

ARTICLES

A BIOLOGICAL BASIS OF RIGHTS

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“There is no denying, at this point, that Darwin’s idea is a universal solvent, capable of cutting into the heart of everything in sight.” Daniel C. Dennett¹

I. INTRODUCTION

Rights are an essential part of a modern legal system.² Yet, scholars have had great difficulty developing a convincing source for rights. Traditionally, scholars have based rights on natural rights—rights that come from God or nature. However, God is based on faith, and no scholar has been able to demonstrate conclusively that rights exist externally in nature. Modern moral rights theories, in contrast, are generally deontological, rejecting metaphysical or theological foundations.³ In other words, they retain classical natural law’s relationship between law and morality, but they reject a connection with the natural order.

Ronald Dworkin is probably the most important twentieth century legal philosopher to have developed a deontological, moral-based conception of rights, which rejects their source in nature.⁴ Dworkin has argued that “[i]ndividual rights are political trumps held by individuals. Individuals have rights when, for some reason, a collective goal is not a sufficient justification for denying them what they wish, as individuals, to have or to do, or not a sufficient justification for imposing some loss or injury upon them.”⁵

Dworkin has stated: “Political rights are creatures of both history and morality; what an individual is entitled to have, in a civil society, depends on both the practice and the justice of its political institutions.”⁶

Dworkin’s theories also appear in his approach to constitutional adjudication:

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¹ DANIEL C. DENNETT, *DARWIN’S DANGEROUS IDEA: EVOLUTION AND THE MEANINGS OF LIFE* 521 (1995).

² *Id.*

³ JEFFRIE G. MURPHY & JULES L. COLEMAN, *PHILOSOPHY OF LAW: AN INTRODUCTION TO JURISPRUDENCE* 37 (rev. ed. 1990); LLOYD L. WEINREB, *NATURAL LAW AND JUSTICE* 3 (1987).

⁴ RONALD DWORKIN, *LAW’S EMPIRE* (1986); RONALD DWORKIN, *TAKING RIGHTS SERIOUSLY* (1978) [hereinafter *DWORKIN, RIGHTS*].

⁵ *DWORKIN, RIGHTS*, *supra* note 4, at xi.

⁶ *Id.* at 87.

Our constitutional system rests on a particular moral theory, namely, that men have moral rights against the state. The difficult clauses of the Bill of Rights, like the due process and equal protection clauses, must be understood as appealing to moral concepts rather than laying down particular conceptions: therefore a court that undertakes the burden of applying these clauses fully as law must be an activist court, in the sense that it must be prepared to frame and answer questions of political morality.⁷

More recently, Alan Dershowitz has developed a system of rights based on experience with wrongs, which he calls “nurtural” rights.⁸ He asserts that “rights are those fundamental preferences that experiences and history—especially of great injustices—have taught are so essential that the citizenry should be persuaded to entrench them and not make them subject to easy change by shifting majorities.”⁹ He views the essential problem of a system of rights as the source of those rights; otherwise, they could not trump majoritarian (democratic) preferences.¹⁰ He rejects both God and nature as the source of rights.¹¹ He also refuses to use the ideal as a basis of rights, declaring “[i]t is more realistic to try to build a theory of rights on agreed-upon wrongs of the past that we want to avoid repeating, than try to build a theory of rights on idealized conceptions of the perfect society about which we will never agree.”¹² Instead, he “identifies the most grievous wrongs whose recurrence we seek to prevent, and then asks whether the absence of certain rights contributed to those wrongs.”¹³ Dershowitz acknowledges that, because his system has no external source, he can only advocate his theory.¹⁴ However, he declares, “[i]f there can be agreement that certain rights are essential to reduce injustice, such agreement constitutes a solid theory of rights.”¹⁵

Neither Dworkin’s nor Dershowitz’s approach is convincing because both approaches lack a source for their rights.¹⁶ One cannot accept rights based on faith: faith often becomes ideology. Rights should be unchangeable (or at least not easily changed), and rights cannot be unchangeable without a source. Dworkin is not clear concerning his source of rights, and, as noted above, Dershowitz admits that his theory has no external source, and his optimism concerning obtaining a consensus on rights is questionable.

⁷ *Id.* at 147.

⁸ See generally ALAN DERSHOWITZ, RIGHTS FROM WRONGS: A SECULAR THEORY OF THE ORIGIN OF RIGHTS 6–9, 86, 119 (2004).

⁹ *Id.* at 81.

¹⁰ *Id.* at 5. See also *id.* at 15–91.

¹¹ *Id.* at 8.

¹² *Id.* at 7.

¹³ *Id.* at 82.

¹⁴ *Id.* at 9.

¹⁵ *Id.* at 82. Dershowitz also states, “The reality is that rights are legal constructs devised by the minds of human beings, based on human experience, and they must be constantly defended in the court of public opinion.” *Id.* at 8.

¹⁶ Professor Dershowitz has written the following concerning Dworkin’s approach: “Accepting his source of rights requires one to accept the brilliance of his logic (or some hidden metaphysical truth) rather than being persuaded that experience demonstrates the utility (broadly defined) of rights.” *Id.* at 117. He has also argued, “Unless there is a compelling source of rights that trumps majoritarian preferences, the default position in a democracy should be a vote of the majority.” *Id.* at 5.

This paper advocates rights based on a different kind of “natural law,” rights which come not from God or externally from nature, but from human behavior—how our minds evolved. Professor Bernd Graefrath has written: “The most acceptable explanation of the biological part of the cosmological process is now one that assumes a natural evolution, developing without purpose.”¹⁷ He has added, “even complex aspects of human culture [can] be explained by the mechanism of an evolution that consists in differential copying success of genes relative to their alleles.”¹⁸

Under this approach, there are two kinds of truth: anthropocentric truth and non-anthropocentric truth.¹⁹ Nonanthropocentric truths are the laws of physical nature and mathematics; they are unassailable truths that “are true regardless of what we happen to think about them.”²⁰ Anthropocentric truths are “truths that are true only because of the kinds of minds that we happen to have, and the cultural worlds in which our minds developed.”²¹ In other words, anthropocentric truths are not unassailable in the universe, but they are truths shared by all mankind.

This Article proposes that rights can be based on anthropocentric truths—that rights arose from human nature. In particular, anthropocentric rights developed to deal with specific adaptive problems in the Environment of Evolutionary Adaptedness (“EEA”). The fundamentals of rights derived from how our brains evolved with the details of rights arising from how a particular culture reacted to how differing geography, ecology, and social conditions affected survival.

Part II of this Article will introduce basic concepts of behavioral biology. It will first discuss neuro-cognitive universals, the universal grammar of morality, and universals in the law. Next, it will examine why cultural differences occur despite the existence of universal human behavioral traits, and then it will consider the selfish gene, a central characteristic of human behavior, and related topics—reciprocal altruism, natural morality, pain, and fairness. Subsequently, it will show how society and the social contract evolved as a means for survival. Finally, it will argue that rights should generally be based on biology because it is easier to enforce a positive human trait than to repress it.

Part III will then present a biological basis for rights. It will first demonstrate the need for rights based on biological factors and introduce the sources of rights in human nature. Next, it will discuss the biological basis of four kinds of rights—property rights, rights to fairness, liberty

¹⁷ Bernd Graefrath, *Darwinism: Neither Biologicistic nor Metaphysical*, in *DARWINISM & PHILOSOPHY* 364, 365 (Vittorio Hösle & Christian Illies eds., 2005).

¹⁸ *Id.* at 369.

¹⁹ See Jonathan Haidt, *Invisible Fences of the Moral Domain*, 28 *BEHAV. & BRAIN SCI.* 552, 552 (2005) [hereinafter Haidt, *Invisible Fences*]. See also Jonathan Haidt & Fredrik Bjorklund, *Social Institutionalists Answer Six Questions About Moral Psychology*, in 2 *MORAL PSYCHOLOGY* 181, 213–14 (W. Sinnott-Armstrong ed., vol. 2 2006).

²⁰ Haidt, *Invisible Fences*, *supra* note 19, at 552.

²¹ *Id.* at 552–53. See also Haidt & Bjorklund, *supra* note 19, at 214 (“We would expect intelligent creatures from another planet to show little agreement with us on questions of humor, beauty, good writing, or morality.”). These authors note that the only other ultrasocial mammals are naked mole rats, but their ultrasociality, like that of bees and ants, is based on kin altruism since all are siblings. Haidt & Bjorklund, *supra* note 19, at 192. Consequently, their social system is radically different from humans.

rights, and rights to equal treatment. Finally, it will examine some implications of a biological basis of rights.

The final part will illustrate how biological rights exist in different cultures. It will first examine how rights based on human behavior developed in the American constitutional system; then it will compare the concept of liberty in American and German law.

II. PRINCIPLES OF BEHAVIORAL BIOLOGY

A. INTRODUCTION

Behavioral biologists study human nature from an evolutionary perspective.²² They connect patterns of “genes through neural activity to brain circuitry and behavior.”²³ They believe that the human brain evolved similarly to human physical characteristics, such as opposable thumbs and walking erect.²⁴ In other words, the human brain evolved through natural selection “to make decisions that enhance reproductive success.”²⁵ Likewise, “complex functional human psychological and behavioral traits are the results of adaption through natural selection.”²⁶

Behavioral biologists study human behavior using methods that allow them to analyze behavior in ways that were unimaginable just a few years ago. Evolutionary psychologists examine how subjects react while playing various “games,” such as the prisoners’ dilemma or the ultimatum game.²⁷ Psychologists also analyze how brain deformities alter human behavior,²⁸ while other scientists study childhood development.²⁹ Comparative anthropologists investigate behavior across cultures.³⁰ Finally,

²² Behavioral biology encompasses many fields including evolutionary biology, evolutionary psychology, cognitive science, neuroscience, etc.

²³ Edward O. Wilson, *Foreword* to DONALD PFAFF, *THE NEUROSCIENCE OF FAIR PLAY: WHY WE (USUALLY) FOLLOW THE GOLDEN RULE* ix (2007) [hereinafter Wilson, *Foreword*, *THE NEUROSCIENCE OF FAIR PLAY*].

²⁴ Graefrath, *supra* note 17, at 367–68 (“Darwinism gives a most plausible biological explanation of the origins of the human brain with all its capacities.”); Sharon Street, *A Darwinian Dilemma for Realist Theories of Value*, 127 *PHIL. STUD.* 109, 113 (2006). For example, Professor Marc Hauser believes that humans possess an innate morality, which is “more like growing a limb than sitting in Sunday school and learning about vices and virtues” MARC D. HAUSER, *MORAL MINDS: HOW NATURE DESIGNED OUR UNIVERSAL SENSE OF RIGHT AND WRONG* xviii (2006). *See also* STEVEN PINKER, *THE BLANK SLATE* 55 (2002); Leda Cosmides & John Tooby, *Cognitive Adaptions for Social Exchange*, in *THE ADAPTED MIND: EVOLUTIONARY PSYCHOLOGY AND THE GENERATION OF CULTURE* 19, 163 (Jerome H. Barkow, Leda Cosmides, & John Tooby eds., 1992); William D. Casebeer & Patricia S. Churchland, *The Neural Mechanisms of Moral Cognition: A Multiple Aspect Approach to Moral Judgment and Decision-Making*, 18 *BIOLOGY & PHIL.* 169 (2003).

²⁵ MICHAEL S. GAZZANIGA, *HUMAN: THE SCIENCE BEHIND WHAT MAKES US UNIQUE* 19 (2008). *See also* PINKER, *supra* note 24, at 302. “These psychologists have argued that human thinking and decision making are biological adaptations rather than engines of pure rationality.” *Id.*

²⁶ Paul H. Robinson et. al., *The Origins of Shared Intuitions of Justice*, 60 *VAND. L. REV.* 1633, 1644 (2007).

²⁷ E.g., GAZZANIGA, *supra* note 25, at 133–34.

²⁸ *Id.* at 119–20.

²⁹ *Id.* at 165–68.

