

THE PSYCHOLOGY AND THE MENS REA OF PURPOSE (AND GOALS)

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ABSTRACT

Though the model penal code and philosophy and law expect criminals to demonstrate increasing levels of purposefulness as crimes increase in severity, this is often not the case. Through the application of the psychology of purpose (and of hierarchical goal systems) to the topic of mens rea, we seek to bridge the chasm between this proscriptive description of the law and the legal realism descriptive finding that those accused of serious crimes are often impulsive adolescents and adults with a history of childhood trauma. We examine how psychological research on purpose and goals may be used to aid judges and jurors in understanding mens rea. We also address how issues important to purpose theory, such as the difference between purpose and meaning and the impact (or lack thereof) of whether purpose content is pro-social, may be disaggregated and explored in criminal law settings. Additionally, we provide two new scholarly resources to scholars interested in researching mens rea. In Part II we provide data visualizations of the most important literature on the topic of mens rea, allowing interdisciplinary scholars to more easily expand beyond their home disciplines, and in Part VIII we provide a table documenting the formulations of mens rea used by each of the fifty states.¹

1. While less than half of law journal articles include abstracts, they have been found to make research more accessible to other legal scholars and to significantly increase citations and references. See Lee Petherbridge & Christopher A. Cotropia, *Should Your Law Review Article Have an Abstract and Table of Contents: An Empirical Analysis*, 85 Miss. L.J. 295, 301, 303 (2016). The presence of tables of contents is more common than abstracts in law journals, though these are far from

INTRODUCTION

The legal concept of mens rea and legally distinct mental states is a perfect point of interdisciplinary intersection between psychology and law that is crying out for research and empirical study. While much previous research has addressed the topics of neurodevelopment in children and adolescents,² and how clinical conditions affect volitional control,³ relatively little psychological research has addressed the forms of mental states. The purpose of this article is to open another critical line of inquiry for empirical study and experimentation, specifically how the psychological conceptions of purpose and goals relate to mens rea. In our examination of purpose, goals, and mens rea, we will primarily discuss mens rea through the lens of the fivefold taxonomic hierarchy of the Model Penal Code employed by the majority of states (strict liability, negligence, recklessness, knowledge, and purpose/intent), though we will also give some attention to the analysis's applicability to the older common law legal systems of intent still present in some states.

This article consists of eight parts. Part I is a brief overview of what mens rea is (particularly its forms under the Model Penal Code), along with a summary of the small amount of research in psychology and law on these form distinctions, and a brief overview of what psychological purpose is as well as a brief overview of the psychology of goal systems. Where Part I presents a traditional narrative literature review of the concepts specifically relevant to this paper, Part II presents something of an empirical literature review on the whole interdisciplinary topic of mens rea. Parts III through VII begin the process of applying what we know from the psychology of purpose and goals to start scaffolding a theoretical framework for how psychological theories of goals and purpose mesh with legal theories

ubiquitous; and their inclusion is likewise associated with easier discoverability and reference by other scholars. *See id.* at 301.

2. *See* Anthony L. Pillay, *Deliberating the Minimum Age of Criminal Responsibility*, 45 S. AFR. J. OF PSYCH. 143, 146 (2015); Robert L. Leahy, *The Child's Conception of Mens Rea: Information Mitigating Punishment Judgments*, 134 J. GENETIC PSYCH. 71, 71 (1979).

3. *See* N. J. Schweitzer et al., *Neuroimages as Evidence in a Mens Rea Defense: No Impact*, 17 PSYCH., PUB. POL'Y, & L. 357, 360 (2011); Ernest S. Barratt & Alan R. Felthous, *Impulsive Versus Premeditated Aggression: Implications for Mens Rea Decisions*, 21 BEHAV. SCI. & L. 619, 626–27 (2003).

of each of the five forms of mens rea under the Model Penal Code, strict liability,⁴ negligence, recklessness, knowledge, and purpose.

On an initial read of this article, many readers may wish to skip Part II and proceed to the direct application of the theories and concepts from Part I in Parts III through VII. Part II is a tool that seeks to provide an empirical visualization of the strands of interdisciplinary research on mens rea and one which scholars may return to as they seek to situate their own research within this web of research. In addition, Part II aims to inform interdisciplinary scholars of which other disciplines have approached the topic of mens rea and to provide a jumping-off point to explore the literature of disciplines beyond their home discipline.

Likewise, Part VIII provides scholars with another tool, Table 1, and an explanation of it. Table 1 is a compilation of what form of mens rea system (Model Penal Code, common law, or a mixed hybrid) is used by each of the fifty states, Washington, D.C., and the federal government. Table 1 also documents how the highest level of mens rea under the Model Penal Code (intent/purpose) is labeled and defined for each Model Penal Code jurisdiction.

The goal of Table 1 in Part VIII (like Figures 7, 10, and 11 in Part II) is to provide researchers with a resource to begin their interdisciplinary inquiry. It is a signpost for scholars indicating which states and settings should be most plainly relevant for research on the purpose and goals of crimes (i.e., the states which require purpose as a mental component of a crime).

While all parts of this article aim to be helpful for future research, Part VII is a new scholarly resource previously unavailable to either legal scholars or psychological scholars. Much of the citations involved in constructing Part VII, in fact, are behind paywalls for Lexis and Westlaw and entirely unavailable for scholars outside of law schools.

4. Definitionally, strict liability is sometimes not considered a form of mens rea *per se*, but rather the absence of any mens rea requirement. However, there are still some minimal mens rea requirements that apply in terms of volition. Doing something completely involuntarily due to a medical event like a seizure or carrying out an action under the coercion of gun point would still provide grounds for an exculpatory affirmative defense, just as it would for other forms of mens rea. Thus, we describe the hierarchy as fivefold, though some only consider it to be fourfold.

I. WHAT IS MENS REA? AND WHAT IS PURPOSE?

Put simply, mens rea is the mental part of a crime, while the actus rea is the action. As a legal principle,⁵ mens rea dates back to at least the time of King Henry I in approximately 1115 AD with recordings of the legal maxim “Reum non facit nisi mens rea,” roughly defendant is not guilty unless possessing a guilty mind.⁶ By 1644, this evolved into “[A]ctus non facit reum, nisi mens sit rea,”⁷ which means that one cannot be guilty of an act without being guilty in the mind.⁸ According to Jens David Ohlin’s modern criminal law textbook, “[i]n order to make punishment morally justified, the actor’s mind must have displayed a culpable mental state while performing the prohibited action. Mental states also perform another essential function in the criminal law: They provide a scheme for distinguishing between levels of culpability.”⁹ Hence, as punishment for a crime increases, the degree of mental state culpability also increases.

There are essentially two legal system approaches as to what a mental state law requires for each type of crime.¹⁰ There is the older common law approach, often using terms like “malice” or “malice aforethought,” and there is the more common Model Penal Code approach, used in whole or in a hybrid with the common law in thirty states.¹¹ Under the Model Penal Code, there are five ascending levels of mens rea: strict liability, negligence, recklessness, knowledge, and purpose.¹²

Of course, there is more to a crime than just the forms of mens rea. In 1958, philosophy and law scholar Gerhard O.W. Mueller proposed a taxonomic scheme for the elements of a crime, illustrated

5. With the legal principle being based upon the same language in theology in the sermons of St. Augustine. See Albert Lévy, *The Origin of the Doctrine of Mens Rea*, 17 ILL. L. REV. 117, 117 n.1 (1923).

6. LEGES HENRICI PRIMI 5 NO. 28. (L. J. Downer ed. & trans. 1972) (1115).

7. EDWARD COKE, THE THIRD PART OF THE INSTITUTE OF THE LAW OF ENGLAND: CONCERNING HIGH TREASON, AND OTHER PLEAS OF THE CROWN AND CRIMINAL CAUSES 54 (1st ed. 1644).

8. Lévy, *supra* note 5, at 117.

9. JENS DAVID OHLIN, CRIMINAL LAW: DOCTRINE, APPLICATION, AND PRACTICE 137 (Erwin Chemerinsky et al. eds., 1st ed. 2016).

10. See *id.* at 138.

11. See Part VIII.

12. MODEL PENAL CODE §§ 2.02, 2.05 (AM. LAW INST., Proposed Official Draft 1962).

in Figure 1.¹³ In Mueller's scheme, the actus rea consists of both the physical movements of the act and a volitional piece labeled "mental processes of a rational mind."¹⁴ And in Mueller's scheme, mens rea consists of "Substance" regarding ethico-legal-philosophic judgments about morality and "Form."¹⁵ It is the form piece of mens rea which pertains to the topic of this paper. Now, while Mueller groups "mental processes of a rational mind" into actus rea, it should be noted that it is typically considered to fall under the heading of mens rea.¹⁶ But what's important is that volition is a separate dimension distinct from the form or level of mens rea. When volition is categorized as part of mens rea, then what remains of actus rea, in the psychological terms of goal systems theory,¹⁷ would probably best be described as the "means" of goal attainment, which Fishbach, Shah, and Kruglanski define as the actions perceived as instrumental to goal attainment.¹⁸

Meanwhile, goals are defined as constituting mental representations whose content is motivational and, as such, have both cognitive and motivational aspects.¹⁹ Goals are associated with other goals, and a wide range of behavioral means are enacted to attain them.²⁰ Structurally, these goals are generally ordered hierarchically in goal systems, with relatively few higher-order (more abstract) goals and a larger number of lower-order (more immediate, concrete, and actionable) subgoals. An example model of a goal system hierarchy can be found in Figure 2. While there has been much research on the psychology and law of volition, there is very little extant research on the psychology and law of mens rea form.

13. See Gerhard O. W. Mueller, *On Common Law Mens Rea*, MINN. L. REV. 42, 1043, 1066 (1958).

14. *Id.* at 1066.

15. *See id.*

16. *See, e.g.,* Schweitzer et al., *supra* note 3, at 358; Barratt & Felthous, *supra* note 3, at 620.

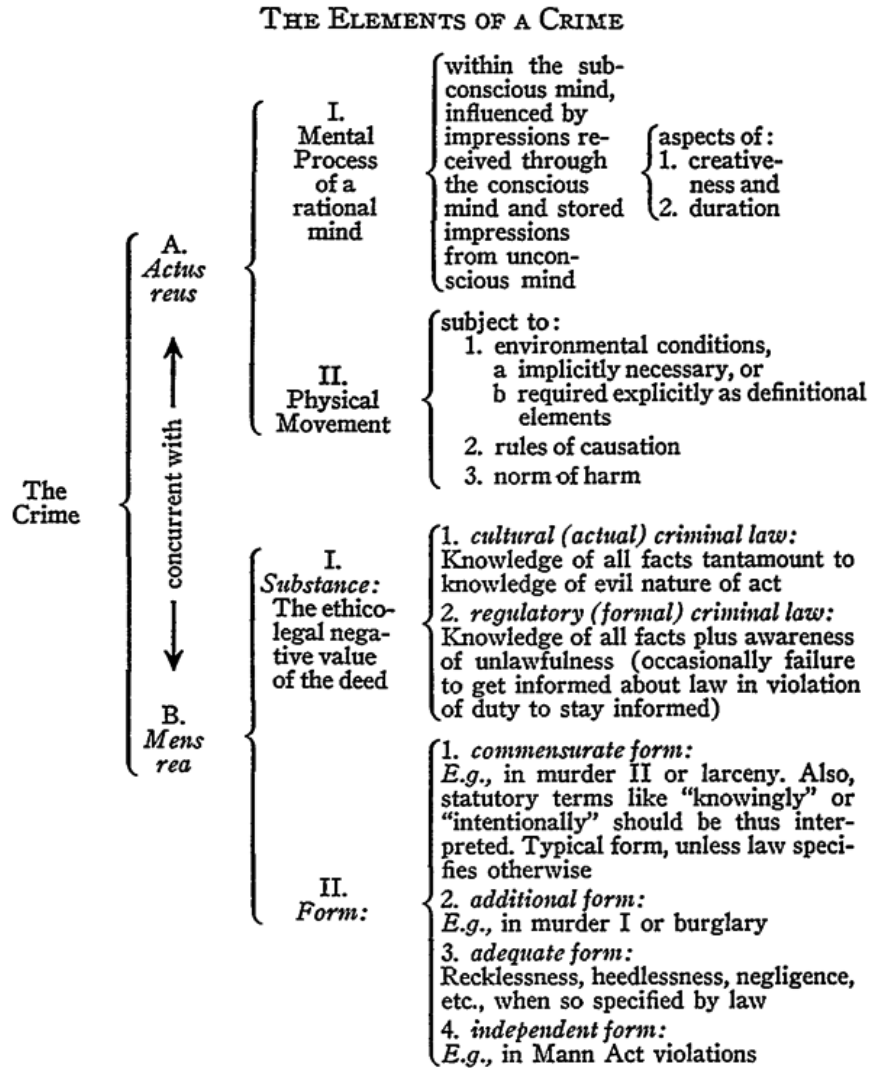
17. *See, e.g.,* Ayelet Fishbach et al., *Emotional Transfer in Goal Systems*, 40 J. EXPERIMENTAL SOC. PSYCH. 723, 724 (2004).

18. *See id.*

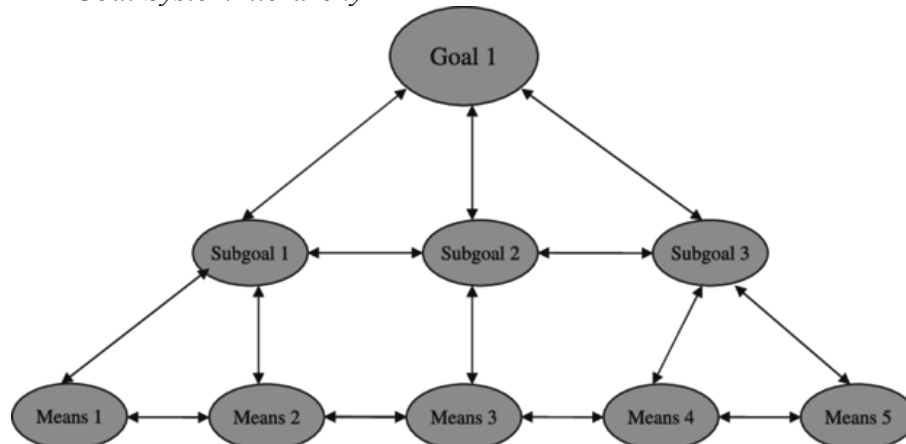
19. *See id.*

20. *See* James Y. Shah & Arie W. Kruglanski, *Aspects of Goal Networks: Implications for Self-Regulation*, in HANDBOOK OF SELF-REGULATION 85, 85 (Monique Boekaerts et al. eds., 2000).

Figure 1



Note. The figure illustrates the elements required for a crime according to Gerhard O. W. Mueller, *On Common Law Mens Rea*, MINN. L. REV., 42, 1043, 1066 (1958). "Mental Processes of a rational mind" is a taxonomically distinct area from the "Form" of the crime.

