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Demystifying Mindreading for the Law

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DEMYSTIFYING MINDREADING

FOR THE LAW

TENEILLE R. BROWN, JD*

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INTRODUCTION: MINDREADING IS UBIQUITOUS

A few summers ago, I was playing in the yard with my kids. I noticed my 3-year-old son pinching the tops off the red lilies we had planted, which were just starting to bloom. I told him to stop. He immediately froze and blurted out "it was an accident!" I surveyed the scene. There were eight decapitated lilies in a row. Eight. I pressed him. "So, you are saying it was an accident, eight times?" He looked down, and then off into the horizon. The jig was up. He furrowed his brow-wondering how I could possibly know it had been intentional. I told him that we generally do not repeat the same movement, accidentally, eight times. He was mystified that I could have known his private thoughts. I told him that he was already developing the ability to read other people's minds, and it would improve as he got older.¹ He looked at me in awe, as if I had some superpower. But it's one of the most basic things we humans do. This sort of mindreadingwhere we look beyond the actual words spoken, to discern someone's true thoughts through their eye gaze, affect, expressions, character, demeanor, and any other cues—is an essential part of our social lives. By aggregating lots of information about other people's mental states, past behavior, character (and unfair stereotypes), we decide whether they should be praised, condemned, or forgiven.

^{*} Teneille R. Brown is a Professor of Law at S.J. Quinney College of Law in the Center for Law and Biomedical Sciences (LABS) and an Adjunct in Internal Medicine in the Center for Health Ethics, Arts, and Humanities (CHeEtAH).

¹ See Daniel Alcala-Lopez, Kai Vogeley, Ferdinand Vinkofski & Danilo Bzdok, *Building Blocks of Social Cognition: Mirror, Mentalize, Share?* 118 CORTEX 4, 4 (2019); Francesco Margoni & Luca Surian, *Conceptual Continuity in the Development of Intent-Based Moral Judgment*, 194 J. EXPERIMENTAL CHILD PSYCH. 1, 3 (2020).

Our marvelous human brains have evolved to read minds in a way few species can. We learn by about age four that people have access to different information from us, which allows us to conceal our thoughts and attempt to interpret theirs. In psychology mindreading is called "theory of mind" and we humans spend a lot of time employing it.² It allows us to engage in meta-cognition-or thinking about thinking-interpreting our own and others' mental states, thoughts, emotions, beliefs, perceptions, desires, knowledge, and decisions.³ For our ancestors, just as for us, being able to infer whether someone tripped or intentionally kicked us was vital for determining whether they were trustworthy and would make good allies, or untrustworthy and should be condemned.⁴ Mindreading is necessary for building complex societies,⁵ because it is critical for cooperating and detecting deception.⁶ As one team put it, "mind perception is the essence of morality."⁷ The thesis of this article is that mindreading-based on all kinds of stereotypes and cues-is far from magical. It is ordinary and ubiquitous and pervades every area of the law. Because we reflexively read minds, it is difficult to imagine that it can be completely mitigated through formal legal rules. But many of our legal doctrines assume that it can. One example I have recently written about is when we tell jurors to focus only on the defendant's conduct when assessing negligence liability, and not attend to mental states.⁸ We also assume that evidence rules can limit the kinds of inferences that jurors draw about an accused's character, even though these mental state inferences are tightly linked with character and are spontaneously made.⁹

² This is also referred to as "mentalizing," "perspective-taking," or sometimes just "empathy." For our purposes, these terms can be used interchangeably. *See* Matthias Schurz Joaquim Radua, Matthias G. Tholen, Lara Maliske, Daniel S. Margulies, Roger B. Mars, Jerome Sallet, & Philipp Kanske, *Toward a Hierarchical Model of Social Cognition: A Neuroimaging Meta-Analysis and Integrative Review of Empathy and Theory of Mind*, 147 PSYCH. BULL. 293, 294 (2021).

³ Id.

⁴ Harriet Over & Richard Cook, *Where do Spontaneous First Impressions of Faces Come From*?, 170 COGNITION 190, 190 (2018).

⁵ Oliver Genschow, Davide Rigioni & Marcel Brass, *The Hand of God or the Hand of Maradona? Believing in Free Will Increases Perceived Intentionality of Others' Behavior*, 70 CONSCIOUSNESS & COGNITION 80, 81 (2019).

