear on questions of personal interaction,”¹⁹³ and that the nature of that resemblance is worth exploring. Both reject reductive instrumentalism; neither holds that legal concepts should *always* reflect ordinary ones. Instead, legal theory should grapple with the complex nature of its concepts, and that “grappling” process should typically include study of the ordinary concepts.

Again, neither the New Private Law nor XJur will simply take the ordinary concepts as constitutive of legal ones. Yet both programs recognize the process of studying ordinary concepts as an *essential* part of jurisprudence. Consider Goldberg and Zipursky’s description of their task in *Recognizing Wrongs*:

We come to the job of explaining the common law somewhat like one trying to explain how the members of a community use their language. The goal is to make explicit the various patterns of thought and conduct that animate this area of law. If it turns out that many of the concepts and principles utilized in this area have the same character as, or a character very similar to, those which are utilized in non-legal discourse about how one ought (morally) to conduct oneself—indeed if it turns out that some of the concepts are identical—that is something to be acknowledged, not hidden from view.¹⁹⁴

This question—how do the concepts of law compare to the concepts in non-law—is essential to the New Private Law. Answering that question requires deep knowledge of law *and non-law*. Of course, we all have some knowledge of ordinary concepts including *reasonableness, causation, consent, intent, duty, and wrongfulness*. But even those ordinary notions are complex, calling for study from more than one method. Introspection, thought experimentation, and moral theorizing can provide tremendous insight into those ordinary concepts. So too can empirical methods. And as Part II demonstrates, some empirical insights are unique, inaccessible via individual introspection or thought-experimentation.

XJur appears so complementary to the New Private Law in part because the New Private Law is admirably honest about the project’s commitments, the complexity of law, and the multi-faceted inquiry jurisprudence calls for. Consider again Goldberg and Zipursky:

Publicity, notice, generality, prospectivity, and the other values that Fuller emphasized seem lacking in a system that relies on judges to articulate rules and principles on a case-by-case basis instead of stating them in canonical form in a code or statute book. ... There is another way in which tort law achieves a kind of fairness in operation by means apart from Fullerian

¹⁹³ Goldberg, *supra*, at 1656.

¹⁹⁴JOHN GOLDBERG & BENJAMIN ZIPURSKY, *RECOGNIZING WRONGS* 79 (2020).

methods. ... Part of what it means for tort law to be “common law” ... is that the wrongs recognized by tort law are, in their substance, drawn from everyday life rather than constructed de novo by judges in aid of some sort of social engineering project.”¹⁹⁵

XJur is well-positioned to contribute to debates about publicity, notice, and other rules of law values.¹⁹⁶ But there is one further, and much more general justification of XJur’s and its focus on laypeople—one Goldberg and Zipursky suggest above. One implication of this more general justification is that the experimental jurisprudence approach is not limited to only those jurisprudential debates premised on publicity or democracy, or where there is also a relevant jury instruction referring explicitly to (e.g.) “reasonable” or “consent.” Beyond all of those justifications, experimental jurisprudence is actually called for by one of the most general and longstanding projects *within* jurisprudence.

That longstanding project is the determination of *our* appropriate legal criteria. For example, what are law’s criteria of wrongs, or causation, or reasonableness, or intent? Countless traditional jurisprudential projects address this type of question, and most often they address it as Goldberg and Zipursky do, by considering *everyday life*. Not *life at the legal philosophy conference*, but *everyday life*. The foundation of jurisprudence is not judge Hercules, but *the ordinary person*:

Holmes’s ... understandable disdain for the pedantic moralist unfortunately him to pose a false dilemma between the pedant and the bad man. Missing from his analysis is the ordinary person, the lawyer who counsels this person, and the judge who understands, applies, and crafts the law imaging that her legal community expects her to take this perspective seriously.¹⁹⁷

The studies in Part II provide unique insight into exactly this ordinary perspective. How does the ordinary person understand what is consensual, causal, reasonable, or intentional?

Although this Section has focused on the New Private Law, XJur’s usefulness extends more broadly, to a range of debates in public and private law theory. Most legal theorists—not just those in the “New Private Law”—recognize a crucial connection between law and ordinary people.

