Law and Philosophy (2024) 43: 507–548
https://doi.org/10.1007/s10982-024-09501-8

BRIAN FLANAGAN, GUILHERME DE ALMEIDA

LAWFUL, BUT NOT REALLY: THE DUAL CHARACTER OF THE CONCEPT OF LAW

(Accepted 17 March 2024)

ABSTRACT. Disagreement on law's relationship to morality has long been driven by disagreement about our ordinary concept. Until recently, however, there had been no systematic investigation of lay intuitions. In this paper, we advance this nascent effort. Across two studies (N = 697), our findings reveal that most people consider law to be more than a matter of political circumstance alone. Contrary to the expectations of most contemporary philosophers, morality (both substantive and procedural) emerges as a key influence on judgments of legal validity: many people say that conduct prohibited by immoral statutes is *not* truly illegal, and that immoral conduct which was never explicitly prohibited *is* truly illegal. This suggests that people often treat law as a dual character concept that, like the concepts of scientist or of artist, features autonomous concrete and abstract dimensions.

I. INTRODUCTION

It has been observed that: '[e]very thoughtful person… recognizes that law is [somehow] related to morality';[1] but how, exactly? When discussing historical events now commonly acknowledged to have been immoral, historians readily employ the vocabulary of law and legality, e.g., in references to Hitler's *Nuremberg Laws*, to Ireland's *Penal Laws*, and to the *Jim Crow Laws* of the Southern United States. Among philosophers, by contrast, the very possibility of wicked laws remains a live question. Following Plato, 'natural law' theorists argue that 'enactments, so far as they are not for the common interest of the whole community, are no true laws'.[2] Conversely, those in the 'legal positivist' tradition assert that 'the existence and content of the law... [is] a matter of social fact whose connection with moral or any

[1] Thomas Broden Jr, 'The Straw Man of Legal Positivism' (1958) 34(4) Notre Dame Lawyer 530, 533.
[2] Plato, *The Laws of Plato* (A.E. Taylor tr, 360 BC, Dent & Sons 1934) Book IV, 715B.

other values is contingent and precarious'.[3] As we will see, these philosophical claims have been debated partly on the basis of assumptions about the content of the folk concept of law. Whereas some theorists suppose that wicked statutes are intuitively not laws, others imagine the opposite to be true.

Until recently, legal philosophers had not engaged in systematic empirical research into which of these competing assumptions held true. Some researchers have now tried to establish what ordinary people think using vignette-based experiments.[4] Importantly, their results suggest that morality does indeed influence ordinary intuitions about legal validity. But it is not the case that these results have simply corroborated one of the currently popular versions of natural law theory.

Instead, they raise the possibility that, like certain other 'dual character' concepts such as scientist or work of art, we conceptualise law's existence along two dimensions: a *deep* sense that is informed by morality, but also a *shallow* sense that is keyed to descriptive features, i.e., to social facts. In this paper, we use two vignette-based experiments to investigate this possibility. We start out by showing that the folk concept of law has played a significant role in analytic general jurisprudence so far, and that, given certain caveats, it should still do so going forward (Section II). We then explore the many ways in which jurisprudential theories have cashed out the relationship between law and morality and elucidate an ancient alternative's commitment to law's dual character (Section III). Building

[3] Joseph Raz, *Ethics in the Public Domain: Essays in the Morality of Law and Politics* (OUP 1994) 210. Raz's formulation is echoed both in the corresponding SEP entry: "[T]he existence and content of law depends ultimately on social facts… and not on its merits", Leslie Green and Thomas Adams, 'Legal Positivism' *Stanford Encyclopedia of Philosophy* (Winter edn, 2019) <https://plato.stanford.edu/archives/win2019/entries/legal-positivism/>; and in John Gardner's well-known elucidation: "In any legal system, whether a given norm is legally valid, and hence whether it forms part of the law of that system, depends on its sources, not its merits", John Gardner, 'Legal Positivism: 5½ Myths' (2001) 46(1) American J of Jurisprudence 199, 199. As these quotes suggest, references to law's 'validity' and 'existence' are often used interchangeably in describing what is at issue in the theory of law. For an explicit example, see Andrei Marmor and Alexander Sarch, 'The Nature of Law' (2019) Stanford Encyclopedia of Philosophy, Edward Zalta (ed.) <https://plato.stanford.edu/archives/fall2019/entries/lawphil-nature/>, 'General jurisprudence… assumes that law possesses certain features… wherever it happens to exist... First, we need to understand the general conditions that would render any putative norm legally valid.' We follow this practice here.

[4] Raff Donelson and Ivar R Hannikainen, 'Fuller and the Folk: The Inner Morality of Law Revisited' in Tania Lombrozo, Joshua Knobe and Shaun Nichols (eds), *Oxford Studies in Experimental Philosophy: Volume 3* (Oxford UP 2020); Ivar R Hannikainen and others, 'Are There Cross-Cultural Legal Principles? Modal Reasoning Uncovers Procedural Constraints on Law' (2021) 45(8) Cognitive Science; Brian Flanagan and Ivar R Hannikainen, 'The Folk Concept of Law: Law Is Intrinsically Moral' (2022) 100(1) The Australasian J of Philosophy 165.

on this theoretical foundation, we report two empirical studies (Sections IV and V) that seek to adjudicate between these jurisprudential stances. Together, these studies suggest that, intuitively, there is a dimension of legal validity for which morality – both substantive and procedural – might not only be necessary, but also sufficient. Section VI summarises the results and discusses some of their philosophical implications.

II. THE ROLE OF INTUITIONS

At the turn of the century, a new research direction in philosophy began to emerge that tapped the methods of experimental psychology to scrutinise the folk conceptual intuitions to which traditional analytic theorists have often found it apt to appeal.[5] On the basis that 'it matters whether the philosopher's intuition is as widely shared as the philosopher believes it to be',[6] this novel paradigm, 'experimental philosophy', soon began to expand its reach into different philosophical domains.[7] The potential for this paradigm to contribute to the theory of the nature of law is evident.

Direct appeals to lay intuitions in jurisprudence are legion.[8] When describing their evaluation of alternative positions, theorists regularly note that '[t]he fact that an account [of the nature of law] does not square with some of our intuitions… may count against

[5] For example, Jonathan M Weinberg, Shaun Nichols and Stephen Stich, 'Normativity and Epistemic Intuitions' (2001) 29(1–2) Philosophical Topics 429; Joshua Knobe, 'Intentional Action in Folk Psychology: An Experimental Investigation' (2003) 16(2) Philosophical Psychology 309; Edouard Machery and others, 'Semantics, Cross-Cultural Style' (2004) 92(3) Cognition B1.

[6] Mark Alfano, Don Loeb and Alexandra Plakias 'Experimental Moral Philosophy' *The Stanford Encyclopedia of Philosophy* (Winter edn, 2018) <https://plato.stanford.edu/archives/win2018/entries/experimental-moral/>. Similarly, Alex Langlinias and Brian Leiter, 'The Methodology of Legal Philosophy' in Herman Cappelen, Tamar Szabó Gendler and John Hawthorne (eds), *The Oxford Handbook of Philosophical Methodology* (Oxford UP 2016) 671, 680.

[7] Joshua Knobe and Shaun Nichols, 'Experimental Philosophy' *The Stanford Encyclopedia of Philosophy* (Winter edn, 2017) <https://plato.stanford.edu/archives/win2017/entries/experimental-philosophy/>.

[8] William A Edmundson, 'Why Legal Theory is Political Philosophy' (2013) 19(4) Legal Theory 331, 333; Nicholas Barber, 'The Significance of the Common Understanding in Legal Theory' 35(4) OJLS 799, 823; Adam Dyrda and Tomasz Gizbert-Studnicki, 'Is the analysis of the concept of law a(n) (im)modest conceptual analysis' (2022) 13(3) Jurisprudence 370, 374; David Plunkett and Daniel Wodak, 'Legal Positivism and the Real Definition of Law' (2022) 13(3) Jurisprudence 317, 324.

[it]'.[9] Likewise, whilst the worry that ordinary folk concepts are liable to ''get in the way'' of conceptual clarity[10] has been raised specifically in relation to the problem of evil laws,[11] in the course of argument about law's relation to morality, philosophers have implicitly prized consistency with the folk concept, that is, with what is 'natural to say',[12] with what 'we call a legal order',[13] with how law is 'spoken of',[14] or with our 'linguistic practices.'[15]

[9] Scott J Shapiro, *Legality* (Harvard UP 2011) 17. Similarly, David Brink, 'Legal Positivism and Natural Law Reconsidered' (1985) 68 The Monist 364, 366; John Kelly, *A Short History of Western Legal Theory* (Oxford UP 1992) 314; John Finnis, 'Law and What I Truly Should Decide' (2003) 48 American Journal of Jurisprudence 107, 113; Liam Murphy, 'Better to See Law This Way' (2008) 83 New York University L Rev 1088, 1107–1108; Nigel Simmonds, *Law as a Moral Idea* (Oxford UP 2008) 66–67; Ronald Dworkin, *Justice for Hedgehogs* (Harvard UP 2011) 405; Maris Köpcke, *Legal Validity: The Fabric of Justice* (Bloomsbury 2019) 3; Barbara Baum Levenbook, 'Mark Greenberg on Legal Positivism' in Torben Spaak and Patricia Mindus (eds), *Cambridge Companion to Legal Positivism* (Cambridge UP 2021) 759; Julie Dickson, *Elucidating Law* (Oxford UP 2022) 106; Stefano Bertea, 'The Dual Nature Thesis as a Cornerstone of Jurisprudence' (2022) 67(1) The American J of Jurisprudence 57, 77; Matthew Kramer, 'Looking Back and Looking Ahead: Replies to the Contributors' in Mark McBride and Visa Kurki (eds), *Without Trimmings: The Legal, Moral, and Political Philosophy of Matthew Kramer* (Oxford UP 2022) 363, 455; Fernanda Pirie, 'Beyond Pluralism: A Descriptive Approach to Non-state Law' (2023) 14(1) Jurisprudence 1, 20–21; Allan Hutchinson, *Hart, Fuller, and Everything After: The Politics of Legal Theory* (Bloomsbury 2023) 80.

[10] Ward Farnsworth, Dustin Guzior and Anup Malani, 'Policy Preferences and Legal Interpretation' (2013) 1(1) J of Law and Courts 115, 132.

[11] HLA Hart, *The Concept of Law* (OUP 1961) 209; John Finnis, *Natural Law and Natural Rights* (OUP 1980) 9–11.

[12] Andrei Marmor, 'Exclusive Legal Positivism' in Jules Coleman and Scott J Shapiro (eds), *The Oxford Handbook of Jurisprudence and Philosophy of Law* (Oxford UP 2002) 104, 119. Similarly, Kenneth Ehrenberg, 'Law is not (best considered) an essentially contested concept' (2011) 7(2) International J of Law in Context 209, 221–222; Scott Hershovitz, 'The End of Jurisprudence' (2014) 124 Yale L J 1160, 1172; George Duke, 'The Weak Natural Law Thesis and the Common Good' (2016) 35(5) Law and Philosophy 485, 486.

[13] Hans Kelsen, *The General Theory of Law and State* (Harvard UP 1945) 113. Similarly, Rolf Sartorius, 'The Concept of Law' 1966 52(2) Archiv für Rechts- und Sozialphilosophie 161, 162; HLA Hart, 'Comment' in Ruth Gavison (ed), *Issues in Contemporary Legal Philosophy: The Influence of HLA Hart* (Clarendon Press 1987) 37; Richard Posner, *The Problems of Jurisprudence* (Harvard UP 1990) xi; Jurgen Habermas, *Between Facts and Norms* (William Rehg tr, MIT Press 1998) 213; Leslie Green, 'Introduction' in HLA Hart, *The Concept of Law* (Oxford UP 2012) xlvii; Timothy Endicott, 'The Irony of Law' in John Keown and Robert P George (eds), *Reason, Morality and Law: The Philosophy of John Finnis* (Oxford UP 2013) 328; Scott Soames, *The World Philosophy Made* (Princeton UP 2019) 308; Wil Waluchow, 'Kramer and Inclusive Legal Positivism' in Mark McBride and Visa AJ Kurki (eds), *Without Trimmings: The Legal, Moral, and Political Philosophy of Matthew Kramer* (Oxford UP 2022) 141.

[14] John Finnis, 'Natural Law Theories' *The Stanford Encyclopedia of Philosophy* (Summer edn, 2020) <https://plato.stanford.edu/archives/sum2020/entries/natural-law-theories/>. Similarly, Ronald Dworkin, *Law's Empire* (Harvard UP 1986) 104; Brian Leiter, 'Objectivity and the Problems of Jurisprudence' (1993) 72 Texas L Rev 187, 207; Susan Haack, 'The Pluralistic Universe of Law: Towards a Neo-Classical Legal Pragmatism' (2008) 21(4) Ratio Juris 453, 461; Jeremy Waldron, 'The Concept and the Rule of Law' (2008) 43 Georgia L Rev 1, 22; David Dyzenhaus, *Hard Cases in Wicked Legal Systems* (2nd edn, Oxford UP 2010) 4.

[15] Kenneth E Himma, *Coercion and the Nature of Law* (Oxford UP 2020) 37. Similarly, Richard Wollheim, 'The Nature of Law' (1954) 2(2) Political Studies 128, 140-41; Ruth Gavison, 'Review of Taking Rights Seriously' (1979) 14(3) Israel L Rev 389, 396; Tom Campbell, 'The Point of Legal Positivism (1998) 9 King's College Law Journal 63, 64; Pavlos Eleftheriadis, *Legal Rights* (Oxford UP 2008) 72; Mitchell N Berman, 'Of Law and Other Artificial Systems' in David Plunkett, Scott S Shapiro and Kevin Toh (eds), *Dimensions of Normativity: New Essays on Metaethics and Jurisprudence* (Oxford UP 2019) 143.