⁶ Liane Young, Jonathan Scholz & Rebecca Saxe, *Neural Evidence for "Intuitive Prosecution": The Use of Mental State Information for Negative Moral Verdicts*, 6 Soc. NEUROSCIENCE 302, 302 (2011).

⁷ Kurt Gray, Liane Young & Adam Waytz, *Mind Perception is the Essence of Morality*, 23 PSYCH. INQUIRY 101 (2012).

⁸ See Teneille R. Brown, *Minding Accidents*, 94 COLO. L. REV. 1 (2022); *e.g., United States v. Fortenberry*, 860 F.2d 628, 632, 635 (5th Cir. 1988) (explaining that it is improper for a jury to infer that the defendant committed the charged offense based on external offense evidence).

⁹ See Teneille R. Brown, *The Content of Our Character*, 126 PENN ST. L. REV. 1, 1–2 (2021); Fed. R. Evid. 404(b)(1) ("Evidence of a crime, wrong, or other act is not admissible

Much of our magical-thinking about jurors ignores that they are humans first, and jurors second.

I. WE CANNOT NOT READ MINDS

Our brains are wired to rapidly infer mental states.¹⁰ Typically, adults cannot *not* infer mental states when we hear how someone has behaved.¹¹ We do it unconsciously, automatically, and unintentionally.¹² Ironically, we may be better at inferring the mental states of *others* because we do it "more regularly and effortlessly in social cognition."¹³ In contrast, we are typically not surprised by our own behavior and do not need to explain it to ourselves by interpreting our own thoughts and actions.

To demonstrate how ordinary mindreading is, let us consider an example. Imagine you have just walked by your colleague's office. She is sitting by her computer with her head in her hands. You ask her how she is doing, and she flatly answers, "I'm fine," while rubbing her forehead. However, her watery and downcast eyes tell you that she is not. She has been crying; she turns away from you. What is your colleague feeling? Most adults would recognize the gulf between her words and her emotions. They would interpret her as trying to hide the fact that she is sad. But, if instead of turning away she lingers and looks us in the eyes without changing the topic, she might want us to ask her again how she is doing. This time she may be ready to share. Mindreading requires us to pick up on subtle nuances and changes in behavior. If you know this colleague well, you will use whatever information you know about her past actions or situation to infer what she might be feeling. Did she just leave a meeting with a difficult person? Is this behavior out of character? We then will use this encounter in the future to read her mind on a different occasion.

Like many biological capacities, mindreading capacity exists on a spectrum. Those who take the colleague's "I'm fine" response at facevalue likely struggle in social interactions because they fail to perceive and interpret important non-verbal cues. They cannot "read the room." In terms of group differences, women outperform men, especially on the

to prove a person's character in order to show that on a particular occasion the person acted in accordance with the character.").

¹⁰ Sarah-Jayne Blakemore & Jean Decety, *From the Perception of Action to the Understanding of Intention*, 2 NATURE REVS. NEUROSCIENCE 561, 561 (2001).

¹¹ See id.

¹² Dana Schneider, Virginia P. Slaughter & Paul E. Dux, *Current Evidence for Automatic Theory of Mind Processing in Adults*, 162 COGNITION 27, 27 (2017); *see also* Teneille R. Brown, *The Content of Our Character*, 126 PENN ST. L. REV. 1, 2 (2021).

¹³ Joshua Hirschfeld-Kroen, Kevin Jiang, Emily Wasserman, Stefano Anzellotti, & Liane Young, When My Wrongs are Worse than Yours: Behavioral and Neural Asymmetries in First-Person and Third-Person Perspectives of Accidental Harms, 94 J. EXPERIMENTAL Soc. PSYCH., 104102, at 2 (2020).

more emotional, or empathic aspects of mindreading.¹⁴ Some people with autism find it difficult to infer people's thoughts, but seem to do fairly well interpreting their feelings.¹⁵ Psychopaths, conversely, struggle to decipher the emotional states of others, but can often read their thoughts just fine.¹⁶ People with untreated forms of schizophrenia may confer minds to inanimate objects, and thus over-attribute thoughts to both things and people.¹⁷ These are all disorders impacting mindreading. Because it is so critical to socializing, our aptitude in this area often predicts how successful we are in many social roles.