Figure 2*Goal System hierarchy*

Note. Figure 2 provides a visual model of a goal system hierarchy taken from Köpetz and colleagues,²¹ which in turn was adapted from Kruglanski et al. This figure depicts how one higher-order goal generates multiple subgoals, which in turn can generate multiple means of action to pursue these subgoals. While not illustrated in this figure, it is acknowledged elsewhere by Köpetz and colleagues, and Kruglanski and colleagues, that one means may affect multiple subgoals, as in the proverb of killing two birds with one stone.²² This figure, for simplicity, depicts a three-layered goal system; however, many-tiered goal systems with multiple layers of lower-order subgoals and higher-order goals are possible. However, conceptions of psychological purpose theory only allow purpose to rest at the top layer of goal systems.²³

What research there is on the psychology of forms of mens rea is primarily in the area of folk psychology.²⁴ Folk psychology concepts

21. Catalina E. Köpetz et al., *Goal Systemic Effects in the Context of Choice and Social Judgment*, 2 SOC. & PERSONALITY PSYCH. COMPASS 2071, 2075 (2008); Arie W. Kruglanski et al., *A Theory of Goal Systems*, 34 ADVANCES EXPERIMENTAL SOC. PSYCH. 331, 334 (2002).

22. Kruglanski et al., *supra* note 21 at 334; Köpetz et al., *supra* note 21 at 2076.

23. See Patrick E. McKnight & Todd B. Kashdan, *Purpose in Life as a System That Creates and Sustains Health and Well-Being: An Integrative, Testable Theory*, 13 REV. GEN. PSYCH. 242, 243 (2009).

24. See Robert A. Beatty & Mark R. Fondacaro, *The Misjudgment of Criminal Responsibility*, 36 BEHAV. SCIS. & L. 457, 457 (2018); Owen D. Jones et al.,

are leigh understandings or beliefs that serve as interpretive frames for regular people.²⁵ For example, theory of mind is the folk psychology of how people infer others' thoughts.²⁶

What this small body of literature shows is both cause for hope and concern. Generally, people have some capacity to make mens rea distinctions but are error-prone, most commonly by ascribing higher levels of mens rea than what facts warrant. An early article among this work by Severance, Goodman & Loftus is significant for its pioneering role;²⁷ however, despite Loftus's immense stature as one of the founders of psychology and law and one of the most highly cited psychologists of all time,²⁸ in the nearly three decades since its publication, the article has attracted only twenty-five citations, according to Google Scholar.²⁹ The Severance, Goodman and Loftus study found that while people could reliably distinguish between negligence and purpose (the highest and lowest levels of mens rea forms), every distinction in between failed to reach statistical significance.³⁰ Articles by Shen et al. (2011),³¹ Ginther et al. (2014),³² and Owens et al. (2018)³³ involve some of the same team of researchers. This line of three papers has found that when participants are given the option to ascribe the best mens rea, they do so reasonably well but do have occasional errors, particularly between adjacent

Decoding Guilty Minds: How Jurors Attribute Knowledge and Guilt, 71 VAND. L. REV. 241, 245 (2018); Matthew R. Ginther et al., *The Language of Mens Rea*, 67 VAND. L. REV. 1327, 1329–31 (2014); Pam A. Mueller et al., *When Does Knowledge Become Intent? Perceiving the Minds of Wrongdoers*, 9 J. EMPIRICAL LEGAL STUD. 859, 859 (2012); Francis X. Shen et al., *Sorting Guilty Minds*, 86 N.Y.U. L. REV. 1306, 1308 (2011); Laurence J. Severance et al., *Inferring the Criminal Mind: Toward a Bridge Between Legal Doctrine and Psychological Understanding*, 20 J. CRIM. JUST. 107, 108 (1992); Bertram F. Malle & Sarah E. Nelson, *Judging Mens Rea: The Tension Between Folk Concepts and Legal Concepts of Intentionality*, 21 BEHAV. SCIS. L. 563, 563 (2003).

25. See Malle & Nelson, *supra* note 24, at 565.

26. See *id.* at 563.

27. See Severance et al., *supra* note 24, at 115.

28. See Ed Diener et al., *An Incomplete List of Eminent Psychologists of the Modern Era*, 2 ARCHIVES SCI. PSYCH. 20, 24 (2014).

29. Internet Search for Loftus Article, GOOGLE SCHOLAR, <https://scholar.google.com/> (search field for “Inferring the Criminal Mind: Toward a Bridge Between Legal Doctrine and Psychological Understanding”).

30. See Severance et al., *supra* note 24, at 117.

31. See Shen et al., *supra* note 24.

32. See Ginther et al., *supra* note 24.

33. See Owens et al., *supra* note 24.

forms of mens rea.³⁴ Mueller, Solan, and Darley found that people can categorize mens rea in isolation with reasonable accuracy; yet, when attaching consequences to punishment, prospective jurors are willing to hold people liable for higher levels of mens rea than they actually demonstrated if the prospective jurors find them otherwise morally culpable.³⁵ Beatty and Fondacaro found that when presented only with the highest level of mens rea definition in isolation, namely purpose, participants were consistently willing to ascribe guilt, though this error was least common for crimes that would be properly classified as negligence, the lowest level of mens rea.³⁶ This commonality of errors in classification documented by folk psychology work on mens rea forms indicates the promise of how research on the psychology of purpose and goals (especially within the context of mens rea) could be used to aid jurors in understanding the taxonomic distinctions between forms of mens rea.

In addition to the research on folk psychological conceptions of mens rea, Heller applied cognitive psychology to mens rea to establish a theoretical framework and call to action for research on mind-reading and perspective-taking pertaining to jurors' evaluations of mental states.³⁷ The most significant article (and thus far, one of the only articles aside from the folk psychology articles mentioned above) to heed this call in some shape or form is one by Vilares and colleagues.³⁸ Vilares and colleagues showed, using f-MRI techniques, that perspective-taking for a crime of knowledge looks different than perspective-taking for a crime of recklessness (experimentally defined as certainty vs. varying levels of reasonable probability of carrying illegal goods).³⁹

In Figure 1, Mueller essentially included all the forms of mens rea that appear in the Model Penal Code, although both purpose and knowledge are squeezed into his unitary commensurate form category.⁴⁰ Similarly, both recklessness and negligence are squeezed

34. See Ginther et al., *supra* note 24, at 1358; Owens et al., *supra* note 24, at 276; Shen et al., *supra* note 24, at 1354.

35. See Mueller et al., *supra* note 24, at 889.

36. See Beatty & Fondacaro, *supra* note 24, at 466.

37. See Kevin Jon Heller, *The Cognitive Psychology of Mens Rea*, 99 J. CRIM. L. & CRIMINOLOGY 317, 317 (2009).

38. See Iris Vilares et al., *Predicting the Knowledge-Recklessness Distinction in the Human Brain*, 114 PROC. NAT'L ACAD. SCI. 3222, 3222 (2017).

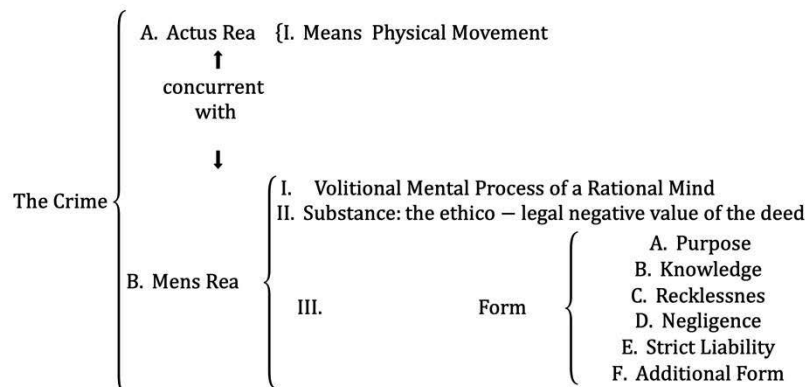
39. See *id.* at 3222–23, 3225.

40. See Mueller, *supra* note 13, at 1066.

into the adequate form category.⁴¹ Mueller's additional form describes how there are actually two mens rea for some crimes, as in the case of burglary.⁴² In burglary, there is both the mens rea to break and enter and the mens rea to commit felonious larceny (AKA theft) once inside.⁴³ In some jurisdictions, Murder 1 is also a crime of additional mens rea, because there is both the mens rea of the act itself, as in Murder 2, and an additional mens rea regarding premeditation.⁴⁴ Spacing out each Model Penal Code mens rea form along with Mueller's additional mens rea and following the more common convention of including volition under the heading of mens rea would leave us with a taxonomy like that shown in Figure 3.

Figure 3

Elements of a Crime Under the Model Penal Code



Note. Figure 3 is a Model Penal Code adaptation of Mueller's "Elements of a Crime," with volitional control grouped under the mens rea header, as is the more common practice. Both Figure 3 and Figure 1 illustrate how form of mens rea is a separate dimension from volition.

One more central element of criminal law and mental processes, which is taxonomically significant for the intersection of psychology with law, is motive. Strictly speaking, criminal motive, unlike criminal

41. *See id.*

42. *See id.* at 1062.

43. *See id.*

44. *See id.*

intent/mens rea, does not need to be proved for someone to be found guilty of most crimes. But according to former prosecutor Bugliosi, “even though the prosecution doesn’t have any legal burden to prove motive, it is always better if it can, because just as the presence of motive . . . is circumstantial evidence of guilt, the absence of motive is perhaps even stronger circumstantial evidence of innocence.”⁴⁵ One way of distinguishing between mens rea and motive is that mens rea could be the immediate intention to do the act, whereas motive is the desire behind why someone wishes to commit an act.⁴⁶ However, mens rea and motive can sometimes be one and the same.⁴⁷ In psychological terms, this kind of relationship would be referred to as goal systems,⁴⁸ with mens rea typically acting as a subgoal to the motive while sometimes coexisting at the same level within a goal system hierarchy. Depending on the mens rea formulation and interpretation, it may also be possible under some circumstances (particularly with the highest levels of mens rea, like purpose) for motive to be the subgoal beneath the more encompassing mental state. Based on these considerations, we have created Figure 4.

45. VINCENT BUGLIOSI, OUTRAGE: THE FIVE REASONS WHY OJ SIMPSON GOT AWAY WITH MURDER 214 (2008).

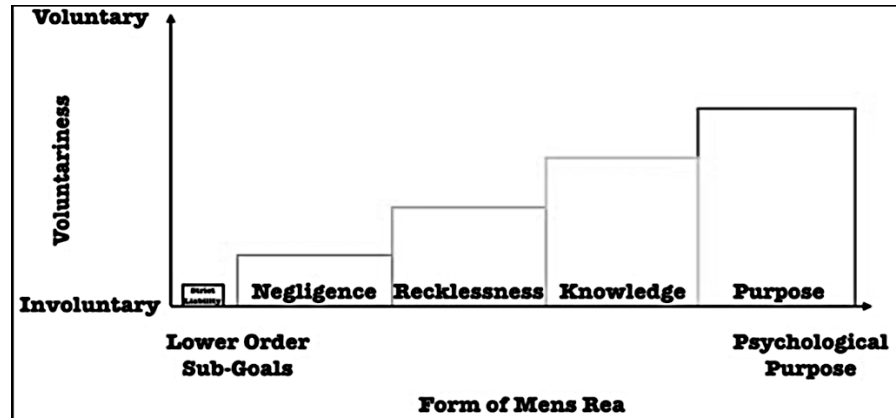
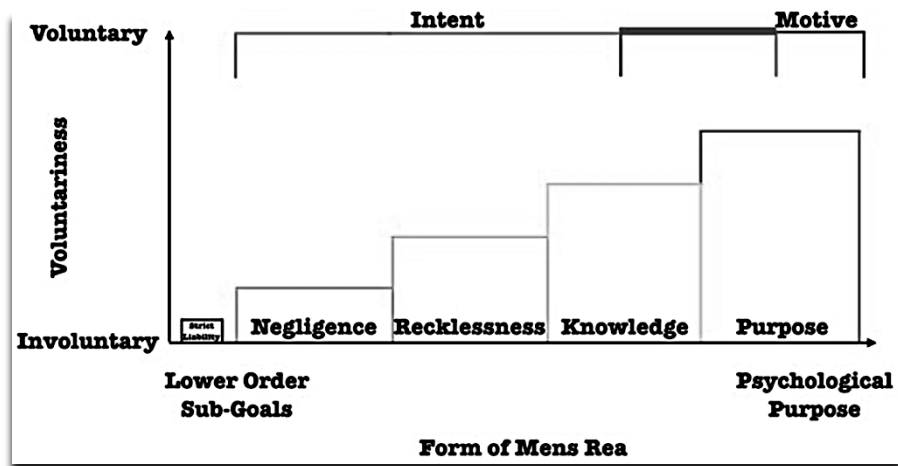
46. See Walter Wheeler Cook, *Act Intention and Motive in the Criminal Law*, 26 YALE L.J. 645, 660–61 (1917).

47. See R. A. DUFF, INTENTION, AGENCY AND CRIMINAL LIABILITY: PHILOSOPHY OF ACTION AND THE CRIMINAL LAW 24 (Basil Blackwell ed., 1990).

48. See, e.g., Fishbach et al., *supra* note 17, at 724.

Figure 4

Conceptual Models of Mens Rea Dimensions of Form and Volition

Figure 4 A**Figure 4 B**

Note. Figure 4 A (Top) is a conceptional diagram depicting voluntariness on the Y-axis dimension and purposefulness on the X-axis dimension. Psychological terms for the X-axis are used below the line, and legal terms are used above the line. Legal terms represent

discrete categories of mens rea forms, whereas psychologically goals and purposive aims exist on a continuum.

Figure 4 B (Bottom) is another conceptual diagram, with voluntariness on the Y-axis dimension and action aim/purposefulness on the X-axis. As in Figure 4 A, Psychological terms for the X-axis are used below the line, and legal terms are used above the line. Overlaid across the top of the image are the legal terms of intent and motive. Intent is an umbrella encompassing the four forms of mens rea, from negligence to purpose (intent is not required for strict liability). Motive is usually located farther along the X-axis and higher up a goal hierarchy than intent; however, the overlapping purple space depicts how intent and motive can simultaneously operate at the same level. The overlapping area also allows for the possibility that for the mens rea of purpose, the motive might actually be a goal beneath a higher order intent.

