

ESSAY
THE NATURE OF REASONABLENESS

Alan Calnan†

Though the notion of reasonableness dominates Anglo-American law, its meaning has been clouded by traditional conceptual analysis. This Essay argues that greater clarity can be gained by taking a scientific approach to the subject, exposing the natural foundations beneath the concept's varied interpretations.

INTRODUCTION

Reasonable legal minds agree that *reasonableness* is one of the foundational concepts of American law, infiltrating everything from administrative, corporate, and constitutional law to crimes, torts, and contracts.¹ Yet the concept's importance and prevalence have not necessarily bred clarity. In fact, a recent flurry of analytic interpretations has only clouded the term's meaning.² While some scholars say reasonableness is a prescriptive standard,³ others believe it describes existing community values,⁴ and still others see it as a combination of the two.⁵ This split is deepened by

† Professor of Law, Southwestern Law School. Many of the ideas in this Essay were inspired by the groundbreaking work of neuroscientist Antonio Damasio, though any “unreasonable” interpretations or applications remain mine alone. On the back end, the Essay was greatly enhanced by the diligence and professionalism of the *Cornell Law Review Online*.

¹ See Brandon L. Garrett, *Constitutional Reasonableness*, 102 MINN. L. REV. 61, 69–70 (2017) (recounting the concept's significance and use within multiple legal fields); Frédéric G. Sourgens, *Reason and Reasonableness: The Necessary Diversity of the Common Law*, 67 ME. L. REV. 73, 74–75 (2014) (same).

² The latest entry appeared just last year in the *Yale Law Journal Forum*. See Alan Z. Rozenshtein, *Fourth Amendment Reasonableness After Carpenter*, 128 YALE L.J.F. 943 (2019).

³ See Alan D. Miller & Ronen Perry, *The Reasonable Person*, 87 N.Y.U. L. REV. 323, 326 (2012) (“We put forward and defend the argument that normative definitions [of reasonableness] are categorically preferable to positive definitions because the latter are logically unacceptable.”).

⁴ See Kevin P. Tobia, *How People Judge What is Reasonable*, 70 ALA. L. REV. 293, 299–300 (2018) (describing this view of reasonableness as a search for the statistically average characteristics of people within a community).

⁵ See *id.* at 296 (arguing that “[r]easonableness is best understood as a

disagreements over the concept's normative basis. Indeed, the latest proposals ground *reasonableness* in a wide variety of ideals, including utilitarianism, economic efficiency, fairness, deontological respect, pragmatic rationalism, formalism, mutuality, and aretaic virtue.⁶

Since reasonableness effectively serves as law's conscience, doubts about its essence are an obvious cause for concern. But the impasse also puts legal theory in a serious predicament. If reasonableness means different things to different people—or, at least, different things in different legal contexts—then there is little point to searching for a common unifying principle. Even if such a principle exists, traditional conceptual analysis has struggled to discover it. As jurisprudence maven Lawrence Solum recently observed, legal philosophy's exhaustive polemic on reasonableness eventually just “runs out of gas.”⁷

Yet the problem with these approaches is not a lack of analytic rigor. Rather, it is an absence of critical facts. What is missing from the discussion of reasonableness, I argue, is a basic understanding of human nature. Because science informs that inquiry, this Essay explores the biological origins of reasonableness by probing three of its key connotations: sensibleness, fairness, and moderation. The first meaning evokes mankind's integrated cognitive faculties; the second addresses humanity's reflexive values; and the third entails the coordinative processes animating human decision-making. Together, these attributes suggest that reasonableness is not an abstract, static, or monolithic ideal; rather, it is an organic, dynamic, and systemic phenomenon for satisfying our natural urge for homeostasis.

I

INTEGRATIVE FACULTIES

Conventional wisdom says that *reasonable* and *sensible* are effectively interchangeable ideas.⁸ But it is not so clear how

hybrid notion that is partly statistical and partly prescriptive”).

⁶ See Sourgens, *supra* note 1, at 80–105 (discussing utilitarian, pragmatic, and formalist paradigms of reasonableness); Benjamin C. Zipursky, *Reasonableness In and Out of Negligence Law*, 163 U. PA. L. REV. 2131, 2160–65 (2015) (proposing a theory of reasonableness as mutuality); Lawrence B. Solum, *Legal Theory Lexicon: The Reasonable Person*, LEGAL THEORY BLOG (Apr. 21, 2019), <https://lsolum.typepad.com/legaltheory/2019/04/legal-theory-lexicon-the-reasonable-person.html> [<https://perma.cc/3VSX-SGJB>] (addressing efficiency, fairness, deontological, and virtue-based notions of reasonableness).