II. WE MAKE LOTS OF MISTAKES WHEN MINDREADING

In neurotypical adults, mindreading is a useful tool that works fairly well. But we still make mistakes.¹⁸ This is because mindreading occurs through a blurry kaleidoscope of memories, morality, prejudice, and emotion.¹⁹ For example, if someone causes severe harm that triggers outrage, we may inflate the culpability of the actor's mental states to assume he was behaving recklessly. We sometimes do this even if the facts indicate the person was not at all reckless. We may also inflate culpable mental states when we hear that the actor is not "one of us." Whether someone is a member of our ingroup will often inform how charitably we interpret their behavior and thoughts.

This is in fact how we dehumanize people—by *not* inferring individual mental states—and assuming that they do not think and feel in the same complex way that we do.²⁰ While *our* thoughts are particular to us and hard to predict, *their* thoughts and feelings are monolithic and predictable. How we attribute minds to others says almost nothing about the individuals in the target group but a great deal about our social

¹⁴ Andrew Martin, J. Huang, Alexander Hunold, & Marcus Meinzer, *Sex Mediates the Effects of High-Definition Transcranial Direct Current Stimulation on "Mindreading*,"366 NEUROSCIENCE 84, 84 (2017).

¹⁵ Maria Andreou & Vasileia Skrimpa, *Theory of Mind Deficits and Neurophysiological Operations in Autism Spectrum Disorders: A Review*, 10 BRAIN SCIENCES 393 (2020).

¹⁶ Simone Shamay-Tsoory, Hagai Harari, Judith Aharon-Peretz & Yechiel Levkovitz, *The Role of the Orbitofrontal Cortex in Affective Theory of Mind Deficits in Criminal Offenders with Psychopathic Tendencies*, 46 CORTEX 668, 668 (2010).

¹⁷ See Emre Bora & Christos Pantelis, Theory of Mind Impairments in First-Episode Psychosis, Individuals at Ultra-High Risk for Psychosis and in First-Degree Relatives of Schizophrenia: Systematic Review and Meta-Analysis, 144 SCHIZOPHRENIA RESEARCH 31–36 (2013).

¹⁸ See Christoph Teufel, Paul Fletcher & Greg Davis, Seeing Other Minds: Attributed Mental States Influence Perception, 14 TRENDS COGNITIVE SCI. 376, 376 (2010); Brendan Gaesser, Episodic Mindreading: Mentalizing Guided by Scene Construction of Imagined and Remembered Events, 203 COGNITION 104325 (2020).

¹⁹ See Kevin Uttich, & Tania Lombrozo, Norms Inform Mental State Ascriptions: A Rational Explanation for the Side-Effect Effect, 116 COGNITION 87–100 (2010).

²⁰ See Gray, Young & Waytz, supra note 7, at 105.

hierarchies and prejudices.²¹ Mindreading is thus influenced by our perception and influences what we perceive.

We automatically use behavior to predict mental states and use mental states to predict behavior.²² And we will use evidence of both to form impressions of people's moral characters, which feed back into the loop to guide our predictions of their behaviors and mental states.²³ All of these inputs: behavior, mental states, moral character are then used to determine whether to judge the actor as morally wrong or blameworthy.²⁴ While research in moral psychology has isolated the different inputs in controlled experiments, they are often hard to separate in the real world.

To make this even more tricky, in real-world social settings there are no known "error" rates for how we read minds, so we can never be *certain* that we got it right. We are often guessing. You said that you feared for your life when you shot the Black teenager, but did you *really*? Was overbilling Medicare an honest mistake, or did you *intend* to repeatedly commit fraud? Did you genuinely *think* the person you stabbed was an alien because you were in the throes of methamphetamine-induced psychosis? This tug-of-war between our moral and legal need to infer mental states and our imperfect but automatic ability to do so has guided much of my research for the last decade. When mindreading goes wrong, it can have devastating consequences. Nowhere is this truer than in civil and criminal trials, where people can lose the custody of their children, millions of dollars, or even their lives when we misread their minds.

III. WE BLAME PEOPLE FOR THE UNINTENTIONAL HARMS THEY CAUSE

If two people behave identically, one may be forgiven and one may be punished based on the mental states they possessed at the time. It is why my kid was so quick to exclaim "it was an accident!" after his guillotinegardening. From an early age we intuit that mindreading is tightly linked with moral judgments.