Figure 4 depicts voluntariness as the Y-axis dimension (where most existing psychology research on mens rea has been conducted).⁴⁹ Along the X-axis are both the discrete legal categories of mens rea and the continuous psychological variable of goal hierarchy level ranging from lower-order subgoals to “purpose in life” at the top of goal hierarchy systems.⁵⁰

In the psychological literature, purpose is defined by leading researchers as follows: “Purpose is a stable and generalized intention to accomplish something that is at once meaningful to the self and of consequence to the world beyond the self,” according to Damon, Menon & Bronk;⁵¹ and “Purpose is a central, self-organizing life aim that organizes and stimulates goals, manages behaviors, and provides a sense of meaning,” according to McKnight and Kashdan.⁵²

Damon, Menon, and Bronk’s definition, while not explicitly a staircase, does require the presence of all of these elements simultaneously, which, added together, can demonstrate purpose.⁵³ Thus, a similar theoretical model to Figure 4’s depiction of forms of

49. See discussion *infra* Part II.C.

50. See McKnight & Kashdan, *supra* note 23, at 243.

51. William Damon et al., *The Development of Purpose During Adolescence*, 7 APPLIED DEVELOPMENTAL SCI. 119, 121 (2003).

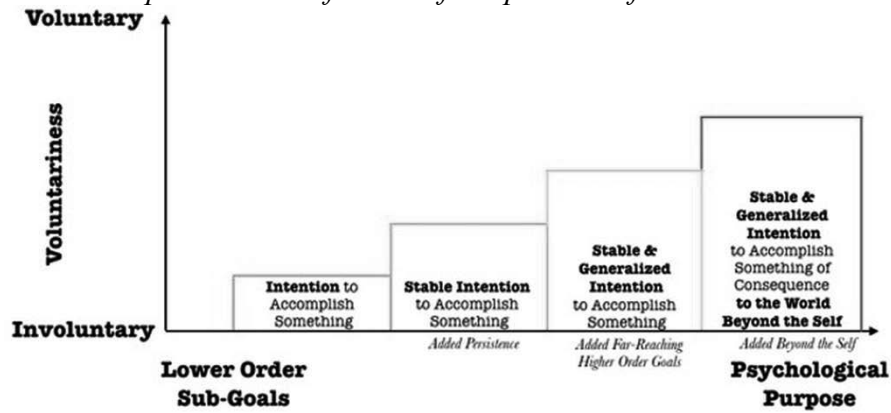
52. McKnight & Kashdan, *supra* note 23, at 242.

53. See Damon et al., *supra* note 51, at 121.

mens rea can be drawn for the required elements of purpose in the Damon, Menon, and Bronk conception, as shown in Figure 5.

Figure 5

Conceptual Model of Sense of Purpose in Life



Elements of Damon's Purpose Conception

Note. Figure 5 is a conceptual diagram depicting the essential elements for Damon and colleagues' conception of purpose. Voluntariness is on the Y-axis dimension, and goal hierarchy is on the X-axis dimension. Successive elements of the definition are listed above the line, with each addition enumerated below the line.

For reference, in the "Questionnaire from Youth Purpose Study" used for the initial wave of Damon and colleagues' work, while all phases of the interview can somewhat be used to assess all aspects of the definition, the first four phases (I. Introduction; II. Inspiration of Purpose/Formative Experiences; III. Opportunities and Supports for Maintenance of Purpose; and IV. Obstacles, Pressures, and Rewards) particularly work to establish the presence of a stable intention to accomplish something.⁵⁴ The fifth phase of the interview (V. Future Goals and Responsibilities) is especially geared toward confirming the generalized far-reaching ambit of the purposive life aim, which will continue to generate new future subgoals.⁵⁵ The penultimate sixth

54. See WILLIAM DAMON, *THE PATH TO PURPOSE: HELPING OUR CHILD FIND THEIR CALLING IN LIFE* 183–86 (First Free Press ed. 2008).

55. See *id.* at 185.

phase of the interview (VI. Categories of Purpose) highlights beyond the self-content of the interview subject's purpose.⁵⁶

The beyond the self-component present in the Damon, Menon, and Bronk definition⁵⁷ is not present in the McKnight and Kashdan definition, where they explicitly decline to place value judgments on purpose content.⁵⁸ Thus, the legal domain provides an opportune context in which to evaluate what, if any, role beyond the self-considerations play empirically. For example, does a criminal purpose for a purely self-interested motive differ psychologically from a criminal purpose to aid others beyond the self, such as to help fellow gang members? Does a white-collar criminal who embezzles funds for personal ambition show less purpose than a white-collar Robin Hood who embezzles funds to redistribute them to his community?

Similarly, both Damon, Menon, and Bronk's and McKnight and Kashdan's definitions conceptualize purpose as distinct from meaning.⁵⁹ Damon, Menon, and Bronk conceptualize meaning as a broader concept, where "one subset of meaning" is meaning derived through life's purpose.⁶⁰ While meaning overall does not require a connection to goals, purpose in life (a subset type of meaning) still has a specific connection to goals and goal-pursuit actions, under Damon, Menon, and Bronk's definition.⁶¹ McKnight and Kashdan agree that purpose-generated goals and subgoals, as part of motivating, planning, and acting, help distinguish purpose from meaning; however, rather than seeing meaning as a broader umbrella concept, McKnight and Kashdan simply see meaning as a distinct construct with a bidirectional relationship to purpose.⁶² Despite significant theoretical

56. *See id.* at 185–86.

57. *See* Damon et al., *supra* note 51, at 121.

58. *See* McKnight & Kashdan, *supra* note 23, at 242.

59. *See* Damon et al., *supra* note 51, at 120–21; McKnight & Kashdan, *supra* note 23, at 242–43.

60. *See* Damon et al., *supra* note 51, at 121.

61. *See id.*

62. *See* McKnight & Kashdan, *supra* note 23, at 242–43; Damon et al., *supra* note 51, at 121. It is worth noting that the theoretical conception of purpose as a subset of meaning is not the only one to construe purpose as part of a broader concept. *See also* Carol D. Ryff & Corey Lee M. Keyes, *The Structure of Psychological Well-Being Revisited*, 69 J. PERSONALITY & SOC. PSYCH. 719, 720 (1995). Purpose is one of six constituent components in a broader psychological well-being construct. In their paper, Ryff and Keyes used factor analysis and a nationally representative sample to validate their six subscales of well-being and confirm an overarching well-being factor. The six subscales are self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and

work on this distinction, conflating purpose and meaning and describing them as the same construct remains a problem that is called out in the literature.⁶³ Some examples from the literature of treating purpose and meaning interchangeably as a unitary concept include Salsman and colleagues,⁶⁴ and Heintzelman and King.⁶⁵ This conflation of purpose and meaning has continued in some corners, despite documented differences in purpose and meaning correlates,⁶⁶ and differences in lay conceptions of purpose and meaning.⁶⁷ However, even researchers who distinguish purpose from meaning acknowledge significant overlap,⁶⁸ and many do view purpose as a distinct component under a broader umbrella construct of meaning.⁶⁹

Exploring purpose within the legal context provides future researchers with an opportunity to further disaggregate purpose and meaning. The essential connection of a psychological purpose to the goals and means carried out in support of that purpose is echoed in the law's essential connection between mens rea and actus rea. This is because mens rea requires an actus rea to carry it out. This link to goals and goal pursuit actions, or actus rea in legal parlance, stands in contrast to meaning, which need not be oriented toward a definite

personal growth. *See id.* Ryff and Keyes' purpose subscale remains one of the most widely used measures of purpose in life.

63. *See, e.g.,* Patrick L. Hill et al., *Life is Pretty Meaningful and/or Purposeful?: On Conflations, Contexts, and Consequences*, 69 AM. PSYCH. 574, 574 (2015); Kaylin Ratner et al., *On the Conflation of Purpose and Meaning in Life: A Qualitative Study of High School and College Student Conceptions*, 25 APPLIED DEVELOPMENTAL SCI. 364, 365 (2021).

64. *See* John M. Salsman et al., *Assessing Meaning & Purpose in Life: Development and Validation of an Item Bank and Short Forms for the NIH PROMIS®*, 29 QUALITY LIFE RES. 2299, 2299 (2020).

65. *See* Samantha J. Heintzelman & Laura A. King, *Life is Pretty Meaningful*, 69 AM. PSYCH. 561, 561 (2014).

66. *See, e.g.,* Login S. George & Crystal L. Park, *Are Meaning and Purpose Distinct? An Examination of Correlates and Predictors*, 8 J. POSITIVE PSYCH. 365, 365 (2013).

67. *See, e.g.,* Ratner et al., *supra* note 63, at 366.

68. *See, e.g.,* McKnight & Kashdan, *supra* note 23, at 242–43; Ratner et al., *supra* note 63, at 365–66.

69. *See, e.g.,* Damon et al., *supra* note 51, at 120–21; Login S. George & Crystal L. Park, *The Multidimensional Existential Meaning Scale: A Tripartite Approach to Measuring Meaning in Life*, J. POSITIVE PSYCH., July 26, 2016, at 2; ROY F. BAUMEISTER, *MEANINGS OF LIFE* 32–36 (1991); Tyler F. Stillman et al., *Alone and Without Purpose: Life Loses Meaning Following Social Exclusion*, 45 J. EXPERIMENTAL SOC. PSYCH. 686, 686–87 (2009).

end⁷⁰ nor move beyond processing and interpreting the world without spurring future actions and goals.⁷¹

Relatedly, when discussing Damon and colleagues' conception of purpose and noble purpose,⁷² a third dimension is also relevant. In Figure 3, the second of the three dimensions of mens rea is "Substance: the ethico-legal negative value of the deed."⁷³ While primarily a question for law and philosophy and entirely irrelevant to McKnight and Kashdan's conception of purpose,⁷⁴ it is nonetheless relevant to the definition of purpose proffered by Damon and colleagues,⁷⁵ where noble purpose has a positive ethical value as opposed to the negative value described by the law and referred to by Damon as ignoble purpose.⁷⁶ According to Damon and colleagues, purpose is related to morals and moral character because "People with purpose have developed stable values that are central to their sense of self, and they are driven by those values to act on them."⁷⁷ In short, ethical and moral questions of substance, though opposite in direction, are important both within the positive psychology work of Damon and colleagues and within legal conceptions of mens rea; and the two may shed additional light on each other.

II. DATA VISUALIZATION OF MENS REA LITERATURE

A. Introduction to Data Visualization

In Part I we outlined the theoretical conception of mens rea and presented a literature review in the traditional sense. Here in Part II, we utilize data visualization to empirically identify the most important legal cases and which disciplines have the most to say about the interdisciplinary topic of mens rea. Section B describes the results of the Lexis Ravel data visualization tool, which creates an off-the-rack data visualization of the most important cases of any desired topic. We

70. See Damon et al., *supra* note 51, at 121.

71. See McKnight & Kashdan, *supra* note 23, at 242–43.

72. WILLIAM DAMON, NOBLE PURPOSE: THE JOY OF LIVING A MEANINGFUL LIFE 9–12, 53–64 (2003).

73. See Figure 3; *see also* Mueller, *supra* note 13, at 1061.

74. See McKnight & Kashdan, *supra* note 23, at 245.

75. See Damon et al., *supra* note 51, at 126–127; DAMON, *supra* note 72, at 9–12.

76. Damon et al., *supra* note 51, at 126; DAMON, *supra* note 72, at 12.

77. Heather Malin, Indrawati Liauw & William Damon, *Purpose and Character Development in Early Adolescence*, 46 J. YOUTH & ADOLESCENCE 1200, 1202 (2017).

proceed to describe and summarize several of these most important cases for mens rea. In section C, we utilize two different corpora of scholarly work and bibliographic information, Web of Science and Scopus, to present data visualizations with VOSviewer of the interdisciplinarity of the work on mens rea. Finally, we organically derive data visualizations to identify research clusters on the topic of mens rea. In this process we document our steps in identifying the “Goldilocks Zone” of search parameters that provides identifiable results (too narrow a search, only a single uninformative cluster emerges, too broad, a multitude of clusters all jumbled on top of each other emerge). Additionally, we also use Scopus to create a pie chart of disciplines using externally defined areas of research based on journal field affiliation.

The goal of Part II is to inform interdisciplinary scholars of which other disciplines have approached the topic of mens rea and to provide a jumping-off point to explore the literature of other disciplines beyond their home disciplines. For a similar data visualization exploration of the co-citation of literature on the psychological conception of purpose see the work of Bronk, Reichard and Qi Li.⁷⁸

Many readers on an initial read of this article may wish to skip Part II and proceed to the direct application of the theories and concepts discussed in Part I to the five forms of Model Penal Code mens rea, strict liability, negligence, recklessness, knowledge, and purpose, in Parts III through VII. The material and data visualizations here in Part II may be most useful to scholars in identifying which legal cases and areas of research papers they should read as foundations to guide their own research questions.

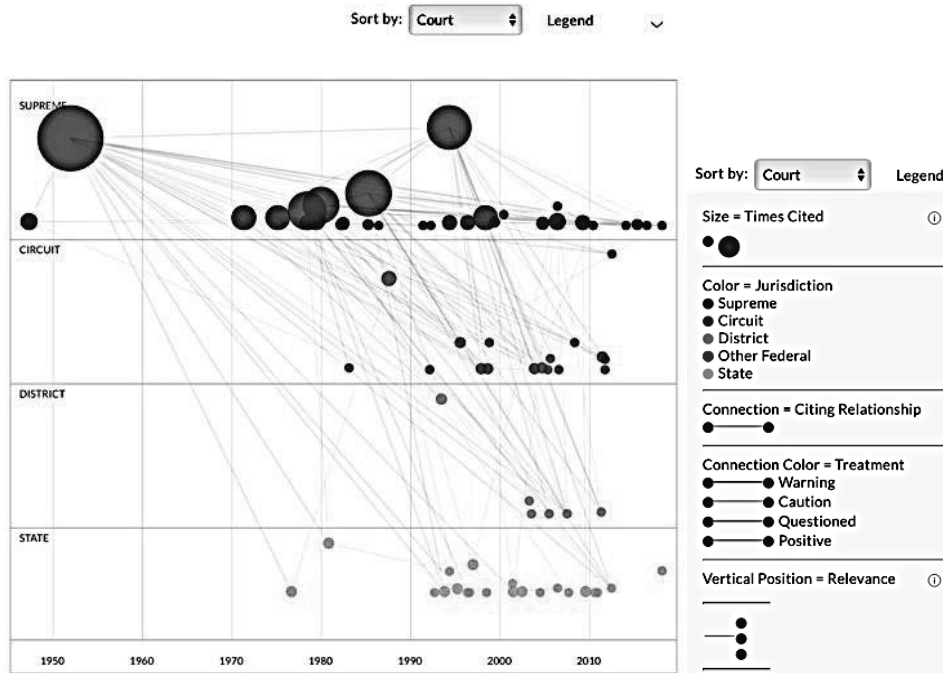
78. See Kendall Cotton Bronk, Rebecca J. Reichard & Jia Qi Li, *A Co-Citation Analysis of Purpose: Trends and (Potential) Troubles in the Foundation of Purpose Scholarship*, 18 J. POSITIVE PSYCH. 1012, 1020–23 (2023) (finding four clusters of purpose research). The largest cluster focused on Ryff’s foundational theories and measures of psychological well-being, with Ryff & Keyes, *supra* note 62, being the most highly cited and connected article in purpose scholarship. The second cluster featured theories and studies of purpose and meaning closely tied to the work of Viktor Frankl, and primarily featured work from clinical and counseling psychology. The third cluster consisted of work on positive aging, featuring research on older adults. The smallest cluster employs Damon and colleagues’ conception of purpose (with Damon et al., *supra* note 51, as the most prominent article in this cluster) and the cluster generally consists of empirical developmental science and positive psychology research on adolescents and younger adults. Bronk, Reichard, & Qi Li also noted their surprise that the vast majority of the research on purpose was published in psychology journals despite purpose’s interdisciplinary nature and relevance to criminal justice and other fields as well.