³⁰ E.g., Raffaele Caterina, *Comparative Law and the Cognition Revolution*, 78 *TUL. L. REV.* 1501 (2004) (including articles cited therein).

neuroscientists examine the brain using techniques such as fMRI scans³¹ and investigate the brain's chemistry.³²

Natural selection is the main force behind evolution. As one scholar has stated: "Differential reproduction of genetically different forms, or evolutionary selection, is the only candidate for the principal guiding force of evolutionary change."³³ Under natural selection, genes compete with other alleles (variations of the gene), and "those alleles that are better at securing the reproductive success of their organisms are likely to spread in the gene pool to the detriment of the others."³⁴ As Professor Marc Hauser has noted: "Natural selection builds organisms with complex features based on a nonrandom but directionless process. Poorly-designed variants are eliminated, better-designed ones favored."³⁵ Similarly, "[i]n evolutionary theory, an 'adaptation' is a biological trait, physiological, psychological, or behavioral, shaped by natural selection to enhance the fitness of members of a species."³⁶ As Professor John McGinnis has observed, "[s]ince resource acquisition ability was important to the genetic fitness of our ancestors, traits that contributed to this ability were selected over time in any given population."³⁷

Another aspect of evolution is sexual selection. Sexual selection is the competition for mates and reproductive opportunities.³⁸ Human males and females make different contributions to reproduction, with females making the most valuable contribution in that they provide the egg, internal fertilization, gestation, and lactation and they bear most of the responsibility for raising their offspring.³⁹ Because females contribute the most important resources and they can have only a limited number of offspring due to gestation, males must compete for females.⁴⁰ Males who are better at attracting mates reproduce and continue their genes, while males that cannot attract mates do not.⁴¹ Thus, nature selects against those males who are not good at attracting mates. Characteristics that attract females indicate traits that the mate will produce strong offspring, traits

³¹ E.g., GAZZANIGA, *supra* note 25, at 124–26, 168–71.

³² *Id.* at 175–76.

³³ Richard D. Alexander, *Evolutionary Selection and the Nature of Humanity*, in DARWINISM & PHILOSOPHY 301, 325 (Vittorio Hösle & Christian Illies eds., 2005).

³⁴ Bailey Kuklin, *Peril Invites Rescue: An Evolutionary Perspective*, 35 HOFSTRA L. REV. 171, 179 (2006) [hereinafter Kuklin, *Peril*].

³⁵ HAUSER, *supra* note 24, at 312. See also Cosmides & Tooby, *supra* note 24, at 167. "If a change in an organism's design allows it to outreproduce the alternative design in the population, then that design change will become more common—it will be selected for." *Id.* In addition, "the fitness of a gene is determined, at least partially, by its ability to coordinate well with the other genes it finds itself with in its particular genome." Bailey Kuklin, *Evolution, Politics and Law*, 38 VAL. U.L. REV. 1129, 1135 (2004) [hereinafter Kuklin, *Politics*].

³⁶ Brian Boyd, *Evolutionary Theories of Art*, in THE LITERARY ANIMAL: EVOLUTION AND THE NATURE OF NARRATIVE 147, 150 (Jonathan Gottschall & David Sloan Wilson eds., 2005). See also Cosmides & Tooby, *supra* note 24, at 164 ("[C]omplex adaptations are constructed in response to evolutionarily long-enduring problems....").

³⁷ John O. McGinnis, *The Human Constitution and Constitutive Law: A Prolegomenon*, 8 J. CONTEMP. LEGAL ISSUES 211, 223–24 (1997).

³⁸ Kuklin, *Peril*, *supra* note 34, at 194–95.

³⁹ *Id.* at 195; PINKER, *supra* note 24, at 252.

⁴⁰ Kuklin, *Peril*, *supra* note 34, at 196–97; PINKER, *supra* note 24, at 252 ("Males compete, females choose; males seek quantity, females quality.").

⁴¹ Kuklin, *Peril*, *supra* note 34, at 205.

such as physical attractiveness, social status, good health, and intelligence, as well as traits demonstrating that the male will help the female raise the child and be a good-faith mate, such as kindness, faithfulness, and the ability to obtain resources.⁴² While certain mate preferences overlap among the sexes, there are also significant differences in preference because of the different investments in and benefits from mating.⁴³ Males prefer mates who are attractive (an indicator of being young and healthy and having good genes), make commitments, and would be a good mother.⁴⁴

Behavioral biologists believe that the brain is modular, with each module having a specialized function (domain-specific reasoning procedures), and that these modules interact to produce a thought or an action and that they can “reinforce or cancel one another out, according to context.”⁴⁵ Professor Hauser has stated: “[t]he logic of natural selection suggests that the mind is equipped with specialized reasoning abilities, designed to solve specific adaptive problems.”⁴⁶ Similarly, Professor Michael Gazzaniga has declared: “[T]hink of a module as a hardwired (innate) mechanism that unconsciously directs you to think or act in a certain way, that directs your attention to such states as belief, desire, and pretense and then allows you to learn about these mental states.”⁴⁷ Professor Steven Pinker has described how these modules interact: “[A]n urge or habit coming out of one module can be translated into behavior in different ways—or suppressed altogether—by some other module.”⁴⁸ Professor Gazzaniga has argued that “[t]hese modules produce specific intuitive concepts that have allowed us to create the societies we live in.”⁴⁹ Neuroscientists have observed the modularity of the human mind with fMRI scans.⁵⁰

⁴² *Id.* at 197–201. See also ANTHONY WALSH, BIOSOCIOLOGY: AN EMERGING PARADIGM 209, 211 (1995) (“Unlike most other mammals, human fathers have strong parental bonds with their children.”).

⁴³ Kuklin, *Peril*, *supra* note 34, at 197–98.

⁴⁴ *Id.*

⁴⁵ GAZZANIGA, *supra* note 25, at 52; Wilson, *Foreword*, THE NEUROSCIENCE OF FAIR PLAY, *supra* note 23, at x; Robinson et al., *supra* note 26, at 1659–60; PINKER, *supra* note 24, at 40, 219; Cosmides & Tooby, *supra* note 24, at 209. “It appears our brains have neuronal circuits that have developed over evolutionary time that do indeed do specific jobs.” GAZZANIGA, *supra* note 25, at 127.

⁴⁶ HAUSER, *supra* note 24, at 291. Professor Pinker thinks we have at the least: 1) an intuitive physics, 2) an intuitive version of biology or natural history, 3) an intuitive engineering, 4) an intuitive psychology, 5) a spatial sense, 6) a number sense, 7) a sense of probability, 8) an intuitive economics, 9) a mental database and logic, and 10) language. PINKER, *supra* note 24, at 220–21. Professor Paul Rubin has pointed out that specialized modules developed because a general purpose mind that could deal with everything in the EEA was too costly. PAUL H. RUBIN, DARWINIAN POLITICS: THE EVOLUTIONARY ORIGIN OF FREEDOM 27 (2002).

⁴⁷ GAZZANIGA, *supra* note 25, at 52.

⁴⁸ PINKER, *supra* note 24, at 40.

⁴⁹ GAZZANIGA, *supra* note 25, at 128.

⁵⁰ *Id.* at 9 (“Brain imaging studies have revealed that specific parts of the brain are active for specific types of information.”); HAUSER, *supra* note 24, at 220–23; Casebeer & Churchland, *supra* note 24, at 178–79; Robinson et al., *supra* note 26, at 1659–64. See generally MARCO IACOBONI, MIRRORING PEOPLE: THE NEW SCIENCE OF HOW WE CONNECT WITH OTHERS (2008); GIACOMO RIZZOLATTI & CORRADO SINIGAGLIA, MIRRORS IN THE BRAIN—HOW OUR MINDS SHARE ACTIONS AND EMOTIONS (2008). fMRI scans measure brain activity by examining blood flow in the brain. For a more detailed explanation of the fMRI, see IACOBONI, *supra*, at 59–60.

B. NEURO-COGNITIVE UNIVERSALS, THE UNIVERSAL GRAMMAR OF MORALITY, AND UNIVERSALS IN THE LAW

Biological rights derive from neuro-cognitive universals that transcend cultures.⁵¹ These universals exist because “[s]ome designs [evolutionary adaptations] out reproduce others until they become universal in the population. . . .”⁵² Behavioral biologists have discovered hundreds of universals.⁵³ Noam Chomsky has conjectured that there is a “universal grammar,” which underlies all human languages.⁵⁴ Professor Raffaele Caterina has declared that “[p]eople from different cultures, and scientists, recognize substantially the same discontinuities in nature, demonstrating that classification of living organisms is not just a matter of cultural conventions.”⁵⁵ Professor Donald Brown has uncovered hundreds of universals including classification, crying, daily routines, envy, etiquette, facial expressions, jokes, law, leaders, logical notions, play, and social structure.⁵⁶ Even art is a universal.⁵⁷

Behavioral biologists believe that morality (our sense of right and wrong) is a universal that is hardwired into our brains (a “universal moral grammar”) and that has aided survival.⁵⁸ Moral judgments are generally intuitive and unconscious; they often occur automatically and allow us to make rapid judgments.⁵⁹ For example, humans developed an innate incest

⁵¹ As Professor Flew has remarked, “any universal natural rights will have to be grounded upon some characteristic or characteristics common to all humankind.” ANTHONY FLEW, *EQUALITY IN LIBERTY AND JUSTICE* 43 (1984).

⁵² Cosmides & Tooby, *supra* note 24, at 170.

⁵³ PINKER, *supra* note 24, at 435–39 (summarizing DONALD E. BROWN, *HUMAN UNIVERSALS* (1991)). See also HAUSER, *supra* note 24, at 419.

⁵⁴ E.g., NOAM CHOMSKY, *KNOWLEDGE OF LANGUAGE: ITS NATURE, ORIGINS, AND USE* (1986); NOAM CHOMSKY, *REFLECTIONS ON LANGUAGE* (1975). Professor Gazzaniga has observed: “Cognitive linguists . . . argue that mental traits are subject to the same forces of natural selection as biological traits.” GAZZANIGA, *supra* note 25, at 56. Similarly, Professor Ian McEwan has noted, “[w]e know now that no blank-disk, all-purpose machine could learn language at the speed and facility that a child does.” Ian McEwan, *Literature, Science, and Human Nature*, in *THE LITERARY ANIMAL: EVOLUTION AND THE NATURE OF NARRATIVE* 5, 17 (Jonathan Gottschall & David Sloan Wilson ed., 2005). Recently, a group of scientists have shown that zebra finches have a universal grammar of song. Olga Fehér et al., *De novo Establishment of Wild-Type Song Culture in the Zebra Finch*, 459 *NATURE* 564 (2009).

⁵⁵ Caterina, *supra* note 30, at 1504.

⁵⁶ DONALD E. BROWN, *HUMAN UNIVERSALS* (1991) (summarized in PINKER, *supra* note 24, at 435–39). See also GAZZANIGA, *supra* note 25, at 103 (“Facial expressions are universal and [] there are specific facial expressions for specific emotions.”).

⁵⁷ GAZZANIGA, *supra* note 25, at 205.

⁵⁸ *Id.* at 115–18; CHARLES DARWIN, *THE DESCENT OF MAN, AND SELECTION IN RELATION TO SEX* 137 (Paul H. Barrett & R. B. Freeman ed., N.Y. Univ. Press 1989) (1871) (“Advancement in the standard of morality will certainly give an immense advantage to one tribe over another.”); HAUSER, *supra* note 24, at xvii, 36, 53–54, 419–20; PINKER, *supra* note 24, at 187–88, 193; Casebeer & Churchland, *supra* note 24, at 170 (“[M]oral reasoning will involve a series of cognitive acts that issue in a conclusion (either implicit or explicit) about what one ought to do or think.”); Jonathan Haidt, *The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Justice*, 108 *PSYCHOL. REV.* 814, 814 (2001) [hereinafter Haidt, *Emotional Dog*] (“Intuitionism in philosophy refers to the view that there are moral truths . . .”); Street, *supra* note 24, at 109, 113–14.

⁵⁹ GAZZANIGA, *supra* note 25, at 118; HAUSER, *supra* note 24, at xvii, 2, 67, 425 (“[W]e are endowed with a moral instinct, a faculty of the human mind that unconsciously guides our judgments concerning right and wrong, establishing a range of learnable moral systems, each with a set of shared and unique signatures.” *Id.* at 425); Casebeer & Churchland, *supra* note 24, at 185; Haidt, *Emotional Dog*, *supra* note 58, at 814 (“In the social intuitionist model it becomes plausible to say, ‘I don’t know, I can’t explain it, I just know it’s wrong.’”). Professor Haidt added: “Affective evaluation occurs so quickly, automatically, and pervasively that it is generally thought to be an integral part of perception.” Haidt, *Emotional Dog*, *supra* note 58, at 819. He continued that “[t]hese flashes of intuition are not dumb; as

taboo that causes a person to be sexually uninterested in a person that he or she lived with as a child, a trait which developed to discourage inbreeding with its genetic costs.⁶⁰ However, there are also times when abstract moral reasoning is required, such as when conflicting moral judgments are involved.⁶¹ In addition, individuals often work out moral dilemmas with others; morality is partly a social process.⁶² In sum, much of our morality is based on moral intuition, but man is also capable of conscious moral judgment and sometimes morality develops through a social process.⁶³

Morality doesn't derive from a single module in the brain; rather, it is produced by several modules in combination.⁶⁴ fMRI scans have revealed that "when people confront certain kinds of moral dilemmas, they activate a vast network of brain regions, including areas involved in emotion, decision-making, conflict, social relations, and memory."⁶⁵ Professors Jonathan Haidt and Craig Joseph have proposed that there are five moral modules: (1) harm/care ("a sensitivity to or dislike of signs of pain and suffering in others"); (2) fairness/reciprocity; (3) authority/respect ("a set of concerns about navigating status hierarchies, e.g., anger towards those who fail to display proper signs of deference and respect"); (4) boundaries between in-groups and out-groups (coalitions); and (5) purity/sanctity ("relating to the emotion of disgust").⁶⁶

In addition, fMRI scans show the effects of emotion on moral reasoning. People distinguish between types of moral dilemmas (such as direct versus indirect harm) based on the regions of the brain activated.⁶⁷ For example, when direct physical harm is involved (e.g., pushing one

with the superb mental software that runs visual perception, they often hide a great deal of sophisticated processing occurring behind the scenes." Haidt & Bjorklund, *supra* note 19, at 188.