²¹ Lasana Harris, Alexander Todorov & Susan Fiske, *Attributions on the Brain: Neuro-Imaging Dispositional Inferences, Beyond Theory of Mind*, 28 NEUROIMAGE 763, 763 (2005); Susan Fiske, *Stereotype Content: Warmth and Competence Endure*, 27 CURRENT DIRECTIONS PSYCH. SCI. 67, 71 (2018).

²² See Jennifer Ray, Peter Mende-Siedlecki, Ana Gantman & Jay Van Bavel, *The Role of Morality in Social Cognition, in* THE NEURAL BASES OF MENTALIZING 13 (Dec. 2020) (unpublished manuscript).

²³ *Id.* at 3 ("There is a close, bi-directional relationship between inferring mental states and attributing stable traits.").

²⁴ "People evaluate the moral character of others not only based on what they do, but also on what leads them to do it. Because an agent's state of mind is not directly observable, people typically engage in mindreading—attempts at inferring mental states—when forming moral evaluations." *See* Clayton R. Critcher, Erik G. Helzer & David Tannenbaum, *Moral Character Evaluation: Testing Another's Moral-Cognitive Machinery*, 87 J. EXPERIMENTAL SOC. PSYCH. 1, 1 (2020).

This distinction might seem ethereal, but it is prevalent in our everyday lives. Focusing our condemnation on agents who intentionally cause harm is why hornets are scarier than bees. Hornets will deliberately sting you without any good reason, while bees usually reserve bothering you for when they feel attacked.²⁵ It makes sense that we would spend more energy trying to avoid hornets, or those who intentionally cause unjustified harms. But at the end of the day, we just don't want to be stung. So even if we are accidentally stung by bees, we will still try to avoid them. If they were human, we may try to get them to calibrate their stings to respond to true threats—to try to encourage them to exercise greater care to prevent injury. This is essentially the law of negligence.

However, the social or legal value we place on mental states is moderated by culture.²⁶ Western societies appear more sensitive to information about intent when assessing blame.²⁷ Harmful *outcomes*, on the other hand, seem to play a more central role in tighter-knit, agrarian communities.²⁸ Despite the cultural variability, an actor's "intentions and other reasons for action play some role in moral psychology in all societies."²⁹ Even in these less industrialized communities, intentional actions are considered more blameworthy, wrong, and deserving of punishment than unintentional actions.

Harmful outcomes are also more prevalent in the moral judgments of young children and adults of advanced age. For example, if someone accidentally threw someone else's cupcake in the trash, younger children evaluate this act as more blameworthy than older children would.³⁰ With age, in Western cultures we grow to appreciate that intentional wrongs are more immoral than accidents. Put differently, in mature minors and adults, it is usually the intent, not the outcome, that is most morally relevant.³¹

²⁵ See Elise Takahama, New Study Determines 'Aggressive Efforts' Needed to Prevent Spread of Asian Giant Hornet in Washington, THE CHRONICLE (Sept. 24, 2020, 11:28 AM), https://www.chronline.com/stories/new-study-determines-aggressive-efforts-needed-to-prevent-spread-of-asian-giant-hornet-in,1119.

 ²⁶ Justin D. Levinson, Mentally Misguided: How State of Mind Inquiries Ignore Psychological Reality and Overlook Cultural Differences, 49 HOWARD L. J. 1 (2005).
²⁷ Id. at 12–13.

 ²⁸ H. Clark Barrett, et al., Small-Scale Societies Exhibit Fundamental Variation in the Role of Intentions in Moral Judgment, 113 PROC. NAT'L ACAD. SCI. 4688, 4689 (2016).
²⁹ Id. at 4693.

³⁰ Melanie Killen, Kelly Lynn Mulvey, Cameron Richardson & Noah Jampol, Amanda Woodward, *The Accidental Transgressor: Morally-Relevant Theory of Mind*, 119 COGNITION 197, 207 (2011).

³¹ Gavin Nobes, Georgia Panagiotaki & Chris Pawson, *The Influence of Negligence, Intention, and Outcome on Children's Moral Judgments*, 104 J. EXPERIMENTAL CHILD PSYCH. 382, 383 (2009).