Such jurisprudential appeals to intuition have sometimes been construed as forming part of the broader philosophical project of 'modest' conceptual analysis described by Frank Jackson.[16] Modest conceptual analysis takes ordinary intuitions seriously, so much so that it is 'of a kind with what cognitive psychologists do when they investigate the young child's concept of *faster than*, and political scientists do when they investigate different voters' concept of *socialist*, and these are, of course, empirical investigations' (original emphasis).[17] On this approach, it is a merit of a theory of the nature of K-hood that it 'say[s] when something counts as a *K*… for our audience, the folk'.[18] So have jurisprudents been right to take it as a virtue of a theory of law that it tells us when something counts as a law for laypeople?

Whereas it is an empirical question whether a particular philosophical theory coincides with folk concepts, it is a philosophical question whether such coincidence might speak in that theory's favour.[19] One basis for treating consistency with folk intuition as a desideratum of a theory of law is that it obviates the need for a further, auxiliary theory to explain how folk intuition had been liable to go awry.[20] In contrast, any theory that consists in 'a new way of carving up the social and political world'[21] supposes that ordinary people's intuitions require 'tutor[ing]'.[22] As such, any theory of law

[16] Himma (n 15) 33–38; see Frank Jackson, *From Metaphysics to Ethics: A Defence of Conceptual Analysis* (OUP 1998).

[17] Jackson ibid 47. Notice the close parallel between Jackson's characterization of modest analysis and Joseph Raz's description of jurisprudential method: 'The identification of a certain social institution as law is not introduced by… academics as part of their study of society. It is part of the self-consciousness of our society to see certain institutions as legal. And that consciousness is part of what we study when we inquire about the nature of law' in Raz, 'Can There be a Theory of Law?' in Martin P Golding and William A Edmundson (eds), *The Blackwell Guide to the Philosophy of Law and Legal Theory* (Blackwell 2005) 331. Similarly, Joseph Raz, *The Authority of Law* (Oxford UP 1979) 104; Joseph Raz, 'Two Views of the Nature of the Theory of Law: A Partial Comparison' (1998) 4(3) Legal Theory 249, 276; Joseph Raz, *Practical Reasons and Norms* (Oxford UP 1999) 164.

[18] Jackson ibid 46.

[19] For dissenting views, see Max Deutsch, ''Experimental Philosophy and the Theory of Reference'' (2009) 24 *Mind and Language* 445; Herman Cappelen, 'X-phi without Intuitions?' In A. Booth and D. Rowbottom (eds), Intuitions, (2014 Oxford UP) 269.

[20] Emad Atiq, 'Legal Positivism and the Moral Origins of Legal Systems' (2023) 36(1) Canadian Journal of Law & Jurisprudence 37, 58.

[21] Hasan Dindjer, 'The New Legal Anti-Positivism' (2020) 26(3) Legal Theory 181, 213.

[22] Brian Leiter and Matthew X Etchemendy, 'Naturalism in Legal Philosophy' *The Stanford Encyclopedia of Philosophy* (Fall edn, 2021) <https://plato.stanford.edu/archives/fall2021/entries/lawphil-naturalism/>. Similarly, Leslie Green, 'The Political Content of Legal Theory' (1987) 17(1) Philosophy of the Social Sciences 1, 16; Jules Coleman, 'Methodology' in Jules Coleman and Scott J Shapiro (eds), *The Oxford Handbook of Jurisprudence and Philosophy of Law* (Oxford UP 2002) 336.

that conflicts with our folk concept demands a supplementary error theory, by which to account for people's misconception of a familiar institution.[23] It is not immediately obvious what such an error theory would look like. Presumably, it would involve appeal to the jurisprudential value of professional expertise – whether academic[24] or practical.[25] Insofar as forms of professional training are assumed simply to induce more reliable intuitions, however, such an association is open to question,[26] not least in legal philosophy itself.[27] We will take it, thus, that the question of the content of the folk concept of law is philosophically salient.

Of course, this does not mean that folk intuitions are all there is to jurisprudence. To say that explaining the folk concept counts in favour of a given theory does not commit one to the much stronger claim that it is the decisive factor in adjudicating between theories. To the consideration of folk intuition, the theorist might add consideration of a theory's possession of formal explanatory virtues such as simplicity or consilience,[28] or, alternatively, of the beneficial social consequences of the theory's broader adoption.[29] Thus, it might be that, in the final analysis, the value of 'sav[ing] appearances'[30] is outweighed by the formal or other virtues of some alternative theory.

---

[23] Frank Jackson, 'Conceptual analysis and the Coercion Thesis' (2021) 45 Revus <https://doi.org/10.4000/revus.7594>. See also the arguments in Lucas Miotto, Guilherme Almeida, and Noel Struchiner, 'Law, Coercion and Folk Intuitions', 43(1) Oxford Journal of Legal Studies, 97, 102-103 about the relevance of folk intuitions for metaphysical debates.

[24] See John Gardner, 'Book Review: Nicola Lacey, A Life of H.L.A. Hart: The Nightmare and the Noble Dream' (2005) 121 Law Quarterly Rev 329, 331; Kenneth Himma, Replacement naturalism and the limits of experimental jurisprudence (2023) *Jurisprudence*, 14:3, 348, 369.

[25] Felipe Jiménez, 'Some Doubts about Folk Jurisprudence: The Case of Proximate Cause' (2021) The University of Chicago L Rev Online <https://lawreviewblog.uchicago.edu/2021/08/23/jimenez-jurisprudence/>; Lewis L Kornhauser, 'Doing Without the Concept of Law' (2015) NYU School of Law, Public Research Paper No. 15–33, 6 <http://dx.doi.org/10.2139/ssrn.2640605>.

[26] See e.g., Weinberg, Nichols and Stich, 'Normativity and Epistemic Institutions' (n. 5) 438; Edouard Machery, 'Expertise and Intuitions About Reference' (2012) 27(1) Theoria: Revista de Teoría, Historia y Fundamentos de la Ciencia 37; Christina Starmans and Ori Friedman, 'Expert or Esoteric? Philosophers Attribute Knowledge Differently Than All Other Academics' (2020) 44(7) Cognitive Science e12850.

[27] Dan Priel, 'Evidence-Based Jurisprudence: An Essay for Oxford' (2019) (2) Analisi e Dirrito 87, 108–09; Kevin Tobia, 'Methodology and Innovation in Jurisprudence' (2023) 123 Columbia Law Review 2483, 2497.

[28] For example, Brian Leiter, 'Beyond the Hart/Dworkin Debate: The Methodology Problem in Jurisprudence' (2003) 48(1) American J of Jurisprudence 17.

[29] For example, Frederick Schauer, 'Normative Legal Positivism' in Torben Spaak and Patricia Mindus (eds), *Cambridge Companion to Legal Positivism* (Cambridge UP 2021).

[30] Samuele Chilovi, 'Grounding-based formulations of legal positivism' (2020) 177 Philosophical Studies 3283, 3285.

Until lately, however, there had been no evidence base by which the identification of a particular folk concept – or concepts – might be tested in any systematic way: 'the question whether… [we have a coherent and determinate set of intuitions about law] is an empirical one, and none of the participants in the debate have undertaken any proper empirical research to establish their views.'[31] Accordingly, there is a risk that the lay intuitions which jurisprudents invoke are 'really those of philosophers acting as spokespersons for the folk, i.e., calling on their own sense of what is obvious'.[32] To overcome this risk we must 'get legal philosophy out into the world to ascertain what ordinary speakers… believe'.[33] To this end, the project of 'experimental jurisprudence'[34] seeks to expand the traditional purview of 'armchair' legal theory by exploiting the methods of psychological research.

Experimental jurisprudence is a methodological innovation that is still in its infancy.[35] However, researchers have already used its distinctive methods to investigate general legal concepts such as rule,[36] coercion,[37] and validity,[38] as well as the particular legal concepts of proximate cause,[39] consent,[40] and mens rea,[41] among others. The advent of 'X-Jur' has occasioned a variety of reactions, including

[31] Grant Lamond, 'Methodology' in John Tasioulas (ed), *The Cambridge Companion to Philosophy of Law* (Cambridge UP 2020) 35. Similarly, Andrew Halpin, 'The Methodology of Jurisprudence: Thirty Years Off the Point' (2006) 19(1) Canadian J of L and Jurisprudence 67, 83–84; Barber (n 8) 806. Implicit in this view is the assumption that dictionary definitions of law do not report a probe of the relevant folk intuition.

[32] Daniel Hutto, 'Presumptuous Naturalism: A Cautionary Tale' (2011) 48(2) American Philosophical Quarterly 129, 134.

[33] Himma (n 24) 350.

[34] Lawrence B Solum, 'The Positive Foundations of Formalism: False Necessity and American Legal Realism' (2013) 127 Harvard L Rev 2464.

[35] For overviews, see, e.g., Kevin Tobia, 'Experimental Jurisprudence' (2022) 89(3) University of Chicago Law Review 735; Roseanna Sommers, 'Experimental Jurisprudence' (2021) 373(6553) Science 394; Karolina Prochownik, 'The Experimental Philosophy of Law: New Ways, Old Questions, and how not to get Lost' (2021) 16(12) Philosophy Compass e12791; Ivar Hannikainen et al, 'The Natural Law Thesis Under Empirical Scrutiny' in Hugo Viciana, Antonio Gaitán and Fernando (eds), Issues in Experimental Moral Philosophy (Routledge 2023).

[36] E.g., Noel Struchiner, Ivar Hannikainen, & Guilherme de Almeida, An experimental guide to vehicles in the park. (2020) 15(3) Judgment and Decision Making 312.

[37] Lucas Miotto, Guilherme Almeida and Noel Struchiner, 'Law, Coercion, and Folk Intuitions' (2023) 43(1) Oxford Journal of Legal Studies 100.

[38] See (n 4).

[39] Joshua Knobe and Scott Shapiro, ''Proximate Cause Explained: An Essay in Experimental Jurisprudence,'' (2021) 88(1) University of Chicago Law Review 165.

[40] Roseanna Sommers, 'Commonsense Consent' (2020) 129(8) Yale Law Journal 2232.

[41] Markus Kneer, M., & Sacha Bourgeois-Gironde, 'Mens rea ascription, expertise and outcome effects: Professional judges surveyed' 2017 169 Cognition 139–146.

a debate about the scope and value of its possible contribution to inquiry into the nature of law and legal reasoning.[42] We consider that embracing X-Jur is critical if we are to take seriously legal philosophers' recognition of the virtue of consistency with lay intuition. In the following section, we present specific predictions that have been made by different jurisprudential schools as to the content of those intuitions. As in other philosophical subfields, progress can be made by acknowledging and testing philosophers' empirical assumptions.[43]

Perhaps the most widely (though not universally) shared assumption is that there is in fact a univocal folk concept of law to be found. So we should register, at the outset, an important limitation to this paper's contribution. It might be that there is simply no unitary folk concept. Some scholars argue that there are many different concepts of law; they seek to calibrate jurisprudential methods to respond to such potential diversity.[44] The claim that no one theory (e.g., legal positivism) best explains all ordinary intuitions about law anticipates evidence of the prevalence of different kinds of intuitions across and within different populations. Crucially, a study which finds that the responses of most participants conform to legal positivism can be interpreted either as evidence that the univocal folk concept of law is positivistic or as evidence that, among the many different concepts of law present in a population, the positivist one is the most frequent. Ultimately, whether there is a single, shared concept of law or many different concepts is also an empirical question; one which can be addressed by means of cross-cultural,[45] developmental,[46] and longi-

[42] See Himma (n 24); and Felipe Jiménez, 'The Limits of Experimental Jurisprudence' in K Tobia (ed), Cambridge Handbook of Experimental Jurisprudence (Cambridge University Press) Forthcoming, preprint: <https://doi.org/10.2139/ssrn.4148963>.

[43] See Brian Flanagan 'The Burning Armchair: Can Jurisprudence be Advanced by Experiment?', Jurisprudence (advance access) https://doi.org/10.1080/20403313.2023.2290954; Kevin Tobia, 'Methodology and Innovation in Jurisprudence' (2023) 123(8) Columbia Law Review 2483.

[44] For example, Brian Tamanaha, 'Socio-Legal Positivism and a General Jurisprudence' (2001) 21(1) OJLS 1; Murphy (n. 9); Nicola Lacey, 'Institutionalising Responsibility: Implications for Jurisprudence' (2013) 4(1) Jurisprudence 1; Dan Priel, 'The Scientific Model of Jurisprudence' in Jordi Ferrer Beltrán, José Juan Moreso and Diego M. Papayannis (eds), *Neutrality and Theory of Law* (Springer 2013); Hillary Nye, 'A Critique of the Concept-Nature Nexus in Joseph Raz's Methodology' (2017) 37(1) OJLS 48; Arie Rosen, 'Law as an Interactive Kind: On the Concept and the Nature of Law' (2018) 31(1) Canadian J of L and Jurisprudence 125.

[45] Ivar Hannikainen and others, 'Coordination and expertise foster legal textualism' (2022) 119(44) Proceeding of the National Academy of Sciences <https://doi.org/10.1073/pnas.2206531119>.

[46] Jessica Bregant, Isabel Wellbery and Alex Shaw, 'Crime but not punishment? Children are more lenient toward rule-breaking when the ''spirit of the law'' is unbroken' (2019) 178 J of Experimental Child Psychology 266.

tudinal research. In the current paper, we employ none of these methods and are therefore unable to fully test this hypothesis.

It is time to distinguish the alternative candidate folk concepts of law to which legal theorists have made appeal.

III. DEVELOPING HYPOTHESES ABOUT THE FOLK CONCEPT

In this section, we regiment conflicting claims about law's intuitive relation to (substantive) morality. Throughout, we focus on how different theories would judge the validity of two test cases. First, we will ask whether the theory deems wicked conduct on which a ban has recently been lifted as lawful. Then, we will ask whether the theory deems wicked conduct that has never been banned as lawful. The first case allows us to test if, in what sense, and to what extent, morality might be necessary for legal validity. The second case probes if, in what sense, and to what extent, morality might be sufficient for legal validity. As we will see, there is already some evidence concerning the first case.[47] However, the second case has not yet been studied experimentally.