⁶⁰ GAZZANIGA, *supra* note 25, at 116–17; Robinson et al., *supra* note 26, at 1645–46.

⁶¹ Casebeer & Churchland, *supra* note 24, at 185; Haidt, *Emotional Dog*, *supra* note 58, at 817. Professor Haidt has asserted that "[t]he social intuitionist model, therefore, is not an antirationalist model. It is a model about the complex and dynamic ways that intuition, reasoning, and social influences interact to produce moral judgment." Haidt, *Emotional Dog*, *supra* note 58, at 829. *See also* Street, *supra* note 24, at 120, 123 ("The view I am suggesting by no means involves thinking of us as automatons who simply endorse whatever evaluative tendencies are implanted in us by evolutionary and other forces." *Id.* at 123); Cass R. Sunstein, *Moral Heuristics*, 28 BEHAV. & BRAIN SCI. 531, 533 (2005) ("System I proposes quick answers to problems of judgment, and System II operates as a monitor, confirming or overriding those judgments."). Professors Mullen and Skitka have suggested that people "tend to shift into a more thoughtful and analytical mode of reasoning when they experience something negative or unexpected." Elizabeth Mullen and Linda J. Skitka, *Exploring the Psychological Underpinnings of the Moral Mandate Effect: Motivated Reasoning, Group Differentiation, or Anger?*, 90 J. PERSONALITY AND SOC. PSYCHOL. 629, 631 n.4 (2006).

⁶² Haidt & Bjorklund, *supra* note 19, at 192–93.

⁶³ Chris D. Frith and Tania Singer, *The Role of Social Cognition in Decision Making*, 363 PHIL. TRANSACTIONS OF THE ROYAL SOC'Y B 3875, 3883 (2008). They add that "decisions dictated by reason are not always good, while decisions dictated by emotion are not always bad." *Id.* at 3884.

⁶⁴ DONALD W. PFAFF, *THE NEUROSCIENCE OF FAIR PLAY: WHY WE USUALLY FOLLOW THE GOLDEN RULE 4* (2007); Casebeer & Churchland, *supra* note 24, at 172, 188; Terrence Chorvat & Kevin McCabe, *The Brain and the Law*, 359 PHIL. TRANSACTIONS OF THE ROYAL SOC'Y LONDON B 1727, 1728 (2004); Haidt & Bjorklund, *supra* note 19, at 203; Robinson et al., *supra* note 26, at 1662.

⁶⁵ HAUSER, *supra* note 24, at 222. *See also* Casebeer & Churchland, *supra* note 24, at 172. *See generally* Joshua Greene & Jonathan Haidt, *How (and Where) Does Moral Judgment Work*, 6 TRENDS COGNITIVE SCI. 517 n. 12 (2002); Jorge Moll et al., *The Neural Correlates of Moral Sensitivity: A Functional Magnetic Resonance Imaging Investigation of Basic and Moral Emotions*, 22 J. NEUROSCI. 2730 n. 7 (2002).

⁶⁶ Haidt & Bjorklund, *supra* note 19, at 203.

⁶⁷ Joshua D. Greene et al., *An fMRI Study of Emotional Engagement in Moral Judgment*, 293 SCIENCE 2105, 2106–07 (2001). *See also* Haidt & Bjorklund, *supra* note 19, at 200.

person off a footbridge to stop a trolley from killing five people—the “trolley problem”), most individuals have an emotional reaction that causes them to think intuitively and come to an immediate conclusion that this action is wrong.⁶⁸ The brain region involved in this process is the ventromedial prefrontal cortex, which integrates affective responses (emotion) with higher cognition.⁶⁹ However, when the same outcome involves indirect harm (e.g., throwing a switch to shift a trolley from killing five people to a track that kills one), individuals do not have the same response with a different part of the brain being involved, and they often exhibit a utilitarian reaction in which one person is sacrificed to save five.⁷⁰ This suggests that intuitive moral responses involve emotion, and they activate different parts of the brain than utilitarian reasoning.

Humans can recognize the emotional states of others, and they “have the ability to form theories with some degree of accuracy about what those desires, intentions, beliefs and mental states are.”⁷¹ In other words, humans have “the ability to observe behavior and then infer the unobservable mental state that is causing it.”⁷² This is “a theory of mind, a more-or-less automatic understanding of what it means to be someone else.”⁷³ Most significantly, “[h]uman nature provides a yardstick to identify suffering in any member of our species.”⁷⁴

“Individuals recognize actions made by others because the pattern of firing neurons [mirror neurons] made when observing an action is similar to the pattern produced to generate the action.”⁷⁵ Professors William Casebeer and Patricia Churchland have described how mirror neurons work:

The behavior of the “mirror neurons” suggests that when seeing the other make the movement, the premotor cortex generates incipient motor commands to match the movement. It is possible that these signals can be detected as intentions, albeit off-line intentions, which are used to interpret what is seen (e.g., “he intends to share food”).⁷⁶

⁶⁸ Greene et al., *supra* note 67, at 2105–07; Haidt & Bjorklund, *supra* note 19, at 200.

⁶⁹ Greene et al., *supra* note 67, at 2106–07; Haidt & Bjorklund, *supra* note 19, at 200.

⁷⁰ Greene et al., *supra* note 67, at 2106–07; Haidt & Bjorklund, *supra* note 19, at 200.

⁷¹ GAZZANIGA, *supra* note 25, at 48–49.

⁷² *Id.* at 49. See also PINKER, *supra* note 24, at 166 (“The faculties underlying empathy, foresight, and self-respect are information-processing systems that accept input and commandeer other parts of the brain and body.”).

⁷³ Casebeer & Churchland, *supra* note 24, at 176–78; McEwan, *supra* note 54, at 5. See also Rebecca Saxe, *Uniquely Human Social Cognition*, 16 CURRENT OPINION IN NEUROBIOLOGY 235 n.2 (2006) (Neuroscientific evidence suggests that social cognition is connected with at least five brain regions. In other words, theory of mind is modular with different parts of the mind supplying different aspects of TOM.).

⁷⁴ PINKER, *supra* note 24, at 172.

⁷⁵ GAZZANIGA, *supra* note 25, at 63. See also Hauser, *supra* note 24, at 224 (The mirror neuron system plays an essential role in moral judgments.). See generally RIZZOLATTI & SINIGAGLIA, *supra* note 50; Iacoboni, *supra* note 50, at 4. One researcher has “suggested that the discovery of mirror neurons promise[s] to do for neuroscience what the discovery of DNA did for biology.” IACOBONI, *supra* note 50, at 8.

⁷⁶ Casebeer & Churchland, *supra* note 24, at 176. See also IACOBONI, *supra* note 50, at 119 (“[M]irror neuron areas help us understand the emotions of other people by some form of inner imitation”); Haidt, *Emotional Dog*, *supra* note 58, at 825.

In other words, an individual understands an action because he has a template in his brain for that action based on his own movements;⁷⁷ humans put themselves in the other person's place.⁷⁸ Moreover, social cognition also depends on the ability to form triadic mental representations of mental states—You, Me, and This (an object), which allows sharing attention to an object and collaborating on a shared goal (“shared intentionality”).⁷⁹

Mirror neurons help us understand the emotions of others.⁸⁰ For example, fMRI scans suggest that “the understanding of the facial expressions of disgust in someone else involves the activation of the same part of the brain that normally is activated during the experience of that same emotion.”⁸¹ Understanding the emotions of others helps us navigate our lives; “[i]f our brains were not able to discriminate at emotional level events perceived, remembered, or imagined, it would be almost impossible for us to deal with even the most banal of the situations that we have to face daily.”⁸² Furthermore, “[b]y being able to feel what others feel, we are also able to respond compassionately to their emotional states.”⁸³

There are specific neural circuits in the brain that allow one to distinguish between oneself and others (self-awareness),⁸⁴ both physically and psychologically.⁸⁵ Professor Gazzaniga has stated that the “sense of self arises out of distributed networks in both hemispheres. It is likely that both hemispheres have processing specializations that contribute to a sense of self, and that sense of self is constructed by the left-hemisphere interpreter on the basis of the input from the distributed networks.”⁸⁶ Professor Marco Iacoboni has elaborated: “The mirror neurons embody both the interdependence of self and other—by firing for the actions of both—and the independence we simultaneously feel and require, by firing more powerfully for actions of the self.”⁸⁷ In addition, the brain may have “super mirror neurons,” which are involved in creating a proper sense of the self.⁸⁸

Our self-awareness and theory of mind contribute to our moral judgments of responsibility.⁸⁹ According to Professor Hauser, “[s]elf-knowledge is a prophylactic, a protective skin that can empower us to avoid

⁷⁷ IACOBONI, *supra* note 50, at 5.

⁷⁸ PFAFF, *supra* note 64, at 79. *See also* RIZZOLATTI & SINIGAGLIA, *supra* note 50, at xii (“Emotions, like actions, are immediately shared; the perception of pain or grief, or of disgust experienced by others activates the same areas of the cerebral cortex that are involved when we experience those emotions ourselves.”).

⁷⁹ Saxe, *supra* note 73, at 237. *See also* Michael Tomasello et al., *Understanding and Sharing Intentions: The Origins of Cultural Cognition*, 28 BEHAV. & BRAIN SCI. 675 n.5 (2005).

⁸⁰ RIZZOLATTI & SINIGAGLIA, *supra* note 50, at 173–93.

⁸¹ GAZZANIGA, *supra* note 25, at 168. For a discussion of several brain scan studies involving mirror neurons, *see* RIZZOLATTI & SINIGAGLIA, *supra* note 50, at 115–38.

⁸² RIZZOLATTI & SINIGAGLIA, *supra* note 50, at 174.

⁸³ IACOBONI, *supra* note 50, at 114.

⁸⁴ GAZZANIGA, *supra* note 25, at 189. *See also* Jean Decety & Claus Lamm, *Empathy Versus Personal Distress: Recent Evidence from Social Neuroscience*, in THE SOCIAL NEUROSCIENCE OF EMPATHY 199, 209 (Jean Decety & William Ickes ed., 2009) (“[S]ocial neuroscience has demonstrated that the self and other are distinguished at both the behavioral and neural levels.”).

⁸⁵ GAZZANIGA, *supra* note 25, at 189.

⁸⁶ *Id.* at 308.

⁸⁷ IACOBONI, *supra* note 50, at 133.

⁸⁸ *Id.* at 202–03.

⁸⁹ HAUSER, *supra* note 24, at 182. As Professors Haidt and Bjorklund have written: “Reasoning requires affective channeling mechanisms.” Haidt & Bjorklund, *supra* note 19, at 195.

temptations or, more mundanely, avoid saying or doing the wrong thing at the wrong time.”⁹⁰ Similarly, empathy (“a matching up of the emotions in the displayer and observer”) derives from our self-awareness, mirror neurons, and theory of mind.⁹¹ “[I]ndividuals can think about what someone else feels, imagine what they would feel in the same situation, work out what would make them feel better, and from this deduce how to make the other person feel better.”⁹² More specifically, “the perception of someone’s suffering evokes an altruistic motivation directed toward the ultimate goal of reducing the suffering.”⁹³ However, empathy is not just automatic; it can be affected by such factors as “the affective link to the other person, the perceived fairness of the other, the subject’s appraisal of whether the reason the other person is suffering is justified, the frequency of a person’s prior exposure to pain-inducing situations and the intensity of the inflicted pain.”⁹⁴

Finally, not all moral emotions are “nice.”⁹⁵ Emotions involving shaming, ostracism, and revenge are part of human nature.⁹⁶ Similarly, disgust protects against disease (lack of purity).⁹⁷ Even fear is an important moral emotion because it can affect our moral choices.⁹⁸

Neuro-cognitive universals also exist in the law, which is not surprising considering the relationship between morality and law.⁹⁹ For example, Professor Brown has discovered numerous universals that are relevant to law including a concept of fairness, distinguishing right and wrong, inheritance rules, murder proscribed, property, rape proscribed, reciprocal exchanges of labor, goods, or services, redress of wrongs, sanctions, sanctions for crimes against the collectivity, and some forms of violence proscribed.¹⁰⁰ Professor George Fletcher has asserted that there is a “deep universal structure of criminal law.”¹⁰¹ Professors Owen Jones and Timothy Goldsmith have claimed that one can see the effects of the evolutionary process on the human brain in the architecture of legal systems.¹⁰² A related set of professors has proposed that humans probably share a sense of

⁹⁰ HAUSER, *supra* note 24, at 183.