As we age, the relative weight people assign to mental states versus bad outcomes changes.³² From about four years old, children are sensitive to bad or good intentions, but prioritize bad outcomes.³³ This means they might punish someone who accidentally causes harm more than someone who intends to cause harm but fails. By middle childhood, older children in Western countries punish like adults, based primarily on the actor's mental states.³⁴ This then reverts to a focus on bad outcomes much later in life.³⁵

Thus, older people might be more likely to attribute greater responsibility to people for the bad outcomes they may have unintentionally caused. This presents a question of whether shrewd defense counsel should seek to strike older adults from negligence juries, particularly when the plaintiff is sympathetic and the injury is physical. Psychologists suggest that young children and older adults rely more on information about outcomes because attending to mental state information takes cognitive effort and strong working memory, even if it happens quickly and appears effortless.³⁶

IV. LEGAL DOCTRINES STUBBORNLY EMBRACE A SIXTEENTH-CENTURY VIEW OF THE BRAIN

The criminal law in the United States mostly tracks the intuitive hierarchy of culpable mental states. To obtain a guilty verdict for most crimes, prosecutors must prove that the accused committed the *actus reus* (voluntary act) with the right kind of accompanying *mens rea* (culpable mental state).³⁷ The Model Penal Code has developed four *mens rea*

³² Francesco Margoni, Janet Geipel, Constantinos Hadjichristidis & Luca Surian, *The Influence of Agents' Negligence in Shaping Younger and Older Adults' Moral Judgment*, 49 COGNITIVE DEVELOPMENT 116–26 (2019).

³³ Gavin Nobes, Georgia Panagiotaki & Paul E. Engelhardt, *The Development of Intention-Based Morality: The Influence of Intention Salience and Recency, Negligence, and Outcome on Children's and Adults' Judgments,* 53 DEVELOPMENTAL PSYCH. 1895, 1906 (2017).

³⁴ When researchers take into account the limited memory recall of the kids, and reminded them of certain facts, they could also prioritize mental state information. Even five to six-year-old children will key punishment to the actor's mental state. *See id.* at 1895–99.

³⁵ See Nikki A. Pucetti et al., *Linking Amygdala Persistence to Real-World Emotional Experience and Psychological-Wellbeing*, 41 J. NEUROSCIENCE 3721, 3725 (2021) (finding a U-shaped curve of advanced age/outcome bias).

³⁶ See Nobes, Panagiotaki, & Engelhardt, supra note 33, at 5.

³⁷ Teneille Brown & Emily Murphy, *Through A Scanner Darkly: Functional Neuroimaging as Evidence of a Criminal Defendant's Past Mental States*, 62 STAN. L. REV. 1119, 1128 (2010). While jurors sometimes struggle to distinguish recklessness from knowledge, in general their lay assessments match the MPC hierarchy of categories. *See* Matthew R. Ginther, Francis X. Shen, Richard J. Bonnie, Morris B. Hoffman, Owen D. Jones, Rene Marois & Kenneth W. Simons, *The Language of Mens Rea*, 67 VAND. L. REV. 1327, 1338 (2014).

categories, which are thought to range from most to least morally culpable.³⁸ These are intent, knowledge, recklessness, and negligence.³⁹ In many criminal cases, the *actus reus* can be observed, and corroborated with physical evidence like cashed checks, bloody murder weapons, or video surveillance. However, the defense is often in the unenviable position of proving the absence of *mens rea*. This has been aptly referred to as "proving the unprovable."⁴⁰

Our assumption that the *mens rea* can be completely separated from the *actus reus* embodies a sixteenth-century view of the body and the mind called substance dualism.⁴¹ Substance dualism has been refuted by neuroscientists, but it continues to find sanctuary in various legal doctrines.⁴² In many areas of the common law, we assume that because mindreading is subjective and invisible, it is somehow less important or real. Legal rules may be reluctant to embrace the ubiquity of mindreading because attorneys and judges prefer objective things we can see and measure.

Mental states cannot be observed in the same way that actions can. So, we are often left guessing at what someone is thinking. Despite massive improvements in machine-learning algorithms and neuroimaging, we still cannot accurately decode legally relevant mental states.⁴³ It remains impossible to reliably distinguish between those who are motivated to deceive us, those who merely misremember, and those who are telling the truth.⁴⁴ While it is true that intentions "don't leave fingerprints or footprints,"⁴⁵ mental states are not metaphysical. They come from the physical brain.