An experimental programme confronts analytic jurisprudence with fresh demands for precision. Translating a theory of law into empirical hypotheses about the content of intuitions requires a clarity about what distinguishes the theory from its competitors that will not always be necessary for the progress of analytic debate. To achieve such clarity, it is helpful to compare appeals to the folk concept of law to research on the content of other folk concepts. In particular, we take advantage of existing empirical work on dual character concepts to elucidate a thus far implicit distinction in varieties of natural law theory. In doing so, we will necessarily engage in the exegesis of some prominent works of legal philosophy. However, our main goal is not exegetical; we are primarily interested in mapping the conceptual space surrounding our test cases.[48]

From the commonplace that intuitiveness counts in a theory's favour, jurisprudents have proceeded to characterise the folk concept of law in ways that correspond to different accounts of law's nature. Following Jeremy Bentham, legal positivists believe that law is

[47] See Flanagan & Hannikainen (n 4).

[48] Similarly, see Guilherme de Almeida and others, 'The Experimental Jurisprudence of the Concept of Rule: Implications for the Hart-Fuller Debate' in Karolina Prochownik and Stefan Magen (eds) *Advances in Experimental Philosophy of Law* (Bloomsbury 2023) 44, 49–52.

fundamentally a matter of concrete social fact. Today, positivism is the dominant account of the nature of law: social reform movements have been said to face 'strategic reasons… not to launch unnecessary assaults on legal positivism writ large';[49] and the theorization of non-municipal legal phenomena has been thought to be delayed by scholars' 'overgeneraliz[ation]' of 'positivists' rejection of natural law views'.[50] In support of positivism, a host of philosophers point to the existence of a folk concept whose key features - like those of 'bachelor'[51] - are non-evaluative: 'The natural law tradition… face[s] an obvious objection… it is just difficult to maintain that morally bad law is not law'.[52] Indeed, even some *natural law* theorists con-

[49] Dwight Newman, 'Indigenous Rights and Decolonized Legal Positivism' in Michelle Madden Dempsey and François Tanguay-Renaud (eds) *From Morality to Law and Back Again: A Liber Amicorum for John Gardner* (OUP 2023) 239, 244.

[50] Allen Buchanan, *Justice, Legitimacy and Self-Determination* (OUP 2004) 20.

[51] See Himma (n 15) 28, 'The application-conditions for using the concept-term bachelor…: something counts as a bachelor if and only if it is an unmarried adult male.'

[52] Andrei Marmor and Alexander Sarch, 'The Nature of Law' *The Stanford Encyclopedia of Philosophy* (Fall edn, 2019) <https://plato.stanford.edu/archives/fall2019/entries/lawphil-nature/>. Similarly, John Austin, *The Province of Jurisprudence Determined* (John Murray 1832) 279; Oliver W Holmes, 'The Path of Law' (1897) 10(8) Harvard L Rev 457, 460; Julius Stone, 'The Province of Jurisprudence Redetermined' (1944) 7(3) MLR 97, 102; Iredell Jenkins, 'The Matchmaker or Towards a Synthesis of Idealism and Positivism' (1959) 12(1) J of L Education 1, 6; Hart (n. 11) 8; DAJ Richards, *The Moral Criticism of Law* (Dickenson 1977) 26; Joseph Raz, *The Authority of Law* (Oxford UP 1979); David Lyons, 'The Connection Between Law and Morality: Comments on Dworkin' (1986) 36(4) J of L Education 485, 485; Randy Barnett, 'The Intersection of Natural Rights and Positive Constitutional Law' (1993) 25(3) Connecticut L Rev 853, 857-858; Anthony J Sebok, 'Misunderstanding Positivism' (1995) 93(7) Michigan L Rev 2054, 2107; Frederick Schauer and Virginia J Wise, 'Legal Positivism as Legal Information' (1997) 82 Cornell L Rev 1080, 1087; Walter Sinnott-Armstrong, 'A Perspectival Theory of Law' (1999) 24 Australian J of L Philosophy 27, 30; Tony Honoré, 'The Necessary Connection between Law and Morality' (2002) 22(3) OJLS 489, 490; Kenneth Himma, 'Reconsidering a Dogma: Conceptual Analysis, the Naturalistic Turn, and Legal Philosophy' (2007) 10 Current L Problems 3, 7; Haack (n. 14) 472; Jules Coleman and Brian Leiter, 'Legal Positivism' in Dennis Paterson (ed), *A Companion to Philosophy of Law and Legal Theory* (2nd edn, Blackwell 2010) 230; Brian Bix, 'Natural Law' in Dennis Paterson (ed), *A Companion to Philosophy of Law and Legal Theory* (2nd edn, Blackwell 2010) 214; Shapiro, *Legality* (n. 15) 17; John Gardner and Timothy Macklem, 'Review of S Shapiro's Legality' (2011) Notre Dame Philosophical Rev <https://ndpr.nd.edu/reviews/legality/>; Martin Stone, 'Legal Positivism as an Idea about Morality' (2011) 61(2) University of Toronto L J 313, 322; Michael Bratman, 'Reflections on Law, Normativity and Plans' in Stefano Bertea and George Pavlakos (eds), *New Essays on the Normativity of Law* (Bloomsbury 2011) 81; David Plunkett, 'A Positivist Route for Explaining How Facts Make Law' (2012) 18(2) Legal Theory 139, 204; Torben Spaak, 'The Canberra Plan and the Nature of Law' Paweł Banaś, Adam Dydra and Tomasz Gizbert-Studnicki (eds), *Metaphilosophy of Law* (Hart Publishing 2016) 109; David Enoch, 'Is General Jurisprudence Interesting?' in David Plunkett, Scott J Shapiro and Kevin Toh (eds), *Dimensions of Normativity* (Oxford UP 2019) 75–76; Berman (n. 15) 143; David Copp, 'Legal Teleology: A Naturalist Account of the Normativity of Law' in David Plunkett, Scott J Shapiro and Kevin Toh (eds), *Dimensions of Normativity* (Oxford UP 2019) 56; Dindjer, (n. 21) 186; Kara Woodbury-Smith, 'On Emad Atiq's Inclusive Anti-positivism' (2021) 20(2) J of Ethics and Social Philosophy 211, 211; Larry Alexander, 'In Defense of the Standard Picture: The Basic Challenge' (2021) 34(3) 187, 187–88; Kevin Toh, 'Legal Positivism and Meta-Ethics' in Torben Spaak and Patricia Mindus (eds), *Cambridge Companion to Legal Positivism* (Cambridge UP 2021) 581; Bill Watson, 'In Defense Of The Standard Picture: What The Standard Picture Explains That The Moral Impact Theory Cannot' (2022) 28(1) Legal Theory 59, 70; Julie Dickson, *Elucidating Law* (Oxford UP 2022) 130–131; Ori Herstein, 'Legal Rights' *The Stanford Encyclopedia of Philosophy* (Spring edn, 2023) <https://plato.stanford.edu/archives/spr2023/entries/legal-rights/>.

cede that their views may be 'counter-intuitive'.[53] As an empirical thesis about the status of immoral acts which are not prohibited by positive legal sources, the assumption of a fundamentally descriptive folk concept results in the following prediction: people will think that there may be jurisdictions in which wicked conduct that has never been banned, or on which a ban has been lifted, is lawful without qualification.

The alternative, natural law position that the existence of a legal rule depends on its relation to moral rules – or, more precisely, to *cardinal* moral rules,[54] – can be specified in different ways.[55] According to the Thomistic tradition, 'every human law has just so much of the nature of law, as it is derived from the law of nature'[56] by which we determine 'what is good and what is evil'.[57] By contrast, 'if in any point [human law] deflects from the law of nature, it is no longer a law but a perversion of law.'[58] One way to conceptualise this tradition is to paraphrase it as the view that law involves

[53] Michael Moore, 'Law as a Functional Kind' in Robert George (ed), *Natural Law Theories* (Oxford UP 1992) 198. Similarly, Deryck Beyleveld and Roger Brownsword, 'Law as Moral Judgment vs. Law as the Rules of the Powerful' (1983) 28 American J of Jurisprudence 79, 110; Hadley Arkes, *Beyond the Constitution* (Princeton UP 1990) 81; Mark Murphy, 'Natural Law Jurisprudence' (2003) 9(4) Legal Theory 241, 250; Joseph Tomain, *Creon's Ghost* (Oxford UP 2009) 77; Mark Greenberg, 'The Moral Impact Theory of Law' (2014) 123(5) Yale L J 1288, 1298; Emad H Atiq, 'There Are No Easy Counterexamples to Legal Anti-Positivism' (2020) 17(1) J of Ethics and Social Philosophy 1, 3; Conor Crummey, 'One-System Integrity and the Legal Domain Of Morality' (2022) 28(4) Legal Theory 269, 278.

[54] Robert P George, *In Defense of Natural Law* (Oxford UP 1999) 112. Throughout this paper, we adopt natural law theory's focus on law's relation to gross rather than lesser injustice.

[55] Taking 'natural law' to denote a particular (and objectionable) version of anti-positivism, not all philosophers who reject positivism adopt the label 'natural law'. For ease of exposition, however, we take 'natural law' simpliciter to be synonymous with anti-positivism, e.g., Ronald Dworkin, 'Natural Law Revisited' (1982) 34(2) University of Florida L Rev 165, 165, 'I am guilty of natural law'.

[56] Thomas Aquinas, *Summa Theologica*, (Fathers of the English Dominican Province tr., Benziger Brothers, 1947 (1269)) (I-II:95:2).

[57] Aquinas (id) I-II:91:2. Similarly, William Blackstone, *Commentaries on the Laws of England, Volume I* (OUP 1765) 41; Seamus Henchy, 'Precedent in the Irish Supreme Court' (1962) 25(2) Modern Law Review 544, 550; ML King Jr, *Why We Can't Wait* (New American Library 1964) 84; Eleftheriadis (n. 15) 172; Robert Alexy, 'The Dual Nature of Law' (2010) 23(2) Ratio Juris 167, 175; Lee Strang, *Originalism's Promise: A Natural Law Account of the American Constitution* (Cambridge UP 2019) 267; TRS Allan, 'Why the law is what it ought to be' (2020) 11(4) Jurisprudence 574, 589; Jeff Pojanowski and Kevin C Walsh, 'Recovering Classical Legal Constitutionalism: A Critique of Professor Vermeule's New Theory' (2022) 98(1) Notre Dame L Rev 403, 419.

[58] Aquinas (id) I-II:95:2.

'a union of fact and value',[59] such that a statute counts as legally valid only if *both* descriptive (concrete) *and* evaluative criteria are fulfilled. In taking such a theory to capture what is natural 'to say',[60] Thomism treats law as a 'thick' concept, comprising cumulative concrete and moral elements.[61]

Consider the thick concept of courage: to exhibit courage, it is not enough to display the concrete characteristic of assuming a significant risk to one's core interests, e.g., one's life; it is critical that one assumes such a risk for a worthy purpose. Accordingly, someone who risks their life to kill innocent civilians cannot qualify as courageous, notwithstanding the possibility that they might die in the attempt. Neither does someone who hates the killing of innocents but who avoids taking any personally risky step to prevent it. Notice that, in likening law to courage, Thomism defends a moralistic understanding within the same one-dimensional paradigm shared with positivism, whereby it is no more acceptable to speak of alternative senses in which something is both plainly lawful and plainly not than it does to speak of senses in which someone is both plainly courageous (or a bachelor) and plainly not, e.g., '[legal] validity is a phase-sortal concept: norms can either be legally valid, or not'.[62]

As an empirical thesis, the assumption of a folk concept of law that is jointly constituted by both concrete and evaluative features results in the following prediction: intuitively, wicked conduct which has never been banned is lawful, whereas that on which a ban has been lifted remains unlawful (because the repealing statute is immoral and thus not a law). In contrast, other strands of natural law invoke a folk concept that presents a *dual* descriptive and evaluative character.

Drawing on research in cognitive science, experimental jurisprudence has explicated this alternative natural law position as the

[59] Bernard Williams, *Ethics and the Limits of Philosophy* (Cambridge, MA: Harvard University Press 1985) 143–44.

[60] Augustine, *On Free Choice of the Will* (Thomas Williams tr, 395 AD, Hackett 1993) 8. Similarly, Gustav Radbruch, 'Statutory Lawlessness and Supra-Statutory Law (1946)' (2006) Bonnie Paulson and Stanley Paulson (trs) 26(1) OJLS 1, 7; Michel Villey, 'Epitome of Classical Natural Law (1961)' (2000) 9(1) Griffith L Rev 74, 90; Philip Soper, 'In Defense of Classical Natural Law in Legal Theory: Why Unjust Law is No Law at All' (2007) 20(1) Canadian J of L & Jurisprudence 201, 204; Joshua Jowitt, *Agency, Morality and Law* (Hart Publishing 2023) 83–84.

[61] David Enoch and Kevin Toh, 'Legal as a Thick Concept' in Wil Waluchow and Stefan Sciaraffa (eds), *Philosophical Foundations of the Nature of Law* (Oxford UP 2013). For an alternative view that 'challenges the traditional interpretation' of natural law as 'explicating… ordinary linguistic practices', see Kenneth Himma, *Morality and the Nature of Law* (OUP 2019) 29–60.