⁷ Solum, *supra* note 6.

⁸ See *Reasonable*, MERRIAM-WEBSTER THESAURUS, <https://www.merriam->

these terms became synonymous or what deeper insight can be drawn from their relationship. After all, any word grounded in reason seems facially antagonistic if not incompatible with a term rooted in the senses. Yet as it turns out, the meaning of *sensible* has changed over time, and its transition to reasonableness reveals more about that concept than any standard dictionary definition can offer.

What makes the etymology of *sensible* so significant is its uncanny resonance with human nature. *Sensible* originated in the Middle Ages with a physical connotation, suggesting something “perceptible to the senses.”⁹ Since sensory perceptions are typically clear and emphatic, sensible things were deemed “easily understood.”¹⁰ This interpretation subtly turned a biological feeling into a mental experience. That tendency was exacerbated by the growing belief in mind-body dualism, which placed reason in control of all human understanding.¹¹ Thus, if a thought were comprehensible, and thus sensible under the latter view, it had to be both “logical” and “reasonable.”¹² So construed, *sensible* became something of a notional composite, integrating body with mind and feeling with rationality.

Though reasonableness is not conceived this way today, science has confirmed its integrative nature. The ostensibly one-dimensional term—*reason-able*—is really the functional integration of two human faculties: reason *and feelings*. As neuroscientist Antonio Damasio has observed, “Feelings and reason are involved in an inseparable, looping, reflective embrace”¹³ in which “mind and brain influence the body proper just as much as the body proper can influence the brain and

webster.com/thesaurus/reasonable [https://perma.cc/2GJ3-WGZT] (listing “sensible” as a synonym for “reasonable”).

⁹ *Sensible*, ONLINE ETYMOLOGY DICTIONARY, https://www.etymonline.com/word/sensible [https://perma.cc/84Z7-9VLK] (last visited June 1, 2019).

¹⁰ *See id.*

¹¹ Mind-body dualism is the belief that “the mind and the body are composed of different substances and that the mind is a thinking thing that lacks the usual attributes of physical objects.” Scott Calef, *Dualism and Mind*, INTERNET ENCYCLOPEDIA OF PHILOSOPHY, https://www.iep.utm.edu/dualism/ [https://perma.cc/PYV4-RX4R] (last visited June 1, 2019). Such “substance” dualism was popularized in the seventeenth century by French philosopher René Descartes. *See id.*; *see also* EDWARD O. WILSON: CONSILIENCE: THE UNITY OF KNOWLEDGE 108 (1998) (discussing Cartesian dualism).

¹² *Sensible*, *supra* note 9.

¹³ ANTONIO DAMASIO, THE STRANGE ORDER OF THINGS: LIFE, FEELING, AND THE MAKING OF CULTURES 171 (Vintage Books ed. 2019).

the mind.”¹⁴ In fact, says Damasio, body and brain are not really separate life systems but rather “two aspects of the very same being”¹⁵—in effect, “an organismic single unit.”¹⁶

Like reason, feelings are a type of cognition.¹⁷ They process and evaluate information obtained internally from a person’s body and memory and externally from the surrounding environment.¹⁸ Informed by homeostasis, which sets the parameters for an organism’s survival and flourishing, feelings provide “a moment-to-moment report on the state of life” inside the body.¹⁹ That report includes a normative judgment about its findings, signaling that the body’s condition is either good or bad.²⁰ Conditions conducive to well-being produce a range of positive or pleasant feelings, while bodily states detrimental to survival evoke feelings that are negative or unpleasant.²¹ Over the course of evolution, these valenced feelings get etched into mankind’s long-term memory bank—DNA—where they emerge as heritable intuitions.²²

This preserved affective experience begets, directs, and grounds our “sense” of reasonableness. When the body’s sensory apparatus is stimulated by new information, our feelings spontaneously appraise the situation and sound an immediate call to either accept or reject the precipitating cause.²³ This impulse often is accompanied by powerful emotions—like anger, fear, joy, or comfort—which heighten the initial reaction.²⁴ These tumultuous feelings finally stir our reason, but not to act as the final arbiter or sole decider. Rather, reason intervenes to *serve* our intuitions by updating their old wisdom with new plans, strategies, and arguments suited to the prevailing circumstances.²⁵ In short, feelings propose general rules of behavior, while reason searches for exceptions. If none can be found or fashioned, our rational

¹⁴ *Id.* at 117; *see also id.* at 12 (stating that feelings are a “cooperative partnership of body and brain”); *id.* at 139 (noting that feelings are “based on hybrid processes that are neither purely bodily nor purely neural”).