³⁸ Kenneth W. Simons, *Should the Model Penal Code's Mens Rea Provisions Be Amended*?, 1 OHIO ST. J. CRIM. L. 179, 195 (2003).

³⁹ MODEL PENAL CODE § 2.02(2) General Requirements of Culpability (AM. LAW INST., 2021).

⁴⁰ Christopher Slobogin, Proving the Unprovable: The Role of Law, Science, and Speculation in Adjudicating Culpability and Dangerousness (Ronald Roesch, ed.) (2006).

⁴¹ See Martin R. Gardner, *The Mens Rea Enigma: Observations on the Role of Motive in Criminal Law Past and Present*, 1993 UTAH L. REV. 635, 655 (1993).

⁴² Francis X. Chen, *Sentencing Enhancement and the Crime Victim's Brain*, 46 LOY. U. CHI. L.J. 405, 417 (2014).

⁴³ Emily Murphy & Jesse Rissman, *Evidence of Memory from Brain Data*, J. LAW & BIOSCI. (2020) (suggesting that even in the future when technological or methodological hurdles can be overcome, how we mistakenly encode memories in the brain will limit the accuracy of any decoding process).

⁴⁴ Teneille Brown & Emily Murphy, *Through a Scanner Darkly: Functional Neuroimaging as Evidence of a Criminal Defendant's Past Mental States*, 62 STAN. L. REV. 1119, 1122 (2010).

⁴⁵ Rita Anne McNamara, Aiyana K. Willard, Ara Norenzayan & Joseph Henrich, *Weighing Outcome vs. Intent Across Societies: How Cultural Models of Mind Shape Moral Reasoning*, 182 COGNITION 95, 95 (2019).

Unfortunately, we have an impoverished vocabulary around mental states in the law. Perhaps because lawyers tend to think of mental states solely from the perspective of the criminal law, we have assumed that mental states must be inculpating—but that is not the case. When psychologists use the term "mental states" they are referring to a broad range of cognitive or emotional states that might be used to infer an actor's thoughts or emotions.⁴⁶ Scholarly discussions and judicial opinions seem to assume that mental states may be amoral. They include perception, evaluation of risk, or awareness. This critical insight untethers mindreading from its residence in the criminal law. Indeed, mindreading is the central province of the jury and is a core part of what they do.⁴⁸

Contracts, probate, administrative, property, and tort law cases all require jurors (and judges) to infer the actors' mental states.⁴⁹ But this process is rarely recognized, occurring primarily in the shadows of the law. If the formal doctrine ignores mental states, factfinders will find a way to bring them in-through the backdoor if necessary. This is precisely what has happened in civil negligence, through the adoption of the test of "reasonable foreseeability" for duty, breach, and proximate causation.⁵⁰ However, rather than being transparent about the need to evaluate mental states when assessing foreseeability, even this test cloaks mental states in a false veneer of objective conduct.⁵¹ Thus, jurors are told they should determine whether a defendant is negligent by looking only at his external behavior. Ironically, therefore, because mindreading does not officially exist anywhere in the elements of negligence, it has been smuggled in to unofficially exist everywhere. Not surprisingly, this leads to extreme confusion around what we mean by foreseeability and how it ought to be operationalized. It also leaves jurors rudderless to infer mental states on their own, without any guidance.

While mindreading conjures up flamboyant images of crystal balls or charlatans, it is a deeply serious endeavor for the law. The primary role of factfinders in civil, criminal, and administrative trials in the United States is to serve as highly-regulated mind readers—to listen to the testimony and

⁴⁶ Mental State, BLACK'S LAW DICTIONARY (11th ed. 2019).

⁴⁷ See Simons, supra note 38, at 194.

⁴⁸ George Fisher's excellent article on the development of the jury's role as lie detector could be read to swap "lie detection" out with "mind-reader," as deception detection is just one of many types of mindreading. The article suggests that the jury's lie-detection' role developed to legitimize the process of litigation. *See* George Fisher, *The Jury's Rise as Lie Detector*, 107 YALE L.J. 575, 705–06 (1997).

⁴⁹ See generally Kenneth W. Simons, *Rethinking Mental States*, 72 B.U. L. REV. 463 (1992).