[62] Marmor (n. 12) 106.

theory that law shares something of the dual character structure that concepts such as scientist and Christian have been found to exhibit:[63]

> [T]here is a class of concepts that are represented via both (a) a set of concrete features and (b) some underlying abstract value. These two representations are intrinsically related, but they are nonetheless distinct, and they can sometimes yield opposing verdicts about whether a particular object counts as a category member or not.[64]

Take the concept scientist. People tend to agree that the statement, ''There is a sense in which she is clearly not a scientist, but ultimately, if you think about what a scientist really is, you would have to say that she truly is a scientist'', sounds natural.[65] Someone who is employed to run laboratory experiments is clearly a scientist in some sense, but should such a person always be completely uninterested in her findings, she will be no *true* scientist. Notice, moreover, that the judgement that the person devoid of curiosity is no true scientist serves to qualify any claim that they might make to be a scientist. This shows us to be dealing with a unitary, though dual concept, rather than two homonymous concepts. Thus, rather than presenting 'two sets of conceptual practices that are contrived to pick out different, albeit closely related, phenomena',[66] a concept such as scientist presents a single conceptual practice that picks out a set of phenomena not all of which manifest *both* a scientist's descriptive *and* evaluative characters.[67]

Typically, dual character concepts exhibit *double*-dissociation: 'Just as it is possible to fulfil the concrete criteria without fulfilling the abstract ones, so too it is possible to fulfil the abstract criteria without fulfilling the concrete ones'.[68] For the concept scientist, thus, there is a sense in which someone who has never been employed to conduct research is plainly not a scientist, but should such a person

[63] See Flanagan and Hannikainen (n. 4).

[64] Joshua Knobe, Sandeep Prasada and George E Newman, 'Dual Character Concepts and the Normative Dimension of Conceptual Representation' (2013) 127(2) Cognition 242, 243.

[65] Ibid.

[66] Kenneth Himma, *Morality and the Nature of Law* (OUP 2019) 39. Himma compares the descriptive and evaluative aspects associated with the concept-term artist to the different contents associated with riverbank and financial bank, and argues that law is similarly homonymous, 37–40. For evidence that 'artist' is not in fact homonymous, but picks out a dual character concept instead, see Knobe and others (n. 64).

[67] For discussion of the distinction between ambiguous v. dual, see G Almeida, 'A Dual Character Theory of Law' (forthcoming) Journal of Legal Philosophy, preprint available on SSRN <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4065049> 6–8, and Shen-Yi Liao and others, 'Dual Character Art Concepts' (2020) 101(1) Pacific Philosophical Quarterly 102, 109–10.

[68] See Knobe and others (n 64) 249. Similarly, Kevin Reuter, 'Dual Character Concepts' (2019) 14(1) Philosophy Compass e12557, 1.

be driven by a sincere commitment to answer unresolved scientific questions, they might nonetheless qualify as a 'true' scientist.

So far, all concepts identified as having a dual character have exhibited the double dissociation just described. In principle, however, a concept's evaluative and concrete dimensions might exhibit merely single-dissociation, whereby they 'cannot come apart in either direction, but only in the direction of the concrete'.[69] It would be possible to instantiate such a concept by satisfying its concrete criteria without satisfying its abstract ones, but not vice versa.

It is this single-dissociation structure that 'neo-Thomistic' natural law appears to describe: '[An immoral law] is a law in a *certain* respect because it satisfies the formal conditions sufficient to establish it technically as a law… [whereas] [a] so-called law that failed to meet any one of the formal conditions would simply be a non-starter'.[70] Thus, unlike a positivist and Thomistic folk concept, a neo-Thomistic folk concept would treat wicked conduct on which a ban has been lifted as clearly lawful in a shallow sense but clearly unlawful in a deep sense. Equally, in denying that law can be instantiated by satisfying its abstract criteria alone, a neo-Thomistic concept, just like its Thomistic and positivist counterparts, would treat wicked conduct which has never been banned as lawful in every sense.

Earlier research in experimental jurisprudence has tested this key prediction of neo-Thomistic natural law. In two studies, Flanagan and Hannikainen presented participants with scenarios featuring grossly unjust statutes, e.g., prohibiting interracial marriage, abol-

[69] Flanagan and Hannikainen (n. 4) 176.

[70] Emphasis added, Norman Kretzmann, 'Lex Iniusta Non Est Lex: Laws on Trial in Aquinas' Court of Conscience' (1988) 33 American J of Jurisprudence 99, 115, 113. Similarly, Lewis L Kornhauser, 'Law as an achievement of governance' (2022) 47(1) J of L Philosophy 1, 20–23; Finnis (n. 14); Jonathan Crowe, *Natural Law and the Nature of Law* (Cambridge UP 2019) 137-138; Veronica Rodriguez-Blanco and Pilar Zambrano, 'One Myth of the Classical Natural Law Theory: Reflecting on the "Thin" View of Legal Positivism' (2018) 31(1) Ratio Juris 9, 27, 30; Maris Köpcke, 'Concept and Purpose in Legal Theory: How to "Reclaim" Fuller' (2013) 58(1) American J of Jurisprudence 75, 88; Gerald J Postema, *Legal Philosophy in the Twentieth Century: The Common Law World* (Enrico Pattaro and others eds, Springer 2011) 449–451; MM Dempsey, 'On Finnis's Way In' (2012) 57(5) Villanova L Rev 827, 839–840; Arthur Ripstein, 'Self-certification and the moral aims of the law' (2012) 25(1) Canadian J of L & Jurisprudence 201, 216; Stephen Perry, 'Where Have All the Powers Gone?' in Matthew D Adler and Kenneth E Himma (eds), *The Rule of Recognition and the U.S. Constitution* (Oxford UP 2009) 326; Nicolos Stavropoulos, 'Legal Interpretivism', *Stanford Encyclopedia of Philosophy* (Fall edn, 2008) <https://plato.stanford.edu/archives/fall2008/entries/law-interpretivist/>; Mark Murphy, *Natural Law in Jurisprudence and Politics* (Cambridge UP 2006) 8; Kent Greenwalt, 'Too Thin and Too Rich: Distinguishing Features of Legal Positivism' in Robert P George (ed), *The Autonomy of Law: Essays on Legal Positivism* (Oxford UP 1996) 10; Dworkin, *Law's Empire* (n. 14) 103–104, 429; Dworkin, *Hedgehogs* (n. 9) 411-12.

ishing property rights for women, requiring sterilisation of those with below-average IQ. Participants were asked whether they agreed with the statements that (A) there is a sense in which the statute is law, and (B) ultimately, when you think about what it really means to be a law, you would have to say that the statute is not truly a law. The authors found that, consistently with their possession of a single-dissociation, neo-Thomist concept of law, a statistically significant minority (30%) accepted that such evil enactments were laws in some sense but insisted that they did not represent true laws.[71]

However, because the stimuli in this earlier paper were limited to cases of immoral *statutes*, it could not test whether the shared prediction of a neo-Thomistic, Thomistic, and positivist folk concept for cases where wicked conduct has *never* been banned. Thus, this group of studies is silent on whether the dual character concept of law presents single or double dissociation.

From a purely theoretical perspective, contemporary legal theory almost unanimously resists the possibility that law might exhibit a double-dissociation structure. But the idea that law is not in fact, 'essentially associated with the phenomenon of *positive law*',[72] has classical pedigree.

On the radical view propounded by Cicero, law need be neither statute, precedent nor custom: '[W]hatever is the just is always the true law; nor can this true law either be originated or abrogated by any written enactments.[73] Although Cicero saw it as articulating the 'very signification of the word "law"',[74] such a view has been derided by contemporary theorists as 'a subject for [clinical] psycho-

[71] See Flanagan and Hannikainen n 4, 174. In a third study, Flanagan and Hannikainen did not find a statistically significant dual character response to statutes that were merely morally objectionable.

[72] Original emphasis, Petar Popović, 'Reading Finnis and Aquinas on Justice as the Evaluative Standard for Positive Law' (2023) 68(1) American J of Jurisprudence 63, 65.

[73] Cicero, *Treatise on the Laws* (Francis Barham tr, 53 BC, Edmund Spettigue 1842) 83. Cicero's view is foreshadowed four hundred years earlier in Sophocles' Antigone, in which the eponymous heroine discounts the king's legislative role by appealing to: "[The immutable unwritten laws of heaven that] were not born of today nor yesterday; They die not; and none knoweth whence they sprang." Sophocles, *Antigone* (F Storr tr, 441 BC, Harvard UP 1912) 455–457, and is later echoed in Justice Robert Jackson's opening statement to the International Military Tribunal at Nuremberg in the aftermath of WWII: 'The real complaining party at your bar is Civilization… Civilization asks whether law is so laggard as to be utterly helpless to deal with crimes of this magnitude by criminals of this order of importance.' 21 November, 1945 <https://www.roberthjackson.org/speech-and-writing/opening-statement-before-the-international-military-tribunal/>.

[74] Cicero ibid 84.

Table 1. Response predictions for the two scenario types probed in Study 1.

Theory	Evil conduct on which ban is lifted	Evil conduct that has never been banned
Positivism	Lawful	Lawful
NL: Thomistic	Not lawful	Lawful
NL: Neo-Thomistic	Lawful in one sense but not lawful in another	Lawful
NL: Ciceronian	Lawful in one sense but not lawful in another	Lawful in one sense but not lawful in another

logical, not philosophical investigation',[75] and is typically dismissed by natural lawyers as 'a cartoon understanding' of natural law.[76] This paper's theoretical contribution is to explicate the Ciceronian position as the theory that law has the very *same* dual character structure as concepts such as scientist and Christian. Holding that law's abstract and concrete dimensions may come apart in either direction, Ciceronian theory uniquely predicts that, intuitively, there is a deep sense in which even wicked conduct which has never been banned is unlawful.

Notwithstanding contemporary philosophers' scepticism about Ciceronian double dissociation, recent research in experimental jurisprudence lends it some credibility. Researchers have found that rule violation judgments follow a double dissociation pattern such that conduct which infringes the rule's text, but not its (morally good)[77] purpose, is thought to violate the rule in a shallow sense only, while conduct defying the rule's purpose, but not its text, is thought to violate the rule in a deep sense.[78] Whereas judgments of whether a law was violated and judgments of whether something counts as a law are distinct, evidence that legal meaning may exhibit

[75] Brian Leiter, 'The Demarcation Problem in Jurisprudence: A New Case for Scepticism' (2011) 31(4) OJLS 663, 666. Similarly, Postema (n. 70) 468; William Baude and Stephen E Sachs, 'Book Review: The "Common Good" Manifesto' (2023) 136(3) Harvard L Rev 861, 898.

[76] Murphy, 'Natural Law Jurisprudence' (n. 53) 243. Similarly, Moore (n. 53) 197; Robert Alexy, *The Argument from Injustice* (Bonnie L. Paulson and Stanley L. Paulson trs, first published 1992, Oxford UP) 4; Giorgio Pino, 'Sources of Law' in John Gardner, Leslie Green and Brian Leiter (eds), *Oxford Studies in Philosophy of Law: Volume 4* (Oxford UP 2021) 59; Bertea (n. 9) 80. We found one exception: Arkes (n. 53) 81.

[77] Brian Flanagan and others, 'Moral Appraisals Guide Intuitive Legal Determinations' (2023) 47(2) Law and Human Behavior 367.

[78] Guilherme Almeida, Noel Struchiner and Ivar Hannikainen, 'Rule is a Dual Character Concept' (2023), *Cognition* 230, 105259.

double dissociation dovetails with the hypothesis that legal validity exhibits a similar structure.

We have reviewed how the assumption of alternative folk concepts has been thought to justify different theories of law's relation to morality (see Table 1). We now turn to gather evidence on the question.

IV. STUDY 1 - LAW AND SUBSTANTIVE MORALITY

The common belief that the folk concept of law is fundamentally descriptive has recently been challenged by a set of studies in which a large majority of participants characterised evil statutes as failing to qualify as fully-fledged laws.[79] While those studies provide initial evidence that morality is in fact intuitively intrinsic to law, they are unable to test whether morality is intuitively *sufficient* for legal validity. Accordingly, in Study 1, we sought, first, to replicate the earlier finding that, contrary to the weight of philosophical opinion (see above), laypeople do not share a fundamentally descriptive concept of law, and, second, to establish whether the concept of law exhibits single (neo-Thomistic) or double (Ciceronian) dissociation.

At the outset, we were conscious that the abstract task of theorising a concept's content requires a person to succeed in synthesising their intuitive understanding, and may yield only an account of 'how [people] think that they think'.[80] Practical tasks, in contrast, promise a stronger test of commitment to a particular concept of law.[81] Accordingly, rather than ask people directly whether they believe morality to be intrinsic to law, we invited them to *apply* their concept of law to vignettes whose characterization would reveal any implicit interconnections.

398 participants were recruited for participation in our experiment through Prolific.co. After excluding 8 responses which failed either of

[79] Flanagan and Hannikainen (n. 4), 175 (noting the aggregate frequency of natural law concepts revealed in Studies 1 and 2, the authors report that 64% of participants 'rejected the view that, ultimately, law is just a matter of concrete social facts').

[80] Matthew Ratcliffe, 'There Are No Folk Psychological Narratives' (2009) 16(6) J of Consciousness Studies 379, 381. Similarly, Sally Haslanger, 'What good are our intuitions?' (2006) 80(1) Proceedings of the Aristotelian Society supplement 89, 97-101; Himma (n. 15), 44–45; Julie Dickson, *Elucidating Law* (OUP 2022) 113–14.

[81] Stephen Finlay and David Plunkett, 'Quasi-Expressivism about Statements of Law: A Hartian Theory' in John Gardner, Leslie Green and Brian Leiter (eds), *Oxford Studies in Philosophy of Law: Volume 3* (Oxford UP 2018) 67; Donelson and Hannikainen (n. 4) 24; Pirie (n. 9) 8–9.

two pre-registered attention checks,[82] we were left with a final sample of 390 participants.[83]

All experimental conditions and scenarios described the same fictional society. The description was developed to encompass the application of the weaker ('inclusivist' or 'soft') strand of positivism that allows that, in a particular society, law's existence might be conditional on morality, i.e., that 'in some legal systems, conformity to certain moral principles—for example, a catalogue of individual rights and liberties—is recognised… as part of a basic criterion for legal validity.'[84] Crucially, in relation to societies in which such conformity is not required, positivists agree that legal validity is not morality-dependent. Accordingly, to address inclusive positivism, we followed Flanagan and Hannikainen in describing a society of which there is no reason to suppose that morality is recognized as a condition of legality:

> Figuria is a large, industrialised state, with a law-abiding population. Its constitution assigns all lawmaking power exclusively to an elected assembly and omits any mention of individual rights.

