Beyond a reasonable doubt, presumption of innocence, and human Metacognition biases

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ABSTRACT

Why do we sit in doubt as we await the jury’s verdict? Why are the odds incredibly high that two separate juries deliberating on the same case will find the same judgment? Is it the “proof rule formula” or the juror’s mental processes and metacognition biases, which empirical researchers have already identified in human cognition, that impact thoughts, opinions, and decision-making, or both?

So Far, our highest standard of proof is the best we have developed in a criminal justice process. The center of this article is that our proof formula is problematic, especially for jurors. The focus is also on the jury whose metacognition as in all humans is biased, but for them, a multifaceted, indefinable proof formula and unclear charge instruction exacerbates their task and baffle them.

Worthy of empirical investigation is the human cognition processes and the metacognition biases that infect thoughts, opinions, and decision-making. This research would be in an attempt to educate and prepare jurors for their task. Only empirical scientists in accord with our legal community can identify the metacognition biases, human frailties, and make jurors aware of them and which when left unchecked contaminate their judgment. In the process and accord with the legal community, the research can find a jury process that allows definitive direction and instructions and develop a time-limited debiasing training intervention to improve self-awareness, where jurors may temper their biases. Adding a brief training session would translate into wakefulness of self toward error-free judgments and their private life.

Keywords: Juror, Verdict, beyond Reasonable doubt, Presumption of Innocence, Metacognition, Biases

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I find it rather unsettling that we are using a formulation that we believe will become less clear the more we explain it.

Chief Judge Jon Newman

INTRODUCTION

In our accusatorial and adversarial system of criminal justice, we have a process that weighs the evidence to determine guilt or innocence. Currently, in that process, there is a rule device standard of proof known as “beyond a reasonable doubt,” coupled with a statutory, “presumption of innocence.” Regardless, with all its faults, this proof standard and the jury system is the best developed so far, and the above two devices of proof are part of the Due Process Clauses of the Fifth and Fourteenth Amendments.

Beyond a reasonable doubt has become the highest burden of proof in any criminal proceeding, along with a statutory duty to instruct on the presumption of innocence without prompting or suggesting. The burden of proof rests with the prosecution to prove its case by proving each essential element of the charged crime in the criminal happening, and to accomplish the task beyond a reasonable doubt under a presumption of innocence.

However, the prosecution may only prove those “facts sufficient to expose the defendant to criminal liability.” The theory, absent a plea of guilt, is that the “finders of fact,” especially jurors, cannot convict of a crime unless there “is absolute certainty of guilt.” For a conclusion of innocence or guilt, the fact finders must examine and consider all the relevant evidence within the highest standard of proof rule. Thus, at the core of American liberty and freedom is the individual right in a criminal charged offense to make the government prove its case beyond a reasonable doubt. However, the rule phrase “beyond a reasonable doubt” is without objective meaning and understanding, especially to the jurors, and the Supreme Court engagements in conflicting doctrines involving this proof phrase is not surprising. The Supreme Court must be concerned with a jury’s interpretation of terms, particularly in their charge instructions, which would lead the jury panel to an overstatement or understatement of the doubt to acquit or convict above all

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1 United States Court of Appeals for the 2nd District. Chief Justice Newman was referring to the standard of proof, beyond a reasonable doubt. See also Victor v. Nebraska, 511 U.S. 1 (1994) at 26.


when the words in jury instructions are parallel to each other and may influence the jury toward error.\textsuperscript{5}

Still, perhaps our high Court’s meaning is that any change, alternative, or corrective action must walk a fine line toward societal trust in the criminal justice system, where the factfinders can be allowed to find guilty verdicts based on proof of guilt and not conjecture. A conflict in the criminal justice system and on society’s idea of justice would occur where factfinder imposes a too high or too low a level standard of proof. A too strict application of a proof standard may lead to fewer convictions and make the system less viable, while a low standard rule would allow more guilty verdicts of the innocent. Thus, it is wise not to explain the proof rule and let the jurors work it out.

On the other hand, how the jury defines and applies “proof beyond a reasonable doubt,” “presumption of innocence,” and their charge instructions could lead to a societal distrust of the criminal justice system because of uncertainty. It becomes critical that jurors have instructions on their tasks, understand the tools that must be applied, including an understandable proof formula, to accomplish an error-free judgment in their decision-making. Then, what is reasonable doubt, let alone beyond it?

We do not quite know what it is, but the Supreme Court has told us what it is not. The words ‘beyond a reasonable doubt’\textsuperscript{5} are not constituent terms, where a lay person can take each word and form an understanding. Together, the words become a complex implied legal doctrine whose meaning no one can define. Legal scholars agree that it is indefinable, and yet, all other lower burdens of proof are definable, but other lesser elements of criminal burdens of proof are defined, e.g., Clear and Convincing Evidence and Preponderance of the Evidence. Nevertheless, the factfinders charged with the very tense task of judging under the highest formula standard of evidence are not allowed to “analyze their mental processes,” nor “submit their processes of mind to objective analysis.”\textsuperscript{6} Such is supposed to make our law self-evident.

Professor James Whitman observed that our proof rule is “vexingly difficult to interpret and apply.” The reason is that the rule “leaves jurors baffled” and no matter how many times a jury request explanation of it, judges are only allowed to give them restricted instruction. This jury dilemma leaves judges unhappily “floundering” by forbidding rules to explain or clarify the standard proof phrase and charge the jury with instructions, which are understandable to jurors,\textsuperscript{7} although the jury must also struggle with the phrase “presumption of innocence.”

\textsuperscript{5} \textit{Id.} Dripps, \textit{supra.} See also Victor, \textit{supra;} and Gage v. Louisiana, 498 U.S. 39 (1990). \textit{Gage} was the only case, where the Supreme Court held a definition of the proof phrase a violation of the Due Process Clause.


According to Professor Wigmore, the “presumption of innocence” is “fixed in our law,” and the Supreme Court in Coffin v. United States (1895) mandated that it be part of the instructions to factfinders. In Re Winship (1970), the Supreme Court believed the presumption of innocence was a fundamental principle of law, and Justice Brennan described this phrase as “that bedrock ‘axiomatic and elementary’ principle whose ‘enforcement lies at the foundation of the administration of our criminal law.’” More so, it is a maxim of American Freedom without which that freedom will not long endure.