⁵⁰ See, e.g., Nichols v. Progressive N. Ins. Co., 2008 WI 20, ¶¶ 13–15, 308 Wis. 2d 17, 746 N.W.2d 220 (2008).

⁵¹ See Blyth v. Birmingham Waterworks Co., 156 Eng. Rep. 1047 (1856).

decide whether the witnesses are credible and telling the truth. Because it can be so easily biased, we must directly acknowledge how jurors and judges (in addition to voters and employers) automatically and imperfectly read minds. We must remove the "mystique of mindreading," and see how ordinary assessments of mental states drive legal decision-making. If we want to have any hope of mitigating the psychological biases at play, we cannot continue to pretend that they do not occur.

V. MINDREADING OCCURS OUTSIDE OF THE CRIMINAL LAW

To date, most legal scholarship around mindreading has focused on criminal intent. This is lamentable for a few reasons. For one, while we can use physical force, planning, and repetition to infer intent, deducing carelessness requires engaging in complex second-order mindreading where we consider what the defendant knew, perceived, or realized.⁵² This makes the mindreading process layered, and providing clear jury instructions even more essential. Second, demonstrating a negligent mental state involves proving a negative (lack of care), which is notoriously difficult. Perhaps this is why we have pretended for some time that negligence liability could be assessed by looking only at a defendant's conduct.⁵³ It would be simpler and easier if this were the case.

It may be easier to ignore the role of mental states in negligence because it is often described as being less of a moral enterprise.⁵⁴ Supporters point to the facts that nobody is going to jail for civil negligence, the burden of proof is much lower, and defendants can be liable for negligence without any demonstration of fault.⁵⁵ Liability may even be strict if a defendant is subjectively incapable of conforming his actions to what is reasonable.⁵⁶ The amoral view of negligence has prevailed in many law schools, where academics have focused on the economic aspects of rules and the cost of accidents.⁵⁷ Of course, this

⁵² See Teneille R. Brown, *Minding Accidents*, draft available on ssrn at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3898109.

⁵³ Simons, *supra* note 49, at 472. For examples of cases that state the black letter law, see *La Plante v. American Honda Motor Co.*, 27 F.3d 731, 735 (1st Cir. 1994); *Wyant v. Lobdell*, 277 N.E.2d 595, 596 (Ind. Ct. App. 1972); *Dairy Road Partners v. Island Ins. Co.*, 992 P.2d 93, 114 (Hawai'i 2000).

⁵⁴ See EDWARD KIONKA, TORTS IN A NUTSHELL 67 (West Publishing, 7th ed. 2020) (When it comes to the conduct-focus of breach, "legal fault and moral blame diverge.").

⁵⁵ See Richard Posner, Instrumental and Noninstrumental Theories in Tort Law, 88 IND. L.J. 469, 486 (2013).

⁵⁶ "If...a man is born hasty and awkward,...no doubt his congenital defects will be allowed for in the courts of Heaven, but his slips are no less troublesome to his neighbors than if they sprang from guilty neglect. His neighbors accordingly require him, at his proper peril, to come up to their standard..." O.W. HOLMES, JR., THE COMMON LAW 108 (1881).

⁵⁷ George P. Fletcher, *Fairness and Utility in Tort Theory*, 85 HARV. L. REV. 537, 538 (1972).

assumes that all mental states are inculpating, and that when defendants are being asked to pay damages, they are not being punished. However, even morally watered-down negligence assessments require jurors to read the defendant's mind and make a moral judgment.⁵⁸ The stakes might be lower, but it is still a game of blame.

Ignoring the role of mindreading does not make it go away. *Any time* jurors are evaluating behavior to assess responsibility, they will be reading the actor's mind and interpreting his thoughts. This process can be easily biased and is far from a rational, objective science. However, we cannot correct these biases if the processes that trigger them are presumed not to occur. Therefore, doctrinal reforms must recognize the powerful and ordinary role of mental state inferences—that is, mindreading—in every single trial.

Electronic copy available at: https://ssrn.com/abstract=4112795

⁵⁸ Melanie Killen, Kelly Lynn Mulvey, Cameron Richardson, Noah Jampol & Amanda Woodward, *The Accidental Transgressor: Morally-Relevant Theory of Mind*, 119 COGNITION 197, 211 (2011).