*B. Lexis Ravel Case Citation Visualizations**1. Introduction to the Lexis Ravel Tools*

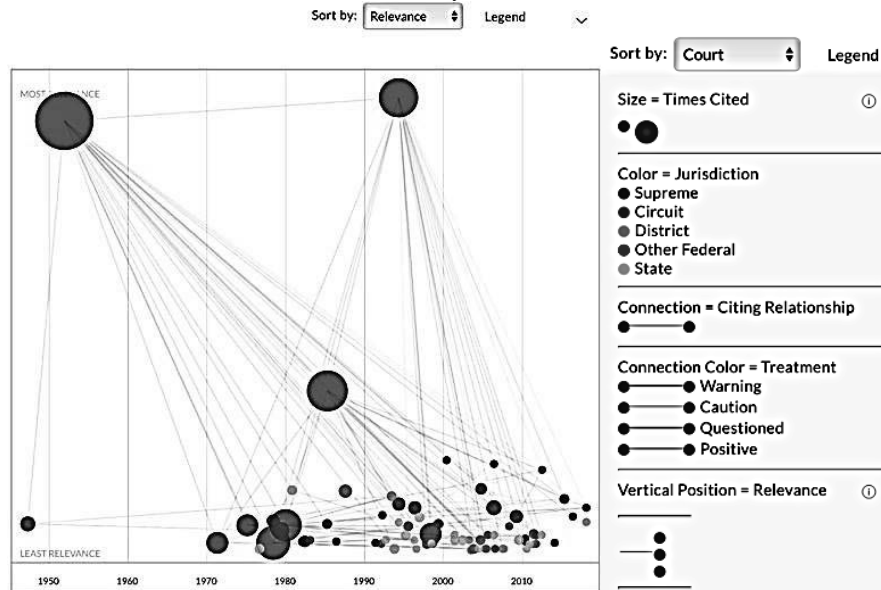
The Lexis Ravel tool helps us visualize the most important cases pertaining to mens rea in the US by both the frequency of citations and the “relevance” to the topic of mens rea. It is not immediately clear how the proprietary Lexis algorithm determines relevance, how it weighs the centrality of mens rea to the holding in cases, the frequency of Shepardization headnotes pertaining to mens rea, or the total times it is discussed in the text.⁷⁹ However, what can be gleaned, at least as an initial guide, is that the relevancy ranking seems to comport with reality. The cases regarded as most relevant have much to do with mens rea and are not simply cases with high citation counts that briefly mention mens rea. The visual depiction of citation counts is not a pure measure of citation counts for each case, but rather a depiction of citation frequency among the seventy-five cases deemed by the Lexis algorithm to have the greatest “relevancy.” The Lexis Ravel tool provides a choice of two visual displays: one, as demonstrated in Figure 6, where cases are sorted by court level (“Supreme,” “Circuit,” “District,” “Other Federal,” and “State”); and another one, as demonstrated in Figure 7 where all cases are ranked by “relevance” in the same space regardless of the type of court (type of court is only indicated by the color of the node representing the case).⁸⁰

79. Or the total number of times mens rea is discussed in the footnotes.

80. See *Ravel™ View in Lexis® Case Search Results*, LEXISNEXIS, https://www.lexisnexis.com/pdf/lexis-advance/Ravel-View-How-To-Literature.pdf?srltid=AfmBOorZrrIv6JN0mRhw-kvPZEvD1ot8ogfpQclYrO_lxqOTUL19mTYJ (last visited Jan. 15, 2025).

Figure 6*Lexis Ravel Mens Rea Cases by Court Type*

Note. Figure 6 is a Lexis Ravel data visualization where cases are sorted by court type. In the parlance of data visualization, cases are nodes (circles), and citations are edges (lines representing citations of one case by another).

Figure 7*Lexis Ravel Mens Rea Cases by Relevance*

Note. Figure 7 is a Lexis Ravel data visualization where cases are sorted by relevance, regardless of the type of court. In the parlance of data visualization, cases are nodes (circles), and citations are edges (lines representing citations of one case by another).

By using the Lexis Ravel tool, we can also see the temporal dimension of when cases were heard along the X-axis.⁸¹ However, the temporal aspect of the data visualization tool produced by Lexis Ravel also reveals a weakness of the search.

2. Supreme Court Cases

The earliest Supreme Court case depicted in the visualization (and also the earliest case of all levels of courts shown in Figures 6 and 7) is *Screws v. United States*, a case where a criminal statute prohibiting any state officer from depriving persons of due process is saved from unconstitutional vagueness by the presence of a “willful”

81. Additionally, (while logged into LEXISNEXIS) by rolling the mouse over cases, researchers can see which other significant cases (nodes) in the visualization the selected case has cited, and which cases have subsequently cited them (edges consist of lines representing citations of one case by another).

(i.e., purposeful) mens rea requirement.⁸² Yet, of course, mens rea did not begin in 1945. For example, the case of *United States v. Balint* took place twenty-three years earlier in 1922, and on Lexis it is clearly marked with the headnote for mens rea of negligence.⁸³ While the Court undoubtedly dealt with the topics of mens rea and its subspecies, intent, recklessness, malice aforethought, etc., it may not have used the specific Latin term mens rea prior to 1945. Thus, despite the recognition of mens rea in Shepardizing some earlier cases, this does not populate the data visualization. The temporal aspect of the Ravel data visualization on Lexis is effectively limited to the last seventy-five years at the Supreme Court level (outside of the Supreme Court, the next earliest case to populate the Lexis Ravel data visualization is *Bethea v. United States*, from 1976, which suggests the corpus drawn on for the included search results at the state, federal district, and appellate circuit levels may be temporally limited to more recent decades⁸⁴).

According to Lexis Ravel visualizations, the three most important Supreme Court cases (and, for that matter, cases in general) on both the metrics of “relevance” and “citations”⁸⁵ are *Morissette v. United States*,⁸⁶ *Staples v. United States*,⁸⁷ and *Liparota v. United States*.⁸⁸ Of these three, the most cited (with 2404 case citations) and chronologically earliest is *Morissette*. *Morissette* reaffirms the essentialness of a mens rea component, in addition to the bad act itself as a guiding, near universal principle for criminal law.⁸⁹ It also holds that when Congress fails to specify what the mens rea is for a crime, the courts generally ought not to interpret that as an absence of mens rea and instead choose the appropriate mens rea based on common law principles and history.⁹⁰ *Morissette* also acknowledges the development of strict liability offenses; without establishing a specific

82. See *Screws v. United States*, 325 U.S. 91, 92–93, 103 (1945).

83. See *United States v. Balint*, 258 U.S. 250, 252 (1922).

84. See *Bethea v. United States*, 365 A.2d 64 (D.C. 1976).

85. “Citations” in the data visualization (with more citations corresponding to larger case node size) are based exclusively on citations from the seventy-five cases with the highest “relevance” value; therefore, discrepancies emerge between cases with the highest “citation” counts in the data visualization and cases with the highest raw citation count across both relevant and irrelevant cases.

86. See generally *Morissette v. United States*, 342 U.S. 246 (1952).

87. See generally *Staples v. United States*, 511 U.S. 600 (1994).

88. See generally *Liparota v. United States*, 471 U.S. 419 (1985).

89. See *Morissette*, 342 U.S. at 251–52.

90. See *id.* at 263.

test to distinguish strict liability crimes from crimes requiring mens rea, it taxonomically describes strict liability offenses as cases generally pertaining to rules passed for the community's safety, health, or well-being.⁹¹

The second chronologically of the three and the third most significant case, both in terms of "relevance" and citations (with 648 citations⁹²), is *Liparota*, a case involving the purchase of food stamps for less than their assigned value.⁹³ In *Liparota*, the court held (because of the rule of lenity) that the government bears responsibility for the burden of proof of the mens rea, which in the instant case required the defendant to knowingly be violating the regulations governing proper usage of/compensation for food stamps.⁹⁴ In terms of the literature, this case is a reminder of the importance of the role of the jury as fact finder and that while mens rea is a psycho-legal concept, ultimately, in each case, the presence or absence of mens rea is a question of fact for the jury.

The case with the most "relevance" according to Lexis and the second most citations (with 1,010 citations⁹⁵) is *Staples*.⁹⁶ Part of this discrepancy between "relevance" and citation count metrics may owe to the fact that *Staples* is forty-two years more recent than *Morrisette*. *Staples* carried forward the rule that, absent a specific declaration by Congress that a criminal statute was meant to impose strict liability, the vast majority of criminal laws would be interpreted by the courts to require mens rea, aside from a small subset of public welfare offenses.⁹⁷ *Staples* also dispensed with reliance upon lenity for the application of this principle.⁹⁸

Looking at the data visualization in Figure 7 for just the "relevance" dimension (not flattened out by court level as in Figure 6), it is clear that these three cases collectively have an outsized influence. When making a comprehensive review of the Supreme Court mens rea doctrine, while all cases (including those from earlier

91. See *id.* at 252–54.

92. Third most citations from the seventy-five most "relevant" cases, not among all cases.

93. See *Liparota*, 471 U.S. at 420–21.

94. *Id.* at 427–28, 435.

95. Second most citations from the seventy-five most "relevant" cases, not among all cases.

96. See generally *Staples v. United States*, 511 U.S. 600 (1994).

97. See *id.* at 618.

98. See *id.* at 619 n.17.

eras using other terms to refer to scienter and mental states) are important, these cases are more important than others. They are substantially higher in the “relevance” dimension and citations from the seventy-five most relevant cases.

3. Other Notable Cases

The visualization of Lexis Ravel in Figure 7 shows that the case outside of the Supreme Court with the highest “relevance” value is a federal appellate case, *United States v. Burwell*.⁹⁹ And Figure 6 shows that the case outside of the Supreme Court with the highest citation count is also an appellate case, *United States v. Pohlott*.¹⁰⁰ Figure 6 also reveals that the district court case with the greatest “relevance” by far among district court cases is *United States v. Cordoba-Hincapie*.¹⁰¹ Most state court cases have similar levels of both “relevance” and citations; however, one case appears somewhat higher on the “relevance” dimension, a Michigan case, *People v. Aaron*.¹⁰² These cases comprise a collection of potentially relevant persuasive precedent for all jurisdictions. *Burwell* is particularly interesting for the inclusion of a dissent written by then Judge, now Associate Supreme Court Justice, Brett Kavanaugh. In *Burwell*, the majority ruled that when a thirty-year mandatory minimum was added to a crime if committed with a machine gun, the *mens rea* only applied to the commission of the crime itself, not to the knowledge of whether or not the gun used in committing the crime could be used as a machine gun.¹⁰³ Kavanaugh, in his dissent, argued that Supreme Court precedent was to always infer a *mens rea* requirement, especially for serious offenses.¹⁰⁴ In *Pohlott*, the Third Circuit ruled that Congress had abolished a diminished responsibility defense due to mental disease (thus upholding the defendant’s conviction) and that the only form of insanity defense left was one completely negating the requisite *mens rea*.¹⁰⁵ *Cordoba-Hincapie* was a drug case where the defendants believed they were illegally importing cocaine, but in fact were

99. See generally *United States v. Burwell*, 690 F.3d 500 (D.C. Cir. 2012).

100. See generally *United States v. Pohlott*, 827 F.2d 889 (3d Cir. 1987).

101. See generally *United States v. Cordoba-Hincapie*, 825 F. Supp. 485 (E.D.N.Y. 1993).

102. See generally *People v. Aaron*, 299 N.W.2d 304 (Mich. 1980).

103. See *Burwell*, 690 F.3d at 502, 515–16.

104. See *id.* at 528–553 (Kavanaugh, J., dissenting).

105. See *Pohlott*, 827 F.2d at 890–91.

illegally importing heroin.¹⁰⁶ The court ruled that there is a rebuttable presumption of knowledge of what drug is being imported; however, when successfully rebutted, then the sentencing must be for the crime the defendants had the *mens rea* for, not the one they actually committed without intent.¹⁰⁷ In *Aaron*, the Michigan Supreme Court abolished the common law felony murder doctrine (where when a death occurs during the commission of another felony, the only *mens rea* required for a murder conviction is that for the other felony) and quashed Aaron's conviction for felony murder, ruling that the "malice" *mens rea* for murder must always be proved in any murder case.¹⁰⁸

*C. Mens Rea Secondary Sources Literature VOSviewer
Visualizations from Scopus and Web of Science*

1. A Choice of Corpus

When analyzing the secondary source scholarly literature about mens rea (or any legal topic), one must make a choice. Do you wish to examine exclusively the material found in law journals and legal literature, or do you wish to examine the interdisciplinary literature, sometimes referred to as "Law and..." scholarship? Ideally, we could look at both; however, at the moment, this is not an option. Lexis and Westlaw have exhaustive access to legal journals but not to other sources of secondary literature, such as the academic journals in other fields to which Web of Science and Scopus have access. And while Web of Science and Scopus have access to some law journals, they do not have the full broad-based access to seemingly all legal journals that Westlaw and Lexis do. Perhaps most importantly, Web of Science and Scopus both allow bibliographic data of search results to be downloaded, which using tools such as VOSviewer, can then be turned into visualizations. Lexis and Westlaw do not.

A search in Westlaw for "mens rea" yields exactly 10,000 results from the secondary literature and combs the entire texts for all articles in the corpus that Westlaw has access to. The actual number of files that touch on mens rea within the Westlaw corpus is probably higher; however, Westlaw caps searches at the top 10,000 most relevant results. An analogous search in Lexis (again with access to searching

106. See *Cordoba-Hincapie*, 825 F. Supp. at 488.

107. See *id.* at 531–32.

108. See *People v. Aaron*, 299 N.W.2d 304, 328–29 (Mich. 1980).

the full text of documents) yields similar results with 19,646 secondary sources that touch on the topic of mens rea, at least in passing. In contrast, the broadest possible search in Web of Science, an “all fields” search, yields only 397 relevant articles, and an “all fields” search in Scopus finds 1,821 articles, a fair amount more than Web of Science, but far less than Lexis and West Law.

For the purpose of examining the interdisciplinary (and particularly psychological) literature conceptions of mens rea, Web of Science and Scopus are the better sources, despite the smaller extent of their legal corpus, because they truly include this interdisciplinary literature. However, another argument in favor of using Web of Science and Scopus is one of simple practicality. At present, bibliographic information cannot be exported from either Westlaw or Lexis. Westlaw has no equivalent to the Lexis Ravel tool, and while Lexis Ravel can be used to great effect to aid in visualization for case citation networks, the Ravel tool is unavailable for secondary source material.