Of course, it might be that the legal systems with which our respondents are most familiar do include substantive constraints on validity. There might be a risk that participants would assess the legality of the conduct not against the described legal order but rather against their own, and therefore regard the enactment of immoral statutes as inconsistent with merely a conventional criterion.[85] To help alleviate that concern and prime participants to consider legality in respect of the posited jurisdiction, we included the name of the fictional jurisdiction in the answer-statements themselves.

---

[82] Attention checks are meant to filter out participants who are not paying sufficient attention to the survey's instructions. A check was administered at the outset, and at a random interval between the study scenarios. For instance, one of our checks for this study started out with the same sentences that started all of the vignettes ("Figuria is a large, industrialised state, with a law-abiding population. Its constitution assigns all lawmaking power exclusively to an elected assembly and omits any mention of individual rights."), but then diverged completely to require participants to select one specific option ("Although it might look like just another question, this item was designed to test for attention. Please select the option that says that stealing is lawful in Figuria."). Participants who failed to heed the instructions were excluded from analysis.

[83] Participants' mean age = 40.07. Gender breakdown: 131 male, 254 female, 3 non-binary, and 2 who preferred not to report their gender.

[84] HLA Hart, 'The New Challenge to Legal Positivism' (1979) (2016) 36(3) OJLS 459, 463.

[85] Emad H Atiq, 'Disagreement about Law and Morality: Empirical Results and the Meta-Problem of Jurisprudence' (2022) Jotwell <https://juris.jotwell.com/disagreement-about-law-and-morality-empirical-results-and-the-meta-problem-of-jurisprudence/>; Leonard Hoeft, 'A Case for Behavioural Studies in Experimental Jurisprudence' in Karolina Prochownik and Stefan Magen (eds) *Advances in Experimental Philosophy of Law* (Bloomsbury 2023) 215, 224.

Participants were then randomly assigned to conditions describing neutral or immoral conduct on which a ban had, respectively, been lifted or never been imposed. For instance, a scenario in the immoral ''ban lifted'' condition read as follows:

> Due to widespread sexist attitudes, Figuria's legislature recently enacted a statute lifting a ban on sexual violence by a man against his wife; men may freely acknowledge such violence without fear of prosecution.

In contrast, a scenario in the neutral ''ban lifted'' condition read thusly:

> Due to a widespread belief that motoring burdens should be minimised, Figuria's legislature recently enacted a statute lifting the requirement on drivers to renew their driving licence annually; a person may drive on a licence that's more than a year old without fear of prosecution.

Meanwhile, participants in the ''never banned'' conditions read about the inaction of the same assembly. Consider, for example, a scenario in the immoral ''never banned'' condition:

> Due to widespread sexist attitudes, Figuria's legislature has never enacted a statute imposing a ban on sexual violence by a man against his wife; men may freely acknowledge such violence without fear of prosecution.

In contrast, a scenario in the neutral ''never banned'' condition read as follows:

> Due to a widespread belief that motoring burdens should be minimised, Figuria's legislature has never enacted a statute that would require drivers to renew their driving licence annually; a person may drive on a licence that's more than a year old without fear of prosecution.

All participants were then asked which of the following three statements best described their thinking:

> In Figuria, [conduct-type] is lawful.
> In Figuria, [conduct-type] is not lawful.
> In Figuria, there is a sense in which [conduct-type] is clearly lawful, but ultimately, if you think about what it really means to be lawful, you would have to say that [conduct-type] is not lawful at all.

We chose this question based on the evidence of a pre-test study that indicated that this set up succeeded in eliciting responses that correctly distinguish between other known descriptive and dual character concepts.[86] Participants answered the question about three

[86] For details, see appendix I, below. An alternative design might involve substituting the statement that the conduct-type is lawful with a more detailed statement (e.g., ''Although immoral, [the conduct-type] is lawful'') or with an equally long statement, ''Ultimately, if you think about what it really means to be lawful, you would have to say that [the conduct-type] is lawful''). Likewise, an alternative design might substitute the single term 'lawful' for a range of ostensible synonyms that might also include, e.g., 'legally permissible', see, e.g., Brian Flanagan and others, (n. 77) 372. We encourage researchers to consider possible follow-up studies along these lines.

different scenarios presented in a random order - and were also presented with the answer statements in a random order.

An alternative worry about such a study is that participants might use questions about legality as a proxy for their views on morality simpliciter, and that, consequently, any ostensible rejection of the conduct's lawfulness might not be intended to refer to law per se.[87] To address the latter concern, half of the participants viewed a version of the study that also asked them to express their moral views. After reading the scenario, but before they were prompted for their views on the conduct's legality, these participants were asked to rate their agreement with a statement that such conduct (e.g., sexual violence by a man against his wife) was immoral. If participants were inclined to use lawfulness merely as a proxy for morality simpliciter, then this cohort ought to ascribe lawfulness more frequently than the other.[88] This strategy for counteracting pragmatic influences on responses has previously been used in experimental jurisprudence,[89] and in experimental philosophy more broadly.[90]

When decisions about how to analyse a body of data are made in the knowledge of the content of this data, those decisions may be distorted by a bias towards employing analyses that yield expected or otherwise significant results. 'Blinding' the data through public pre-registration of the analysis plan in advance of data collection is the standard means of addressing this risk;[91] we duly pre-registered our study and analysis plan at <https://aspredicted.org/kb3by.pdf>. Whenever the analyses reported were not included in the analysis plan, we will emphasise that they are exploratory in nature. For ease of exposition, we will report the results of our tests in ordinary language in the main text, while supplying further information about our statistical tests and data analysis procedures in accompanying

[87] Jonathan Mummolo and Erik Peterson, 'Demand Effects in Survey Experiments: An Empirical Assessment' (2019) 113(2) American Political Science Rev 517.

[88] In experimental terminology, the study followed a 2 (condition: ban lifted, never banned) x 2 (morality: immoral, neutral) x 2 (moral probe: present, absent) design with condition, morality, and moral probe as between-subjects manipulations and scenario as a within-subjects manipulation nested within morality.

[89] For example, Flanagan and others (n. 77) 367.

[90] For example, Knobe (n. 5).

[91] Marcus R Munafò and others, 'A manifesto for reproducible science' (2017) 1(21) Nature Human Behaviour.

footnotes and in Appendix II. All data, stimuli, and analysis scripts are available at: https://osf.io/pgfqh/.

As set out in the pre-registration form, each of the legal theories explored in Section III makes specific predictions about the effects of our experimental manipulations on participants' propensity to select each of the three options.[92] We predicted that the double dissociation dual character pattern associated with Ciceronian natural law would obtain. Ciceronianism's main prediction is that participants would be more likely to select the dual character option in the ''Immoral'' condition when compared to the ''Neutral'' baseline, regardless of whether there was never a ban or a ban was recently lifted. The theory also predicts that participants would be significantly more likely to say that the conduct was lawful in the ''Neutral'' condition when compared to the ''Immoral'' condition. Finally, Ciceronianism predicts no difference between conditions as to the likelihood that participants would say that the conduct was ''not lawful'' (Figure 1).

The planned analysis revealed all hypothesised patterns of significance.[93] Crucially, and contrary to the prediction of Neo-Thomistic natural law theory, immoral actions that had never been banned were as likely to prompt participants to select the dual character option as those on which a ban had recently been lifted.[94]

If participants were using these options simply to vent their disapproval of the target action-type, we would expect the systematic differences detected above to be dampened or eliminated in the condition where the selection was preceded by a question about the action-type's immorality. However, this was not what we found.[95]

[92] Our planned analysis required transforming participant selection into three binary variables encoding whether each of the three options was selected on that trial. We then built a mixed effects model for each binary dependent variable with fixed effects for experimental condition (''Never banned'' vs. ''Ban lifted''), morality (''Immoral'' vs. ''Neutral'') and the condition * morality probe interaction term while accounting for random effects of participant. Full results for the pre-registered analysis, as well as for some of the exploratory models, are available in appendix II.

[93] The option indicating that the conduct was lawful was more likely to be selected in the ''Neutral'' condition ($\hat{p}$ = 84.13%) when compared to the ''Immoral'' condition ($\hat{p}$ = 55.22%; $\chi^2 = 40.21$, $p < .001$). In contrast, the dual character statement was significantly more likely to be selected in the ''Immoral'' ($\hat{p}$ = 36.15%) as compared to the ''Neutral'' condition ($\hat{p}$ = 10.05%; $\chi^2 = 39.50$, $p < .001$). Finally, no effects arose for a model of participants' likelihood of selecting the ''not lawful'' option (all ps > 0.2). See Appendix II for full results for each of the three models.

[94] b = -1.80, z = -2.06, p = .165.

[95] Models which included main effects and interactions with the presence or absence of the moral probe revealed exactly the same significance patterns as before, with no significant interactions (all ps > .24). See Appendix II.

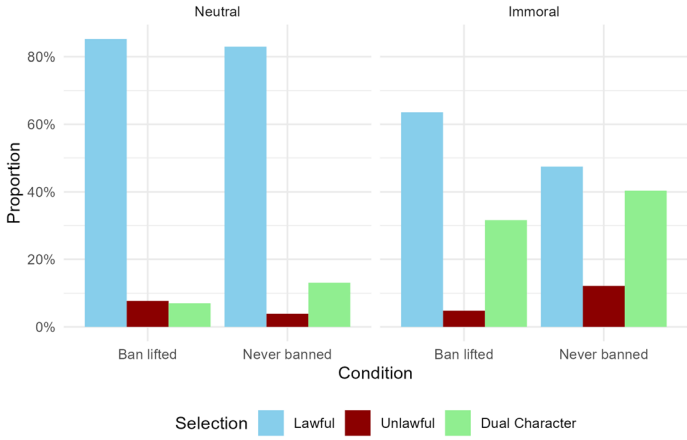

Figure 1. Proportion of forced-choice selection by experimental condition, collapsed across scenario and levels of "moral question"

In an exploratory analysis of responses, we substituted participants' condition assignment (to the "Immoral" and "Neutral" condition) with participants' own subjective assessment of each conduct-type's morality.[96] This analysis revealed the same significance patterns in respect of an association between moral ratings and participants' diminished propensity to select the lawful option[97] and increased tendency to select the dual character statement option.[98] In other words, the more strongly participants disapproved of conduct, the weaker their tendency to judge it as lawful, and the more likely they were to select the dual character statement. This result further supports the theory that participants' judgments about legal validity depend on their moral judgments.

[96] In statistical terms, that meant substituting the term encoding the "Immoral" and "Neutral" conditions with a fixed effect of subjective moral assessments, allowing the latter to interact with all other fixed effects.

[97] $\chi^2 = 21.28$, $p < .001$.

[98] $\chi^2 = 16.40$, $p < .001$. No significant effects arose when modelling participants' propensity to select the statement that the conduct was not lawful (all ps $> .035$). Moreover, while there were significant main effects of the never banned vs. ban lifted manipulation over participants' likelihood of selecting the lawful ($\chi^2 = 5.85$, $p = .016$) and dual character options ($\chi^2 = 5.57$, $p = .018$), there were no significant interactions between this manipulation and subjective moral ratings (all ps $> .16$).

Finally, we conducted an exploratory analysis of participant profiles. While most participants gave uniform responses to the three scenarios (70.26% were consistent), participants who evaluated immoral conduct were more likely to give contrasting responses to different scenarios (68.16% of them were consistent) than those evaluating morally neutral conduct (72.49% of them were consistent). The proportion of consistent answers was highest for the ban lifted/immoral condition combination (75.26%) and lowest for the never banned/immoral condition (61.54%). Taken together, a majority (58.71%) of participants who evaluated wicked conduct responded by saying that it was illegal either in a sense or in all senses in respect of at least one of the presented scenarios. This included participants who were inconsistent (31.84%), those who consistently selected the dual character option (23.38%), and those who consistently selected the option saying that the conduct was illegal (3.48%). On the other hand, 41.29% of participants consistently selected the positivist option in the immoral condition.[99] Notably, when we restricted the analysis to participants assigned to the immoral condition who were inconsistent, moral disapproval predicted participants' likelihood of selecting the dual character statement,[100] suggesting that inconsistency in responses was a reaction to the experimental condition (immorality) rather than a product of mere inattention.

So what does all this mean? First, our study offers a conceptual replication of findings by earlier research showing that immoral statutes are not perceived as true laws,[101] and, second, presents initial evidence that wicked conduct which was never banned is seen as lawful in a sense, but not truly lawful. Whereas the combination of these two findings conforms with the prediction that legal validity behaves as a double dissociation dual character concept, our exploratory analyses show substantial division among participants. On the one hand, a majority of participants took morality into account

[99] As we are interpreting two out of three options to be inconsistent with the legal positivist's folk concept, the presence of random noise in participant responses would lead our analysis to overstate the prevalence of natural law intuitions. There are indications, however, that the level of noise is low. Only 3.48% of participants consistently selected the option saying that the conduct was illegal, which is both much less than the consistent selection of the other options and far below the 33.3% which would be expected by chance. We are grateful to an anonymous reviewer for pointing out this limitation.

[100] $\chi^2 = 4.04$, $p = .04$. No other effects were significant.

[101] Flanagan & Hannikainen (n 4).

in making at least one of their validity judgments. On the other hand, the most frequent response among consistent participants was that predicted by legal positivism. Finally, among consistently moralistic participants, the most frequent pattern was that predicted by Ciceronianism.