⁹¹ *Id.* at 194. See also IACOBONI, *supra* note 50, at 5, 109; RIZZOLATTI & SINIGAGLIA, *supra* note 50, at 185–93. A group of neuroscientists have theorized that empathy has both cognitive and affective components. Simone G. Shamay-Tsoory, *Empathetic Processing: Its Cognitive and Affective Dimensions and Neuroanatomical Basis*, in *THE SOCIAL NEUROSCIENCE OF EMPATHY* 216 (Jean Decety & William Ickes eds., 2009). See also Decety & Lamm, *supra* note 84, at 209 (“[E]mpathy operates by way of unconscious and automatic processes that, far from functioning independently, represent different aspects of a common mechanism.”).

⁹² HAUSER, *supra* note 24, at 352.

⁹³ Haidt, *Emotional Dog*, *supra* note 58, at 824.

⁹⁴ Firth & Singer, *supra* note 63, at 3877 (citations omitted).

⁹⁵ GAZZANIGA, *supra* note 25, at 130.

⁹⁶ *Id.* at 131.

⁹⁷ *Id.* at 137.

⁹⁸ PFAFF, *supra* note 64, at 22–23.

⁹⁹ Professor Kar believes that “law and morality share a deep and pervasive structure—an analogue in the moral and legal domain of what Noam Chomsky has called the ‘deep structure’ or ‘universal language’ or grammar.” Robin Bradley Kar, *The Deep Structure of Law and Morality*, 84 TEX. L. REV. 877, 878 (2006).

¹⁰⁰ PINKER, *supra* note 24, at 435–39.

¹⁰¹ GEORGE P. FLETCHER, *BASIC CONCEPTS OF CRIMINAL LAW* 5 (1998).

¹⁰² Owen D. Jones & Timothy H. Goldsmith, *Law and Behavioral Biology*, 105 Colum. L. Rev. 405, 466 (2005).

justice concerning deserved punishment, which arose from the social nature of humans through evolution.¹⁰³ Furthermore, Professor Peter Strahlendorf has theorized that Darwinian algorithms (“the interaction between information in gene-determined structures and environmental information that occurs in the functioning of cognitive programs”)¹⁰⁴ underlie our sense of justice.¹⁰⁵ He has explained: “It is the Darwinian algorithms that are [evolutionary] adaptations, . . . the algorithms are solutions to problems, the solving of which must have resulted in greater reproductive success of individuals in the past.”¹⁰⁶

The mind also has cognitive limitations—“[t]here are things it cannot do, cannot learn, and cannot comprehend.”¹⁰⁷ Our cognitive abilities were developed for survival—“[i]f an organism repeatedly comes across the same situation, any individual that evolves a mechanism to understand or predict the results of the situation is going to have a survival advantage.”¹⁰⁸ Consequently, our cognitive limitations exist because mankind did not need all skills on the primate savannah. These limitations apply to moral reasoning: “[f]rom an evolutionary perspective, the survival of the animal depends on its maintaining its inner milieu within a very narrow range of values.”¹⁰⁹ In other words, strong moral relativism does not exist.

C. CULTURAL DIFFERENCES

Culture provides the details of human behavior. The development of culture aided survival in the EEA in light of differing geography, ecology, and social circumstances.¹¹⁰ Professor Hauser has written that “[c]ultural variation is only possible because of specialized psychological mechanisms that enable particular forms of learning.”¹¹¹ Similarly, Professor Pinker has observed that “familiar categories of behavior—marriage customs, food taboos, folk superstitions, and so on—certainly do vary across cultures and have to be learned, but the deeper mechanisms of mental computation that generate them may be universal and innate.”¹¹² For example, all cultures proscribe murder, but the exceptions to murder vary by culture. Finally,

¹⁰³ Robinson et. al., *supra* note 26, at 1639, 1646, 1664.

¹⁰⁴ Peter Strahlendorf, *Traditional Legal Concepts from an Evolutionary Perspective*, in *THE SENSE OF JUSTICE: BIOLOGICAL FOUNDATIONS OF LAW 128* (Roger D. Masters & Margaret Gruter ed., 1991).

¹⁰⁵ *Id.* at 148–49.

¹⁰⁶ *Id.* at 149.

¹⁰⁷ GAZZANIGA, *supra* note 25, at 127. *See also* Haidt & Bjorklund, *supra* note 19, at 183.

¹⁰⁸ GAZZANIGA, *supra* note 25, at 252, 254.

¹⁰⁹ Casebeer & Churchland, *supra* note 24, at 175. *See also* Morris B. Hoffman, *The Neuroeconomic Path of the Law*, 359 *PHIL. TRANS. R. SOC. LOND. B.* 1667, 1669 (2004) (“[T]here is indeed a relatively fixed and immutable set of right and wrong human behaviors.”).

¹¹⁰ PINKER, *supra* note 24, at 60, 68; Kar, *supra* note 99, at 887; Robinson et al., *supra* note 26, at 1640. *See generally* JARED DIAMOND, *GUNS, GERMS, AND STEEL* (1997). “History followed different courses for different people because of differences among peoples’ environments, not because of biological differences among people themselves.” *Id.* at 25.

¹¹¹ HAUSER, *supra* note 24, at 132. *See also* PINKER, *supra* note 24, at 35, 39, 60–63 (“[T]here can be no learning without innate circuitry to do the learning.”); Edward O. Wilson, *Foreword from the Scientific Side* to *THE LITERARY ANIMAL: EVOLUTION AND THE NATURE OF NARRATIVE* viii (Jonathan Gottschall & David Sloan Wilson eds., 2005) [hereinafter Wilson, *Foreword from the Scientific Side*]; Kuklin, *Politics*, *supra* note 35, at 1172 (“[T]he ability to learn is an evolved trait.”).

¹¹² PINKER, *supra* note 24, at 39. *See also* Caterina, *supra* note 30, at 1513 (“[W]e can say that perception of the world, recognition of certain discontinuities in the world, precede, and do not follow, cultural elaboration.”).

Judge Morris Hoffman has argued: “Perhaps all behaviors are represented in the brain by a set of probability distributions which are then continuously influenced by the interaction between ultimate causes (the initial probabilities evolution built into our brains) and proximate causes (the particular environmental challenges brains are called upon to solve).”¹¹³

Although there is a narrow range of possible moral systems,¹¹⁴ the details of morality do vary among cultures.¹¹⁵ Professor Hauser has observed that “[a] mature individual’s moral grammar enables him to unconsciously generate and comprehend a limitless range of permissible and obligatory actions within the native culture, to recognize violations when they arise, and to generate intuitions about punishable violations.”¹¹⁶ Or, as Professor Graefrath has asserted: “We have to distinguish between the *ethos* of a community, which tells us what people in this community regard as obligatory, and *morality proper*, which tells us what is obligatory without reference to what a community’s customs happen to be.”¹¹⁷

Man learns the details of a culture through imitation by exposure to that culture’s social norms.¹¹⁸ The ability to imitate others is innate and often unconscious.¹¹⁹ As Professor Hauser has observed, “[t]he role of experience is to instruct the innate system, pruning the range of possible moral systems down to one distinctive moral signature.”¹²⁰ More specifically, mirror neurons create a connection between the observation and imitation of an action.¹²¹ Under this process, “the action as observed and as executed must share the same neural code and that this is the sine qua non condition for imitation.”¹²² Furthermore, the aforementioned triadic mental representations are important for learning culture.¹²³

According to one theory, cultural differences occur in the realization of morality because different cultures stress different aspects of Haidt’s and Joseph’s five modules.¹²⁴ There are three areas of moral concern under

¹¹³ Hoffman, *supra* note 109, at 1672.

¹¹⁴ HAUSER, *supra* note 24, at 74, 420–21 (“The universal moral grammar is a theory about the principles that enable children to build a large but finite range of distinctive moral systems.”); PINKER, *supra* note 24, at 37 (“Universal mental mechanisms can underlie superficial variation across cultures.”); Jones & Goldsmith, *supra* note 102, at 424 (“[E]ach species come evolutionarily equipped . . . with proclivities to learn some behaviors far more easily than others.”).

¹¹⁵ Variations among cultures do not create cultural relativism. First, as noted, all cultures share many universals. Second, also as noted, the cultural variations are created by innate structures in the mind that permit cultural learning. Finally, as Professor Arnhart has pointed out, “for any given set of circumstances, there are naturally better and worse ways to satisfy the natural desires of human beings.” LARRY ARNHART, *DARWINIAN NATURAL RIGHT: THE BIOLOGICAL ETHICS OF HUMAN NATURE* 39 (1998).

¹¹⁶ HAUSER, *supra* note 24, at 44.

¹¹⁷ Graefrath, *supra* note 17, at 370.

¹¹⁸ HAUSER, *supra* note 24, at 422; PINKER, *supra* note 24, at 63. *See also* IACOBONI, *supra* note 50, at 70.

¹¹⁹ GAZZANIGA, *supra* note 25, at 160; IACOBONI, *supra* note 50, at 73. Imitation is “the capacity of an individual to replicate an observed act.” RIZZOLATTI & SINIGAGLIA, *supra* note 50, at 140.

¹²⁰ HAUSER, *supra* note 24, at 422. *See also id.* at 165.

¹²¹ GAZZANIGA, *supra* note 25, at 177. *See also* RIZZOLATTI & SINIGAGLIA, *supra* note 50, at 139–71.

¹²² RIZZOLATTI & SINIGAGLIA, *supra* note 50, at 140.

¹²³ *See* Tomasello, *supra* note 79, at 675. “The main point is that [one]-year-old infants use their newly emerging skills of intention understanding not only to predict what others will do, but also to learn from them how to do things conventionally in their culture.” *Id.* at 680.

¹²⁴ GAZZANIGA, *supra* note 25, at 130; Haidt & Bjorklund, *supra* note 19, at 209.

these modules: (1) the ethic of autonomy (suffering and reciprocity), which is concerned with an individual's rights, freedoms, and welfare; (2) the ethic of community (hierarchy and coalitional boundaries), which is concerned with protecting families, communities, and nations; and (3) the ethic of divinity (the concern for purity), which involves the spiritual self and physical and mental purity.¹²⁵ An environmental trigger activates the input into these modules; they then elicit moral emotions, and moral intuition (output) ensues.¹²⁶

D. THE SELFISH GENE AND RELATED TOPICS

An important concept in behavioral biology is the notion of the selfish gene. Behavioral biologists believe that genes are selfish; they are only interested in their survival.¹²⁷ Judge Hoffman has written: “[i]ndividuals, not groups, are the functional units through which genes act, and social norms become adaptive only because they confer a net benefit to individuals.”¹²⁸ The first goal of the selfish gene is the organism's survival, and the second is reproduction.¹²⁹

Various mechanisms, such as reciprocal altruism, natural morality, pain, and a notion of fairness, evolved to counteract the selfish gene and make man a social animal, thus aiding survival. People cooperate when they trust others to cooperate (reciprocal altruism).¹³⁰ Therefore, cooperation is a byproduct of the selfish gene—cooperation aids survival.¹³¹ In other words, being selfless comes from being selfish.

Natural morality, through the emotions of anger, indignation, and gratitude, also helps control the selfish gene.¹³² Because humans can sense the feelings of others, they anticipate that others will become angry and retaliate when they are cheated.¹³³ Moreover:

It can be to a selfish person's advantage to have moral sentiments that are visibly expressed by moral emotions, which predispose him not to cheat. Moral emotions, which are difficult to counterfeit, advertise that you have

¹²⁵ GAZZANIGA, *supra* note 25, at 130. *See also* PINKER, *supra* note 24, at 271; R.A. Shweder et. al., *The “Big Three” of Morality (Autonomy, Community, and Divinity), and the “Big Three” Explanations of Suffering*, in MORALITY AND HEALTH 119, 119–69 (A. Brandt & P. Rozin eds., 1997).

¹²⁶ GAZZANIGA, *supra* note 25, at 132–141.