The historical issue of this presumption goes back to the beginning of civilized societies beyond the Justinian Code (529-565 CE), later known as the Corpus Juris Civilis, to the Laws of Sparta, Athens, and Deuteronomy. The Justinian Code brought together man’s “perpetual wish to render every one his due” and that “the maxims of law are these: to live honestly, to hurt no one, to give every one his due.” Nowhere in the Justinian Code do the words “innocent until proven guilty” follow each other, but they indeed appear very close to each other and most importantly within the code’s philosophy and spirit of innocence unless there is guilt by proof.

According to Huntley Holland and Harvey Chamberlin, 1973, the presumption is not derived from a proven fact, or one “inferred based on probability,” however, as quoted in

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9 Coffin v. United States (1895), 566 U.S. 432, the origin and establishment of the “presumption of innocence” doctrine.


12 CJC, Institutes, Bk. I, Of Persons. “Justitia est constans et perpetua voluntas jus sumus cuique tribuendi” (Justice is the constant and perpetual wish to render every one his due); also, Justinian Institutes I, I, 3; Digest I, I, 10.

13 See in CJC, Bk. IX, Title IV, 9. 4. 1.; Id. c.9.1, Nov. 134; Id. at CJC, Bk. IX, 9.4.9. The concept of bail begs the conclusion of freedom in the absences of proof of guilt. So too, innocence is assumed by this concept in the absence of guilt. See also CJC in Bk. IX, Title IX, 9.9.7; Id. Book. IX, 9.4.9. Here too, innocence is assumed by the concept in the absence of guilt. CJC in Book. IX, Title IX, 9.9.7; Id. at 9.9.18; Id. at 9.9.22; Id. Book. IX, Title XLVII, at 9.47.12 and 9.47.16.
McCormick on “Evidence” as more of “assumption of innocence” in the absence of facts to the contrary, where a defendant’s conduct is assumed lawful.\textsuperscript{15} Thus, the latter is understandable; the other proof component is indefinable. Although in everyday life the words “beyond a reasonable doubt” might easily be defined and correctly used. So, how did it come forward?

Once the concept of reasonable doubt was an epistemological effort in search of certainty of criminal verdicts to ease the conscience of jurors for their Soul’s salvation,\textsuperscript{16} and explained by Justice Edward D. White in his majority opinion in Coffin v. United States (1895), as follows:

\begin{quote}
[L]et us consider what reasonable doubt is. It is, of necessity, the condition of mind produced by the proof resulting from the evidence in the cause. \textit{It is the result of the proof, not the proof itself, whereas the presumption of innocence is one of the instruments of proof, going to bring about the proof from which reasonable doubt arises; thus one is a cause, the other an effect}. To say that the one is the equivalent of the other is therefore to say that legal evidence can be excluded from the jury and that such exclusion may be cured by instructing them correctly in regard to the method by which they are required to reach their conclusion upon the proof actually before them; in other words, that the exclusion of an \textit{important} element of proof can be justified by correctly instructing as to the proof admitted. \textit{The evolution of the principle of the presumption of innocence, and its resultant, the doctrine of reasonable doubt, make more apparent the correctness of these views[ ] and indicate the necessity of enforcing the one in order that the other may continue to exist}.\textsuperscript{17}
\end{quote}

Thus, all jurors should understand their task and the tools provided, but do they?

All are familiar with the courtroom theater, especially when the jury retires to deliberate a verdict. We know that the jury panel must find guilt or innocence beyond a reasonable doubt and therefore, after seeing and listening as the jury panel did; to us, all the evidence may speak to guilt or innocence. Nevertheless, we, in doubt drama, wonder what the jury will decide. So too, the odds are incredibly high that two separate juries deliberating on the same case will find the same verdict, yet, we are committed to the view of that concordance.\textsuperscript{18}

Under this view, the jurors are theoretically never in doubt because they are reasonable persons, and have an awareness and insight into specific facts of reality. They

\textsuperscript{14} Holland and Chamberlin, \textit{supra}, p. 147.

\textsuperscript{15} Charles T. McCormick, Evidence 806 (2d ed. 1972), Quoted in Holland and Chamberlin, \textit{supra}, at 148.


\textsuperscript{17} Id. Coffin at 460. (emphasis added) (The above quote has three passive voice phrases in the same wordy sentence and the use of the word “important” where it should read “essential,” which create unclear meaning to an untrained recipient.).

\textsuperscript{18} Richard Dawkins, Science of the Soul (Random House, pp. 297-300 (2017).}
know when their reasonable ‘doubts’ about guilt arise. On the other hand, we know humans are generally terrible at metacognition and unaware of bias contamination, where biases infect thought, opinions, and decision-making.

Further, the jurors’ job requires an ability to comprehend the law sufficiently to apply it to the facts. It is also its job to evaluate facts and evidence in the particular case, listen carefully to the evidence, and make sense of what happened in the criminal event. The consensus is that jurors can do this job well—perhaps better than judges. The problem lies elsewhere in the judgment and verdict, where the application of our standard of proof and other legal phrases, e.g., “presumption of innocence” and “circumstantial evidence,” baffles the jurors. The jury’s task is severe and problematic culminating with the deliverance of a verdict under a specific, but elusive, proof rule.

Our proof standard forces jurors to discount possible or unreasonable doubts, but such is still doubt, which compounds the standard’s ambiguity because jurors may not know where reasonable doubt ends and possible or unqualified doubt begins. The language and concepts of law, which are precise to decrees are quite sophisticated, even in plain language, cause jurors to struggle.

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Even to the sophisticated defense counsel, the rule phrase poses a problem also to the erudite defense counsel. Defense counsel must not emphasize or rely too heavily on the proof rule and the burden of proof or risk signaling to the jury that he or she may think the defendant guilty. A person’s words “Prove it” or “You cannot prove it” displays overconfidence and evokes the sound of guilt.

Nonetheless, a trial to deprive a person of liberty should be about the truth. In the end, it is about whether the jury process yields a guilty or innocent verdict. In our system of criminal procedural due process, because we have seen the innocent person convicted, there is doubt whether all persons found guilty are guilty and whether all the persons found innocent are innocent. In a criminal trial, the search for the ultimate truth for a verdict is one-sided in a system that depends on a non-perfect but error-free human judgment.