¹⁵ *Id.*

¹⁶ *Id.* at 126.

¹⁷ *See* JONATHAN HAIDT, *THE RIGHTEOUS MIND: WHY GOOD PEOPLE ARE DIVIDED BY POLITICS AND RELIGION* 52–53, 102 (2012).

¹⁸ *See* DAMASIO, *supra* note 13, at 30–31, 146–47, 157.

¹⁹ *Id.* at 104.

²⁰ *See id.* at 25, 102, 105–07.

²¹ *See id.*

²² *See id.* at 21–22; *see also* HAIDT, *supra* note 17, at 144.

²³ *See* HAIDT, *supra* note 17, at 64–66.

²⁴ *See* DAMASIO, *supra* note 13, at 99–100, 108–13.

²⁵ *See* HAIDT, *supra* note 17, at 54.

faculty readily justifies, defends, and approves the proposal.²⁶

Even when reason counsels a different course of action, feelings continue to influence its trajectory. Feelings monitor the quality of the mind's response to a problem, making us feel good when the solution benefits our welfare and bad when it fails to advance our interests.²⁷ This feedback renews the rational review of better alternatives, thus completing one cycle of integrated problem-solving and initiating a repeating succession of others.²⁸ At each turn, reason is informed and tempered by feelings, and feelings are informed and tempered by reason.

Reasonableness emerges when the relationship between reason and feelings is relatively reciprocal. When it is not, the effect is unmistakably *un-reasonable*. Psychopaths and sociopaths are rational, but they lack important social feelings like empathy, compassion, guilt, or shame.²⁹ By contrast, infants are extremely emotional, but they have undeveloped powers of reason.³⁰ Although adults with impulse control disorders are capable of rational thinking, they often are captive to their feelings and emotions. In each situation, the actor's *dis-integrated* mentality prevents them from behaving as a reasonable person.

Ironically, our integrative faculties may explain why humans ever began creating such behavioral standards in the first place. According to Professor Damasio, "Feelings, as deputies of homeostasis, are the catalysts for the responses that began human cultures."³¹ When people started experiencing the stress of group living, Damasio surmises, they would have invented a variety of responses to diminish their displeasure.³² These reactions initially may have "ranged from moral prescriptions and principles of justice to modes of social organization and governance."³³ Because such conventions proved effective, they were formalized in codes of conduct and eventually sanctified as law.³⁴

We may not know precisely how reasonableness came to represent these homeostatic developments. Yet one thing is

²⁶ *See id.*

²⁷ *See* DAMASIO, *supra* note 13, at 15–16, 171.

²⁸ *See id.* at 117.

²⁹ *See* HAITT, *supra* note 17, at 72–73.

³⁰ *See id.* at 74–75.

³¹ DAMASIO, *supra* note 13, at 26 (emphasis omitted).

³² *See id.* at 13.

³³ *Id.* at 13, 26–27.

³⁴ *See id.* at 13, 21, 26, 28–29.

reasonably clear: we cannot hope to understand the meaning of that concept without investigating the integrated interplay of reason, feeling, *and* homeostasis.³⁵

II

REFLEXIVE VALUES

As it turns out, homeostasis and feelings are not just *biological faculties* for *creating* reasonableness. They are also *normative agents* that *inform* this mindset. We have seen how homeostasis gives valence to our feelings, which make positive and negative judgments about our homeostatic stability. But that process goes deeper still, imbuing us with core values that prime our every decision. While these values often seem too deep to fathom, their natural foundations actually lie well within the realm of reasonableness.

The central value of reasonableness is fairness.³⁶ Though fairness is presented as a single concept, it combines two ostensibly inconsistent ideals. Fairness can be either a general sense of justice and equity³⁷ or conformity with specific rules or duties.³⁸ In reality, however, fairness is neither unary nor binary. It is a complementary and reflexive set of ideals naturally derived from mankind's highest normative authority, the human brain.