¹²⁷ *See* PINKER, *supra* note 24, at 199. *See generally* RICHARD DAWKINS, *THE SELFISH GENE* (1976).

¹²⁸ Hoffman, *supra* note 109, at 1674. *See also* DAVID P. BARASH, *THE SURVIVAL GAME: HOW GAME THEORY EXPLAINS THE BIOLOGY OF COOPERATION AND COMPETITION* 216 (2003) (“It is now widely acknowledged that evolution does *not* operate for the good of species, but rather, via the disparities in success of different individuals and—better yet—of competing genes.”); HAUSER, *supra* note 24, at 311 (“From the gene's-eye view, the way to think about the evolution of moral behavior is to think selfishly.”).

¹²⁹ Alexander, *supra* note 33, at 309.

¹³⁰ BARASH, *supra* note 128, at 157; HAUSER, *supra* note 24, at 82. Trust is “the willingness to behave in such a way that only makes sense if you believe that others will reciprocate any benefits to you extended to them.” Chorvat & McCabe, *supra* note 64, at 1729.

¹³¹ HAUSER, *supra* note 24, at 380; McGinnis, *supra* note 37, at 217 (“In primitive societies, where centralized enforcement of obligations were quite imperfect, psychological mechanisms that resulted in cooperation would have been naturally selected.”); Robinson et al., *supra* note 26, at 1647.

¹³² *See* ARNHART, *supra* note 115, at 161.

¹³³ GAZZANIGA, *supra* note 25, at 132.

a conscience and would suffer uncomfortable feelings of guilt if a promise were broken.¹³⁴

Pain is also an important social emotion. When an individual experiences social rejection, that individual suffers pain.¹³⁵ Avoiding this pain helps keep the group together and thus aids in its survival.¹³⁶ Similarly, shame and guilt help prevent humans from violating social norms.¹³⁷ Finally, man is born with an innate sense of fairness, with the details of fairness being set by the local culture.¹³⁸ In fact:

The psychology of fairness in our own species is rich, including some ability to keep tabs, to place subjective values on different entities and actions, to judge when an inequity has transpired, to distinguish accidental from intentional giving and renegeing, and to determine when an act is worthy of retribution.”¹³⁹

E. BEHAVIORAL BIOLOGY, SOCIETY, AND THE SOCIAL CONTRACT

Mankind flourished because it came together into social groups, which produced a survival advantage (reciprocal altruism on a large scale). Professor David Barash has asserted: “[t]he basic concept of ‘society’ assumes give and take, often called a ‘social contract,’ whereby individuals make what is essentially a deal with society at large. Each will forego certain selfish, personal opportunities in exchange for profiting from the cooperation of others.”¹⁴⁰ Professor Gazzaniga has proposed that “all those social relationships we worry about intensely are merely by-products of behavior originally selected to avoid our being eaten by predators.”¹⁴¹ Groups that cooperate internally prevail over selfish groups for survival.¹⁴² As Professor Gazzaniga has declared: “[w]ithout all those others, without our alliances, we die.”¹⁴³ For example, cooperation in hunting was important for human evolution because it created a supply of meat for protein and energy that allowed us to grow big brains.¹⁴⁴ Furthermore,

¹³⁴ *Id.* at 131.

¹³⁵ Chorvat & McCabe, *supra* note 64, at 1732.

¹³⁶ *Id.*

¹³⁷ GAZZANIGA, *supra* note 25, at 135.

¹³⁸ HAUSER, *supra* note 24, at 79, 84; Sarah F. Brosnan & Frans B. M. de Waal, *Monkeys Reject Unequal Pay*, 425 NATURE 297, 297 (2003).

¹³⁹ HAUSER, *supra* note 24, at 392.

¹⁴⁰ BARASH, *supra* note 128, at 129. *See also* Kar, *supra* note 99, at 898 (“Social contract problems arise whenever we could all do better by agreeing to be bound by some standard of action if that were the price of having all (or a significant majority of) others be similarly bound.”). As Professor Pinker has pointed out: “[p]eaceful coexistence, then, does not have to come from pounding selfish desires out of people. It can come from pitting some desires—the desire for safety, the benefits of cooperation, the ability to formulate and recognize universal codes of behavior—against the desire for immediate gain.”

PINKER, *supra* note 24, at 169.

¹⁴¹ GAZZANIGA, *supra* note 25, at 82. Professor Pinker has asserted that “[t]he modern theory of evolution falls smack into the social contract tradition.” PINKER, *supra* note 24, at 285.

¹⁴² GAZZANIGA, *supra* note 25, at 82. *See also* BARASH, *supra* note 128, at 133 (“In a world of social dilemmas, the pursuit of rational self-interest results in a bad payoff for everyone.”); Robert Boyd et. al., *The Evolution of Altruistic Punishment*, 100 PROC. NAT’L ACA. SCI. U.S. 3531, 3531 (2003) (“It is plausible that more cooperative groups are less subject to extinction because they are more effective in warfare, more effective in coinsuring, more adept at managing common resources, or for similar reasons.”); Wilson, *Foreword*, THE NEUROSCIENCE OF FAIR PLAY, *supra* note 23, at xi.

¹⁴³ GAZZANIGA, *supra* note 25, at 83.

¹⁴⁴ *Id.* at 88–89.

Professor Hauser has observed: “[w]hat has allowed us to live in large groups of unrelated individuals that often come and go is an evolved faculty of the mind that generates universal and unconscious judgments concerning justice and harm.”¹⁴⁵

Man can live in large groups because humans are innately able “to monitor social behavior in large groups so that we may access the value of cooperation, the risk of noncooperation, and so on.”¹⁴⁶ Under the social contract, most “people don’t mind paying ‘their fair share,’ once they are convinced that (1) it is in fact fair; and (2) others are doing the same.”¹⁴⁷ On the other hand, people stop cooperating when others are cheating.¹⁴⁸ Cheating violates and undermines the social contract.

Societies must, therefore, be able to control cheaters (free riders) and prevent excessive status-seeking. Punishment is the glue that holds societies together; without punishment, society would fall apart.¹⁴⁹ Animals expend energy (use resources) to reduce or avoid punishment.¹⁵⁰ When individuals are punished, “the individuals in the group benefit because they are less likely to be subject to violence, theft, or cheating,”¹⁵¹ thus increasing their chances of surviving and reproducing. For example, gossip, which affects reputation, may have evolved as an early way to restrain cheaters.¹⁵² Similarly, as Professor Haidt has averred: “the combination of language and a full theory of mind made it possible for large groups of non-kin to reap the benefits of cooperation by monitoring each other’s behavior (with gossip), shunning or punishing cheaters, and rewarding team players.”¹⁵³

¹⁴⁵ HAUSER, *supra* note 24, at 60. *See also* Kar, *supra* note 99, at 891.

¹⁴⁶ GAZZANIGA, *supra* note 25, at 80; HAUSER, *supra* note 24, at 274 (“[I]t is likely that evolution equipped us with a specialized ability to work through the cost-benefit analysis of a social contract.”); PINKER, *supra* note 24, at 285 (declaring that “the logic of social contracts may have propelled the evolution of the mental faculties that keep us in these groups.”).

¹⁴⁷ BARASH, *supra* note 128, at 137.

¹⁴⁸ *Id.* at 152; Ben Seymour et. al., *The Neurobiology of Punishment*, 8 NATURE REVIEWS NEUROSCI. 300 (2007) (“In humans, however, punishment also appears to adopt an important role in promoting and preserving cooperation.”). *See generally* Janice Nadler, *Flouting the Law*, 83 TEX. L. REV. 1399 (2005) (“When a person evaluates particular legal rules, decisions, or practices as unjust, the diminished respect for the legal system that follows can destabilize otherwise law-abiding behavior.”); PINKER, *supra* note 24, at 261 (noted that individuals differ genetically in their selfish tendencies).

¹⁴⁹ GAZZANIGA, *supra* note 25, at 129 (“If cheaters take over, reciprocity crumbles.”); HAUSER, *supra* note 24, at 77, 99, 390, 403–08 (“If the payoffs to defection are higher than the payoffs to cooperation, individuals defect.” *Id.* at 77.); BARASH, *supra* note 128, at 136 (“The best—perhaps the only—solution is for external constraints to force individuals to cooperate, because otherwise they won’t.”); Boyd et. al., *supra* note 142, at 3533 (“[A]dding punishment sustains substantial amounts of cooperation in much larger groups.”). *See generally* Özgür Gülerk et. al., *The Competitive Advantage of Sanctioning Institutions*, 312 SCIENCE 108 (“Profound empirical evidence shows that the possibility of sanctioning norm violators stabilizes human cooperation at a high level, whereas cooperation typically collapses in the absence of sanctioning possibilities.”); Haidt, *Emotional Dog*, *supra* note 58, at 826 (only man has “widespread third-party norm enforcement”). Similarly, Justice Holmes stated: “If you want to know the law and nothing else, you must look at it as a bad man, who cares only for the material consequences which such knowledge enables him to predict, not as a good one, who finds his reasons for conduct, whether inside the law or outside it, in the vaguer sanctions of conscience.” Oliver Wendell Holmes, Jr., *The Path of the Law*, 10 HARV. L. REV. 457, 459 (1897).

¹⁵⁰ Seymour, *supra* note 148, at 300.

¹⁵¹ Robinson et. al., *supra* note 26, at 1650.

¹⁵² GAZZANIGA, *supra* note 25, at 94–97. *See also* BARASH, *supra* note 128, at 153 (“Also, don’t overlook the role of social punishment, administered by other ‘players’ who stand to lose if someone in their group is stingy or a shirker.”); HAUSER, *supra* note 24, at 81.

¹⁵³ Haidt, *Emotional Dog*, *supra* note 58, at 826.

Behavioral biologists believe that the human brain has a special module to detect social cheaters.¹⁵⁴ For example, facial expressions and voice tone can often reveal a cheater because of the effect of the underlying emotions.¹⁵⁵ Similarly, humans' shared emotions, which are triggered when cheating occurs, motivates societies to punish cheaters.¹⁵⁶ People even punish cheaters when it is costly to themselves (altruistic punishment) because punishing cheaters promotes cooperation and is a fitness indicator for sexual selection.¹⁵⁷ Further, it might be immoral *not* to punish cheaters, and the cost of punishment is reduced when undertaken by a group.¹⁵⁸ Moreover, because culture is learned through observation and is passed from generation to generation, punishment becomes a behavioral-cultural norm, thus allowing "the outcome of punishment to be learned without personal transgression."¹⁵⁹ In addition, punishment and other law help to create trust within the group.¹⁶⁰ In sum, law and punishment help maintain reciprocal altruism within a group when the opportunity for personal interaction is impossible because of the group's size.¹⁶¹

F. HUMAN NATURE, "OUGHT," AND RIGHTS

Behavioral biologists do not believe that what is natural is necessarily good or that nature creates "musts."¹⁶² What was adaptive on the savanna may no longer be proper today.¹⁶³ Obviously, violence was part of our evolutionary past, but this is not a human behavioral trait that we want to encourage in our modern world. In addition, "[t]he proper evolutionary use of a domain may be quite different from its current use."¹⁶⁴ Consequently, as Professor Edward Wilson has noted, our innate characteristics "have to be played like a musical instrument, with some parts stressed to produce results of great beauty and pleasure (by terms of the human limbic system) and other parts sublimated and averted."¹⁶⁵ Therefore, "[t]he step from *is* to *ought* requires a special justification."¹⁶⁶ For instance, "if there is a kind of 'natural' tendency for male domination, but we find it morally obligatory

¹⁵⁴ BARASH, *supra* note 128, at 267; GAZZANIGA, *supra* note 25, at 99; HAUSER, *supra* note 24, at 272, 276; Cosmides & Tooby, *supra* note 24, at 205–06. "[T]hat cheater detection device develops at an early age, operates regardless of experience and familiarity, and detects cheating but not *unintentional* violations." GAZZANIGA, *supra* note 25, at 100.

¹⁵⁵ GAZZANIGA, *supra* note 25, at 103. *See also* BARASH, *supra* note 128, at 105, 180.

¹⁵⁶ Kar, *supra* note 99, at 914.

¹⁵⁷ GAZZANIGA, *supra* note 25, at 82; Seymour, *supra* note 148, at 306.

¹⁵⁸ Robinson et. al., *supra* note 26, at 1650–51.

¹⁵⁹ Seymour, *supra* note 148, at 304.

¹⁶⁰ Chorvat & McCabe, *supra* note 64, at 1734.

¹⁶¹ *Id.*

¹⁶² HAUSER, *supra* note 24, at 3; Graefrath, *supra* note 17, at 370. Darwin did not view evolution as leading to a positive end. Graefrath, *supra* note 17, at 374. "The existence of inborn talents . . . does not call for Social Darwinism." PINKER, *supra* note 24, at 150.