If there is no commitment to the view that two different juries would find the same verdict under similar conditions, then “Beyond a Reasonable Doubt” is a hollow and empty” phrase because it does not mean what it states. More so, for better or worse, the Supreme Court’s interpretations, restrictions, critical assertions, and its case law in general on this standard of proof contribute significantly to the virtual meaninglessness of it.

While empiricists know more of the human mental processes involved in judgment and decision-making, on this standard of proof issue nothing has changed but the original

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19 Id.

20 Id.


22 Id. Dawkins, supra.
intent. This proof rule remains just as elusive and undefined in the minds of jurors as for any other measure of proving guilt or innocence considered in the early periods before the advent of the “beyond a reasonable doubt” rule. Nevertheless, our criminal justice system is also accusatorial as are most of the United Kingdom common law systems with jury trials; some of which have or are attempting to alter or change the above proof phrase to make it understandable to the jury and lighten their obligation.

The fact finder is the only element of the criminal justice system that considers evidence to its conclusion. The jury process directly connects to the evidence. Thus, the law, judges, and lawyers attempt to allow only specific evidence to reach the jury under the rules of evidence and its admissibility. However, we are not permitted to inquire into the jury’s method, parts, practice, or procedure used by the jury panel to reach its verdict. Nonetheless, it is fitting to investigate why jurors are confused with or do not understand the proof formula. The human cognition of understanding words or terms and the cognition biases are worthy of examination in an attempt to educate and prepare jurors for their task. Thus, all jurors should understand their function as free of cognitive bias as possible, and the tools provide that they may genuinely accomplish their oath.

We would be derelict if we did not strive for a better proof rule to protect a defendant who may be innocent. A way to accomplish a better proof rule and educate the juror is to look at how humans think and judge while processing their decision-making. It is time to return to the empirical researchers to help us with this challenging but attainable duty.

We Must Know Why Before We Can Find a Corrective Action

The Roman law united into the Justinian Code or *Corpus Juris Civilis* (529-565 CE) does not use the words “reasonable doubt” and “presumption of innocence” together. However, legal scholars agree that the Code implies these concepts. Roman jurists believed that doubt in criminal matters required acquittal, while the teachers of common law believed that the true origin of doubt was the presumption of innocence derived from the concept in the Justinian Code with a theme that one is innocent until proven guilty. As stated earlier, the Bible expresses formal accusation, diligent inquiry, and satisfactorily proof of “the thing certain” and does not use the words “reasonable doubt” about witness testimony, but merely of the sin of bearing false witness as a commandment, and in discussions of the human conscience concerning doubt. 23 However, in Genesis, there is a reference that “without a doubt” equates to the common sense of “certainty.” 24

Further, one’s conscience uncertainty if not from faith was a sin. 25 Thus, the legal world began to see an attempt to resolve the jurors’ plight. In Christian moral theology, there was always room for some doubt so long as it was reasonable.

Before our present proof standard, there was a procession of proof rules that placed the juror not only in doubt about the proof measures at play. Among those measures were, “absolute certainty,” “conscience uncertainty,” “full persuasion,” “moral certainty,”

23 Deut. xvii, 4.

24 Genesis 37:23.

25 Verse 23, Romans 14:23.
“practical certainty” and others employed to acquit or convict but that caused the risk that put him in peril of his soul’s salvation by judging wrong. These standards also created juror’s doubts about the standards themselves and where judges struggled to explain them. “The shadow of doubt” phrase extended not only outside reasonable doubt but also towards the impossible as it equated to a non-existing “absolute certainty.”

The words “reasonable doubt” was not used as a two-word concept until the 16th-early 17th Century. In the second half of 18th Century in England when the majority was God-fearing, the proof “reasonable doubt” came into being not, as it is today, to protect the defendant, or serve as a safeguard against constitutionally unjustifiable risk of resolving ambiguous cases in his favor, but to protect the jurors’ conscience.27

In English criminal court trials, the conscience of jurors in their early common law verdicts caused worry for their souls. More so, street court trial pamphlets announced that “the Juryman, who [falsely or in error] finds any other person guilty, is liable to the Vengeance of God upon his Family and Trade, Body and Soul, in this world and that to come.”28 The jurors’ worry of their salvation prompted the English legal system to borrow conceptual elements of doubt and certainty from Locke and the new empirical philosophers. The origin was a typical design to make it easier to convict not more difficult and was the legal community’s attempt to lessen the doubts created by the standards of proof for criminal conviction.

Research suggests that Francisco Suarez (1547-1617), a Spanish Jesuit priest, philosopher, and theologian, addressed the rule’s concept and first used the words “reasonable doubt.”29 Suarez was well versed in canon law, common law, as well as

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28 Whitman, supra. Whitman’s treatise is a thorough understanding of the proof rule, its origin, and condition. Such accusations of possible damnation appeared in street pamphlets of common law court trials before the advent of reasonable doubt in the 17th and 18th Century, and prior. According to Greenleaf, when King Alfred in one year had 44 judges hanged for false judgments, he later ruled that he would not charge murder against judges and their officers. See also Greenleaf, A Treatise on the Law of Evidence (Boston: Little, Brown and Company, 3rd Ed. Part 5 § 29 at n 3, pp. 28-30 1868). (Courtesy of Google Books) More so, Whitman correctly fostered that English jurors faced legal liability until 1670. Medieval Italian judges were subject to civil and criminal liability for incorrect judgments. Modernly, Italy and European Union nations have laws placing judges civilly liable under a form of misrepresentation of fact or evidence.

29 Francisco Suarez, Disputaciones metaphysicae (1597), Fractatus de charitate (Disp. 13, Sec. 7, note 6. 47, vol. 12, 756), and “De libigus” (1612) (Translations by and Courtesy of Google Books). Born to the Jewish faith, he became a Catholic and was ordained a Jesuit priest. A student of law, philosophy, and theology, he is regarded as the most significant scholastic after Thomas Aquinas. See also James Franklin, The Science of Conjecture: Evidence and Probability before Pascal (John Hopkins U., Press 2001/2002). Whitman, at 10.
substantive and procedural matters in law. He also addressed the “presumption of innocence;” the “right against self-incrimination;” and the “right to appeal.”