The brain evolved in three stages to solve three different adaptive challenges.³⁹ While the ancient *selfish* brain structures promoted the individual's survival, later *social* structures facilitated cooperation and group living.⁴⁰ The final *global* layer reconciled conflicts between its discordant predecessors and fashioned long-term strategies for human flourishing.⁴¹

As an assembled unit, the brain produces the two types of fairness that make up our sense of reasonableness. The selfish and social modules emit *moral intuitions*. Inherited at birth,

³⁵ See *id.* at 5.

³⁶ *Reasonableness*, OXFORD LIVING DICTIONARIES, <https://en.oxforddictionaries.com/definition/reasonableness> [<https://perma.cc/T2PH-3K6B>] (last visited June 3, 2019) (entry 1).

³⁷ *Fair*, BLACK'S LAW DICTIONARY (10th ed. 2014) (entry 1).

³⁸ *Fair*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/fair> [<https://perma.cc/4UXJ-A4M8>] (last visited June 3, 2019) (entry 1b(1)).

³⁹ See PAUL D. MACLEAN, *THE TRIUNE BRAIN IN EVOLUTION: ROLE IN PALEOCEREBRAL FUNCTIONS* 13–18 (1990).

⁴⁰ See GERALD A. CORY, JR., *THE CONSILIENT BRAIN: THE BIONEUROLOGICAL BASIS OF ECONOMICS, SOCIETY, AND POLITICS* 9–14 (2004).

⁴¹ See *id.* at 15–18.

these intuitions are self-evident to their hosts, who perceive them as special, serious, imperative, and universal *rules*.⁴² So when someone violates these rules, the infraction *feels instinctively* unfair.

This deep-seated feeling derives from values so important to human survival that they have been imprinted into our genome by natural selection. Though cultures prioritize these values differently, all people crave autonomy, care, or security from harm, reciprocity, loyalty, hierarchical authority, sanctity, and integrity.⁴³ Because we possess a visceral need for these basic goods, we feel subconsciously entitled to their fulfillment. When that entitlement is threatened or impaired, our indignity reflex automatically kicks in and we are filled with a sense of injustice and inequity. This feeling appears to account for theories of reasonableness grounded in deontology and virtue ethics.⁴⁴

Our global neural network works differently. It deliberately constructs *conventional standards* to solve current problems that evolution, genes, and intuitions cannot or do not address. These standards depend on a logical accommodation of many factors, including the norms, practices, customs, and conditions prevailing at the moment. Though conventions are influential, they do not feel nearly as binding. In fact, they typically must be enforced by external incentives like punishments or social sanctions or justified by the power of affective persuasion.⁴⁵ When such standards are breached, we *think* the transgression is unfair because it departs from a rational assessment of costs and benefits.⁴⁶

The *legal* notion of reasonableness does a good job of capturing the dual strands of biological valence. Our moral intuitions are embedded in bright-line rules of law, including crimes and torts against battery, false imprisonment, theft or

⁴² See Haidt, *supra* note 17, at 11–12 (discussing and affirming the earlier work of psychologist Elliot Turiel).

⁴³ See *id.* at 178–79, 200–01, 215.

⁴⁴ See, e.g., Heidi Li Feldman, *Prudence, Benevolence, and Negligence: Virtue Ethics and Tort Law*, 74 CHI.-KENT L. REV. 1431, 1431 (2000) (explaining that one must examine reasonableness with reference to the virtues of prudence and benevolence); Gregory C. Keating, *Reasonableness and Rationality in Negligence Theory*, 48 STAN. L. REV. 311, 343 (1996) (noting that a freedom-based approach to reasonableness “resonates with quite natural moral intuitions, and ‘fits’ with much of tort law” (footnote omitted)).

⁴⁵ See Haidt, *supra* note 17, at 11; Shaun Nichols, *Sentimental Rules: On the Natural Foundations of Moral Judgment* 5–7, 25 (2004).