2. *Finding the Goldilocks Zone Conceptually*

The “Goldilocks Zone” is a term based on the fairy tale,¹⁰⁹ and is often used in modern parlance to refer to something which is just right, such as what planets are potentially habitable.¹¹⁰ In a perusal of the mens rea literature, the Goldilocks Zone represents those articles that sufficiently deal with mens rea as a substantial part of the content they discuss. A search based merely on article title (which produces 144 articles in a search of the Web of Science core collection and 121 in a search of Scopus) is probably too narrow, at least conceptually.¹¹¹ On the other hand, a search of everything possible (an “all fields” search) is probably too wide, at least conceptually,¹¹² dragging in articles hardly related (which produces 373 articles for Web of Science and 1,821 articles for Scopus). Conceptually the Goldilocks Zone for mens rea literature is probably the “topic” search in Web of Science, which searches the title, abstract, author, keywords, and keywords plus, and

109. See ROBERT SOUTHEY, *THE STORY OF THE THREE BEARS* (1837), *reprinted in THE CLASSIC FAIRY TALES* 264 (Iona Opie & Peter Opie ed., 1974).

110. See Charles H. Lineweaver et al., *The Galactic Habitable Zone and the Age Distribution of Complex Life in the Milky Way*, 303 *SCI.* 59, 60 (2004).

111. But perhaps not descriptively for web of science, see Figure 9 employing a title search in contrast to Figure 8 employing a topic search.

112. But perhaps not descriptively for Scopus, see Figures 11 and 12 employing all fields searches in contrast to Figure 10 employing topic equivalent searches.

the analogous “Article Title, Abstract, and Keywords” search in Scopus, which yield 370 articles in the Web of Science corpus and 431 in the Scopus corpus.¹¹³ This is, therefore, the point chosen when imposing external categories of research areas as in section 4; however, as discussed in the next section, when organically deriving clusters from the citation networks, the “topic” search (and its Scopus equivalent) do not yield intelligible results.

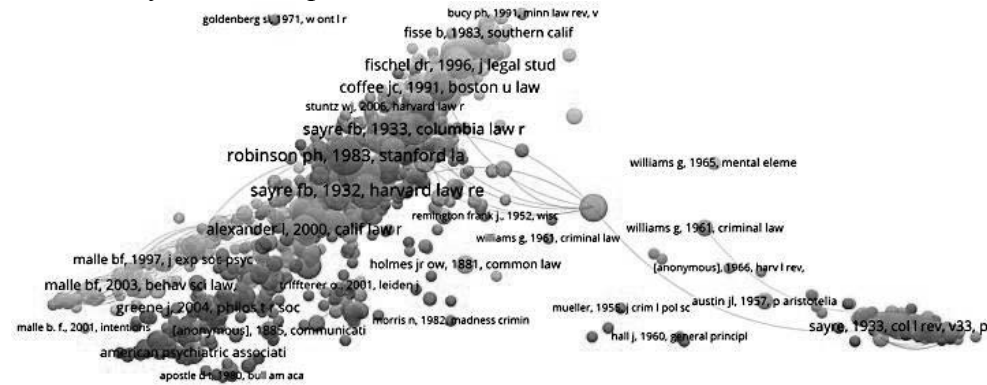
3. Finding the Goldilocks Zone Organically from Cluster Analysis Data Visualizations

What level makes the most sense for a data visualization must be balanced against the backdrop of ideal scholarly scope and the real-world consideration of what information can be gained from a visual display of data from each search level. We begin this consideration with a Web of Science topic search co-citation cluster map with a minimum of two co-citations, as shown in Figure 8.¹¹⁴ Unfortunately, this yields a mess with ten indecipherable clusters bunched up together. To be useful and interpretable, the information must be narrowed. In this case, narrowing the scope of inquiry to a title search is the appropriate approach.¹¹⁵

113. Based on the volume of search results we can also see that the Scopus “all fields” search is able to tap into information simply unavailable to Web of Science, dramatically increasing the article yield compared to the topic search. In contrast, a Web of Science all fields search (not illustrated) finds only an additional three mens rea articles in the expanded all fields search. This de minimis three article difference as a practical consideration could be a small argument for the Goldilocks Zone for Web of Science searches to be visualizations drawn from the all fields search, which is essentially a small remit wider than the topic search.

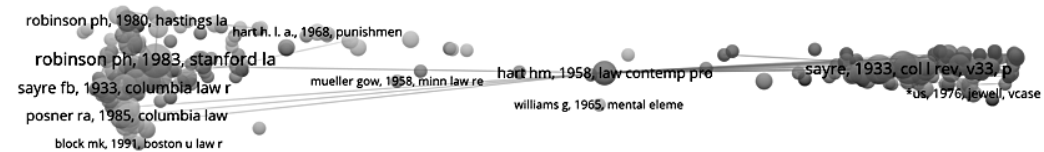
114. An all fields search visualization for Web of Science is nearly identical to the topic search visualizations of Figure 8.

115. Attempting to narrow the scope of the all fields search by increasing the required co-citation count from two to five is less helpful than narrowing the search parameter to article titles. An increase in co-citation requirement overcorrects, reducing the corpus to 119 articles, and while the cluster count is reduced to a manageable six, much of the interdisciplinarity is lost and we are left with four clusters of exclusively law journals and two clusters of predominantly law journals with a small amount of everything mixed in. Due to its lack of usefulness this graph is not included here.

Figure 8*Web of Science Topic Search*

Note. Figure 8 is a Web of Science topic search co-citation cluster map with a minimum of 2 co-citations.

Figure 9 narrows the scope by of the search by displaying a cluster map of a mens rea title search in the Web of Science core collection corpus.

Figure 9*Web of Science Title Search*

Note. Figure 9 is a Web of Science title Search co-citation cluster map with a minimum of two co-citations.

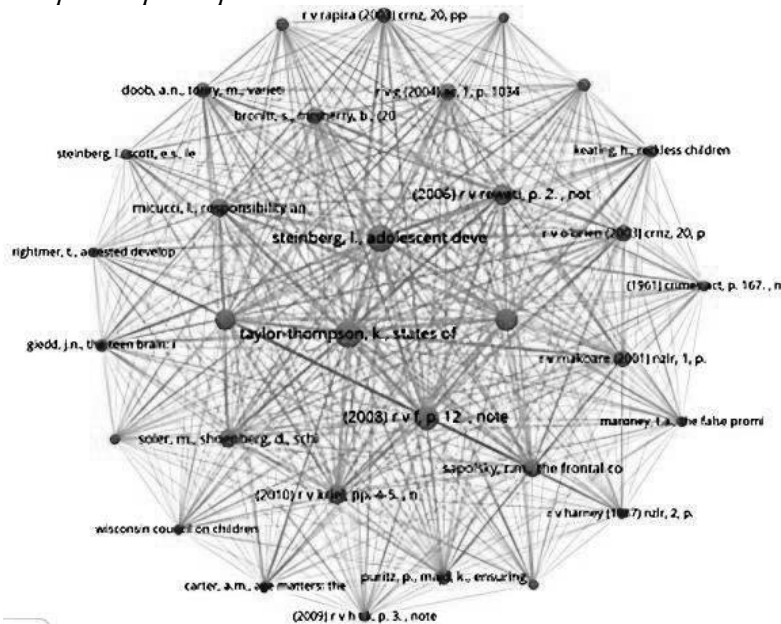
We can see that the title search breaks down into a relatively neat and understandable six-cluster framework. Specifically, one of the clusters consists of older philosophy and law work; one cluster consists of modern law review articles; one cluster consists of mid-century law review articles; one cluster is highly interdisciplinary, with a heavy representation of psychology and law; one cluster is predominantly comprised of contemporary law journals, but with some interdisciplinary psychology and law and philosophy and law

components; and lastly there is also one cluster around economics and law topics. This comprehensible six-cluster structure of mens rea literature yielded by the title search makes a compelling case for the title search (especially when contrasted against the results of the topic search) being the Goldilocks Zone for an organically derived data visualization from the Web of Science corpus.

Scopus as a corpus has a similar problem but in the other direction. We can see this when we begin a topic equivalent search data visualization for Scopus in Figure 10.¹¹⁶

Figure 10

Scopus Topic Equivalent Search



Note. Figure 10 A is a Scopus topic equivalent search co-citation cluster map with a minimum of two co-citations.

For Scopus, in the topic search equivalent, Scopus may not provide as extensive bibliographic information as Web of Science does, because when set to create a visualization, only thirty-two articles remain with two or more co-citations. All of these articles are

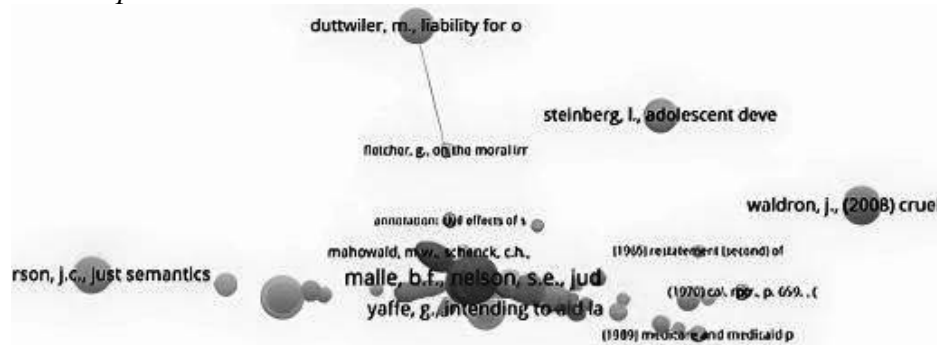
¹¹⁶ A title search visualization for Scopus is nearly identical to the topic search equivalent visualization of Figure 10 and likewise produces only a single cluster.

grouped into a single cluster. So, aside from identifying thirty-two potentially prominent articles on mens rea, this is meaningless.

In contrast, a Scopus derived co-citation data visualization for an all fields search encounters the opposite problem of being too large and expansive a collection as in Figure 11.

Figure 11

Scopus All Fields Search 2-Cocitations



Note. Figure 11 is a Scopus all fields search co-citation cluster map with a minimum of 2 co-citations.

Figure 11 depicts too much clustering, with forty clusters all jumbled together. However, a more reasonable visualization can be found for the Scopus all fields search by increasing the required co-citation count to five as in Figure 12.

Figure 12

Scopus All Fields Search 5-Cocitations



Note. Figure 12 is a Scopus all fields search co-citation cluster map with a minimum of 5 co-citations.

In Figure 12, depicting a Scopus all fields search co-citation data visualization with a minimum of five co-citations, six clusters emerge. The largest cluster consists primarily of contemporary law and

philosophy scholarship, with a pinch of judgment and decision-making psychological research; one cluster consists of law journal articles from the 80s and 90s; one cluster consists of law journal articles from all times, but mostly the present; one cluster focuses on psychology and law; one cluster focuses on older philosophy and law scholarship, and the final cluster consists of just two items. For Scopus, Figure 12 is arguably the Goldilocks Zone.

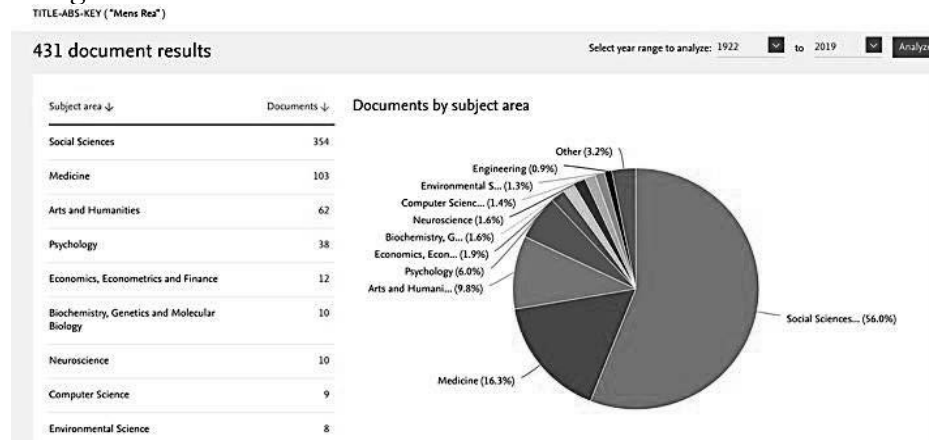
4. *Finding the Goldilocks Zone Conceptually Redux:
Imposition of External Categories*

The data visualizations and the categories of clusters in Figures 8 through 12 are all derived organically from the co-citations within the corpus itself. While we have attempted to describe the content of the six clusters that emerge in the Web of Science title search or the six clusters that emerge in the Scopus all fields five minimum co-citations visualization, these descriptive labels for categories, like philosophy and law or economics and law, are not hard and fast rules, but rather generalizations. Scopus does, however, provide an alternative data visualization option. Instead of organically letting all cases cited in the corpus serve as nodes and co-citations serve as connecting edges, Scopus also allows for pie charts with the external imposition of categories based on factors such as the field classification of any given journal.

Since the subject area pie chart data visualization that Scopus provides is tagged with externally imposed categories rather than organically arising clusters, our choice of search level a priori becomes more important again. While with cluster analysis, there is some reasonable defensibility of altering search scope in response to the data to find a level of analysis that allows for substantive interpretability, in contrast, with pre-loaded, externally imposed, always interpretable subject area categories, our earlier discussion about what level of search is most appropriate conceptually, again, applies. And here this means that Figure 13, with its usage of the topic equivalent search, is the Goldilocks Zone.

Figure 13

Scopus Topic Equivalence Search, Externally Imposed Categories



Note. Figure 13 is a Scopus topic equivalence search (title, abstract, & keywords) subject area pie chart breakdown.

In Figure 13, we can make several observations. First, if we look at the raw numbers to the left and compare them with the percentages on the right, we can see that many articles are multi-tagged as both social sciences and narrower levels of discipline. The largest category, unspecified social sciences, consists primarily of law review articles, though much of the “Law and...” journals are also represented in this space. The second largest category is medicine; the relevance and nature of which is self-evident. The third largest category is called “Arts and Humanities,” though really, the vast majority of this content is law and philosophy, with a small amount of other material, such as law and history, mixed into the category as well. The psychology category is fourth at 6% of the literature or thirty-eight articles. Among these thirty-eight articles is some psychiatric material and clinical psychological material on the insanity defense, as well as some work on the neurodevelopment of children; there also is work directly on forms of mens rea (such as the aforementioned folk psychology work discussed in Part I). The fifth largest category is economics at 1.9%, biochemistry is sixth at 1.6%, neuroscience is tied for sixth at 1.6% (some of the neuroscience material is duplicative of items also identified as psychological, and some of it is unique), computer science is the eighth largest at 1.4%, environmental science is the ninth largest with 1.3%, engineering is tenth with 0.9%, and other assorted

categories (with less than 1% individually) combine to make up 3.2% of the material.