Professor Barbara J. Shapiro opined on the “perceived view” of the proof rule’s origin and expounded the origin of the phrase in her tome. She equated the proof rule’s phrase to John Locke who spoke of degrees of certitude and degrees of probability and who conceived that the highest degree of probability achievable is “when a man cannot avoid believing it.” Indeed, Locke never used the words “beyond a reasonable doubt” or “reasonable doubt” much less defined them. Locke and John Wilkins did use the words “moral certainty” and “doubt” but not in an ethical or moral context, but in contrast to a mathematical certainty associated in rigorous demonstrations and as firm and settled truths. While Locke analyzed his thoughts of doubt in degrees of certitude and probability, he was dealing with the ideas of doubt and certainty. The most significant factor of his mind was that he could see modern humanity and was in the right place and time to influence the legal community and future governments.

Locke and the empirical philosophers of his era, i.e., Francis Bacon, John Wilkins, and Robert Boyle, were just as concerned about Christian epistemological reasoning of doubt and addressed the issue in their expressed thoughts and writings. The legal profession recognized the jurors’ fear in reasoning facts that led to a conviction, which made the legal profession, especially Judges and defense counsels, more than ready to embrace a rule derived from these philosophers/epistemologists to alleviate the factfinders’ conscience.

In understanding the original meaning of our proof rule, Professor Whitman devised a jurisprudential distinction between “proof procedures” and “comfort procedures, where the former “aims to achieve proof in cases of uncertainty,” and the latter “aims to relieve the moral anxieties of persons who feared [to engage] in acts of judgment.” In line with Professor Whitman’s points on the issue of Christian conscience, logic dictates its development through Judeo-Christian values and the teachings of right and wrong, as well as legal concepts involving doubt and presumption of innocence. However, some historians’ declarations on the issue failed to take hold of the concept of “reasonable doubt” to seriously consider that Christians of the early modern period had significant concerns about their soul’s salvation. America’s legal system and the beliefs of its common law parent brought to it the rule formula and the same problematic issues.

Research indicates that the first use of “reasonable doubt” in American courts was in the American Colonies in the Boston Massacre trials of 1770, which some called The Birth

30 Tractatus de fide, Disp. 20, sec. 4, nn. 18-19 (Vol. 12, 528) Courtesy of Google Books).


32 De legibus, disp., IV, c. 16, notes 5-8 (Vol. 5, 396-398) demonstrating the difference between substantive and procedural matters in law.


35 John Locke, An Essay Concerning Human Understanding, 4 (Ch. 16, §§6-8).

of American Justice, its star, the brilliant John Adams.\footnote{John H. Langbein, The Origins of Adversary Criminal Trial (Oxford U. Press 2003, at 262). See also Hiller B. Zobel, The Boston Massacre (W.W. North & Company, New York-London 1970).} According to Anthony A. Morano, the prosecution and the defense used the “reasonable doubt” standard in these trials with emphasis that this standard of proof was in line with traditional English usage.


In 1822, Englishman Thomas Starkie published his treatise on evidence, which came to America two years later with the arguments for reasonable doubt proof under a construct that “equated moral certainty with the absence of reasonable doubt.”\footnote{Thomas Starkie, A Practical Treatise of the Law of Evidence and Digest of Proofs, in Civil, and Criminal, Proceeding (Philadelphia: T& J.W. Johnson & Co., pp. 709, 724, 744, 761, and 865 1860) (1824). Cf. Sheppard, \textit{supra}, at 1195. Starkie used the phrase, “Exclusion of Every Reasonable Doubt.”} Today, the original purpose of the rule has been lost to the ages and no longer commands the judge or juror to worry about his soul’s salvation in a belief of its risk by judging the innocent guilty.

In Miles v. United States (1881), the Court stated: “The evidence [in any criminal trial] upon which a jury is justified in returning a verdict of guilt must be sufficient to produce a conviction of guilt, to the exclusion of all reasonable doubt.”\footnote{Miles v. United States, 103 U.S. 304, 304, 312 (1880). See Davis v. United States (1895), 160 U.S.469, 488; Holt v. United States (1910), 218 U.S. 245, 253; and, Spencer v. Randall (1958), 356 U.S. 513, 525–526.} In \textit{In re Winship}, the Supreme Court held that the “Due Process Clause’ protected the accused against conviction except upon proof beyond a reasonable doubt of every element necessary to constitute the crime charged.”\footnote{\textit{In re Winship}, at 364.} While we find no mention of the proof rule in the Constitution, in \textit{Winship, supra}, the Court read this proof rule into Constitutional Law.\footnote{For a more thorough understanding of the past and present condition, see Whitman, \textit{supra}, and Shapiro, \textit{supra}.}

The Supreme Court made it a standard of proof as a device to protect the accused—precisely what it was not created for, let alone as a standard of evidence proof.

Further, in Cage v. Louisiana (1990), the Supreme Court forbid instructions which included “moral certainty,”\footnote{Cage v. Louisiana 498 U.S. 39 (1990). \textit{Supra} Whitman, The Origins of “Reasonable Doubt,” at 2.} Ironically, “reasonable doubt” was brought into existence also to clarify “moral certainty,” which later merged with reasonable doubt.

Concerned about the words “moral certainty,” the Supreme Court clarified itself in Victor v. Nebraska (1994).\footnote{\textit{In re Winship}, at 364.} The Court held that jury instructions that define “reasonable
Beyond a reasonable doubt” required a “moral certainty” as equivalent to “substantial doubt,” and was not a violation of due process because the use of the term “moral certainty” was accompanied by clarifying language. The Court attempted to define what was beyond a reasonable doubt and what it was not. So much so that Justice Ginsberg in her concurrence stated: “The Federal Judicial Center has proposed a definition of reasonable doubt that is clear, straightforward, and accurate.”

Nevertheless, Justices Ginsberg and O’Connor left their cues that the Court did not condone the antiquated “moral certainty” phrase in juror instructions. Victor v. Nebraska also left it unclear whether courts should define the rule’s “reasonable doubt” when jurors appear confused, but the Court left no doubt of its disapproval of unclear reasonable doubt instructions. While the Court refused to make the rule’s phraseology clear and unambiguous, allow more clarification in instructions, or to propose a better process, it made clear that “error in defining ‘reasonable doubt’ is never harmless.” By Supreme Court decisions, the rule must not be defined or made clear and must remain firm. However, the Court refused to prepare or enlighten the jury for its task which leaves us in a dilemma.