⁴⁶ See Stephen G. Gilles, *On Determining Negligence: Hand Formula Balancing, the Reasonable Person Standard, and the Jury*, 54 VAND. L. REV. 813, 824 (2001) (reviewing the cost-benefit or risk-utility approach to reasonableness).

conversion of property, breach of confidentiality, and abuse or exploitation of the weak and vulnerable.⁴⁷ Because these offenses directly betray our harm, autonomy, reciprocity, loyalty, and authority values, they are treated as presumptively unreasonable. When our values conflict or interrelate in complex ways, the law typically abandons a rule-based approach and replaces it with a general standard of reasonableness.⁴⁸ This is particularly evident in the tort theory of negligence, where an endless array of lawful but ill-considered acts may result in someone's harm. In these cases, findings of unreasonableness cannot be presumed, but must be rationally and affirmatively justified by considering all of the surrounding circumstances.⁴⁹

Yet law's rendition of reasonableness as fairness is not quite complete. Because the legal concept lacks a foundation in human nature, it misses reasonableness's essential reflexivity. Rules and standards are never entirely separate, nor are they permanently set in stone. Rather, like the faculties of reasonableness inside the brain, these valenced mediums are constantly shaping and being shaped by each other.

Such circularity is most conspicuous at the level of doctrine, where rules and standards are locked in a perpetual feedback loop. In torts, for example, the presumptive rule of an intentional tort or strict liability theory is often countered by a privilege or defense grounded in the standard of reasonableness.⁵⁰ In other situations, a reasonableness standard is used to clarify an ambiguous rule, as is true for cases of outrage and abnormally dangerous activities.⁵¹ This

⁴⁷ Professor John Mikhail specifically has argued that the elements of a battery action find support in moral psychology. See John Mikhail, *Any Animal Whatever? Harmful Battery and Its Elements as Building Blocks of Moral Cognition*, 124 ETHICS 750, 755 (2014).

⁴⁸ See DAN B. DOBBS ET AL., HORNBOOK ON TORTS 193–95 (2015) (describing the evolution of reasonableness in the tort theory of negligence).

⁴⁹ RESTATEMENT (THIRD) OF TORTS: PHYSICAL & EMOTIONAL HARM § 3 (2010) (“A person acts negligently if the person does not exercise reasonable care under all the circumstances.”).

⁵⁰ For example, battery's rule against harmful or offensive contacts may be countered by a privilege of self-defense, which depends on the reasonableness of the defendant's response. See DOBBS ET AL., *supra* note 48, at 132 (“A person is privileged to use reasonable force to defend himself against unprivileged acts that he reasonably believes will cause him bodily harm, offensive bodily contact, or confinement.”). Likewise, strict liability's rules against certain animals and activities may be met in many jurisdictions with the reasonableness-based defense of comparative fault. See *id.* at 793–94.

⁵¹ Outrageous conduct is viewed as unreasonable behavior that seriously violates the norms of a civilized society and can be assessed only by reference to

relationship is also reversible. Doctrinal standards—like negligence’s standard of reasonable care—frequently spawn rule-based exceptions;⁵² and in some scenarios—like the no-duty principle for nonfeasance—the exceptions can effectively restore the standard.⁵³

Because reasonableness’s reflexivity is ongoing, its patterns can even shape the course of law’s historical development. If one assumes a global perspective—in fact, the sort of meta-view taken by our faculty of reason—these ripple effects soon snap into focus. It becomes clear that theoretical standards—like the original writ of trespass or “wrongs”—may splinter into more fine-grained behavioral rules—like our various intentional torts.⁵⁴ It is also apparent that a hodge-podge of specific social rules can scale up to form a general standard of reasonable care, as happened with the theory of negligence.⁵⁵

One can even see these normative movements waffling to-and-fro. A good example is the law of products liability, which gradually morphed from a strict no-duty rule to a standard of reasonableness, then transitioned to a rule of strict liability, and ultimately morphed back into a standard of reasonableness.⁵⁶ In each situation, reasonableness is not just the state of fairness wrought by our rules and standards; it is also the process for achieving their coordination.

III

COORDINATIVE PROCESSES

The idea of reasonableness *as coordination* is captured by yet a different connotation of the term. Being reasonable means being moderate or displaying moderation.⁵⁷ Since the

various circumstantial factors. *See id.* at 707–09. Similarly, an abnormally dangerous activity is determined by analyzing a number of factors that “look like a poorly disguised negligence regime, balancing such things as the value of the defendant’s activity to the community.” *Id.* at 786.

⁵² For example, some jurisdictions recognize a rule that exempts property owners from negligence for failing to trim foliage at the perimeter of their premises. *See id.* at 207.

⁵³ *See id.* at 615–16 (stating that the “exceptions [to the no-duty principle] have the effect of creating a duty to act in most instances where a reasonable person would feel compelled to act”).