¹⁶³ HAUSER, *supra* note 24, at 417.

¹⁶⁴ GAZZANIGA, *supra* note 25, at 254. *See also* PINKER, *supra* note 24, at 219.

¹⁶⁵ Edward O. Wilson, Comparative Social Theory, in 1 THE TANNER LECTURES ON HUMAN VALUES 68–69 (Sterling M. McMurrin, ed. 1980). *See also* TIMOTHY H. GOLDSMITH, THE BIOLOGICAL ROOTS OF HUMAN NATURE 67 (1991); Douglas A. Terry, *Don't Forget About Reciprocal Altruism: Critical Review of the Evolutionary Jurisprudence Movement*, 34 CONN. L. REV. 477, 502–03 (2002) ("[T]he function of law is to both condone and prohibit the manifestations of certain biological tendencies given to humans by natural selection.").

¹⁶⁶ Graefrath, *supra* note 17, at 370. *See also* PINKER, *supra* note 24, at 164.

that females have the same moral status as males, biological knowledge can help us determine what the most promising course of action will be to counter the ‘natural’ tendency that we cannot justify.”¹⁶⁷ On the other hand, “[n]ature may . . . limit what is morally possible, and suggest ways in which humans . . . are motivated into action.”¹⁶⁸

One reason to base a theory of rights on biology is that it is easier to adopt a positive natural trait than to repress it since it is part of the human behavioral system.¹⁶⁹ As Professor Ian McEwan has noted, “[i]f there are human universals that transcend culture, then it follows that they do not change, or they do not change easily.”¹⁷⁰ Similarly, as philosopher Michael Oakeshott declared, “[t]o try to do something which is inherently impossible is always a corrupting enterprise.”¹⁷¹ More specifically, “[s]hared institutions of justice are not easily altered, regardless of their source.”¹⁷² Therefore, it would be easier and more efficient to enforce positive human traits, than to repress them. This is especially true with rights because, as noted above, a moral system is built into our brains.

Equally important, normative statements about rights should be predicated on facts; “ought” needs to be grounded in “is.” As Professors Haidt and Fredrik Bjorklund have declared: “If moral facts are anthropocentric facts, then it follows that normative ethics cannot be done in a vacuum, applicable to any rational creature anywhere in the universe.”¹⁷³ Furthermore, “[w]hen not properly grounded, entire schools of metaethics can be invalidated by empirical studies....”¹⁷⁴ Theories about rights should not contradict scientific facts, but rather be grounded in science. The theory of rights proposed in this paper is grounded in science.

III. BIOLOGICAL BASIS OF RIGHTS

A. INTRODUCTION

It is the thesis of this paper that a universal system of basic rights is hardwired into our brains (a universal grammar of rights), just like morality is hardwired into our brains. In fact, rights relate to our innate ability to tell

¹⁶⁷ HAUSER, *supra* note 24, at 3; Graefrath, *supra* note 17, at 370. *See also* PINKER, *supra* note 24, at 299 (“Because social conventions are not adopted to human nature alone, a respect for human nature does not require preserving all of them.”).

¹⁶⁸ HAUSER, *supra* note 24, at 4.

¹⁶⁹ Neel P. Parekh, *Note: When Nice Guys Finish First: The Evolution of Cooperation, the Study of Law and the Ordering of Legal Regimes*, 37 U. MICH. J. L. REFORM 909, 942–43 (2004) (“Legal rules that ignore human realities will prove inefficient.” Further adding that evolutionary analysis “directs that where appropriate, a default rule should conform to instinctive behavior and reduce private and social costs.”). *See also* Jones & Goldsmith, *supra* note 102 at 413 (“We can consider the law effective when it gets its job done, and efficient when it does so with minimum waste.”).

¹⁷⁰ McEwan, *supra* note 54, at 12. *See also* E. O. Wilson, *Foreword from the Scientific Side*, *supra* note 111, at ix (“Our cultures and values seem highly variable to us but in fact are very specialized and very epigaeic and diurnal mammalian.”).

¹⁷¹ Quoted in PINKER, *supra* note 24, at 290.

¹⁷² Robinson et. al., *supra* note 26, at 1687–88. Adding that “[i]t is unlikely that the shared intuition that serious wrongdoing should be punished can be changed through social engineering, at least not through methods short of the kind of coercive indoctrination that liberal democracies find unacceptable.”

¹⁷³ Haidt & Bjorklund, *supra* note 19, at 214.

¹⁷⁴ *Id.* at 215.

right from wrong. Like morality,¹⁷⁵ our hardwired rights are general principles with the details of these rights being specified by particular cultures. In other words, we have an innate toolkit for building a system of rights.¹⁷⁶ Among these rights are (1) property rights; (2) a right to basic fairness; (3) liberty rights; and (4) a right to be treated equally.¹⁷⁷ These innate rights are not a minimum, but rather a foundation.

Behavioral biology demonstrates the need for rights. First, behavioral biologists have established that humans are sentient, autonomous beings who have a moral sense.¹⁷⁸ As Professor Haidt has stated, “Thomas Jefferson’s declaration that certain truths are ‘self-evident’ is an example of ethical intuitionism.”¹⁷⁹ Despite the traditional (and now totally discredited) social science theory of man as culturally constructed, the human mind is not a blank slate that allows for easy social engineering—human nature cannot be rewritten.¹⁸⁰ Rather, all humans are defined by the inner workings of their minds, and they share a similar genetic makeup. In addition, as Kant believed, human beings are morally special because they have the capacity for rational choice and the freedom of rational beings should be respected.¹⁸¹ For example, psychology experiments, such as the trolley problem discussed above, have shown that “it is permissible to cause harm as a by-product of achieving a greater good, but it is impermissible to use harm as a means to a greater good.”¹⁸² Finally, autonomy helps the individual survive.¹⁸³

Second, rights help hold the social contract together. Social contracts involve “commitment” problems which are “any dynamic, strategic problem in which an individual can obtain more desirable or self-interested results by giving up certain options or by guaranteeing others—in short, by making commitments.”¹⁸⁴ A person will not voluntarily give up her selfish interest (commit or remain committed) when that person is subject to the tyranny of a majority of which that person is not a part of. Similarly, part of our evolved nature is the freedom to leave our group and join another one to avoid coercion by dominants.¹⁸⁵ In other words, “[e]xit freedom had the

¹⁷⁵ HAUSER, *supra* note 24, at 47.

¹⁷⁶ *Accord* HAUSER, *supra* note 24, at xvii.

¹⁷⁷ I am not claiming that this is a definite list of basic rights. However, our current state of knowledge concerning behavioral biology suggests that these are the most important rights.

¹⁷⁸ PINKER, *supra* note 24, at 425.

¹⁷⁹ Haidt, *Emotional Dog*, *supra* note 58, at 814.

¹⁸⁰ RUBIN, *supra* note 46, at ix (“The notion that humans are born as blank slates (*tabula rosa* to use Locke’s Latin phrase) is no longer intellectually respectable among serious people.”). *Accord* Jim Chen, *Law as a Species of Language Acquisition*, 73 WASH. L.J.1263, 1272 (“[W]e stand on the brink of a century whose principal intellectual project may consist of overthrowing the Standard Social Science Model. . .”). *See generally* PINKER, *supra* note 24. Rubin has noted that false views of human nature have led to great suffering, such as the reign of communism. RUBIN, *supra* note 46, at 2.

¹⁸¹ MURPHY & COLEMAN, *supra* note 3, at 77–79.

¹⁸² HAUSER, *supra* note 24, at 33, 120.

¹⁸³ Lauren K. Hall, *The Liberated Beast: An Evolutionary Justification for Political Liberty*, http://www.allacademic.com/meta/p_mla_apa_research_citation/1/3/8/9/0/pages138908/p138908-1.php at *13.

¹⁸⁴ Kar, *supra* note 99, at 898. *See also* Hoffman, *supra* note 109, at 1670 (“living in groups requires rather sophisticated mechanisms to regulate relationships between members.”).

¹⁸⁵ RUBIN, *supra* note 46, at 97–98 (2002). *See also* Hoffman, *supra* note 109, at 1673 (“[T]he small groups in which we evolved contained an important element of freedom—the freedom to enter into mutually beneficial social institutions, the freedom to decline to do so, and, as Rubin points out, the

effect of imposing constraints on dominant individuals in the group: if a few powerful individuals got too powerful, they risked loss of members, and thus some of the net advantage of living in groups. Likewise, even the majority in any group had to keep a keen eye on majoritarian excess.”¹⁸⁶

Rights help solve the commitment and exit problems by protecting individuals from the tyranny of a majority and creating trust.¹⁸⁷ While an individual will not always win what he or she wants in the political process, rights will protect that individual from overreaching by the majority. In other words, rights grant a minimum for each person under the social contract, which encourages that person to give up his or her selfish interest, to remain a member of that community, and to further both the individual’s and community’s ability to survive. As Judge Hoffman has declared:

The deepest social connections that bind us bind us only because, in the end, we are free to disregard them. They have become powerful precisely because they must have had enough long-term utility to overcome their short-term costs, and to keep us from exercising our freedom to exit the group.¹⁸⁸

Of course, in order for rights to help hold the social contract together, society must punish those who violate others’ rights.

A third reason for the existence of rights is to prevent violence and increase the chances for survival. Professor Barash has declared: “What isn’t arbitrary is the underlying idea: the success of strategies that settles conflicts with a minimum of violence.”¹⁸⁹ In other words, when rules settle disputes, no one is harmed and genes are passed on.

Another justification for rights is to compensate for flaws in human nature.¹⁹⁰ As Professor Pinker has written, “[i]n the Tragic Vision, humans are inherently limited in knowledge, wisdom, and virtue, and all social arrangements must acknowledge those limits.”¹⁹¹ Society must protect individuals from nepotism, selfishness, competition for social status, and power seeking. Hierarchy is part of human nature, and while it is necessary for a functioning society, rights must be protected within the hierarchy.¹⁹² Individuals must be safeguarded from those who govern; otherwise, the social contract will break down. Similarly, humans need to be protected from group coercion. Finally, societies with a system of rights work better

freedom to leave the group and to join another.”); THOMAS NAGEL, EQUALITY AND PARTIALITY 24 (1991). One might ask why more civilized societies have not had a strong system of rights. The answer is that a dictator can often limit exit freedom, Hoffman, *supra* note 109, at 1673, and that to exit, there must be somewhere to go.

¹⁸⁶ Hoffman, *supra* note 109, at 1673.

¹⁸⁷ See Jeffrey Evans Stake, *The Property 'Instinct,'* 359 PHIL. TRANSACTIONS ROYAL SOC’Y LONDON 1763, 1766 (2004) (“[n]o strategy will be an [evolutionarily stable strategy] in situations where it would make permanent reproductive losers of one group.”).

¹⁸⁸ Hoffman, *supra* note 109, at 1673.

¹⁸⁹ BARASH, *supra* note 128, at 232.

¹⁹⁰ See PINKER, *supra* note 24, at 128 (“The checks and balances of democratic institutions were explicitly designed to stymie the often dangerous ambitions of imperfect humans.”).

¹⁹¹ *Id.* at 287. See also RUBIN, *supra* note 46, at 113 (“[I]ndividuals prefer to be dominants and reduce the freedom of others.”).

¹⁹² Mark F. Grady & Michael T. McGuire, *The Nature of Constitutions*, 1 J. BIOMETRICS 227 (1999) (arguing that constitutions arise from subordinates’ agreements with each other to prevent excessive appropriations by dominants.).

and further the survival chances of their inhabitants. For example, “no functioning democracy with political rights has ever suffered a famine.”¹⁹³

While the above demonstrates justifications for rights, the question remains what their source is within human biology. As will be shown in detail below, rights come from the following sources: (1) the autonomy of human beings (liberty rights; a right to equal treatment); (2) reciprocal altruism, which is part of the social contract (rights are what an individual gets from entering into the social contract—property rights, fairness, etc.); (3) rights that arose as a solution to an evolutionary problem (certain property rights arose as a method to avoid harm and violence); and (4) our innate morality (most rights). Some rights have a combination of sources as their basis. In addition, our inner sense of morality helps define these rights, and these rights aided survival.