As one more example, consider a seminal article in traditional (non-

¹⁹⁵ GOLDBERG & ZIPURSKY, *supra*, at 207-08.

¹⁹⁶ See Part IV.A. *supra*.

¹⁹⁷ *Id.* at 363; see also *id.* at 364 (“It is not only judges and lawyers who interact with the law of torts, directly or indirectly. Everyone does. We all need to know what to expect of the persons, businesses, offices, and organizations around us, and we all need to know what is expected of us. That is why the wrongs recognized by courts as torts cannot be the wrongs that Judge Hercules would endorse for being those whose recognition would make the law the best it can be from the perspective of aspirational political or moral theory”).

experimental) jurisprudence: Keating's *Reasonableness and Rationality in Negligence Theory*.¹⁹⁸ Keating argues that tort negligence is grounded in reasonable (not "rational") risk imposition and that it should be. Moreover, Keating argues, tort reasonableness is better explained by social contract theory than by law and economics.

Perhaps surprisingly, that (non-empirical) work of jurisprudence begins with a reflection about our *ordinary* cognition: "Latent in our ordinary moral consciousness, and manifest in philosophical reflection, is a distinction between reasonableness and rationality."¹⁹⁹ This appeal to ordinary cognition is not merely rhetorical or motivational. Throughout the article, Keating emphasizes the central role that ordinary concepts play in the jurisprudential argument:

The claims of and the case for the social contract conception can be summarized in three theses. First, because negligence law assigns paramount importance to *the concept of reasonableness*, it receives stronger support from social contract theory than from economics.²⁰⁰

Not all of Keating's arguments depend on empirical facts about the ordinary concept of *reasonableness*, but this first one reflects a very important and often overlooked mode of jurisprudence. For legally significant concepts that have an ordinary counterpart—like *reasonableness*, *cause*, *intent*, *consent*, or even *the self* or *law*—a central question is: What is that ordinary concept? This question is a *jurisprudential* one.

Of course, the legal criteria are not necessarily *equivalent* to the criteria of the ordinary concept, but traditional jurisprudence understands that there is something critically important in grappling with the features of the corresponding ordinary concept. For example, Keating argues that the ordinary notion of reasonableness supports social contract theory:

Social contract theory holds that persons must be held "responsible for their ends." They must, that is, moderate the demands that they make on social institutions so that those demands fit within the constraints of mutually acceptable principles. *This is simply an extension of our ordinary idea of reasonableness.*²⁰¹

¹⁹⁸ Gregory Keating, *Reasonableness and Rationality in Negligence Theory*, 48 STAN. L. REV. 311 (1996).

¹⁹⁹ *Id.* at 311.

²⁰⁰ *Id.* at 382 (emphasis added).

²⁰¹ *Id.* at 370 (emphasis added) ("Reasonable people do not have an extravagant sense of the importance of their own preferences and aspirations in comparison with the aspirations of others. Moreover, reasonable people do not believe that their projects warrant the commitment of a disproportionate share of social wealth, and they do not make demands on others that they would be unwilling to honor themselves").

This argument for the social contract theory of reasonableness depends on an empirical claim about the ordinary concept. As it happens, recent experimental jurisprudence research provides some empirical support for Keating's view. Empirical studies confirm that there is an important distinction between the ordinary notions of reasonableness and rationality, supporting Keating's hypotheses.²⁰² Moreover, as Keating intuited, the ordinary concept of reasonableness reflects what is socially acceptable (e.g. customary and good),²⁰³ and not necessarily what is economically rational or efficient.²⁰⁴

In this example, Keating's intuitions about the ordinary concept of reasonableness were impressively accurate. Later experimental jurisprudence studies lend further support to Keating's (empirical) jurisprudential hypotheses. But it is possible that in some other cases, intuitive armchair jurisprudence might not capture the whole picture of ordinary cognition.

This possible disconnect—between what a legal expert believes about the ordinary concept and what is true of the ordinary concept—could arise for a number of reasons. One possibility is that the legal expert just makes a mistake. Their intuition about the ordinary concept does not actually reflect the features of the ordinary concept. Perhaps the author was not thinking sufficiently clearly, or was unconsciously biased in favor of some particular theory. Studying the ordinary concept more robustly (with empirical methods) might help strengthen the theorist's conclusions. As James Macleod puts it, "Hart and Honoré, after all, had a sample size of two: Hart and Honoré."²⁰⁵ Experimental jurisprudence can serve as an empirically grounded method of jurisprudential conceptual analysis.