D. Conclusions

So, what can we say in conclusion about the case literature and secondary material scholarship on mens rea from empirically derived data visualizations? As far as binding legal precedent in the U.S., we know that the three biggest cases by a wide margin are *Morissette v. United States*,¹¹⁷ *Liparota v. United States*,¹¹⁸ and *Staples v. United States*.¹¹⁹ We know that *Screws v. United States* appears to be the earliest Supreme Court case to explicitly use the term “mens rea,”¹²⁰ even though *Screws v. United States* references earlier cases on the topic, and the secondary literature was already using the term decades prior.¹²¹ Therefore, any exhaustive historical examinations of the literature must use earlier terms such as scienter and terms specific to the type of mens rea required in the instant case. In addition to the nationally binding precedent of the Supreme Court,¹²² several other notable cases ought to be considered at least as persuasive in the districts, circuits, and states where they are not binding. These other notable cases include *United States v. Burwell*,¹²³ *United States v. Pohlot*,¹²⁴ *United States v. Cordoba-Hincapie*,¹²⁵ and *People v. Aaron*.¹²⁶

As far as the secondary literature is concerned, we can see three potential Goldilocks Zones for search. Conceptually, and with

117. See generally *Morissette v. United States*, 342 U.S. 246 (1952).

118. See generally *Liparota v. United States*, 471 U.S. 419 (1985).

119. See generally *Staples v. United States*, 511 U.S. 600 (1994).

120. See generally *Screws v. United States*, 325 U.S. 91 (1945).

121. See e.g., Albert Lévy, *Extent and Function of the Doctrine of Mens Rea*, 17 ILL. L. REV. 578 (1922) (published in what is now the NW. U. L. REV. but was then known as the ILL. L. REV)1.

122. Mens rea occupies an interesting position in terms of how binding Supreme Court precedent on it is. The requirement that most crimes must have a mens rea component is a binding constitutional due process consideration; however, much of what makes up the specific mens rea requirements for each crime is determined by state law, and the exact boundaries of the public welfare (strict liability) regulations exceptions to a mens rea requirement in federal and state law are also distinctly controlled by each entity within its sphere of our federalism system.

123. See generally *United States v. Burwell*, 690 F.3d 500 (D.C. Cir. 2012).

124. See generally *United States v. Pohlot*, 827 F.2d 889 (3d Cir. 1987).

125. See generally *United States v. Cordoba-Hincapie*, 825 F. Supp. 485 (E.D.N.Y. 1993).

126. See generally *People v. Aaron*, 299 N.W.2d 304 (Mich. 1980).

externally imposed scholarship field taxonomy, the Goldilocks Zone is a topic search (i.e., Figure 13) which highlights the five most important categories of the multi-disciplinary articles scholarship as law review articles, humanities (i.e., philosophy) and law articles, medicine and law articles, psychology and law articles, and economics and law articles. For organically derived data visualizations using Web of Science, the Goldilocks Zone is a two-co-citation minimum title search (i.e., Figure 9) with six clusters (older philosophy and law, modern law review articles, mid-century law review articles, psychology and law and general interdisciplinarity, contemporary law journals, and economics and law). On the other hand, for organically derived data visualizations using Scopus, the Goldilocks Zone is a five-co-citation minimum all fields search (i.e., Figure 9) with six clusters (contemporary law and philosophy plus judgment and decision-making psychological research, law journal articles from the 80s and 90s, predominately contemporary law journal articles, psychology and law, older philosophy and law, and a two-item cluster). Not only do similar conceptual clusters emerge from all three ways of looking at the subject area, but in both of the organically derived visualization networks, we also see temporal clustering of some waves of scholarship conducted in certain areas.

So, in conclusion, thanks to data visualization, we know quite a lot about what cases are most important and what strains of interdisciplinary scholarly research are central for the concept of mens rea.

III. STRICT LIABILITY

Strict liability crimes/offenses/violations are punishable acts for which there is no mental state requirement whatsoever.¹²⁷ In actual practice, strict liability is limited mostly to what are often referred to as public welfare offenses, things like pollution, consumer protection, and some traffic regulations.¹²⁸ One of the most common areas of consumer protection that employs strict liability for offenses is products liability, embodying the general idea that products should not be defective and should perform as advertised.¹²⁹ For example, glasses

127. See MODEL PENAL CODE § 2.05 (AM. LAW INST., Proposed Official Draft 1962).

128. See DUFF, *supra* note 47, at 198; see also Mueller, *supra* note 13, at 1092–93.

129. See Alan Schwartz, *The Case Against Strict Liability*, 60 FORDHAM L. REV. 819, 819–20 (1991).

should not instantly shatter when placed on the face, and stoves should not explode. The greater the danger of a product defect, the greater the responsibility to disclose and forewarn.¹³⁰

Because strict liability offenses have no mental state requirement, there is very little that psychology and psychological research have to say about them directly. Where psychology could well be relevant to strict liability is in establishing the boundaries of this limited area of the law. The drafters of the Model Penal Code in an explanatory note wrote that “The theory of the Code is that noncriminal offenses, subject to no severer sanction than a fine, may be employed for regulatory purposes upon the basis of strict liability because the condemnatory aspect of a criminal conviction or of a correctional sentence is explicitly precluded.”¹³¹ So, psychology broadly could be relevant in illustrating why a crime ought not to be included in the strict liability category by contrasting the mental processes of a person committing the crime in question with the mental processes typical of public welfare type offenses. Existing psychology research has established that the folk psychology of people’s social rule perception tracks pretty closely with actual strict liability offenses and that, unlike with most other forms of mens rea, mock jurors are much less influenced by the harm done than by social rule violations.¹³² For example, illegally dumping a container of chemicals too close to a waterway is an offense and purity violation of social norms, regardless of whether that one specific container’s worth of chemicals actually causes harm.¹³³

One of the two most influential mens rea cases of the last century in the United States concerned strict liability. In *Staples v. United States*, the Court ruled that (for federal law) unless statutes explicitly declare there to be no mens rea requirement, they should not be interpreted as strict liability offenses.¹³⁴ In other words, in the absence of direction about mens rea from Congress, courts should ascribe the appropriate mens rea to criminal statutes, not interpret them as waiving a mens rea requirement. But the Court also based this specific

130. See *id.* at 840–41.

131. MODEL PENAL CODE § 2.05 explanatory note (AM. L. INST., Proposed Official Draft 1962).

132. See, e.g., Carly Giffin & Tania Lombrozo, *Wrong or Merely Prohibited: Special Treatment of Strict Liability in Intuitive Moral Judgment*, 40 L. & HUMAN BEHAV. 707, 714–15 (2016).

133. See *id.* at 716–17.

134. See *Staples v. United States*, 511 U.S. 600, 619–20 (1994).

holding on two other forms of evidence: first, that the public welfare offenses regulated by strict liability generally had relatively small punishments and, second, the social norms about the item (guns) being regulated.¹³⁵ Since the behavior of the defendant in *Staples*, owning a gun while ignorant of its illegal modification, does not violate a social norm, that too was evidence of the requirement of mens rea of knowledge of the modification rather than a strict liability offense, where mens rea and knowledge are irrelevant. So, whether a statute is more related to the psychology of social norms or the psychology of goals can shed some insight into whether it ought to properly be construed as a crime of strict liability or of some other form of mens rea.

IV. NEGLIGENCE

Negligence is the second lowest level of mens rea after strict liability and can be found in many common law criminal codes as well as those based around the Model Penal Code. The Model Penal Code defines acting negligently as:

A person acts negligently with respect to a material element of an offense when he should be aware of a substantial and unjustifiable risk that the material element exists or will result from his conduct. The risk must be of such a nature and degree that the actor's failure to perceive it, considering the nature and purpose of his conduct and the circumstances known to him, involves a gross deviation from the standard of care that a reasonable person would observe in the actor's situation.¹³⁶

Psychologically, the mens rea form of negligence raises questions at both the low end and the high end. On the low end, this concerns the legal standard of minimum levels of thought necessary for a crime. A goal system can extend downward to means below the level of conscious control (such as the means of how frequently and deeply a person breathes while in pursuit of the goal of running a marathon).¹³⁷ Still, for something to be a crime of acting negligently it must be of high enough order that a person has a reason for his conduct chosen means. It must be a high enough order that he or she could be dissuaded from the chosen means by the awareness of risk. Therefore, the legal question of what is the minimum level of thought for a crime

135. See *id.* at 613–15, 617–18.

136. MODEL PENAL CODE § 2.02(2)(d) (AM. L.A.W INST. 2023).

137. See Shah & Kruglanski, *supra* note 20, at 86.

of negligence is inextricably linked with the psychological question of what is the lowest-order goal or goal system that can consciously generate means.

On the higher end, the presence of higher-order goals or psychological purpose should act as evidence refuting the requirements that the risk be “unjustifiable.” These higher-order goals or purposive life aims are the justification. Theoretically, negligence describes an “actor’s failure to perceive” risk associated with an action. Thus, proof of higher-order goals overriding that risk raises questions as well regarding whether the presence of a higher mens rea form could be evidence against a charge at a lower level. This issue is also discussed in the following section on recklessness.

V. RECKLESSNESS

The mens rea form of recklessness is perhaps the most relevant to the psychology of contrasting goal systems and questions of approach-avoidance motivation. The Model Penal Code defines recklessly as the following:

A person acts recklessly with respect to a material element of an offense when he consciously disregards a substantial and unjustifiable risk that the material element exists or will result from his conduct. The risk must be of such a nature and degree that, considering the nature and purpose of the actor’s conduct and the circumstances known to him, its disregard involves a gross deviation from the standard of conduct that a law-abiding person would observe in the actor’s situation.¹³⁸

In psychological terms, the law effectively says that everyone has (or should have) a goal system regarding proper care, caution, and general avoidance of harm (Goal System A). And that when a person unjustifiably gives more motivational weight to another competing goal system (Goal System B), and a criminally liable act or harm results; then that person is guilty of recklessness. There are several major veins for psychological inquiry regarding crimes of recklessness. Firstly, the phrase “consciously disregards” means that for a person to be guilty he or she must choose Goal System B over the safety and risk concerns of Goal System A. While less explored in the legal domain, these questions of approach and avoidance in

138. MODEL PENAL CODE § 2.02 (2)(c).

psychology date back at least to Lewin¹³⁹ and continue to be addressed in more contemporary times with hierarchical goal systems.¹⁴⁰ In approach motivation, behavior is instigated or directed by a desire to achieve a positive event or possibility, whereas in avoidance motivation, behavior is instigated or directed by a desire not to have a negative event or possibility materialize.¹⁴¹ The legal domain and crimes of recklessness specifically provide a great ecological context for the study of why one goal system is more influential in a given setting than another. This is because for a crime to be reckless, there must be two goal systems, with the illegal one chosen over the safety concerns of the legal one. And this psychology is important to the legal system because it can show whether someone really is following a more proximal approach goal at the expense of a more distal safety/avoidance of harm goal.

Additionally, the phrase “unjustifiable risk” is also something to which psychology can speak. Depending on which hierarchical goal system being acted on has a greater generation of subgoals, this may inform the question of whether the risk was justifiable.

Suppose there isn’t conscious disregard because of unawareness of risk or, in psychological terms, the lack of existence or awareness of a competing goal system. In that case, a crime can’t be reckless (though it may be negligent). Similarly, if a goal hierarchy is too high or the action is generated in pursuit of one’s purpose in life, then the mens rea also does not appear to fit. This intersection point of law and psychology is less clear jurisprudentially. In some cases, this may serve to negate the “unjustifiable” prong. In other cases, it could be a taxonomic argument for an action being better described by a mens rea form of purpose or knowledge.

As with negligence, if someone is acting in concordance with a psychological purpose in life, the mens rea of “recklessness” is not an apt characterization of their mental state. It would not exactly be new or controversial for a prosecutor to make an argument that a defendant’s actions are more in line with a mens rea of purpose or knowledge. What is less clear is what would happen if a defense

139. See generally KURT LEWIN, A DYNAMIC THEORY OF PERSONALITY (Donald K. Adams & Karl E. Zener trans., McGraw-Hill Book Co. 1st ed. 1935) (arguing that a person’s approach and avoidance is due to environmental influences).

140. See, e.g., Andrew J. Elliot et al., *Approach and Avoidance Motivation in the Social Domain*, 32 PERSONALITY & SOC. PSYCH. BULL. 378, 378 (2006).

141. See Andrew J. Elliot & Martin V. Covington, *Approach and Avoidance Motivation*, 13 EDUC. PSYCH. REV. 73, 73–74 (2001).

counsel were to argue that something is not a crime of recklessness because the defendant's actions were taken in pursuit of their purpose or at least higher-order goals, but that for other reasons (perhaps additional actus rea requirements for the higher mens rea purpose instantiation of the crime, or simply that the greater offense is not charged) that the defendant lacks the appropriate mens rea to be found guilty. If a person is too purposeful in their action, is that a defense for a charge of recklessness? This is in some contrast with the depiction we proposed in Figure 4. Still, it is not 100% clear that there is an unbroken continuum of escalating mental states for all crimes in all jurisdictions or, if instead, there may be some gaps where the mental state is inconsistent with the fact pattern. A person who is more purposeful may be more sympathetic and thus charged with a lower-order crime even though the definition does not fit. For example, if a pregnant woman's spouse, while driving her to the hospital to give birth, injures a pedestrian, is that spouse necessarily guilty of a reckless vehicular assault when the spouse was acting in concordance with his or her family-centric purpose in life?

Lastly, the second sentence of the Model Penal Code for recklessness requires "gross deviation from the standard of conduct that a law-abiding person would observe in the actor's situation."¹⁴² Again, psychology has a lot to say about this because this is a question, in large, part of normative behavior. Returning to the goal system hierarchy of goals and means,¹⁴³ how do people make decisions about their goals and the means to attain them? And are a defendant's actions consistent or inconsistent with how people normatively would approach (or avoid) that goal? Purpose and positive psychology could also play an exculpatory role; for example, if a purposeful person is less likely to be goaded on by the rewards of social praise,¹⁴⁴ then evidence of their purposefulness could be used as evidence to dispute alleged recklessness.

VI. KNOWLEDGE

The Model Penal Code defines knowingly as follows:

142. MODEL PENAL CODE § 2.02(2)(c) (AM. L. INST. 2023).

143. See, e.g., Fishbach et al., *supra* note 17, at 723.

144. See Anthony L. Burrow & Nicolette Rainone, *How Many Likes Did I Get?: Purpose Moderates Links Between Positive Social Media Feedback and Self-Esteem*, 69 J. EXPERIMENTAL SOC. PSYCH. 232, 232 (2017).