B. PROPERTY RIGHTS

Several scholars believe that property rights are hardwired into human brains, that there are “identifiable patterns in the resolutions of disputes over resources.”¹⁹⁴ Professor Jeffrey Stake thinks that property rights evolved to avoid harm to individuals: “[r]ivals can reduce the costs of competition by adopting strategies for determining the outcome of fights without physical damage.”¹⁹⁵ “Thus, a body is more likely to survive if the brain is equipped with rules of property incorporating evolutionary stable strategies (“ESS”) for reducing the costs of allocating resources among competitors.”¹⁹⁶ Other scholars give additional reasons for the development of property rights including that they involved territorial possession,¹⁹⁷ that they developed as a method to control cheating,¹⁹⁸ that they evolved as an incentive to get people to work,¹⁹⁹ and that survival is based on the use of things.²⁰⁰ This author believes that the last two reasons are particularly important; an individual should generally be able to keep the fruits of his labor because they are necessary for his survival. Finally, all these reasons contribute to the cohesiveness of the social contract by motivating cooperation and cutting down on free riders.

¹⁹³ DERSHOWITZ, *supra* note 8, at 163.

¹⁹⁴ Stake, *supra* note 187, at 1763. *See also* Herbert Gintis, *The Evolution of Private Property*, 64 J. ECON. BEHAV. & ORG. 1, 15 (2007); McGinnis, *supra* note 37, at 222 (“[P]roperty is a phenomenon that exists apart from any organized government.”); Thomas W. Merrill & Henry E. Smith, *Law and Morality: Property Law: The Morality of Property*, 48 WM. & MARY L. REV. 1849, 1894 (2007) (“These points establish, we believe, that property rights must be moral rights if they are to exist at all, and that the moral right to property is not qualitatively different from those moral rights we describe as human or civil rights.”). Professor Pipes has noted that there has never been a society so primitive as to not have some form of ownership. RICHARD PIPES, PROPERTY & FREEDOM 76 (1999). He has added that the idealized notion of primitive communism has no basis in fact. *Id.* at 117.

¹⁹⁵ Stake, *supra* note 187, at 1763. *See also* Gintis, *supra* note 194, at 3.

¹⁹⁶ Stake, *supra* note 187, at 1763. *See also* Merrill & Smith, *supra* note 194, at 1858 (“This ‘possession’ or ‘bourgeois’ convention is an evolutionarily stable strategy.”).

¹⁹⁷ Gintis, *supra* note 194, at 2 (“[P]reinstitutional ‘natural’ private property has been observed in many species, in the form of the recognition of territorial possession.”).

¹⁹⁸ HAUSER, *supra* note 24, at 80.

¹⁹⁹ PINKER, *supra* note 24, at 290.

²⁰⁰ Hoffman, *supra* note 109, at 1675, n.3.

Professor Stake proposes that “humans might be programmed with three rules for initially allocating rights in a thing: to the first person to touch the thing, or to the older contestant, or to the dominant member of the group.”²⁰¹ Particular cultures would then determine the details of these rules.²⁰² For example, a “first-in-time convention” (possession) might have developed because humans fight harder for something they already possess, which means that deferring to the person who was first in time can avoid harmful violence for both parties.²⁰³ Part of this convention would be rules for determining who is first in time, for example, a person who first controls a wild animal has title to it.²⁰⁴ Thus, “[t]he result is that most of us descended from beings who could correctly determine who was first in time according to the convention.”²⁰⁵

Our mirror neurons and the related ability to form triadic mental representations of mental states were involved in the development of property rules. Professor Stake has written:

[W]e may be programmed to recognize when we have a certain proximate relationship to a physical object and, by mirroring, to recognize when others have a similar relationship to an object. Our brains may then determine ‘ownership’ by combining that relational data with information about previous relationships, such as information about who was first in time and what voluntary transfers have occurred.²⁰⁶

For example, through the above process one may recognize an individual possesses an object if they are grasping that object.²⁰⁷

If property rules exist to help hold the social contract together, then society must protect individuals’ property. Animal studies have suggested that group protection of individual property may have ancient roots.²⁰⁸ Professors Thomas Merrill and Henry Smith have noted that property rights work because a significant majority of people recognize property as moral rights.²⁰⁹ These authors think that law, without morality, cannot create a system of property rights and that, if property rights are based on morality, they can be secured with minimal legal enforcement.²¹⁰ This accords with the present author’s theory that much of our modern law is based on practices that developed on the savannah as survival advantages, and that modern law helps reinforce these evolutionary behaviors and makes them work in large groups.²¹¹

²⁰¹ Stake, *supra* note 187, at 1764.

²⁰² *Id.*

²⁰³ *Id.*

²⁰⁴ *Id.* at 1765.

²⁰⁵ *Id.*

²⁰⁶ *Id.* See also Merrill & Smith, *supra* note 194, at 1858 (“Rules making nearness and physical control the criteria for possession have a psychological basis, and the convention of respecting possession stems from people’s mutual expectations that they will respect the right to control these things.”).

²⁰⁷ Stake, *supra* note 187, at 1765.

²⁰⁸ *Id.* at 1767.

²⁰⁹ Merrill & Smith, *supra* note 194, at 1850.

²¹⁰ *Id.* See also Gintis, *supra* note 194, at 2.

²¹¹ For example, this author believes modern contract law derived from reciprocal altruism (“tit for tat”), which developed during the EEA. A person would give up his selfish aims in order to cooperate with another person so that both parties would benefit, thus increasing both their chances for survival.

In addition, property rights are not based on a utilitarian, cost-benefit analysis.²¹² For example, the property right to prevent trespass to land is absolute; it does not depend on a cost-benefit analysis that the trespass would or would not be beneficial to society.²¹³ Accordingly, economic development takings where the government takes property from an innocent party and awards it to another party who can make better use of it are not justified. While the new use might create a bigger pie and produce favorable externalities, such as better business in the neighborhood, such takings go against our basic instincts concerning the sanctity of property.²¹⁴ Eminent domain under such circumstances constitutes immoral coercion of innocent parties.²¹⁵ While the Supreme Court disagreed in *Kelo*,²¹⁶ the strong criticism against the holding of this case²¹⁷ supports the proposition that property is an instinctive, moral right. As Professors Merrill and Smith have declared: “Coercing innocent persons to give up their homes and farms in order to bestow favors on the select few, however, crosses the line of what most persons are prepared to countenance, consistent with popular perceptions of morality.”²¹⁸

Behavioral biology also supports intestate succession (and similarly inheritance by will). Intestate succession is a way of transferring property (resources for survival) to those who share a person’s genes, thus furthering the survival of the individual’s genes.²¹⁹ Since closer relatives, such as children and parents, share more of the donor’s genes, intestate succession laws favor closer relatives rather than distant ones.²²⁰ These laws also favor spouses, who are unrelated genetically to the donor, because favoring spouses increases a spouse’s investment in his or her children.²²¹ Furthermore, “[e]volutionary pressure could have shaped brains to send property where it will be most efficiently deployed”—where it has a greater chance of furthering the donor’s genes.²²² For example, primogeniture may have arisen because “[u]nder primogeniture, a decedent’s land passed to a

²¹² Merrill & Smith, *supra* note 194, at 1851. They add that “we will argue that the forms of utilitarianism that undergird modern law and economics which assume a degree of plasticity of property and have underplayed the information and coordination problems present in core property situations are inconsistent with the nature of the rights in question.” *Id.* at 1856–57.

²¹³ *Id.* at 1871–74.

²¹⁴ And, a stretched reading of the Constitution. The Takings Clause says public *use*, not public purpose. U.S. CONST. amend. V.

²¹⁵ Merrill & Smith, *supra* note 194, at 1882–84.

²¹⁶ See *Kelo v. City of New London*, 545 U.S. 469 (2005).

²¹⁷ See generally Janice Nadler & Shari Seidman Diamond, *Eminent Domain and the Psychology of Property Rights: Use, Subjective Attachment, and Taker Identity*, 5 J. EMPIRICAL LEGAL STUD. 713 (2008). These authors have noted that the disapproval rating for *Kelo* was around 80–90%. *Id.* at 720. They added: “Our experiments suggest that subjective attachment to property looms far larger [than public purpose] in determining the perceived justice of a taking.” *Id.* at 713.

²¹⁸ Merrill & Smith, *supra* note 194, at 1884. Professors Haidt and Bjorklund have argued: “Traditional utilitarianism, for example, does an admirable job of maximizing moral goods derived from the harm/care foundation. However, it often runs afoul of moral goods derived from the fairness/reciprocity foundation (e.g., rights), to say nothing of its violations of the ingroup/loyalty foundation (why treat outsiders equal to insiders?), the authority/respect foundation (it respects no tradition or authority that demands anti-utilitarian practices), and the purity/sanctity foundation (spiritual pollution is discounted as superstition).” Haidt & Bjorklund, *supra* note 19, at 215.

²¹⁹ Stake, *supra* note 187, at 1768.

²²⁰ *Id.*

²²¹ *Id.* at 1772.

²²² *Id.* at 1769–70.

single son, thereby maximizing that son's chances of becoming an alpha male and, hence, his reproductive opportunities."²²³ Of course under different cultural conditions different rules will develop.

Society often limits a person's ability to leave property to one's relatives through inheritance taxes. Such taxes are often necessary for the good of the society—to support public projects. However, when a society takes too much of a person's property upon death, it negates human nature. Part of the incentive to work is to leave property to those who share one's genes. Studies have shown that the elderly do not consume all of their resources so that they can transfer those resources to their kin.²²⁴ Taking too much of a person's property upon death destroys that incentive to work.

In sum, because property rights are a basic part of human evolution and morality, they have greater importance than many modern courts and writers have given them.²²⁵ Not only are they hardwired into our brains, they are also tied into our personhood and autonomy.²²⁶ Accordingly, they are equal to other basic rights, such as the right of liberty or the right of equal treatment. As Professor McGinnis has asserted: “[i]f property is natural to man, a government that ignores the interests of mankind in property and exchange does so at its own peril.”²²⁷

C. A RIGHT TO FAIRNESS

Fairness is universal, and mankind's sense of fairness is based on the “Golden Rule” (“Do unto others as they would do unto you” and “Don't do unto others as you would not have them do to you”).²²⁸ Our sense of fairness derives from our theory of mind working through our mirror neurons that allows us to identify with others.²²⁹ As mentioned in Part II, the parts of the mind that we use in doing an action are often the same parts that perceive that action when it involves others.²³⁰ Professors Terrence Chorvat and Kevin McCabe have written that “[a] relatively simple version of a TOM [theory of mind] would be to assume that the other person will do what we would do in the same situation.”²³¹ Similarly, Professor Pinker has asserted: “No creature equipped with circuitry to understand that it is immoral for you to hurt me could discover anything but that it is immoral

²²³ *Id.*

²²⁴ McGinnis, *supra* note 37, at 215. Alan Wolfe has noted that Americans disfavor inheritance taxes because this is a type of family-related altruism that people understand. Alan Wolfe, *The Moral Sense in Estate Tax Repeal*, N.Y. TIMES, July 24, 2000, at A19.

²²⁵ See *infra* notes 321–24 and accompanying text on the Framers' conception of property rights.

²²⁶ Merrill & Smith, *supra* note 194, at 1859.

²²⁷ McGinnis, *supra* note 37, at 222.

²²⁸ HAUSER, *supra* note 24, at 410; PFAFF, *supra* note 64, at 4, 10–12. For this paper, fairness is “the equitable distribution of goods or outcomes.” Golnaz Tabibnia & Matthew D. Lieberman, *Fairness and Cooperation are Rewarding: Evidence from Social Cognitive Neuroscience*, 1118 ANNUAL N.Y. ACAD. SCI. 90, 91 (2007).

²²⁹ As Professor Iacoboni has written, mirror neurons “show that we are not alone, but are biologically wired and evolutionarily designed to be deeply interconnected with one another.” IACOBONI, *supra* note 50, at 267. Philosopher Thomas Nagel recognized that “[a]ny social arrangement governing the relations among individuals, or between the individual and the collective, depends on a corresponding balance of forces within the self—its image in microcosm.” NAGEL, *supra* note 185, at 4.

²³⁰ See *supra* notes 71–83 and accompanying text.

²³¹ Chorvat & McCabe, *supra* note 64, at 1729.

for me to hurt you.”²³² Like the other rights mentioned in this paper, our sense of fair play helped individuals and groups survive because it produced evolutionary advantages over those individuals and groups that lacked a sense of fairness.²³³

Humans innately sense when they are being treated fairly or unfairly by others.²³⁴ “People judge fairness . . . both on the distribution of gains and on the possible alternatives to a given outcome;”²³⁵ “reciprocal exchanges must be relatively equal . . .”²³⁶ In other words, one derives the fairness of an outcome (e.g., property, money, goods) from a comparison of one’s outcome/input ratio to the outcome/input ratio of another.²³⁷ Individuals have positive emotions when they are treated fairly and strong negative emotions when they believe that they have been treated unfairly.²³⁸ The most common reactions to unfairness are anger, protest, spite, and outrage.²³⁹ Similarly, “when a worker perceives that another with similar inputs receives greater rewards, that worker will reduce effort.”²⁴⁰ People are also sympathetic to those who have treated them fairly.²⁴¹

In addition, reciprocal altruism is a part of our sense of fairness: “whenever people treat each other in a fair, sympathetic manner, they are exhibiting an essential understanding of the importance of reciprocity.”²⁴² Cooperation is connected with reward-related neural activity,²⁴³ and it also depends on the other person’s reputation.²⁴⁴ Our sense of fair play probably first developed in sexual love and parental love and then spread to others in society.²⁴⁵ In addition, our sense of fear, anxiety, and danger generally

²³² PINKER, *supra* note 24, at 193.