Is it safer to advise a juror to find guilt beyond a reasonable doubt? Thus, letting the juror struggle with the meaning of the phrase to him or her and face the other definitions held by each juror, or explain it to the jury as guidelines? The Supreme Court held to the latter but restricted the instruction, commanded that the rule applied, and nothing else was appropriate. This picture which the Supreme Court saw is not shared elsewhere in the common law world. However, some Justices outside our system agree with the Supreme Court. Nevertheless, the American legal community has shown a continuous disinterest in methods and research of common law jurisdiction outside our own to change or replace the rule we employ. Alternatively, we must alleviate the new modern jury’s doubt about the standard of proof phraseology and its legal concept along with the “Presumption of Innocence” doctrine, which adds to the jurors’ stressed task.

Additional, the Supreme Court decisions on the government’s burden of proof are of two basic categories: that which is “presumption in the government’s proof,” and that which “regulates jury instructions that shift to the defense the burden of proof . . . to particular issues.” Before 1979, the Supreme Court left it unclear whether “Due Process”

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46 Id. at 26-27, which the Court relied upon to favor jury instruction that left the jurors convinced of the defendant’s guilt if the evidence against the defendant proved that “facts were more likely true than not.”
47 Id.
required a jury to conclude that direct proof of “one fact (the “Basic fact”) which provided evidence of another fact (the “presumed fact”), were both satisfied by the rule.\textsuperscript{52} County Court of Ulster County v. Allen (1979) clarified the issue.\textsuperscript{53} However, a rational connection must exist between the basic fact and the presumed fact. The rule of law in \textit{Ulster County} stated that “there be a ‘rational connection’ between the basic facts that the prosecution proved and the ultimate fact presumed, and that the latter is ‘more likely than not to flow from’ the former.” Nevertheless, the above clarification is also confusing to jurors.\textsuperscript{54}

In Ulster County, supra, a divided Court (5/4) made a distinction between mandatory presumptions and permissive presumption. “[S]ince the persecution bears the burden of establishing guilt[] it may not rest its case entirely on a presumption, unless the fact proved is sufficient to support the inference of guilt beyond a reasonable doubt.” In the permissive presumptions, the Court’s majority view was that:

\begin{quote}
[T]he prosecution may rely on all of the evidence in the record to meet the reasonable doubt standard. There is no more reason to require a permissive statutory presumption to meet a reasonable-doubt before it may be permitted to play any part in a trial than there is to require that degree of probative force for other relevant evidence before it may be admitted.\textsuperscript{55}
\end{quote}

In Estelle v. McGuire (1991), the Court majority upheld an opinion to the disagreement of Justices O’Connor and Stevens. These dissenters believed that the jury instructions which the majority supported appeared to direct the jury to draw an inference from the evidence that a child was battered could be attributed to the father defendant that had beaten-up the child in the past and, thus, necessarily had done the battering. However, are there good reasons to justify our proof rule?

Judge Brian Martin, Chief Judge of the Supreme Court of the Northern Territory, put forward three considerations of our proof rule for its justification: One, the expression was “understood well enough by the average man in the community.” Two, the consideration was that “departure from the formula ‘has never prospered.’” Three, the consideration was that the “expressions other than ‘beyond a reasonable doubt invited the jury to analysis their own mental processes,’ which was not the task of the juror.” However, Justice Martin promoted needed changes that “permit expanded explanation that provides genuine assistance within the current formula or more modern and readily understood concepts that require the jury to be ‘sure’ of guilt?”\textsuperscript{56} What are other jurisdictions doing to ease the jurors’ task?

For the past few decades, England has abandoned having judges instruct jurors on reasonable doubt, which occurred because senior legal theorists reasoned that reasonable doubt could not be defined, uniformly understood, or consistently applied. Instead, England

\begin{footnotesize}
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\item \textsuperscript{52} \textit{Id.} at 1668.
\item \textsuperscript{53} 442 U.S. 140.
\item \textsuperscript{54} \textit{Id.} at 142.
\item \textsuperscript{55} \textit{Ulster County Court v. Allen} (1979), 443 U.S. 140, 166–167.
\item \textsuperscript{56} \textit{Id. supra} Chief Justice Martin.
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replaced it by advising jurors that to convict they are required to be “sure” of the defendant’s guilt. The simple words such as “sure” of guilt and “firmly convinced” derived from jury surveys added appropriately to jury instructions have proven very useful. Other problems come forward in the fundamental propositions of our criminal law.

However, what does ‘sure’ mean to any juror? Does it mean a balance of probabilities or an implausible high standard or just what a reasonable juror may believe? To most jurors “sure of guilt” sets a high bar, while some jurors may believe that it sets a lower standard of proof. Thus, the word “sure” may lean a person to a personal understanding. In the application of our rule device compounds the problems.

Professor of Law Youngjae Lee sees a broader problem in statutory language areas, where the proof rule does not fit. Professor Lee argues that the fundamental proposition of our criminal law is wrong because an element of a crime is of two types: one factual and one moral. The “factual” are questions about historical facts of what criminally happened, while the moral/normative such as “reckless,” “unjustified,” or “without consent” concerns questions about not only historical facts of what happened but also about the evaluative significance of what happened.

Thus, Professor Lee posits three reasons to explain why our proof rule should not apply: One, the rule’s requirement “applied to normative elements compel overly underinclusive interpretation of crime definitions because the standard requires factfinders to acquit where there are reasonable moral disagreements.” Second, “by, in effect, limiting the scope of crime definitions, the requirement undermines the value of using normative terms to crime definitions, as a method of guiding citizens to behave as a responsible, law-abiding citizen.” Third, “the requirements produce a situation where important normative decisions are delegated to ultimate factfinders, especially the jury, with excessively restrictive instructions as to when they are allowed to act on their moral beliefs.”

Thus, an ambiguity arises in the mind of a juror when asked to learn (but not how to determine) facts, norms, or both: The first doubt is “doubt about facts” and a second doubt is “doubts about norms,” or a combination of them, where an “element,” which is more ambiguous than ‘facts,’” as in conditions such as “under the circumstances evincing a depraved indifference to human life,” “recklessly engaged in conduct, and cause,” “depraved heart,” “heinous,” “debased,” “perversion,” or “wanton conduct” that elicit combinations with factual elements, which create doubts about facts, norms, and morals, or all of them. Along with the preceding, how does California handle the proof rule?