The finding that the legality of wicked conduct is deeply contentious (a finding supported by the fact that participant inconsistency increased significantly in judging such cases) fits well with the predictions of Ciceronian natural law. After all, according to this position, the respective conduct in ''Never banned'' and ''Ban lifted'' is simultaneously legal and illegal, with the answer depending on the sense under consideration. Ciceronians accurately predict that many people will notice the tension and select the dual character statement. But even those who selected one of the other two options could have felt the tension without explicitly recognizing it. These participants would either become inconsistent, or they would solve the tension in favour of one of the two criteria. In contrast, positivism and Thomistic natural law, as defined, predict no conflict, with the former treating conduct in both ''Never banned'' and ''Ban lifted'' as legal and the latter treating conduct in ''Never banned'' and ''Ban lifted'' as legal and illegal, respectively.

Given these features, Study 1 found support for the predictions of Ciceronian natural law. Remarkably from a jurisprudential perspective, it suggests that, for many people, law may be analogous to the folk concepts of, e.g., artist and scientist, in that immorality *suffices* to render conduct legally prohibited. In other words, for many people, just as someone who is deeply curious about how to make discoveries about the natural world but who works as police officer might qualify nonetheless as a true scientist in a deeper sense, a fundamental moral principle that is not reflected in any currently salient political act might nonetheless qualify as a true law. Thus, not only does morality matter to perceptions of legal validity, it seems that it matters in the most radical way that it could, namely, in the form of a doubly dissociative dual character concept. This, in turn, raises the question of the *breadth* of morality's integration into the concept of law. Does the application of moral criteria concern matters of substantive virtue only, or might it also encompass questions of pro-

cedural justice? That is the question that Study 2 is designed to explore.

V. STUDY 2 - LAW AND PROCEDURAL MORALITY

Thus far, we have mapped only the relations between laws and the morality of their substantive content. Study 2 investigates whether law's intuitive moral element exists on a procedural plane as well as a substantive one.

The normative aspect of dual character concepts is not usually described in terms of the all-things-considered moral evaluation applicable to a statute's content. Instead, cognitive scientists often speak of a concept's 'characteristic' value. Proposing the notion of an 'inner' morality of law, Lon Fuller famously developed 'a procedural version of natural law' which articulates a vision of what it takes to fulfil law's characteristic value. On this account, there are eight *formal* virtues on which a statute's legal character depends; so much so that:[102]

> ''A total failure in any one of these eight directions does not simply result in a bad system of law; it results in something that is not properly called a legal system at all''.[103]

Accordingly, Fuller describes a folk concept of law which includes a moral element of a procedural rather than substantive character. In specifying a *thick* concept where both concrete and abstract features are necessary for a statute to count as legal, Fuller's proposal is structurally analogous to the Thomistic understanding of law's relationship to substantive morality. But a neo-Thomistic/Ciceronian analogue, on which procedurally improper statutes lack deep legality (only), is also possible.[104]

Fuller often talks about the inner morality of law as a discipline which pertains at the level of the legal system, such that defects of

[102] Statutes must be (i) consistent, (ii) enforced according to their terms, (iii) general in application, (iv) intelligible, (v) directed towards prescribing conduct that is possible, (vi) prospective in application, (vii) stable over time, and (viii) publicly announced, Lon L Fuller, *The Morality of Law* (Yale UP 1964) 96–97. Some practical examples of the operation of these principles are provided below.

[103] ibid, 39. Similarly, Lon L Fuller, 'Positivism and Fidelity to Law: A Reply to Professor Hart' (1958) 71(4) Harvard L Rev 630, 645.

[104] A further alternative is to posit that law is a 'cluster' or prototype concept, in which its abstract features are cumulatively relevant even while not strictly necessary, such that their absence produces a *borderline* case: each feature may be 'more or less instantiated ... [such that] [l]aw, in the focal sense of the term, is fully instantiated only when each ... is fully instantiated', Finnis (n. 11) 277. With regards to our experiments, such a prototype concept would make similar predictions to the 'thick' concept view: statutes/conduct in the experimental conditions would be less likely to be seen by ordinary people as being laws/being lawful when compared to the control conditions.

legality are manifested by the jurisdiction as a whole.[105] On other occasions, he treats compliance with procedural principles as determinative of the validity of specific statutes.[106] Notice that these perspectives are likely to be interrelated: it would be surprising if a system's status as legal could be diminished by the failure of many statutes to satisfy a particular principle without such failures also undercutting the legality of the individual statutes at issue. Indeed, the discriminatory power of a more granular lens is confirmed by previous empirical research that shows that people hold that compliance with Fullerian principles is integral to the validity of individual legal rules.[107] Moreover, in seeking to track people's practical application of the concept of law via a vignette-based experiment, manipulating the characteristics of discrete legal materials is much more manageable than contrasting entire legal systems. For these reasons, we chose to focus on the pertinence of Fuller's desiderata for individual statutes.

A broader question concerns the identification of procedural properties as genuinely evaluative. Theorists have vigorously debated whether Fuller's desiderata represent moral virtues which, 'reduce… [rulers'] capacity for evildoing',[108] or merely principles of

[105] Fuller (n. 102) 39; similarly, see Aziz Huq, 'What We Ask of Law' (2022) 132(2) Yale L J 487, 493-95.

[106] Fuller (n. 102) 62; similarly, see Kristen Rundle, *Forms Liberate: Reclaiming the Jurisprudence of Lon L Fuller* (Bloomsbury 2012) 80 and Jonathan Crowe, 'Between Morality and Efficacy: Reclaiming the Natural Law Theory of Lon Fuller' (2014) 5(1) Jurisprudence 109, 113.

[107] See Donelson and Hannikainen (n 4).

[108] Robert P George, 'Reason, Freedom, and the Rule of Law: Their Significance in the Natural Law Tradition' (2001) 46 American J of Jurisprudence 249, 253. Similarly, Lon L Fuller, *The Morality of Law* (Revised ed, Yale UP 1969) 200–206; EP Thompson, *Whigs and Hunters: The Origin of the Black Act* (Parthenon 1975) 266–68; Finnis (n. 11) 273; Neil MacCormick, 'Natural Law and the Separation of Law and Morals' in Robert P George (ed), *Natural Law Theories* (Oxford UP 1992) 123–124; Simmonds (n. 9) 69–111; Michael Baur, 'Beyond Standard Legal Positivism and "Aggressive" Natural Law: Some Thoughts on Judge O'Scannlain's "Third Way"' (2011) 79(4) Fordham L Rev 1529, 1534; John Tasioulas 'The Rule of Law' in John Tasioulas (ed), *The Cambridge Companion to Philosophy of Law* (Cambridge UP 2020) 124–129.

legal efficacy, i.e., of 'good legal craftsmanship'.[109] Conversely, for still other theorists, such as Friedrich Hayek, Fuller's principles, whilst indeed moral in character, are not intrinsic to law:

> If a government is given authority to do whatever it regards as desirable, every act of such government is legal, but this does not mean that it will act under the rule of law.[110]

Existing empirical research does not directly advance this debate. In an early contribution to experimental jurisprudence, Donelson and Hannikainen asked participants to select which of a series of pairs of statements reflecting Fuller's principles of the inner morality of law and their negations they would endorse. In one of the experiment's conditions, the pairs of statements reflected empirical claims about actual law (e.g., ''The law as enforced [does/does not] differ much from the law as formally announced''), while in the other condition, they reflected necessary claims about a recently discovered society called the Faraway nations (e.g., ''The law as enforced [in Faraway nations] [could/could not] differ much from the law as formally announced''). If the law *necessarily* could not differ in enforcement from the law as formally announced, it follows that no actually existing *laws* would diverge in such a way. Surprisingly, the researchers found that necessity claims received *more* endorsement than empirical claims, a trend that was also present among lawyers and that was replicated in 11 different countries.[111]

---

[109] HLA Hart, 'Book Review: The Morality of Law by Lon L. Fuller' (1965) 78 Harvard L Rev 1281, 1285. Similarly, Robert Summers, 'Professor Fuller on Morality and Law' (1965) 18(1) J of L Education 1, 25–26; Joseph Raz, *The Authority of Law* (Oxford UP 1979) 223–26; Judith Shklar, *Legalism* (Oxford UP 1986) xii; Matthew Kramer, *In Defense of Legal Positivism* (Oxford UP 1999) 51; Anna Lukina, 'The Paradox of Evil Law' in Mark Tushnet and Dimitry Kochenov (eds), *Research Handbook on the Politics of Constitutional Law* (Edward Elgar 2023) 711. Significantly, this debate is orthogonal to the question of whether the morality of a statute's *content* is intrinsic to legality. For instance, a natural lawyer could agree with Hart's rejection of the moral pedigree of Fullerian principles and insist that the only truly moral element of legal validity concerns a provision's substance; see, for example, Ronald Dworkin, 'Philosophy, Morality and Law - Observations Prompted by Professor Fuller's Novel Claim' (1965) 113 University of Pennsylvania L Rev 668; Anthony D'Amato, 'Lon Fuller and Substantive Natural Law' (1981) 26(1) American J of Jurisprudence 202. Indeed, a theorist might endorse the pertinence of lay intuition to inquiry into law's relation to procedural morality even whilst rejecting its relevance to inquiry into law's relation to substantive morality: Alani Golanski, 'The Rule of Law: ''A'' Relation Between Law and Morals' (2022) 42(2) Northern Illinois University L Rev 208, 227.

[110] Friedrich Hayek, 'Freedom and the Rule of Law' in Richard Bellamy (ed), *The Rule of Law and the Separation of Powers* (Routledge 2005) 148; similarly Gardner (n 3) 210, '[T]he law's living up to the rule-of-law values that Fuller called the ''inner morality of law'' cannot be among the conditions for the legal validity of any norm.'

[111] Donelson and Hannikainen (n. 4); Hannikainen and others, 'Are There Cross-Cultural Legal Principles? Modal Reasoning Uncovers Procedural Constraints on Law' (n. 4).

This puzzling result might seem to amount to a contradiction,[112] especially given that the same pattern was exhibited by participants who interpreted the 'could' descriptively rather than prescriptively. However, as Raff Donelson has argued,[113] research into dual character concepts suggests one way to make sense of these results: divergence as to what's impossible and what's actual might simply reflect an intuition that procedurally improper statutes would clearly still be laws in some sense, even while they would clearly not be laws in a deeper sense. If that is the case, then we would expect the necessity statements to refer to what is needed in order for a statute to count as a true law, while the empirical statements reflect the fact that, while still remaining laws in some sense, statutes that flout procedural constraints fail to be true laws. Such an analysis is consistent with both Ciceronian and Neo-Thomistic views in that it extends the dual character structure that many natural law theorists have used to explain the relationship between social fact and substantive morality to the relationship between social fact and procedural principles. Moreover, given the close association identified in the dual character literature between a concept's deep character and evaluative reasoning, such an analysis would suggest that Fullerian safeguards are indeed more than mere principles of efficacy.

Conversely, if Fuller's safeguards are cumulative elements of a positive law's validity, then the intuition that such safeguards are intrinsic to law might *either* form part of a purely descriptive concept, which specifies concrete procedural features *or* form part of a thick concept, which specifies morally desirable procedural features. Thus, for Thomistic natural lawyers such as Fuller himself, violating law's inner morality disqualifies a statute as a plain instance of law just as a risk-taking SS officer's dedication to Nazism disqualifies him as a paradigm of courage. For Hartian positivists, in turn, the failure to comply with such safeguards disqualifies a statute as a plain instance of law just as a concoction's tendency to cause immediate regurgitation disqualifies it as a paradigm poison,[114] or as a length of steel's bluntness disqualifies it as a paradigm knife.[115] Significantly, the re-

[112] Himma (n 24) 364, 'This response is clearly confused'.

[113] See Raff Donelson, 'Experimental Approaches to General Jurisprudence' in Karolina Prochownik and Stefan Magen (eds) *Advances in Experimental Philosophy of Law* (Bloomsbury 2023) 27, 34.

[114] Hart (n. 109) 1286.

[115] Raz (n. 109) 226.

sult that statutes which fail to comply with Fullerian principles are not plain instances of law in *any* sense is consistent with each of these two alternative characterizations.

Accordingly, to achieve new purchase on the question of law's inner morality, Study 2 employs a practical task modelled on Study 1.

A total of 299 participants were recruited for participation in our experiment through Prolific.com. There were no exclusions, as all participants passed the pre-registered attention check.[116]

To establish how Fuller's principles determine the intuitive validity of laws, we compared the status ascribed to specific, procedurally proper statutes with that ascribed to statutes with a corresponding procedural vice. Given the response to Study 1, we anticipated that the disparity in the proportion of participants who regard procedurally proper and improper statutes as legal in a deep sense would be greater than that between people who regard them each as legal in a shallow sense.

It seemed plausible that the Fullerian principles most likely to reveal whether any procedural concept of law does exhibit a dual character would be those about which opinions as to the necessity and actuality of compliance are known to diverge, a discrepancy which is most pronounced with respect to the principles of intelligibility, enforcement, and consistency.[117] Accordingly, our main experimental manipulation concerned whether a statute complied with one of these three Fullerian principles. We collected judgments about four different scenarios, each relating to a different area of law (labour, construction, election, and traffic law).[118]

For instance, participants assigned to both the ''noncompliance with Fullerian principle'' experimental condition and to the consistency principle would answer questions about mutually inconsistent laws across the four domains of labour, construction, elections, and traffic, in a random order. For the traffic domain, for example, they would read the following vignette:

> Skyland is a large, industrialised state, with a law-abiding population. Skyland's legislature recently enacted a statute concerning the speed at which vehicles may be driven on Highway 1.

[116] Participants' mean age = 39.61. Gender breakdown: 100 male, 193 female, 6 non-binary.

[117] Hannikainen and others, (n. 4).

[118] The study followed a 2 (compliance with Fullerian principle v. noncompliance) between x 3 (principle: intelligibility, enforcement, consistency) between x 4 (scenario: labour, construction, election, traffic) within subjects design. See Supplementary Materials for complete stimuli.

> This statute has one provision which sets out a minimum speed of **40 miles per hour**, but another which establishes a maximum speed of **35 miles per hour**.