It could also be that a legal expert, in virtue of all of their expertise and training, has some diminished access to the ordinary concept. When law students acquire a new concept of *causation*, are the corresponding ordinary concepts entirely unchanged, or has their causal reasoning changed both in and out of law? This is an open and unexplored empirical question. But if legal education might sometimes alter one's ordinary concepts, this is another major reason that experimental jurisprudence would play a critical role. There are features of a legal concept that laypeople cannot access, but perhaps there are also features of the ordinary concept that legal experts cannot perfectly access. Given the classical jurisprudential project of comparing ordinary to legal concepts,²⁰⁶ this possibility could support a jurisprudential division of conceptual labor; with laypeople as the experts of ordinary concepts and cognition.

²⁰² Igor Grossman, Richard P. Eibach, Jacklyn Koyama & Qaisar B. Sahi, *Folk Standards of Sounds Judgment; Rationality Versus Reasonableness*, 6 SCIENCE ADVANCES (2020) (finding a distinction between the ordinary concepts of reasonableness and rationality).

²⁰³ Tobia, *supra*.

²⁰⁴ Christopher Jaeger, *The Empirical Reasonable Person* 72 ALA. L. REV. (forthcoming 2021) (finding that the law notion of reasonableness is affected by what is customary more so than what is economically rational).

²⁰⁵ Macleod, *supra*, at 1021.

²⁰⁶ E.g. Gardner & Honoré, *supra*.

A final possibility is that some features of ordinary concepts are not easily accessible by introspection—by anyone, layperson or expert. For example, recall the “hybrid theory” of reasonableness. On that view, reasonableness judgment reflects a hybrid of statistical and prescriptive considerations. It may not be possible to very cleanly test such a subtle feature of the concept with the traditional mode of armchair thought experimentation. No matter how hard one reflects, it might be difficult to identify with certainty whether one’s own notion of the reasonable is a hybrid of considerations of the average and ideal. However, it is possible to begin to assess the predictions of that proposed analysis with cognitive science.²⁰⁷

A central part of experimental jurisprudence is the study of ordinary language and concepts. And this is precisely because a central part of *jurisprudence* is such study ordinary language and concepts. Jurisprudence has long been concerned with “*our* moral intuitions,”²⁰⁸ “intuitions of a community”—not the seminar room community, but rather *our* social-legal community.²⁰⁹ As Jeremy Waldron explains, “It is not enough that we have considered what Kant said to Fichte;”²¹⁰ intuitions of legal philosophers are to be assessed against what is in fact, “*out there, in the world.*”²¹¹

CONCLUSION

“Whither jurisprudence? Time will tell.”²¹² Yet, some scholars have made skeptical and pessimistic prognoses, heralding the “death of jurisprudence.”²¹³

I suspect that these reports are greatly exaggerated. Recall Posner’s characterization of jurisprudence: It is “the most fundamental, general, and theoretical plane of analysis of the social phenomenon called law.”²¹⁴ There is tremendous value in achieving wisdom about longstanding jurisprudential questions, and also from formulating and raising new ones.

²⁰⁷ Recall that in the study discussed previously, a large number of participants were assigned to separate groups to evaluate average, ideal, and reasonable quantities, and then the mean ratings were statistically analyzed to assess whether average and ideal ratings both predict reasonableness ratings. This provides some evidence in favor of the proposed account.

²⁰⁸ E.g. Kimberly Kessler Ferzan, *Justifying Self-Defense*, 24 *LAW & PHILOSOPHY* 711, 749 (2005) (emphasis added) (on the role of intuition in justifying the proposed analysis of self-defense).

²⁰⁹ Joshua Dressler, *Does One Mens Rea Fit All: Thoughts on Alexander’s Unified Conception of Criminal Culpability*, 88 *CAL. L. REV.* 955, 961 (2000).