In California, the authority is Penal Code, Sections 1096 and 1096 (a). People v. Freeman (1984),61 Victor v. Nebraska (1984),62 Lisenbee v. Henry (1999),63 as well as

57 Id. at 297.


60 Id. Lee, supra, at 3-4.

61 8 Cal. 4th 450 [34 Cal. Rptr. 2d 558, 882 P.2d 249.

62511 U.S. 1, 16-17.

63 166 F.3d 997. See also Chapman v. California (1967), 386 U.S. 18; Boyde v.
Penal Code Section 1096 reads as follows:

A defendant in a criminal action is presumed to be innocent until the contrary is proven, and in case of a reasonable doubt whether his or her guilt is satisfactorily shown, he or she is entitled to an acquittal, but the effect of this presumption is only to place upon the state the burden of proving him or her guilty beyond a reasonable doubt, reasonable doubt is defined as follows: “It is not a mere possible doubt; because everything relating to human affairs is open to some possible or imaginary doubt. It is that state of the case, which, after the entire comparison and consideration of all the evidence, leaves the minds of jurors in that condition that they cannot say they feel an abiding conviction of the truth of the charge.

Penal Code Section 1096 (a) reads as follows: “In charging a jury, the court may read to the jury Section 1096, and no further instruction on the subject of the presumption of innocence or defining reasonable doubt need be given.” In California, the jury instructions are set by statute beginning with the above et seq, commonly known as jury instruction 100 (trial process), 101 (cautionary admonitions: jury conduct), 102 (note taking), 103 (reasonable doubt), 104 (evidence), and 105 (witnesses). Any fashioned instruction must not vary from the above statutes. Even with such guidance as above, the jury will struggle to find their way toward judgment.

An Emerging Awareness of the Plight of the Factfinders

What is the meaning of the beyond a reasonable doubt? Legal scholars are unable to define it. Why does it still command a prominent place in our jurisprudence? The Supreme Court dictates so. Is there “certainly” in the proof rule because the epistemologists have sufficiently argued the rule’s phraseology? No, epistemologists may argue it to no avail. Is it because our system has adopted it and that is the end of it? Yes. Has it become so intertwined with “due process” imposed by the Supreme Court that we dare not tinker with it? Yes. Is it unthinkable to entertain an alternative and beginning with the Supreme Court, the legal status quo believes so? Is it a notion (a belief, concept, impression, perception, view), an idea (a thought, inspiration, design) that is too important to disregard, or is it a subjective emotional thought conclusion or an objective mental process? All, but only


64 4 Millman, Sevilla & Tarlow, California Criminal Defense Practice, Ch. 83, Evidence, § 83.03 [1], Ch. 83, Submission to Jury and Verdict, §§ 85.02 [1A][a], [2][a][1], 85.04[2][a]; 5 Witkin. & Epstein, California Criminal Defense Practice, Criminal Trial (3rd ed. Matthew Bender, 2000), §§ 521, 637, 640. See also “Reasonable Doubt, Committee on Standard Jury Instructions,” Criminal, Report to CALJIC; “Pinpoint Instruction” (defense theory and focus re reasonable doubt) People v. Sears (1970), 2 Cal.3d 180, 190 (84 Cal. Rptr. 711, 495 P.2d 847). Denial of jury instruction request of defense evidence regarding preméditation and deliberation is an error; People v. Adrian (1982) 135 Cal.App.3d 335, 338, [185 Cal. Rptr. 506, error in the refusal to give a requested instruction relating to self-defense re burden of proof; People v. Granados (1957), 49 Cal.2d 346, error in the refusal of instruction concerning reasonable doubt in Felony Murder cases); People v. Brown (1984) 152 Cal.App.3d 674, 677–678 and 199 Cal. Rptr. 680 – Error in the refusal of instruction of reasonable doubt in identification.
empirical researchers can answer, and they are not in play. Is it a state-of-mind as some jurists have posited, where we must become skeptical and where we refuse to believe or have a reason to doubt; and as skeptics, we question the validity or authenticity of something perceived to be factual? Maybe, but we must not be too skeptical for that requires evidence stronger than necessary to convict. Nor should we make a dogma of it as Judge Learned Hand instructed of his only declared gospel, skepticism that had excellent use to discover the truth.\textsuperscript{65} Could the term “Skepticism” improve or further burden the process? The Supreme Court held that any clarification leads to ambiguity. When a premise becomes indefinable, any one’s attempt to define it becomes ambiguous. Would the words “sure” of guilty make a difference to a juror? Other jurisdictions outside ours believe so.

The jury as ordinary people understands the rule’s phrase outside the courtroom but not when it is their ultimate task of fulfilling the meaning of that ambiguous old rule. At the same time, jurors must attempt to see the factual reality of what happened in the criminal event. We do not call upon jurors to make an objective analysis of reasonable doubt or presumption of innocence—legal terms to which they are unaccustomed. However, this phraseology invites “analysis of their . . . mental process.”\textsuperscript{66} Their mental processes must determine guilt or innocence within the meaning of the proof rule’s phrase, but judges from top to bottom refuse to define it, either because they cannot, or procedure forbids them from doing so. Is it that Justices believe that it is the jury that must set the standard of reasonableness and define the proof rule, and are all factfinders, reasonable persons? Out of the chaos, an efficient \textit{voir dire} may save the day, but in the end, it is a trust, or perhaps a hope, that serious factfinders will provide justice, and protect the innocent.

The controversy and problem lie in the doctrine and application of the proof rule’s phrase in the mind of a modern, reasonable person juror.\textsuperscript{67} Jurists and legal scholars conclude that the rule’s expression has no definitive meaning. If such were true, then how could anyone convict on the strength of this rule and take away a person’s liberty or life; there must be something else that justifies this living fossil, or is it just a wrong rule as some belief?

Whitman concluded that today’s jurors because they are not professional jurors, must be instructed that “reasonable doubt” is neither a proof rule nor an objective truth, and the wrong question to ask a jury is “whether guilt has been ‘proven beyond a reasonable doubt?’”\textsuperscript{68} Whitman offered that the rule is too deeply rooted in the criminal justice system and that judges must inform jurors of the rule’s history, on their open-mindedness, and noble spirit.\textsuperscript{69} The interpretation and attempted clarity of the standard of proof will always cause further ambiguity.