Conversely, participants assigned to the ''compliance with Fullerian principle'' condition under the consistency principle answered questions about laws that were mutually consistent in each legal domain. For the traffic domain, for instance, they would read the following vignette:

> Skyland is a large, industrialised state, with a law-abiding population. Skyland's legislature recently enacted a statute concerning the speed at which vehicles may be driven on Highway 1. This statute has one provision which sets out a minimum speed of **25 miles per hour**, and another which establishes a maximum speed of **75 miles per hour**.

All participants were then asked which of the following three statements best described their thinking:

> This statute is a law.
> This statute is not a law.
> There is a sense in which this statute is a law, but ultimately, if you think about what it really means to be a law, you would have to say that this statute is not a law at all.

The options were presented in a randomised order. Finally, participants also rated the extent to which they endorsed the Fullerian principle at hand. For instance, participants assigned to the consistency principle rated on a 5-point scale whether they agreed that ''Laws should be consistent with each other''.[119]

Each of the legal theories referenced in Table 2 makes specific predictions about the option that participants would select under the study's different conditions.[120] Based on previous research and in accordance with both Ciceronian and Neo-Thomistic strands of natural law, we predicted that participants would be more likely to select the dual character statement in the 'noncompliance' condition when compared to the 'compliance' condition. These theories also predict that respondents would more often select the statement that the statute counted as a law in the 'compliance' condition. Finally, they predict no significant differences between the two compliance conditions in respect of participants' propensity to say that the statute was not a law. On the other hand, both Hartian positivism and Thomistic natural law entail that a non-compliant statute is not a plain instance of law; they predict that whether a statute complies

[119] We pre-registered our study and analysis plan at <https://aspredicted.org/kz7s9.pdf>.

[120] Our planned analysis required transforming the participant's selection into three binary variables encoding whether each of the three options was selected on that trial. We then built a mixed effects model for each binary dependent variable with fixed effects for condition (Compliance vs. Non-compliance) while accounting for random effects of participant and scenario.

Table 2. Predictions made by different jurisprudential positions for Study 2.

Theory	Procedurally Problematic Statute
Hayekian Positivism	Plainly a law.
Hartian Positivism/Thomistic NL	Not plainly a law.
Neo-Thomistic/Ciceronian NL	Plainly a law in one sense but not in another.

with the principles will produce significant differences in participants' propensity to select the statements that the statute was and was not a law, but no differences between their likelihood of selecting the dual character statement.

As predicted by Ciceronian natural law, the dual character statement was indeed more likely to be selected in the non-compliance condition as compared to the compliance condition,[121] while the statement that the conduct was lawful was more likely to be selected in the compliance as opposed to the non-compliance condition.[122] Notably, the dual character statement was the option most often selected by participants in the non-compliance condition (right-hand side of Figure 2).[123] However, in contrast to the predictions of Ciceronian and Neo-Thomistic natural law and in line with the other theories, the option indicating that the conduct was unlawful was significantly more likely to be selected in the non-compliance condition as compared to the compliance condition.[124]

[121] $\hat{p}_{\text{non-compliance}} = 37.6\%$, $\hat{p}_{\text{compliance}} = 27.4\%$; $\chi^2 = 8.47$, $p = .004$.

[122] $\hat{p}_{\text{compliance}} = 54.1\%$, $\hat{p}_{\text{non-compliance}} = 26.3\%$; $\chi^2 = 40.54$, $p < .001$. A curious feature of the data is the surprisingly high percentage of participants in the 'compliant' condition who reported at least some sense in which the relevant statute was not a law (45.94%). Why did that happen? One possibility is that, despite our best efforts, participants might have considered the statutes as immoral for some reason, thus leading to a reduction in perceived validity. This explanation runs counter to the fact that establishing things like speed limits and height limitations for new buildings sound as morally neutral as can be. Another possible explanation is that participants categorised the provisions not as full-fledged legislation but rather as mere regulations or ordinances. Finally, it could be the case that participants misunderstood the task, and considered it a trick question. After all, in the ''compliant'' condition, questions were very straightforward and may have puzzled participants who were expecting a more challenging exercise. Nonetheless, a majority (54.06%) of participants selected the expected response, a result not due solely to chance, as shown by an χ^2 goodness of fit test ($\chi^2 = 121.23$, $p < .001$).

[123] To allay any concern that the differences between selections within the non-compliance condition might simply reflect random noise, we ran a χ^2 goodness of fit test to compare the observed distribution with a uniform distribution whereby each of the three options had equal probability of being selected. The test suggested that the differences between observed frequencies was indeed significant ($\chi^2 = 13.55$, $p = .001$).

[124] $\hat{p}_{\text{non-compliance}} = 36.1\%$, $\hat{p}_{\text{compliancee}} = 18.6\%$; $\chi^2 = 23.78$, $p < .001$.

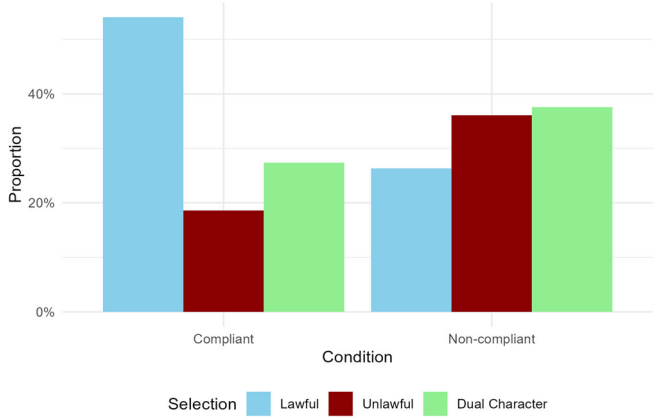

Figure 2. Proportion of forced-choice selection by experimental condition, collapsed across scenario and Fullerian principle

In an exploratory analysis, we considered how participants' selections were influenced by their subjective endorsement of the relevant Fullerian principle. This analysis suggested that, in the non-compliance condition, participants who more strongly endorsed a given principle were more likely to select the dual character statement.[125]

Finally, we conducted an exploratory analysis of participant profiles. Unlike in Study 1, most participants in Study 2 were *inconsistent* (61.87%). Moreover, participants assigned to the non-compliance condition were significantly more likely to respond inconsistently (64.24%) when compared to those assigned to the compliance condition (59.46%).[126] In the non-compliance condition, 13.91% of participants consistently selected the dual character statement, 12.58% of participants consistently selected the option which said that the statute was not a law, and 9.27% of participants consistently said that the statute was a law.

So what is the upshot of these findings? The main question Study 2 sought to address was whether violating procedural desiderata might form part of a dual character concept of law just as it appears that substantive values do, thereby instantiating, per Fuller, an inner

[125] This involved adding subjective endorsement as an independent variable in the models and allowing that variable to interact with compliance. The only significant interaction emerged for the likelihood of selecting the dual character statement ($p = .009$, all other ps $> .24$).

[126] That effect held even when controlling for the effects of moral assessment and of the moral assessment by compliance interaction ($F_{(1,\ 1193)} = 4.79$, $p = .03$).

morality of law. The results of Study 2 failed to provide any support for the predictions of the Hayekian view. On the other hand, both the predictions of Hartians/Thomists and of Ciceronians were partly vindicated by the data. Participants were more likely to say that a statute simply did not count as a law when it was inconsistent, enforced in a way that differed from its text, or was unintelligible. They were also more likely to say of such statutes that they qualified as law in a shallow sense only. Notably, the latter, dual character response may explain the otherwise puzzling divergence that has been observed between people's respective assessments of the impossibility of procedurally improper laws and of their actual occurrence: whereas statutes that flout Fuller's principles are laws in the concrete sense, they are not laws in the evaluative sense.

The existence of dual character intuitions is further reinforced by our exploratory finding that participants' propensity to give such a response is predicted by the extent to which they endorse the relevant procedural desideratum. This could be interpreted in the following way: high endorsement indicates that the participant identified the relevant Fullerian principle as one of law's characteristic values. Hence, not complying with it meant that the statute was not a law in a deep sense. However, most accounts of law's intrinsic value are pluralistic, pointing at several different ways in which a statute can fail to count as a paradigmatic law. Thus, complying with the Fullerian principle would be a necessary but not sufficient condition for the statute to count as a law in a deep sense, which might explain why participants who endorsed the principle sometimes denied that a statute that did comply with the principle was a law in a deep sense.

Taken together, these results provide support for the idea that many participants apply the concept of legal validity in a dual character fashion. This, in turn, provides important clues for future research in general jurisprudence. One of the leading theories behind dual character concepts such as art,[127] and scientist,[128] claims that the normative criteria associated with these concepts are defined by their *characteristic* values, and not all-things-considered moral goodness. Consider the case of scientist: according to the data, laypeople tend

[127] Liao and others, (n. 67).

[128] Knobe, Prasada and Newman (n. 64).

to say that someone who routinely does experiments, but who does not care at all about truth, is not a true scientist;[129] conversely, people who never run experiments, but who nonetheless have a deep commitment to truth are regarded as true scientists (see Appendix I, below). But having a deep commitment to truth is never sufficient to make someone a *good* person, just a *true* scientist. Sometimes, research articulating the moral dimension of law focuses on the demands of practical rationality or morality generally.[130] What the dual character standpoint suggests is that research into law's own virtue[131] may be equally significant.

VI. LAW'S EVALUATIVE DIMENSION

Confronted with the prospect of applying America's Fugitive Slave Act of 1850 to rendition a slave back to the plantation from which he escaped, antebellum Northern judges often faced a conflict between deference to the legislature and their moral commitments. Confronted with a deeply unjust statute, what would the judge do? The answer to this question might be thought to turn on whether the Fugitive Slave Act was in fact a law. We have seen that, for most legal philosophers, this is a question on which lay intuition should be brought to bear (Section II). However, different jurisprudential theories make different predictions about such situations and about the intuitive relationship between law and morality more broadly (Section III). In this paper, we have sought to test some of those predictions.

Across two studies, we surveyed ordinary intuitions. Study 1 yielded evidence that can be interpreted in the light of two alternative assumptions: that different people conceptualise legal validity in different ways, and that all people share a common way of conceptualising legal validity. The first approach follows Flanagan & Hannikainen in mapping how participants could be classified into discrete 'profiles' that represent individual differences. In that light, Study 1 revealed that most participants regarded morality as integral to law, and that many even considered morality to be an *autonomous* dimension of legality, precluding wicked conduct from ever being truly legal. The results of Study 1 are accordingly at odds with the

[129] Ibid.

[130] For example, Finnis (n. 11); Murphy (n. 70).

[131] For example, Fuller (n. 102); Joseph Raz, 'The Law's Own Virtue' (2019) 39(1) OJLS 1.

prevailing assumption among contemporary philosophers of law that the 'cost… [of] using a concept that is distinct from that used by folk' is borne by natural law theory,[132] and, by extension, with the assumption, shared by contemporary natural law theorists *themselves*, that illegality absent social prohibition is absurd (see Section III). Whether Study 1 positively supports the natural lawyer's appeal to intuition is more problematic. Shedding light on this question would require us to directly test the univocality of the folk concept(s), not just its content.

Similarly, the results of Study 2 conflict with the claim of Hartian positivists that procedure is to law simply what sharpness is to a knife. The evidence of a sizable dual character response suggests that a procedurally problematic statute is not simply akin, as per Hartians, to a non-cutting 'knife'. On the contrary, for a plurality of participants, such a statute would clearly still be a law in some sense; for such participants, the statute's failure nevertheless to qualify as a law in a deep sense consists in its conflict with a value represented by the relevant Fullerian principle. It is not clear what *value* might be represented by a principle that a statute ought to be enforced according to its terms (or be intelligible or be consistent) if not a moral one. Accordingly, by denying the deep legality of statutes lacking Fuller's desiderata, such participants appeared to treat the latter not just as mere communicative or institutional requirements but as part of law's characteristic moral value. Thus, in applying a dual character concept of law, many participants seemed to evince attachment to an inner *morality* of law. Our findings would therefore seem to challenge the basic positivist response to Fuller, namely, that law's admittedly intuitive procedural elements do not reflect any intrinsic morality.

More broadly, the evidence that people consider wickedness to undercut lawfulness sits uneasily with a prominent understanding of how we morally evaluate court decisions. Recall the question of whether to return the escaped slave. Some have suggested that we 'assign blame and responsibility differently' to the judge who renditions the slave than to the legislators who voted to enact the statute.[133] On this account, we see such a judge as facing a practical

[132] Plunkett (n. 52) 204.

[133] Leslie Green, 'Legal Positivism' *The Stanford Encyclopedia of Philosophy* (Spring edn, 2018) <https://plato.stanford.edu/archives/spr2018/entries/legal-positivism/>; similarly, John Mackie, 'The Third Theory of Law' (1977) 7(1) Philosophy & Public Affairs 3, 10–11.

trilemma that legislators did not: whether to discharge one's official duty by advancing slavery, to lie about what the law says, or to resign.[134] If, however, the injustice of the Fugitive Slave Act were thought to diminish its legal validity, then it would be deemed open to such a judge to conclude sincerely that rendition might not be legally required: the law *itself* might call for a judge to prioritise morality over statute book.[135] In lending support to the antecedent, our research suggests that people might not in fact recognize the described trilemma and be inclined instead to blame the slave's fate on judge and legislator equally.

Throughout this paper, we have assumed that there is a single shared concept of law and that our studies shed light on the content and structure of this concept. As we noted earlier, however, that assumption is challenged by some. The evidence we have presented might alternatively be interpreted as indicative that different people have different concepts of law. Some are legal positivists, others are Thomistic natural lawyers, still others are Ciceronians, and so on, roughly along the proportions described in the last paragraph of each results section. Still, the rates of inconsistency in both studies, especially in Study 2, might suggest that, instead of different people having different concepts of law, everyone might be pulled towards different aspects of the same concept and resolve the felt tension sometimes in one possible direction and sometimes in another. Future research ought to investigate which of these assumptions is true.