²¹⁰ Jeremy Waldron, *How to Argue for a Universal Claim*, 30 *COLUM. HUM. RTS. L. REV.* 305, 313 (1999). Waldron’s point concerns the comparison of our (Western) human rights intuitions against the intuitions of those from other (non-Western) countries. The point relevant to this Essay is that it is also assumed that the relevant intuitions are *not* just those of expert legal theorists—what matters are the views of “people or whole societies.” *Id.* at 306.

²¹¹ *Id.* at 313.

²¹² Solum, *supra* note 1, at 2497.

²¹³ See, e.g., Omri Ben-Zvi, *Zombie Jurisprudence*, in *SEARCHING FOR CONTEMPORARY LEGAL THOUGHT* (Cambridge Univ. Press, 2017).

²¹⁴ Richard A. Posner, *THE PROBLEMS OF JURISPRUDENCE* xi (Harvard University Press 1990).

So why the skepticism? One jurisprudential eulogy concerns jurisprudence's dissolution into other disciplines.²¹⁵ Perhaps there is nothing distinctively legal about law's notions of *causation*, *knowledge*, or *reasonableness*. The questions of traditional jurisprudence are scattered into questions of "law as morality"²¹⁶ or "law as economics." Experimental jurisprudence might be seen as another destructive force, proposing "law as surveys." This Article has argued that this is a fundamental misconception of the XJur movement. Rather than imagining jurisprudential questions dissolving into non-jurisprudential questions of moral philosophy or the social sciences, experimental jurisprudence reaffirms these questions' fundamentally jurisprudential nature.

Questions about whether (and how) legal concepts differ from ordinary ones are longstanding jurisprudential questions. And they are partly empirical ones. Many central legal concepts—including *consent*, *intent*, *causation*, *reasonableness*, *knowledge*, and *recklessness*—may share features with their ordinary counterpart. It is possible that not all features of ordinary concepts are known, and that not all features are discoverable by introspection or armchair thought experimentation. Empirical methods uniquely address these central questions, *of jurisprudence*, about ordinary language and concepts. The XJur program does not assume that law should simply adopt the ordinary concept, but understanding the ordinary features—whether by thought experimentation or modern experimentation—raises important questions and is a central part of the analysis of legal concepts. Experimental jurisprudence thereby re-opens a range of fascinating *jurisprudential* questions about law and its concepts.²¹⁷ Moreover, it provides new tools to address these questions. Experiments have discovered new, subtle, and surprising conceptual features, all of which call for further theoretical analysis.

While experimental jurisprudence offers new methods, it also invites analysis from those who do not themselves conduct empirical studies. This is one lesson of the debunked 5 ½ myths: to participate, one need not run experiments or even collect original data. Empirical data is a prerequisite, but there is already an abundance of data ripe for experimental jurisprudential analysis. The cognitive science of ordinary language and concepts (e.g. concerning causation, intent, explanation, responsibility, and the self) is full of such data.²¹⁸ Those studies are essentially "suspended experimental jurisprudence," relevant datasets waiting to be precipitated into experimental jurisprudence, upon the addition of thoughtful jurisprudential analysis. For jurisprudence theorists concerned with *our* intuitions, empirical work in cognitive science is an essential resource.

²¹⁵ Ben-Zvi, *supra*. ("There is nothing distinctively 'legal' about legal norms.").

²¹⁶ *Id.*.

²¹⁷ Perhaps legal concepts share many features of the corresponding ordinary ones; or perhaps they are very distinctive. The truth, I would bet, is that legal concepts most often reflect a mixture of features—some drawn from corresponding ordinary concepts, and others that are unique. But that remains an open empirical question. And the place to start is with experimental discoveries of the features of these concepts.

²¹⁸ See sources cited in Part II *supra*.

This Article has argued that experimental jurisprudence is not a social scientific replacement of jurisprudence; rather it is a form *of* jurisprudence. Traditional jurisprudence has always contained a central empirical program, concerned with law's relation to ordinary language and concepts. The justification for such traditional jurisprudence also justifies this experimental approach. Moreover, it is the opposing view—that jurisprudence has *nothing* to learn from careful study of ordinary language and concepts—that reflects a dramatic break from tradition.

Whither experimental jurisprudence? To the same place as jurisprudence—in search of increasingly sophisticated answers to our most fundamental legal questions: What is *our* law, and what should it be?