\textsuperscript{68} Whitman, \textit{The Origins of “Reasonable Doubt,”} at 164.

\textsuperscript{69} \textit{Id.} at 165.
However, the jurors are instructed and charged without an understanding of ‘moral’ or ‘reasonable doubt,’ but only with expressible coherence as the bases for reasonableness, which undermines the jurors’ goal, and moves the jurors from the state burden to the state’s favor unless the defendant can convince the court of a specific type of doubt. Further, as Steve Shepard expounds that “the loss of understanding of moral certainty and the increasing acceptance of articulability as a basis for reasonableness underscored a great shift in thinking about judgment by a juror.”\textsuperscript{70} This shift of the burden may alter the Presumption of Innocence.

We need research and Jury surveys on the juror’s understanding of what the rule’s phrase and the concepts of “reasonable doubt,” “presumption of innocence,” and jury instructions mean. The central issue concerning juror doubt of the above phrases causes concern. For example, in 2008, Lily Trimboli conducted a jury survey, where the first question asked was “What was your understanding of Beyond a Reasonable Doubt.”\textsuperscript{71} The following result came from 1,225 jurors in 112 juries: 1) There was considerable divergence among jurors about the meaning of this proof rule; 2) The vast majority stated that they understood the judge’s instructions entirely or understood most things said by the judge. On the rule’s phrase, the range span was from 10% that believe the phrase meant “pretty likely person is guilty;” almost 12% that it was “very likely person is guilty;” about 23%” that it was “almost sure person is guilty;” to a 55% that believed that it meant “sure person is guilty.” However, most of the research on this issue consistently found that jurors do not quite understand instructions, and have difficulty with the legal concepts of “circumstantial evidence,” “reasonable doubt” and “presumption of innocence.” More so, recent research was alarming since it demonstrates that the ordinary lay juror has an unclear notion of what these legal phrases mean and adopts his or her interpretative meaning in their verdict.

Research by Larry Laudan found that the problem does not stop at the juror level and extends from the attorneys, trial judge, judges, jurists, and the Supreme Court as deduced from their written opinions. The problem then is systemic in the criminal justice system because of “strikingly discrepant understandings” of a generic standard of proof for judging guilt or innocence, where there is no assurance that a rival jury would reach the same conclusion in an ‘identical’ case. The latter implies unreliability, and thus, fundamentally unjust.\textsuperscript{72} Judges should not give instructions to jurors that differ from other jurisdictions or provide lawyerly explanations, albeit within permissible directions. Therefore, what is the jurors’ thinking or what is their thought process during their task?

Concerning the Factfinders, empirical research of the juror and the process of guilt or innocent judgment find that jurors, as all members of humanity, have a realm of human irrationality and “cognitive biases,” which are unconscious errors of reasoning that distort their judgment of the world. The leading researchers on the psychology of judgment,
decision-making, and behavioral economics are Professor of Psychology and Economics, Dr. Daniel Kahneman and his late collaborator, Dr. Amos Tversky.\textsuperscript{73}

Their empirical research findings demonstrated that people might not be as rational as thought. People may have flawed reasoning with an inflated sense of how well they understand.

This research suggests that people in decision-making tasks fall prey to known cognitive biases. These include “loss aversion,” a tendency to prefer avoiding losses to acquired similar gains; “framing,” decisions where the different options’ outcomes, people frame concerning gains, or losses and where any perception of a benefit gain wins over a perceived loss when the subject does not engage in rational thought. Instead, it takes a decision-making shortcut. Others are: “Anchoring,” when we rely too heavily on an initial piece of information offered. The “Illusion of validity” when the data tells a coherent story, a person may overestimate his or her ability to interpret and predict an outcome accurately. In the case of jurors, the choices of other jurors might influence how a juror thinks and where that juror does not engage in rational thought but instead, may take a decision-making shortcut. In Anchoring, a juror might rely heavily on an initial piece of evidence and witness testimony. Another bias is an “Illusion of validity,” when the data tells a coherent story, and a juror may overestimate his or her ability to interpret and predict an outcome accurately. Although not given much study by Drs. Kahneman and Tversky, the critical “Confirmation bias,” is in play, where we may tend to be more receptive to evidence that confirms our pre-existing beliefs or hypotheses, and mentally reject information that contradicts our beliefs.

Most relevant to the jurors’ task, is a well-established bias, “Overconfidence,” which is a tendency to be more confident in their ability to judge that is objectively reasonable. Jurors as all humans may tend to believe that they are more ethical than others, assume that they have good character and do the right thing under ethical challenges, and perhaps most shockingly, they may continue to hold these beliefs about themselves even while making explicitly wrong decisions. Studies show that this bias makes humans overconfident in their moral character and act without proper reflection. Additionally, the overconfidence phenomenon suggests that persons overestimate the validity of their general knowledge.\textsuperscript{74}

Also, contaminating our cognitive function may be the biases of “Temporal Discounting,” a preference toward the immediate reward, and “Blind Spot,” where we recognize the brunt of prejudice on the judgment of others while failing to understand our bias on experience.\textsuperscript{75} The “Ambiguity Effect” is the tendency to avoid options because of

\textsuperscript{73} Daniel Kahneman, \textit{Thinking, Fast and Slow} (Farrar, Straus and Giroux 2011). Kahneman is Ph.D. Berkeley 1961 and Noble laureate, which he shared with Dr. Amos Tversky for their work in the development of an alternative account of decision-making in their “prospective theory.”


missing information, a bias that would also affect jurors.\textsuperscript{76}

Precise focus on the juror’s dilemma would result in realistic outcomes specific to them and the proof rule. Generally, persons’ confidence in their judgments is relatively more significant than the scientific accuracy of those judgments. According to Psychologists P. A. and J. K. Adams, research literature has defined overconfidence in three distinct ways as an effect on decisions or performance: One, overestimation of one’s actual performance; two, over placement or superposition of one’s performance relative to others, and three, over-precision in expressing unwarranted certainty in the accuracy of one’s belief.\textsuperscript{77}

Overestimation is a phenomenon that occurs in the performance of hard tasks as in the duty of jurors not exceptionally skilled for that purpose.\textsuperscript{78} When persons believe that their judgment is better than others, it makes them place themselves above the perception of others; or when they are overconfident in knowing the truth, they allow over-precision.\textsuperscript{79} When confident over items of evidence, which we judge to exonerate or convict, one possible explanation is confidence in an evidentiary issue, where we may have inflated the evidence item’s value within the totality of the evidence by “over-precision” and where we place evidence above other evidence.\textsuperscript{80} Empirical researchers have identified some 114 decision-making, belief, and behavioral biases along with 29 social and 50 memory error biases.