⁵⁴ *See* ALAN CALNAN, A REVISIONIST HISTORY OF TORT LAW: FROM HOLMESIAN REALISM TO NEOCLASSICAL RATIONALISM 160–61, 191–200, 225–30 (2005) (discussing this historical progression).

⁵⁵ *See id.* at 161–62, 201–09, 231–48, 274–76.

⁵⁶ *See* Alan Calnan, *Torts as Systems*, 28 S. CAL. INTERDISC. L.J. 301, 351–53 (2019).

⁵⁷ *Reasonableness*, OXFORD LIVING DICTIONARIES,

core idea of moderation is avoiding extremes or lessening their intensity,⁵⁸ this version of reasonableness certainly assumes a coordinative mentality. But it also comes with a familiar qualification. Like other aspects of reasonableness, the mind's coordination process is not purely rational. Instead, it is a natural dynamic of a complex biological system.

All living systems contain disparate elements organized to achieve some purpose.⁵⁹ Because these elements are innately competitive, they must coordinate their individual aims just to maintain system function.⁶⁰ That process, though system-specific, is neither haphazard nor idiosyncratic. Rather, it is the product of a universal medium called coordination dynamics.⁶¹ This uncanny natural power not only senses system instability, but also initiates a continuous cycle of adjustments to restore equilibrium at all levels of existence.⁶²

In fact, coordination dynamics accounts for the integrated brain mechanics mentioned earlier. Alerted by homeostasis, coordination dynamics sets out to reconcile the cacophony of thoughts and feelings aroused by a disruptive event. It also harmonizes the selfish, social, and global drives directing the mind's response.⁶³ As the process unfolds, coordination dynamics employs the trick of moderation to inhibit extreme, knee-jerk reactions. Though the mind simultaneously entertains opposed positions—a process called metastability—it constantly explores the vast array of middle-ground alternatives, ensuring that the final decision is measured, moderate, and, ultimately, reasonable.⁶⁴

<https://en.oxforddictionaries.com/definition/reasonableness>
[<https://perma.cc/T2PH-3K6B>] (last visited June 3, 2019) (entry 2).

⁵⁸ *Moderate*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/moderate> [<https://perma.cc/P2T2-ALEJ>] (last visited June 3, 2019) (as a noun, entry 1a; as a verb, entry 1).

⁵⁹ DONELLA H. MEADOWS, THINKING IN SYSTEMS: A PRIMER 11 (Diana Wright ed., 2008).

⁶⁰ See J.A. SCOTT KELSO & DAVID A. ENGSTRØM, THE COMPLEMENTARY NATURE 9–12 (2006).

⁶¹ Coordination dynamics is “a set of context-dependent laws or rules that describe, explain, and predict how patterns of coordination form, adapt, persist, and change in natural systems.” *Id.* at 90.

⁶² Coordination dynamics helps to explain patterns within and between genes and proteins, different brain regions, various parts of the body, natural organisms and their environments, and among people, social structures, and institutions. See *id.* at 111.

⁶³ See CORY, *supra* note 40, at 20, 21 & n.9 (observing that “[t]he two master programs of self-preservation and affection” within the brain are “locked in inseparable unity” to form a motivational and behavioral spectrum that continuously blends both tendencies without ever reaching either extreme).

⁶⁴ See KELSO & ENGSTRØM, *supra* note 60, at 10–11.

But that's not all. These dynamics do not just operate in isolation. Because systems are overlapping and interactive, their dynamics have a circular causality, scaling up to higher levels and affecting the levels below.⁶⁵ So it is with law. Human beings first addressed their survival problem by forming larger coordination systems called societies. When these social systems came into conflict, they formed coordinative cultural systems like religions, philosophies, traditions, and customs to hold their factions together. Yet even this was not enough. As cultures and sub-cultures clashed, humanity adapted once again, this time by developing the still higher coordination system of law.⁶⁶

Law served as a system of *sociocultural* homeostasis. As Professor Damasio explains, “the development of justice systems responded to the detection of imbalances caused by social behaviors that endangered individuals and the group.”⁶⁷ Law's purpose was to coordinate society's volatile elements by reestablishing a healthy equilibrium between the law-abiding and the lawless.⁶⁸

The longer law persisted, the more deeply coordination dynamics shaped the human psyche. Nurtured by global values of authority, sanctity, and integrity, this sociocultural norm became a pervasive natural instinct, inspiring an exalted and unifying legal “system” that reflected and reinforced its coordinative nature. In fact, within democratic cultures, coordination dynamics bred legal institutions structured *for the very purpose* of facilitating reasonable decision-making.