A person acts knowingly with respect to a material element of an offense when: (i) if the element involves the nature of his conduct or the attendant circumstances, he is aware that his conduct is of that nature or that such circumstances exist; and (ii) if the element involves a result of his conduct, he is aware that it is practically certain that his conduct will cause such a result.¹⁴⁵

In other words, this mens rea means that a person knows he/she is doing an action or knows that he/she is performing an action that will definitely cause a result, where the prohibited actus rea is either the action or the result. Knowledge does not require desire or aim; thus, purpose content or goal content contrary to (or orthogonal to) the consequences of a crime could be used as exculpatory evidence to show that knowledge is the more appropriate mens rea charge for a given criminal action than purpose. In psychological terms, a crime of knowledge mens rea requires goals and means to attain those goals that cause a foreseeable prohibited consequence. Where recklessness requires forsaking a goal system of risk avoidance, knowledge requires the approach motivation for the desired goal to outweigh the avoidance motivation for the illegal consequence. In a certain sense, psychological purpose may often be proof of legal knowledge, rather than legal purpose, because crimes of knowledge are understood by the legal community not to require the crime to be the desired ends in and of itself. Therefore, psychologically a distinct aim or purpose separate from the action itself, for which the action is simply a precursor step, could serve as evidence against a mens rea of purpose and in favor of knowledge, especially if the prohibited actus rea is an undesired (avoidance motivating) consequence.

VII. LEGAL PURPOSE/INTENT AND PSYCHOLOGICAL PURPOSE AND GOALS

Psychologically, Damon, Menon, and Bronk see purpose as a far-reaching higher-order goal of sorts within goal systems,¹⁴⁶ and McKnight and Kashdan similarly place purpose atop goal systems as the highest-order aim.¹⁴⁷ Purpose is so tied to aims and the subgoals

145. MODEL PENAL CODE § 2.02(2)(b).

146. Damon et al., *supra* note 51, at 121.

147. McKnight & Kashdan, *supra* note 23, at 243.

they generate that goal setting has been used as a proxy for purpose.¹⁴⁸ Legally, purpose, as the highest form of mens rea, is a higher-order aim, though depending on the jurisdiction, perhaps not so high as psychological purpose. The Model Penal Code defines the mens rea of purpose, stating:

A person acts purposely with respect to a material element of an offense when: (i) if the element involves the nature of his conduct or a result thereof, it is his conscious object to engage in conduct of that nature or to cause such a result; and (ii) if the element involves the attendant circumstances, he is aware of the existence of such circumstances or he believes or hopes that they exist.¹⁴⁹

The Model Penal Code definition of purpose clearly cares about the connection between ends and desired objectives. Similarly, in expounding upon his definition of psychological purpose, Damon writes, “Purpose is directed at accomplishments, or ends, towards which one can make progress. The ends may be material or nonmaterial, and they may be reachable or non-reachable.”¹⁵⁰ Again, these parallels are undeniable, though not dispositive, on the question of whether legal purpose does (or should) require a psychological purpose.

One further consideration which can inform that question is to look at the most serious crimes. And the most serious common law crimes in our federal legal system truly do seem to ask for a psychology of purpose. The mens rea element of both “International Terrorism” and “Domestic Terrorism” requires that the crime “(B) appear to be intended— (i) to intimidate or coerce a civilian population; (ii) to influence the policy of a government by intimidation or coercion; or (iii) to affect the conduct of a government by mass destruction, assassination, or kidnapping.”¹⁵¹ And the United States Constitution defines treason in purposive language as well, saying, “Treason against the United States, shall consist only in levying War against them, or in adhering to their Enemies, giving them Aid and Comfort.”¹⁵² A mens rea of “adhering to their enemies” is a truly

148. Patrick L. Hill et al., *Collegiate Purpose Orientations and Well-Being in Early and Middle Adulthood*, 31 J. APPLIED DEVELOPMENTAL PSYCH. 173, 173 (2010).

149. MODEL PENAL CODE § 2.02(2)(a) (AM. L. INST. 2023).

150. DAMON, *supra* note 72, at 11.

151. 18 U.S.C. § 2331(1)(B), (5)(B).

152. U.S. CONST. art. III, § 3.

purposeful mens rea, and from an Ecological Systems Theory perspective,¹⁵³ these crimes are crimes in part because of the opposition of their perpetrators to the macrosystem values of the society in which they find themselves. In a Supreme Court review of a World War II treason case, *Haupt v. United States*, where a father was arrested for housing his Nazi collaborating son, the court affirmed that the mens rea for treason requires the inclusion of a purpose to aid or adhere to enemies and that such actions alone in support of a familial purpose would not be enough to constitute treason.¹⁵⁴ For the most serious crimes, purpose content clearly can play an exculpatory role.

Since crimes increase in seriousness and severity as one ascends hierarchical goal systems to levels of moral and philosophical dispute with our society's macrosystem values, it is the position of this author that crimes which require legal mental states of purpose should require a psychological purpose. While this is a proscriptive view of purpose in the legal system, in a descriptive account of the current status quo, it would be more accurate to say that legal mens rea of "purpose" (also known as "intent" in many jurisdictions)¹⁵⁵ is equivalent psychologically to a goal, which within goal hierarchy systems need not sit atop the entire system as is the case for psychological purpose.¹⁵⁶ In fact, people convicted of the most serious crimes, rather than fitting an Eriksonian conception of persons with purpose (where purpose is a psychological asset in psycho-social development of identity commitment),¹⁵⁷ instead often have extremely high scores on the Adverse Childhood Experiences scale.¹⁵⁸ Many may best be described, according to Garbarino, as "untreated traumatized children inhabiting and controlling the dangerous adolescents and adults that

153. See Urie Bronfenbrenner, *Ecological Systems Theory*, in *SIX THEORIES OF CHILD DEVELOPMENT: REVISED FORMULATIONS AND CURRENT ISSUES* 187 (Ross Vasta ed., 1992).

154. See *Haupt v. United States*, 330 U.S. 631, 632–41 (1947).

155. See *infra* Part VIII.

156. See McKnight & Kashdan, *supra* note 23, at 243.

157. See e.g., ERIK H. ERIKSON, *IDENTITY: YOUTH AND CRISIS* 232–233, 328 (1968); Patrick L. Hill & Anthony L. Burrow, *Viewing Purpose Through an Eriksonian Lens*, 12 *IDENTITY: INT'L J. THEORY & RSCH.* 74, 75 (2012).

158. JAMES GARBARINO, *LISTENING TO KILLERS: LESSONS LEARNED FROM MY TWENTY YEARS AS A PSYCHOLOGICAL EXPERT WITNESS IN MURDER CASES* 233–234 (2015); Garbarino *infra* note 164.

stand accused of murder.”¹⁵⁹ However, while descriptively psychological purpose is higher than the goals mens rea purpose seems to require, legal purpose is also not at the lowest level of a goal hierarchy. Descriptively, the legal system’s dividing legal line for purpose lies somewhere between the de minimis height of the goal of scratching one’s nose because it itches and the towering height of psychological purpose, giving rise to countless subgoals within a goal system. The disconnect between legal theory requiring escalating levels of criminal thought with escalating crimes and the reality of many criminals’ childlike impulsiveness raises an empirical question for the study of whether those convicted of crimes with a mens rea of purpose score higher or lower on average on psychological measures of purpose than do those convicted of crimes of lesser mens rea.¹⁶⁰ In any event, the precise dividing line locations within goal system hierarchies where each form of mens rea lies will also potentially vary between each of the fifty-two legal systems enumerated in Table 1 in Part VIII.¹⁶¹

There is also interesting potential for understanding purpose theory through studying the psychology of bigotry and hate crimes. Research has shown that psychological purpose makes most people more comfortable with, and less agitated by, diversity.¹⁶² But it is an open question whether this is also true of ignoble purposes that include bigotry as subgoals. In the law, much attention has come of late to “gay/trans panic” defenses articulated by perpetrators of hate crimes against sexual minorities.¹⁶³ If these attacks stem from the acting out

159. James Garbarino, *ACEs in the Criminal Justice System*, 17 ACAD. PEDIATRICS S32, S32 (2017). The Adverse Childhood Experiences (ACE) scale is a ten-item scale of major life hardships in childhood, such as abuse, which explains 65% of the variation in suicide attempts, 55% of the variation in substance abuse and 45% of the variation in depression. See GARBARINO, *supra* note 159, at 233–34. Eighty-seven percent (87%) of the population have a score of three or less on the ACE. Scores of eight, nine and ten have frequencies of approximately one in 1000. However, among the murderers interviewed by Garbarino (2017) scores of eight or higher are extremely common and in fact rather typical. See *id.*

160. See GARBARINO, *supra* note 159, at 106, 109.

161. See *infra* Table 1.

162. See, e.g., Anthony L. Burrow & Patrick L. Hill, *Derailed by Diversity? Purpose Buffers the Relationship Between Ethnic Composition on Trains and Passenger Negative Mood*, 39 PERSONALITY & SOC. PSYCH. BULL. 1610, 1617 (2013); Anthony L. Burrow et al., *Purpose in Life as a Resource for Increasing Comfort with Ethnic Diversity*, 40 PERSONALITY & SOC. PSYCH. BULL. 1507, 1513 (2014).

163. See, e.g., Nicholas D. Michalski & Narina Nunez, *When Is “Gay Panic” Accepted? Exploring Juror Characteristics and Case Type as Predictors of a*

of subgoals of bigotry in pursuit of an ethico-religious purpose in life, then they should be more purposeful, not less, legally. Are these highly motivated actions spurred on by correspondence with driving life aims, or are the people who commit these acts the exact opposite of purposeful people whose ebbs and flows of self-esteem are less turbulent than their purposeless peers?¹⁶⁴

The context of mens rea, and the mens rea form of purpose in particular, also provides an opportunity to address one of the major contemporary issues in purpose theory, how purpose in life differs from meaning in life.¹⁶⁵ Psychological purpose must have a connection to action and goals, and the legal mens rea form of purpose must facilitate and drive the actions of the actus rea. The presence of meaning in life is irrelevant and orthogonal to questions of guilt because meaning does not require action; however, a purpose drives actions in pursuit of that purpose. These purposes can be exculpatory, as in the case of refuting treason for a purpose other than to aid and adhere to enemies, or incriminating when actions are taken as means in pursuit of a criminal purpose, as in the case of assaulting a rival gang member. Lay conceptions of meaning often include using purpose to help define meaning,¹⁶⁶ and there is some empirical work linking purpose to a broader meaning construct.¹⁶⁷ Thus, the law and mens rea crimes of purpose provide an opportunity to study how much purpose necessarily influences meaning in contexts where purpose inherently matters and meaning does not. In short, because the law cares about purpose but not meaning, the legal setting is a natural environment in which researchers can explore the differences between purpose and meaning.

In this article, we have attempted to shed light on how legal conceptions of mens rea and the mens rea form of purpose may be informed by psychological conceptions of purpose and goals;

Successful Gay Panic Defense, 37 J. INTERPERSONAL VIOLENCE 782, 783–84 (2020); Alexandra Holden, *The Gay/Trans Panic Defense: What It Is, and How to End It*, A.B.A. (March 31, 2020), <https://www.americanbar.org/groups/crsj/publications/member-features/gay-trans-panic-defense/>.

164. See Burrow & Hill, *supra* note 162, at 1617.

165. See, e.g., Hill et al., *supra* note 63; Frank Martela & Michael F. Steger, *The Three Meanings of Meaning in Life: Distinguishing Coherence, Purpose, and Significance*, 11 J. POSITIVE PSYCH. 531, 534 (2016).

166. See Ratner et al., *supra* note 63, at 378.

167. See George & Park, *supra* note 66, at 614; see also Stillman et al., *supra* note 69, at 688; Salsman et al., *supra* note 64, at 2300.

however, a skeptic may pause at the fundamental question of whether these really are related topics. Proof that legal and psychological conceptions are indeed related can be found in how the law and psychology operationalize their definitions. For instance, when jurors are charged with determining whether someone acted purposely, they aren't told to disregard lay language or their normal understanding of what purpose is. They are simply told (in concordance with the Model Penal Code) that someone is purposeful if "it is his conscious object to engage in conduct of that nature or to cause such a result."¹⁶⁸ Likewise, psychological conceptions of purpose are deeply tied to study participants' lay conceptions of what the word purpose means. One of the common methods of measuring purpose is a six-item single-factor scale developed by Scheier and colleagues where one of the questions (reverse coded) directly asks participants to agree or disagree with the simple statement: "There is not enough purpose in my life."¹⁶⁹ It is hard to get closer to lay language than that question, which is essentially just asking participants, "Do you feel purposeful?" And just as mens rea is inextricably tied to actus rea, a psychological purpose is strongly linked with the locomotion of taking actions towards goal attainment.¹⁷⁰ Both the law and psychology rely on the idea that people intuitively understand what it means to have a purpose. But just as knowing that you have memories and can remember some things (and forget others) does not make a juror an expert on the science of memory, neither does being able to indicate whether you feel purposeful make a juror or research participant an expert on the psychological science of purpose and all its consequences and corollaries. A research treatise on purpose theory like Damon, Menon, and Bronk,¹⁷¹ or McKnight and Kashdan,¹⁷² is beyond the scope of knowledge jurors and research participants bring with them into the lab or the courtroom; however, those theoretical endeavors rely on the same lay conceptions of what the word purpose means, as do jury instructions. So, just as memory experts can add

168. MODEL PENAL CODE § 2.02(2)(a) (AM. L. INST. 2023).

169. Michael F. Scheier et al., *The Life Engagement Test: Assessing Purpose in Life*, 29 J. BEHAV. MED. 291, 293 (2006).

170. Anna Vazeou-Nieuwenhui et al., *The Meaning of Action: Do Self-Regulatory Processes Contribute to a Purposeful Life?*, 116 PERSONALITY & INDIVIDUAL DIFFERENCES 115, 116 (2017).

171. See Damon et al., *supra* note 51, at 117.

172. See McKnight & Kashdan, *supra* note 23, at 242.

insight to the courtroom in the form of expert witness testimony,¹⁷³ we suggest that experts on the psychology of purpose have important insights that they could convey as expert witnesses. Similarly, just as psychological research questions on topics pertaining to memory have been influenced and informed by legal considerations,¹⁷⁴ research on the psychology of purpose and goals can be informed and furthered by the legal contexts of forms of mens rea and, in particular, the mens rea form of purpose.

VIII. TABLE OF MENS REA & PURPOSE FORMULATION VARIANTS

One of the central aims of this paper is to inspire psychological research on purpose and goals to take up these research questions in the legal context of research on the forms of mens rea. To that end, it is helpful to know with what legal frameworks to start.

We have given significant attention to the potential for how the psychology of purpose may interface with the legal mens rea form of purpose, but most of the states which have adopted the Model Penal Code use the word “intent” or “intentionally” instead of “purpose” or “purposely.”¹⁷⁵ So, which states are these inquiries actually most relevant in, and what states could they be contrasted with in experimental designs, where forms of mens rea, or the definitions of forms of mens rea, are used as independent variables? What follows is an attempt to answer that question.