Research on cognitive biases suggest that people are more likely to act to avert a loss than to achieve gain, place value on a change in probability with higher value placed on a shift from 0% to 10%, going from impossibility to possibility than from 45% to 55%, and set higher value on a change from 90% to 100% going from possibility to certainty.\textsuperscript{81}

In Dr. Kahneman’s research, his central thesis is the existence of two systems of human thought: “System One” is fast, intuitive, automatic, stereotypic, emotional, and understands simple sentences. “System Two” which is slower, more deliberative, and more logical. Unfortunately, System Two has “ego depletion” or tires easily and, often, instead of slowing to analyze one becomes content to accept and endorse the easy heuristic answer without bothering to scrutinize the logic. System Two is more inactive than System One when content. It allows System One to feed it the weak story that System One proposes and which System One obtained from its natural conclusion based on a comfortable easy but flawed method of answering a hard question. By doing so, System Two allows System One to take over, thus forcing a System One thought judgment. Psycho-neuroscientists find that it takes a tremendous mental effort to be always in System Two, and people are prone to

\textsuperscript{76} Jonathan Baron, Thinking and Deciding (2nd ed., Cambridge U. Press, 1994).


\textsuperscript{79} Id.


\textsuperscript{81} Id. \textit{supra} Scopelliti.
using System One’s mental shortcuts when possible, which guide irrational decisions. As a result, Dr. Kahneman suggests, people often place too much confidence in their judgment, and fall victim to biases from framing choices to a tendency to replace a problematic question with one which is easy to answer.

Accordingly, Dr. Kahneman sees System One as associating unique information with existing patterns or thoughts, rather than creating new profiles for each new experience.\(^{82}\) In a legal metaphor, when presented with a new case, a judge limited to heuristic thinking would only be able to think of a similar historical one, rather than the case’s uniqueness.\(^{83}\) While System Two draws to arrive at explicit beliefs and reasoned choices, it is slow, effortful, infrequent, logical, calculating, and conscious, and will determine the appropriateness of behavior in the setting as well as determine the validity of complex logical reasoning. Unlike System One that proposes, System Two disposes.

William James believed that humans cognitively possess two different kinds of thinking: Associative and True Reasoning. In 1975, Jonathan Evans suggested a dual process theory of two distinct processes: Heuristic and Analytic. Evans postulated that while in the heuristic process a person chooses which information is relevant to his current situation, and where a person discards irrelevant information. The analytic methods follow, where the relevant information selected is used to make judgments about that situation.\(^{84}\)

Psychophysics research adds to the understanding of these distortions in metacognition. Further, in recent studies, a theory on the “underconfidence phenomenon,” where a realism of confidence accounts for discrimination of senses as an underconfidence bias, and research on it is ongoing.\(^{85}\) Scientists base their theory “on the law of comparative judgment and the assumption of confidence as an increasing function of the perceived distance between stimuli and predicted underconfidence.”\(^{86}\) Another of their experiments showed that prolonged experience of outcome feedback does not affect underconfidence.\(^{87}\)

As was first thought almost a hundred years ago, “medical discovery is providing the scientific and academic communities the evidence that emotion is primary in decision making.”\(^{88}\) Thus, emotion will induce changes in the prefrontal cortex and becomes very important in judgment and decision making.\(^{89}\) The findings of Joseph R. Simpson and co-researchers suggest an active interplay between cognitive task performances and emotions.

\(^{82}\) Id. Kahneman, Judgment Under Uncertainty.

\(^{83}\) Id. Kahneman, Thinking, Fast and Slow.


\(^{86}\) Id.

\(^{87}\) Id.


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Conclusion: What Would the Jury Process Look Like in Ten-Years?

While we must condemn criminals, as Professor Whitman believes and St. Augustine posits, criminals must not be convicted with a passion of self-righteousness by well-meaning jurors unknowing of their metacognition processes and biases, but rather with compassion and with doubt of our moral authority to judge. Any standard of proof must not be without empirical research, and must be ageless, well defined, and applied with certainty but in comportment with society’s vision of fair justice and due process.

Bertrand Russell believed that “None of our beliefs are quite true; all have a least a penumbra of vagueness and error.” He also believed in skepticism, rationality, and that the only way to arrive closer to the truth is never to assume certainty. Jurors require a clear structure to allow their ‘free will’ to choose correctly. However, the human thought process is full of biases, some 218, according to researchers that effect preference in decision-making, belief, and behavioral activity, social, and memory errors.

Empirical studies specific to “finders of fact” in criminal trials would yield useful findings toward a better standard of proof rule and method of instructing and charging the jury. In accord with the legal community, it is the empirical scientist, psycho-neuroscientist, psychophysicist, research psychologist and epistemologist that the criminal justice system must consult to obtain knowledge to arrive at a better fact-finding process and proof rule than the proof formula in place. Judges demand rationality of the factfinders and anything that invades the jurors’ method of thinking toward their goals affects the outcome of guilt or innocence and may alter “presumption of innocence.” Therefore, we must consider and do everything possible to deliver us from a false sense that our proof rule is the only one viable and that jurors are accomplishing justice.

We must replace the process with definable terms in a standard of proof rule, where jurors do not become baffled by ambiguity, and judges are not left foundering to clarify an indefinable standard of proof (as a Right) and bring clarity to the phrase presumption of innocence. The only way to accomplish the above is to engage the empirical scientists in accord with the legal community to conduct extensive research on jury decision-making and their recognition of metacognition biases. In essence, we must achieve debiasing the jurors through incentives, nudging, and training. More so, to find a jury process that allows definitive directions and instructions. In ten years or less, a successful outcome would render juries more confident in their verdicts and more error-free in judgments. Perhaps, this awareness of self will translate into their private lives and society, thus the making of a more harmonious culture.