Finally, our research contributes to a growing literature in cognitive science which aims to identify which concepts share the dual character structure first proposed by Knobe and colleagues.[136] This literature has recently been criticised; it has been shown that, given

---

[134] Robert Cover, *Justice Accused: Antislavery and the Judicial Process* (Yale UP 1975) 6–7. Similarly, JD Goldsworthy, 'Detmold's 'The Unity of Law and Morality'' (1986) 12 Monash University L Rev 8, 14–15; Steven Burton, *Judging in Good Faith* (Cambridge UP) 225. A fourth alternative, to publicly announce that one is simply ignoring the law in favour of voting for the just outcome, may also be available: 'I am a persevering defender of human dignity… [if] in doubt, we must side with this citizen's hope to be cured at a more advanced [medical] center. […] once again, whenever torn between the dictates of the law and the demands of justice, I'll opt for the solution that I consider to be more just.' Justice Luis Fux, then of Brazil's Superior Court of Justice (MS 8895 DF 2003/0014265–0). Notice, however, that this approach succeeds in averting the unjust outcome only by exposing the judge to a sort of criticism from which the legislator, in contrast, would be immune, namely, that they had violated their oath of office (to apply the law).

[135] Joel Feinberg, *Problems at the Roots of Law* (Oxford UP 2003) 32–33. Similarly, D'Amato (n. 109) 215; Jeremy Waldron, 'Who Needs Rules of Recognition?' in Matthew D Adler and Kenneth E Himma (eds), *The Rule of Recognition and the U.S. Constitution* (Oxford UP 2009) 343–344.

[136] See (n. 64).

sufficient prodding, people might use dual character language to characterise concepts which are usually thought to have a single character and vice versa.[137] The question of framing raises an important ambiguity. In pursuing the described jurisprudential inquiry into legal validity, our interest lay not in whether law *could* be represented through a dual character structure, but in whether it usually *is* thus represented, spontaneously. Accordingly, we sought to nudge participants as little as possible towards dual character determinations. Notably, we used a novel design that is capable of discriminating between known dual and single character concepts (Appendix I). We believe that the fact that participants did spontaneously represent validity as a double dissociation dual character concept is significant, even if it is also the case that concepts could be coerced into or out of that structure by sufficiently robust context. Moreover, it is a finding that suggests points of contact between general jurisprudence and the cognitive science of concepts. For instance: experimental philosophers have sought to find a more precise characterization of the intrinsic value associated with the concept of art in order to drive this debate forward.[138] Jurisprudents should take stock of the methods and arguments at work in such efforts, and consider a comparable investigation of the intrinsic value associated with law.

VII. CONCLUSION

Law is a domain in which 'the numerous complexities of our lives are regulated by norms, decisions, and force'.[139] The question of how such regulation relates to the moral status of the sundry aspects of social life endures both because it matters whether, and in what way, something counts as a regulating norm or decision and because knowing ourselves means uncovering the nature of a distinctively human adaptation.[140] *How* to address this question of law's relation to morality is itself an open question. This paper aims to add an

[137] Jonathan Phillips and David Plunkett, ''Are There Really Any Dual Character Concepts?'' 2023 37(1) Philosophical Perspectives 340.

[138] Liao and others (n. 67).

[139] Marmor (n. 12) 124.

[140] Orion A Lewis and Sven Steinmo, 'How Institutions Evolve: Evolutionary Theory and Institutional Change' (2012) 44(3) Polity 314.

empirical dimension to one long-prominent approach, namely, appeal to the content of our folk concept.

What we found suggests that, contrary to the predictions of most legal theorists, morality is embedded in how many of us think about law's existence. We discovered that our participants often conceived of law as something that, depending on the morality of its form (Study 2) or content (Study 1), may exist in a shallow sense - or in a deep sense - *only*. Certainly, evidence of ordinary intuition can ultimately be set aside within an overarching philosophical inquiry. But these results suggest that perhaps even the most radical natural law theory can no longer be rejected as contrary to our folk concept, and that how we think about law fits with our thinking about a broad range of other concepts whose application is severally driven by potentially conflicting descriptive and evaluative contents.

FUNDING

Open Access funding provided by the IReL Consortium. The authors would like to thank the Insper Institute of Education and Research and the Maynooth University Faculty of Social Sciences and Social Sciences Institute for funding the studies reported in this paper. We would also like to thank Maynooth University for funding open access to our paper.

OPEN ACCESS

VIII. APPENDIX I - VALIDATION OF THE DEPENDENT MEASURE

An earlier version of this paper employed a different dependent measure. Instead of asking participants which of three different options best described their thinking, we asked them to fill-in the blanks in two different sentences, e.g.:

> There is a sense in which [conduct] is ____ in Figuria. (not lawful/lawful)
> Ultimately, when you think about what it really means to be lawful, you would have to say that [conduct] is ____ in Figuria. (not truly lawful/truly lawful)

A reviewer of the earlier draft hypothesised that this measure was too weak and that it might not accurately discriminate between dual

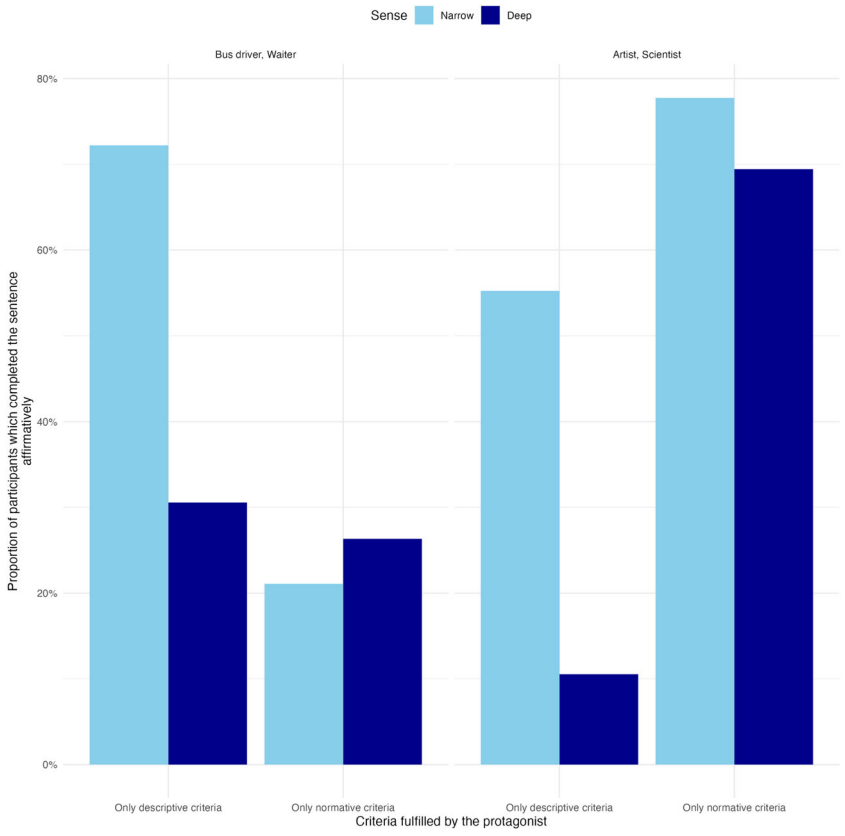

Figure A.1. Proportion of selected completion, collapsed across target concept

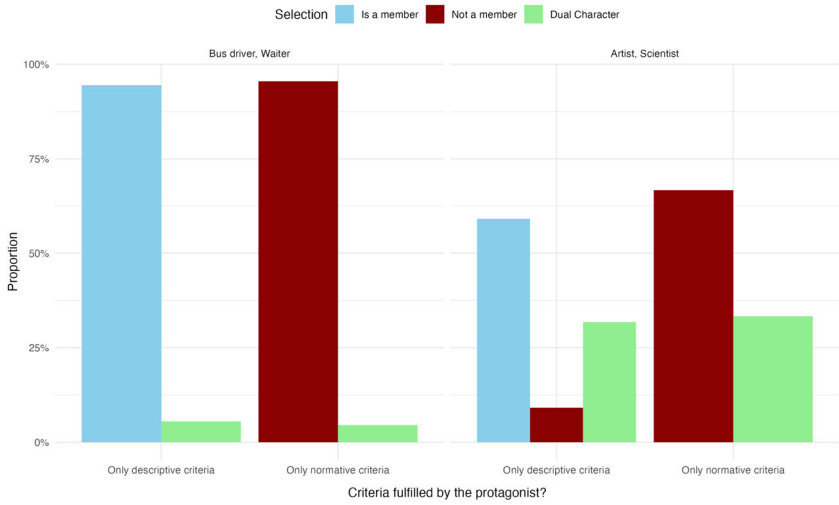

Figure A.2. Proportion of selected completion, collapsed across target concept

and single character concepts. To test this hypothesis, we ran a simple pre-test using known cases of single and dual character concepts.[141] As depicted in Figure A.1, the reviewer's hypothesis was correct, which prompted us to develop a different measure that was less likely to show false positives with regards to dual character concepts.

We arrived at a 3-item forced choice design and pretested the measure with versions of the stimuli used to check the reviewer's objection. As depicted in Figure A.2, this measure was clearly able to distinguish between known dual character concepts such as scientist and artist and single character concepts such as bus driver and waiter. Accordingly, Studies 1 and 2 employed this improved paradigm.

IX. APPENDIX II - FULL MODEL RESULTS FOR STUDY 1

For Study 1, we built different mixed effects models for each possible option participants could have selected. All models included fixed effects for condition (ban lifted vs. never banned), moral valence

[141] Sampled from Knobe, Prasada and Newman (n. 64); Liao and others, (n. 67).

(immoral vs. neutral) and the condition * moral valence interaction while accounting for random effects of participant. Thus, we had separate models that took as dependent variables the likelihood that participants would select the option expressing that (a) the conduct was lawful, (b) the conduct was unlawful, and (c) there was a sense in which the conduct was lawful, but that it was not truly lawful.

Participants' judgment that the conduct was lawful was significantly affected by both condition ($\chi^2 = 5.85$, $p = .015$) and moral valence ($\chi^2 = 40.21$, $p < .001$), but not by the condition*moral valence interaction ($\chi^2 = 2.94$, $p = .086$).

Participants' judgment that the conduct was unlawful was not significantly affected by condition ($\chi^2 = 0.02$, $p = .89$), moral valence ($\chi^2 = 0.21$, $p = .64$), or the condition*moral valence interaction ($\chi^2 = 1.63$, $p = .20$).

Participants' judgment that the conduct was lawful in one sense, but that it was not truly lawful was significantly affected by condition ($\chi^2 = 5.87$, $p = .015$) and moral valence ($\chi^2 = 39.50$, $p < .001$), but not by the condition * moral valence interaction ($\chi^2 = 0.50$, $p = .48$).

Next, we added the moral question (present vs. absent) as a fixed effect to each of the three models, allowing it to interact with all other fixed effects.

Participants' judgment that the conduct was lawful was still significantly affected by both condition ($\chi^2 = 6.50$, $p = .011$) and moral valence ($\chi^2 = 40.25$, $p < .001$), but not by the condition*moral valence interaction ($\chi^2 = 2.59$, $p = .11$). Asking the moral question did not significantly affect participants' likelihood to select that option ($\chi^2 = 0.00$, $p = .98$), nor did it interact with condition ($\chi^2 = 1.85$, $p = .17$), moral valence ($\chi^2 = 2.27$, $p = .63$) or the condition * moral valence interaction ($\chi^2 = 0.05$, $p = .82$).

Participants' judgment that the conduct was unlawful was still not significantly affected by condition ($\chi^2 = 0.02$, $p = .90$), moral valence ($\chi^2 = 0.16$, $p = .68$), or the condition*moral valence interaction ($\chi^2 = 1.76$, $p = .18$). Asking the moral question did not significantly affect participants' likelihood to select that option ($\chi^2 = 0.00$, $p = .96$), nor did it interact with condition ($\chi^2 = 0.01$, $p = .93$), moral valence ($\chi^2 = 0.01$, $p = .92$) or the condition * moral valence interaction ($\chi^2 = 0.12$, $p = .72$).

Participants' judgment that the conduct was lawful in one sense, but that it was not truly lawful was still significantly affected by condition ($\chi^2 = 4.11$, $p = .043$) and moral valence ($\chi^2 = 39.75$, $p < .001$) , but not by the condition * moral valence interaction ($\chi^2 = 1.02$, $p = .31$). Asking the moral question did not significantly affect participants' likelihood to select that option ($\chi^2 = 0.10$, $p = .75$), nor did it interact with condition ($\chi^2 = 3.19$, $p = .074$), moral valence ($\chi^2 = 0.09$, $p = .76$) or the condition * moral valence interaction ($\chi^2 = 0.05$, $p = .82$).

Finally, we restricted our analysis to participants assigned to the moral question condition (N = 186) and substituted all terms denoting moral valence with participants' own subjective assessment of to what extent each conduct-type was immoral.

Participants' judgment that the conduct was lawful was significantly affected by both condition ($\chi^2 = 5.85$, $p = .016$) and moral ratings ($\chi^2 = 21.28$, $p < .001$), but not by the condition*moral ratings interaction ($\chi^2 = 1.97$, $p = .16$).

Participants' judgment that the conduct was unlawful was not significantly affected by condition ($\chi^2 = 0.03$, $p = .85$), moral ratings ($\chi^2 = 0.06$, $p = .81$), or the condition*moral ratings interaction ($\chi2 = 0.85$, $p = .36$).

Finally, participants' judgment that the conduct was lawful in one sense, but that it was not truly lawful was significantly affected by condition ($\chi^2 = 5.57$, $p = .018$) and moral ratings ($\chi^2 = 16.40$, $p < .001$), but not by the condition * moral ratings interaction ($\chi^2 = 0.84$, $p = .36$).

School of Law and Criminology
Maynooth University, Maynooth, Ireland
E-mail: Brian.Flanagan@mu.ie

Law School
Insper Institute for Education and Research, São Paulo, Brazil