These features consistently promote metastability by juxtaposing polar positions, diversifying their analysis, assessing their intersections and interstices, and synthesizing medial solutions. The process begins with law's superstructure, which strikes a delicate balance of powers among the executive, legislative, and judicial branches of government. It also permeates the infrastructure of each branch. Within the executive branch, power is divided among the president, the cabinet, and various implementing agencies. Meanwhile, legislative authority is split between the House and the Senate and judicial judgment is stratified by a multitiered court system.

⁶⁵ See *id.* at 114–15.

⁶⁶ See DAMASIO, *supra* note 13, at 12–13, 24–27, 165–83.

⁶⁷ ANTONIO DAMASIO, *SELF COMES TO MIND: CONSTRUCTING THE CONSCIOUS BRAIN* 310 (Vintage Books ed. 2012).

⁶⁸ *Id.*

Though such governance structures may *seem* to “leave the realm of biology,” Professor Damasio insists “that is simply not true.”⁶⁹ “The protracted negotiating process required for governance efforts,” he continues, “is necessarily embedded in the biology of affect, knowledge, reasoning, and decision making.”⁷⁰ Because “[h]umans are inevitably caught inside the machinery of affect and its accommodations with reason,” “[t]here is no exit from that condition.”⁷¹

These coordinative properties scale all the way down to law’s minutia. Legal concepts are framed as rules, standards, and principles or policies, and they are packaged as competitive rights and duties. If these binaries cannot be reconciled, they are functionally coordinated by law’s global mediator, the Constitution.

Such accommodations are not permanent, however. Under the common law system, each new decision must be continually coordinated with the old wisdom of past opinions. The same holds true in individual lawsuits, where law’s longstanding norms are constantly mediated by judges and juries informed by prevailing social values. Within the trial process itself, the law’s high-minded rationality gets further mediated by the raw emotion of the parties, the witnesses, and the factfinders.⁷² Even when a final decision is necessary, law typically does not entrust the responsibility to a single person, but assigns it to a panel of coordinators willing to reconcile their differences in the common pursuit of justice.

Of course, there is no guarantee that the resulting judgments will be sensible, fair, or moderate. Seemingly rational people sometimes do irrational things. But because law is an essentially coordinative enterprise, it is reasonable *by nature* even though it is not always reasonable *in fact*.

CONCLUSION

Conventional legal theory treats big questions as matters for deep philosophical discourse. That has certainly been true in the jurisprudence of reasonableness, which has become little more than intellectual jousting. It is now clear, however,

⁶⁹ DAMASIO, *supra* note 13, at 224.

⁷⁰ *Id.* (emphasis omitted).

⁷¹ *Id.* (emphasis omitted).

⁷² See Jessie Allen, *A Theory of Adjudication: Law as Magic*, 41 SUFFOLK U. L. REV. 773, 811 (2008) (noting that in the ritual of trial, “[n]orms and values . . . become saturated with emotion, while the gross and basic emotions become ennobled through contact with social values”) (quoting VICTOR TURNER, *THE FOREST OF SYMBOLS: ASPECTS OF NDEMBU RITUAL* 30 (1966)).

that topics like reasonableness cannot be grasped by analysis alone. Because reasonableness has physiological origins, it is susceptible to scientific investigation. In fact, science helps to illuminate three of the concept's core connotations: sensibleness, fairness, and moderation. While the first meaning describes the cognitive integration of reason and feeling, the second evokes homeostatic values like justice and reciprocity, and the third reflects the dynamics of human coordination.

Admittedly, these findings do not tell the whole story, as new discoveries in the natural sciences continue at a frenzied pace. But such insights *do* bring us closer to the truth. Even if that prospect doesn't convert every science skeptic, it *does* make a naturalized approach to reasonableness *reasonable in itself*. As Professor Damasio counsels, "It is often feared that greater knowledge of biology reduces complex, minded, and willful cultural life to automated, pre-mental life," but science actually "reinforces the humanist project" by "achiev[ing] something spectacularly different: a deepening of the connection between cultures and the life process."⁷³

⁷³ DAMASIO, *supra* note 13, at 243.