Table I is a compendium of the approach to mens rea form employed by all fifty states, plus Washington, D.C., and the federal government. Specifically, information is provided on whether states use the Model Penal Code or a common law approach to mens rea (or, in a few cases, a hybrid approach of the two).¹⁷⁶ States which use a Model Penal Code (MPC) approach are further broken down by whether they use “intentionally” or “purposely” as their highest form of mens rea, and if they use intentionally, whether or not purpose is included in the definition or just the “conscious object” phrase (CO).¹⁷⁷ This information represents a new scholarly resource

173. See, e.g., Mark L. Howe, *Memory Lessons from the Courtroom: Reflections on Being a Memory Expert on the Witness Stand*, 21 *MEMORY* 576, 578 (2013).

174. See, e.g., Thomas A. Busey & Geoffrey R. Loftus, *Cognitive Science and the Law*, 11 *TRENDS IN COGNITIVE SCIS.* 111, 111 (2007).

175. See *infra* Table 1.

176. *Infra* Table 1.

177. *Infra* Table 1.

previously inaccessible to psychologists outside of law schools, as many of the relevant jury instructions and statutes are hidden behind the paywalls of the legal search tools Westlaw and Lexis.

Table 1

Mens Rea and Purpose Formulations: Model Penal Code, Common Law, or Hybrid Approaches Across States

Court System	Model Penal Code Variant or Common Law	Jury Instructions or Statute
Alabama	MPC Intentionally = Purpose	ALA. CODE § 13A-2-2(1) (2025).
Alaska	MPC Intentionally = CO	ALASKA STAT. ANN. § 11.81.900(A)(1) (West 2025).
Arizona	MPC Intentionally = Objective	ARIZ. REV. STAT. ANN. § 13-105(10)(a) (2024).
Arkansas	MPC Purposely = CO/Intention	Arkansas Model Jury Instructions-Criminal, AMCI 2d 113.
California	Common Law	CALCRIM No. 250-254 (2024).
Colorado	MPC Intentionally = CO	COJI-Crim F:185, 195, 241, 308 (2024).
Connecticut	Hybrid General and Specific Intent Defined Collectively but not individually as Purpose	CONN. GEN. STAT. § 53a-3 (2024).
Delaware	MPC Intentionally	Del. P.J.I. Crim. § 2.5, 4.25-30
D.C.	Common Law	1 Barbara E. Bergman, Criminal Jury Instructions for the District of Columbia § 3.100 (Matthew Bender, Rev. Ed.).
Florida	Hybrid Willfully = Intentionally/Purposely/ Knowingly	Florida Standard Jury Instructions In Criminal Cases

Georgia	Common Law	Georgia Suggested Pattern Jury Instructions, Vol. II: Criminal Cases §§ 1.40.10, 1.41.10.
Hawaii*	MPC Intentionally = CO	Hawaii Pattern Jury Instructions - Criminal, No. 602.
Idaho	Common Law	ICJI 305.
Illinois	MPC Intentionally = Purpose/CO	Illinois Pattern Jury Instructions, Criminal, No. 5.01A (4 th ed. 2000).
Indiana	MPC Intentionally = CO	1 Indiana Judges Association, Indiana Pattern Jury Instructions—Criminal, 4 th Ed., 9.0120 (Matthew Bender).
Iowa	Common Law, Specific Intent and Malice definitions include Purpose	Iowa Criminal Jury Instructions §§ 200.1, 200.2, 200.3, 200.19, 200.20.
Kansas	MPC Intentionally = CO	KAN. STAT. ANN. § 21-5202(h) (2024).
Kentucky	Hybrid Intentionally = CO	1 Cetrulo, Kentucky Instructions to Juries §§ 3.01-3.03 (2024).
Louisiana	Common Law	LA. STAT. ANN. § 14:10 (2024).
Maine	MPC Intentionally = CO	Alexander Maine Jury Instruction Manual § 6-38 (2025 ed. LexisNexis Matthew Bender).
Maryland	Common Law	Maryland Criminal Jury Instructions and Commentary §§ 3.01(A)-3.09 (3 rd Ed. 2024)

Massachusetts	Common Law General and Specific Intent defined collectively but not individually as Purpose	Massachusetts Superior Court Criminal Practice Jury Instructions § 3.120.
Michigan	Common Law	MICH. COMP. LAWS SEV. § 8.9 (LexisNexis 2025).
Minnesota	MPC Intentionally	Minnesota Jury Instruction Guides, Criminal (CRIMJIG) (10 th ed. 2025).
Mississippi <i>Missouri</i>	Common Law <i>MPC Purposely</i>	MSJI Criminal § 2748 <i>Missouri Approved Jury Instructions-Criminal 4th ed.</i>
<i>Montana</i>	<i>MPC Purposely</i>	<i>Montana Criminal Jury Instructions No. 2-106.</i>
<i>Nebraska</i>	Common Law Intent is defined as equivalent to Purpose, and Purpose is used in some criminal statutes	<i>Nebraska Jury Instructions, Criminal 4.0.</i>
Nevada	Common Law	NEV. REV. STAT. § 193.190 (2024).
<i>New Hampshire</i>	<i>MPC Purposely</i>	<i>N.H. Bar Assoc. Criminal Jury Instructions 2.03 (1985).</i>
<i>New Jersey</i>	<i>MPC Purposely</i>	<i>N.J. STAT. ANN. § 2C (West 2024).</i>
New Mexico	Common Law General Intent definition includes Purpose	Uniform Jury Instructions 14-141 NMRA.
New York	MPC Intentionally = Purposely/CO	CJI2d[NY] Penal Law art 121.13.
North Carolina North Dakota	Common Law MPC Intentionally = Purposely/CO	N.C.P.I. Crim. 120.10. N.D. CENT. CODE § 12.1-02-02 (2024).

<i>Ohio</i>	<i>MPC Purposely</i>	<i>Ohio Jury Instructions, CR Section 417.01 (2008).</i>
Oklahoma	Common Law	OUJI-CR § 4-61.
Oregon	MPC Intentionally = CO	Or. UCJI No. 1035.
Pennsylvania	MPC Intentional = Purpose	Pa. SSJI (Crim), § 15.2701A (2024).
Rhode Island	Common Law	11 R.I. GEN. LAWS § 11-23-1 (2024).
South Carolina	Common Law	SC JI CRIMINAL § 1-12.
South Dakota	Hybrid	S.D. CODIFIED LAWS § 22-1-2 (2025).
Tennessee	MPC Intentionally = CO	Tenn. Prac. Pattern Jury Instructions – Criminal § 2.08 (26 th ed. 2022).
Texas	MPC Intentionally = CO	TEX CRIM. CODE ANN. § 6.03 (West 2006).
Utah	MPC Intentionally = CO	MUJI 2d CR CR302A, CR302B.
<i>Vermont</i>	<i>Hybrid Purposely</i>	<i>Vt. Criminal Jury Instructions § 1-6-12.1</i>
Virginia	Common Law	Virginia Model Jury Instructions–Criminal Instruction No. 37.200 (LexisNexis Matthew Bender).
Washington	MPC Intentionally = Purpose	Wash. Pattern Jury Instructions – Criminal (WPIC) 10.01.
West Virginia	Common Law	W. VA. CODE § § 61-2-16(a) (2024).
Wisconsin	MPC Intentionally = Purpose	WIS. STAT. § 939.23 (2024).
<i>Wyoming</i>	<i>Hybrid Purposely</i>	<i>WYO. STAT. ANN. § 6-2-101 (2024).</i>
Federal	Common Law	18 U.S. Code

States where the highest form of mens rea is intent and the definition of intent includes purpose are bolded. States where the highest form of mens rea is purpose are bolded and italicized.

Common law state (Nebraska) that includes “purpose” for some crimes is italicized.

*Hawaii does not include “purpose” in jury instruction language but does include purpose as a definition/synonym for intent in case law history.

Among the fifty-two court systems, between the fifty states, Washington, D.C., and the federal courts, twenty-four states use some version of the Model Penal Code, twenty states along with Washington, D.C., and the federal courts use a common law approach, and six states use a hybrid between the Model Penal Code and common law approaches.¹⁷⁸ There are eight states which explicitly use “purpose” or “purposely” as one of their types of mens rea.¹⁷⁹ There are an additional twelve states that include “purpose”/“purposely” in their definitions of intent, making a total of twenty states where purpose is either an explicit form of mens rea or included in the definition of one of the mens rea mental states.¹⁸⁰

An important future direction for researchers is to compare how juries/mock jurors in districts with purpose as the highest level of mens rea differentially dispose of a case with the same case facts as juries/mock jurors with instructions from common law jurisdictions. And an important future direction for legal practitioners is to try to get psychological researchers on purpose to serve as expert witnesses in jurisdictions where the highest mens rea form is either purpose or defined as purpose. This also suggests the research question of investigating how a psychological explanation of purpose and goals could affect jury decision-making.

Beyond these applied questions, this table also provides a canvas upon which psychological purpose scholars can draw to differentiate purpose and meaning. One way this can be done is by looking at external third-party perceptions of a person’s purpose.

Some work beginning to explore third-party perceptions of purpose was presented by sociologist Reuben Miller at the 2018

178. *Supra* Table 1.

179. *Supra* Table 1.

180. *Supra* Table 1.

conference on Purpose in Context: Ecological Perspectives.¹⁸¹ In his talk, Miller explored how in research on formerly incarcerated persons transitioning and adapting to life post incarceration, rather than purpose being an asset, it is a necessity because they have to convince everyone they interact with that they are now on the right path and are both not a threat and worthy of receiving help.¹⁸² While Miller's published work does not explicitly use the term purpose, it contains threads of the same ideas. He noted that formerly incarcerated persons "are expected to be civically engaged in ways that conventional citizens are not, and to offer some social or material benefit to their home communities."¹⁸³ Also, as they navigate a landscape of over 48,000 laws, policies, and administrative sanctions across the United States targeting people with criminal records, when interacting with others "they must prove in each encounter that they are 'safe' and ultimately worth the risk involved in helping them."¹⁸⁴ Thus, in his talk,¹⁸⁵ Miller described purpose as a necessity for parolees and other formerly incarcerated persons who "are expected to 'work on' some deficient aspect of their personal life at all times."¹⁸⁶ And just as how purpose is a driving aim, not an immediately achievable goal, the personal transformation former prisoners must display is also conceptualized as an unending aspiration.¹⁸⁷

The position of a parolee or potential parolee stands in somewhat mirrored contrast to the position of a defendant. To be found guilty of a serious crime, a prosecutor must convince a jury that a defendant has a criminal purpose. To be granted parole and to stay on parole, a parolee must convince an administrative body or his/her parole officer that he/she not only does not have a criminal purpose but has some

181. Reuben Jonathan Miller, Halfway Home: Race, Punishment, and the Afterlife of Mass Incarceration Talk presented at the conference on Purpose in Context: Ecological Perspectives at Cornell University: Halfway Home: Race, Punishment, and the Afterlife of Mass Incarceration (Nov. 9, 2018).

182. *Id.*

183. Reuben Jonathan Miller & Forrest Stuart, *Carceral Citizenship: Race, Rights and Responsibility in the Age of Mass Supervision*, 21 THEORETICAL CRIMINOLOGY 532, 542 (2017).

184. Reuben Jonathan Miller, *All Leviathan's Children: Race, Punishment and the (Re-)Making of the City*, in CLASS, ETHNICITY AND STATE IN THE POLARIZED METROPOLIS 215, 225 (John Flint & Ryan Powell eds., 2019).

185. See Miller, *supra* note 181.

186. Reuben Jonathan Miller, *Devolving the Carceral State: Race, Prisoner Reentry, and the Micro-Politics of Urban Poverty Management*, 16 PUNISHMENT & SOC'Y 305, 324 (2014).

187. See *id.*

kind of positive purpose, direction, and prospects. It could even be said that to be convicted of a crime with a mens rea of purpose, a jury must be convinced that a defendant possesses what Damon refers to as “ignoble purpose,”¹⁸⁸ while to be granted parole and to avoid recidivism, a potential parolee must prove that he/she possesses what Damon refers to as “noble purpose.”¹⁸⁹

There are twenty states where purpose is explicitly written into the statutes and jury instructions for the highest form of mens rea, for which the psychological study of purpose should be extremely germane to legal questions of guilt.¹⁹⁰ For the other eleven states where their mens rea schema is at least partially based on the Model Penal Code conception, though not explicitly using the word purpose, a psychological study of purpose should still be highly relevant due to the basis of these legal systems on a purposeful Model Penal Code.¹⁹¹ And since the Model Penal Code did not just materialize from the ether but was, in fact, based on common conceptions for organizing the mens rea of the common law,¹⁹² the psychological conceptions of and research on purpose ought to be considered in Common Law jurisdictions as well.

CONCLUSION

In conclusion, psychological research on purpose and goals can and should inform the legal system and legal theory of mens rea. The existent folk psychology research on forms of mens rea reveals a common occurrence of errors in understanding the blurry lines between adjacent forms of mens rea. This muddled understanding is something which psychological research on purpose and goals can better inform for jurors and other legal actors. By applying a nuanced psychological understanding, scholarly experts can sharpen blurry lines between adjacent forms of mens rea. Furthermore, the law of mens rea provides a natural setting in which the study of goal systems hierarchy can be explored, where noble purpose can be investigated for its exculpatory and rehabilitative role and contrasted with ignoble purpose and its incriminating role, where purpose can be differentiated

188. See DAMON, *supra* note 72, at 11–12.

189. See *id.*

190. *Supra* Table 1.

191. *Supra* Table 1.

192. See, e.g., Mueller, *supra* note 13, at 1047.

from meaning, and where the relationship between purpose content and divergent outcome trajectories can be studied.

This article has attempted to provide a conceptual framework and tools for research with which an inquiry can be begun into questions about the intersection of psychological purpose and goals with legal conceptions of mens rea. In Part II, we provided empirically derived data visualizations of the interdisciplinary research on mens rea and the most important legal cases. These data visualizations may aid researchers in identifying bodies of literature to familiarize themselves with. For example, both the Web of Science and Scopus corpora identified clusters of research in philosophy and law articles (both past and present), psychology and law articles, and traditional law review articles (from various eras). Additionally, the Web of Science data visualization also highlighted a medicine and law article cluster and an economics and law article cluster. Through the table of mens rea formulations across states in Part VIII, this article provides researchers with a tool for the easy creation of independent variables of jurisdictional context that can be interacted with researchers' theoretical questions of interest regarding purpose or goals.

There have been two primary goals of this article: 1) To demonstrate to psychologists that conducting research on the psychology of purpose and goals in the legal context of mens rea can help further develop psychological theory and clarify areas of current theoretical dispute. And conversely, 2) to demonstrate to legal scholars and legal practitioners that psychological research can aid in better understanding mens rea, in particular, the differences between distinct forms of guilty mind mental states (e.g., purpose, knowledge, recklessness, negligence, and strict liability). Here, at the end of the article, hopefully readers may also be convinced of the merit in conducting psychological research on forms of mens rea.