²³³ PFAFF, *supra* note 64, at 7; Timothy Ketel & Bryan Koenig, *Justice, Fairness, and Strategic Emotional Commitment*, in *ADVANCES IN THE PSYCHOLOGY OF JUSTICE AND AFFECT* 133, 133 (David De Cremer ed., 2007).

²³⁴ See generally Tabibnia & Lieberman, *supra* note 228, at 94 (“Numerous behavioral and self-report studies using the ultimatum game have established that people dislike unfair treatment.”). See also Brosnan & de Waal, *supra* note 138, at 297 (“During the evolution of cooperation it may have become critical for individuals to compare their own efforts and pay-offs with those of others.”); John Richardson, *How Negotiators Choose Standards of Fairness: A Look at Empirical Evidence and Some Steps Toward a Process Model*, 12 *HARV. NEGOT. L. REV.* 415, 417, 421 (2007).

²³⁵ Brosnan & de Waal, *supra* note 138, at 299.

²³⁶ Hoffman, *supra* note 109, at 1671.

²³⁷ David De Cremer, *Justice and Affect: When Two Friends Meet*, in *ADVANCES IN THE PSYCHOLOGY OF JUSTICE AND AFFECT* 1, 3–4 (David De Cremer, ed. 2007). See also JAMES Q. WILSON, *THE MORAL SENSE* 70 (1993) (“[E]quity: People who are equal with respect to contributing should be equal with respect to outcomes.”); Tabibnia & Lieberman, *supra* note 228, at 90.

²³⁸ Tabibnia & Lieberman, *supra* note 228, at 91. In addition to human studies, Professors Brosnan & de Waal have demonstrated that monkeys have a sense of fairness. Brosnan & de Waal, *supra* note 138, at 297 (“Here, we demonstrate that a nonhuman primate, the brown capuchin monkey . . . , responds negatively to unequal reward distribution in exchanges with a human experimenter. Monkeys refused to participate if they witnessed a conspecific obtain a more attractive reward for equal effort, an effect amplified if the partner received such a reward without any effort at all.”).

²³⁹ Richardson, *supra* note 234, at 418–422.

²⁴⁰ *Id.* at 418.

²⁴¹ Tabibnia & Lieberman, *supra* note 228, at 95 (“When viewing fair partners who appeared to be in pain, men and women both exhibited increased activity in insular and anterior cingulate regions, suggesting an empathetic response to pain.”); Richardson, *supra* note 234, at 416.

²⁴² PFAFF, *supra* note 64, at 118.

²⁴³ Tabibnia & Lieberman, *supra* note 228, at 95.

²⁴⁴ *Id.* at 95–97. “Faces of cooperators, regardless of intention, were rated as more likable than neutral faces; and faces of defectors, particularly intentional defectors, were rated as less likeable than neutral faces.” *Id.* at 97.

²⁴⁵ PFAFF, *supra* note 64, at 5, 81.

keeps us from harming others.²⁴⁶ Similarly, “[p]eople define their norms of fairness through social processes; groups of people create norms and work to enforce them.”²⁴⁷

Evolutionary psychologists have used the “ultimatum game” to study fairness in humans.²⁴⁸ The ultimatum game is a two player game in which A is given money to be divided between A and B in any portion A wants. If B accepts the offer, the players split the money, but if B rejects the offer, the players get nothing. One might expect that A would keep a very large portion (say 90%) for selfish reasons and B would accept a small portion (say 10%) because at least he would get something. However, A generally offers an average of 40%, and B usually rejects offers below 30%. This shows that “[h]umans have built-in regulators, evolved over aeons of intense social interaction, that tells us not to be unfair to each other, lest today’s player A will become tomorrow’s player B.”²⁴⁹ In addition those who receive unfair offers (those in the position of B) will often reject those offers even if he loses something, too, due to B’s sense of fairness and the desire to punish those who are unfair.²⁵⁰

Our sense of fair play appears in brain activity that neuroscientists have detected and tracked.²⁵¹ For example, neuroscientists have observed that unfair offers activate areas of the brain connected with both cognition and emotions.²⁵² In addition, some neuroscientists believe that there is a Golden Rule hormone—oxytocin—which is produced in the hypothalamus and which may have evolved in connection with motherly love.²⁵³ Oxytocin increases feelings of trust, both in being willing to trust and creating trust in others.²⁵⁴

Finally, studies have shown that when humans have strong moral convictions concerning a matter, they are more interested in substantive fairness than procedural fairness.²⁵⁵ This occurs because “people’s affective reactions [especially outrage] to outcomes color their judgments of fairness.”²⁵⁶ Accordingly, “[p]rocedural information may do little to offset the feelings of incensed outrage in reaction to an outcome that threatens a moral mandate: instead, anger and outrage may lead people to paint the entire situation as unfair.”²⁵⁷

²⁴⁶ *Id.* at 22. “Fear can spur the Golden Rule circuitry into action, causing people to opt for ethical choices in a variety of situations.” *Id.* at 23.

²⁴⁷ Richardson, *supra* note 234, at 421.

²⁴⁸ *E.g.*, Hoffman, *supra* note 109, at 1671.

²⁴⁹ *Id.*

²⁵⁰ *Id.*

²⁵¹ PFAFF, *supra* note 64, at 7; RIZZOLATTI & SINIGAGLIA, *supra* note 50, at 173–193.

²⁵² Chorvat & McCabe, *supra* note 64, at 1731.

²⁵³ PFAFF, *supra* note 64, at 100–01. Vasopressin may also be involved with the Golden Rule, especially in males. *Id.* at 104.

²⁵⁴ *Id.* at 104–05.

²⁵⁵ Mullen & Skitka, *supra* note 61, at 629.

²⁵⁶ *Id.* at 631.

²⁵⁷ *Id.*

D. LIBERTY RIGHTS

Liberty rights derive from the autonomy of human beings. Man has a natural desire for liberty because it helps the autonomous individual survive by allowing choice.²⁵⁸ “Evolutionary theorists realize that there is more than one possible goal or end to human life and that end which is chosen may depend in large part on the circumstances in which an individual finds himself.”²⁵⁹ In other words, “[w]e need liberty in order to make up for our lack of knowledge of diverse human ends, and the diverse understanding of human ends leads to a justice in which each man lives according to his own conscience, as opposed to that of another.”²⁶⁰ Furthermore, “[a] just society recognizes when it has squelched the individual, deleting the political conception of self.”²⁶¹ Finally, liberty is necessary for diversity in society; a group needs individuals who can perform specialized functions. In sum, liberty facilitates the experience and the natural genetic variations among human beings.

Mirror neurons facilitated the development of liberty rights. Through our theory of mind, along with our emotions of empathy, sympathy, and responsibility, an individual can see that others should be treated in the same way that the individual is (given the same liberty).

During the EEA, man was completely free (liberty is prior to the state). However, by entering into a social contract (which increases an individual’s ability to survive), man must give up some liberty, but only the liberty which is necessary for society’s protection.²⁶² Liberty is what man receives from the social contract in exchange for what he gives society; liberty is part of reciprocal altruism on the societal level. In addition, the more liberty a society allows its inhabitants, the more likely those inhabitants are to remain part of that society. Liberty also breeds personal responsibility: “[b]y taking away freedom we essentially deny that the individual has any responsibility for himself, negating his moral worth, and further negating the possibility for political friendship between citizens.”²⁶³ As Professor Lauren Hall has noted: “[a]s autonomous individuals, selected by natural selection with certain desires and needs, we alone hold the responsibility

²⁵⁸ Hall, *supra* note 183, at *11, *13, *16. “Hunter-gatherer societies, with relatively egalitarian social structures, would have allowed little direct physical coercion since few would have the requisite power necessary to exert such control.” *Id.* at *10. Throughout history, humans have taken great risks to protect their freedoms. RUBIN, *supra* note 46, at 113.

²⁵⁹ Hall, *supra* note 183, at *10. Professor Arnhart has written that “[t]he human good is variable insofar as what is desirable for human beings varies according to individual temperament, individual history, social custom, and particular circumstances.” ARNHART, *supra* note 115, at 17. He has identified twenty natural desires that are rooted in human nature and which vary in the individual and a particular society based on the above factors: “a complete life, parental care, sexual identity, sexual mating, familial bonding, friendship, social ranking, justice as reciprocity, political rule, war, health, beauty, wealth, speech, practical habituation, practical reasoning, practical arts, aesthetic pleasure, religious understanding, and intellectual understanding.” *Id.* at 29. *See also* RUBIN, *supra* note 46, at 14 ([H]umans are highly individualistic.”).

²⁶⁰ Hall, *supra* note 183, at 10.

²⁶¹ HAUSER, *supra* note 24, at 187.

²⁶² According to John Locke, “[a]nything that is not transferred remains beyond the government’s authority, still as a matter not of power but of right.” WEINREB, *supra* note 3, at 132. This is based on “the assumption that the individual is fully formed prior to any action of the state.” *Id.* at 133.

²⁶³ Hall, *supra* note 183, at 25.

for our own survival and that of our children.²⁶⁴ Moreover, since liberty is part of human nature, groups that grant more liberty will generally work more efficiently and require less coercion.²⁶⁵ Finally, when people have liberty rights, they do not have to fight for liberty, thus increasing their survival chances.

That liberty is a central part of human nature does not mean that individuals should be allowed to do whatever they please.²⁶⁶ As Professor John Rawls recognized, “arguments for restricting liberty proceed from the principle of liberty itself.”²⁶⁷ By entering into society, individuals must obey the group’s rules, or the group will collapse. While this may restrict the individual somewhat, it increases the survival chances for all.

Society can also limit liberty when that liberty interferes with another individual’s liberty.²⁶⁸ As discussed in detail in the next section, individuals are equal under the social contract, which increases their chances of survival. For example, criminal laws interfere with liberty, but such laws are necessary to protect other individuals. Similarly, government can step in when someone is overreaching in the marketplace.

Society, however, should only restrict individual liberty when it is necessary for the good of society. This means that there should be few restrictions on “morality.” For example, since homosexuality does no real harm to society, it should be permitted. On the other hand, society can restrict sexual activity when there is the danger of harm, such as protecting children by banning sex between adults and children.

Slavery is the opposite of liberty because it takes away all liberty rights. It also treats an individual as a means to an end. As Professor Larry Arnhart has noted, humans are not naturally adapted for slavery.²⁶⁹ A slave has no autonomy and no dignity, which are central to man’s nature. Slavery also goes against mankind’s natural moral sense, which was shaped by natural selection.²⁷⁰ In particular, slavery contradicts man’s moral sense not to be exploited.²⁷¹ In addition, a master/slave relationship lacks the reciprocity that is central to society based on human nature. Slavery also interferes with liberty because it interferes with the subcategories of liberty

²⁶⁴ *Id.* at 25.

²⁶⁵ *See id.* at 2.

²⁶⁶ Professor Hall has asserted that “[j]ust as in the classical liberal tradition, evolutionary liberty is not simply license, doing whatever one wants to win the evolutionary race.” *Id.* at 2. She added: “Evolutionary liberty . . . is liberty within the constraints of other aspects of human nature. . . . To protect social relationships, natural selection has instilled in us a moral sense which prevents (most of the time) our desire for liberty from becoming a desire for license.” *Id.* at 22.

²⁶⁷ John RAWLS, A THEORY OF JUSTICE 213 (2d ed. 1999).

²⁶⁸ Herbert Spencer “took it for granted that restraints to prevent a person from ‘directly or indirectly aggressing on his fellows’ were not only consistent with liberty but essential to it.” WEINREB, *supra* note 3, at 132 (quoting THE MAN VERSUS THE STATE 27 (Ind.: Liberty Classics) (1981)). Similarly, J. S. Mill wrote that “the only purpose for which power can be rightfully exercised over any member of a civilised community, against his will, is to prevent harm to others.” JOHN STUART MILL, ON LIBERTY 96 (1951). Although this author generally agrees with Mill, Mill’s statement is based on a utilitarian view of law, while this author’s view derives from biology.

²⁶⁹ *See* ARNHART, *supra* note 115, at 161.

²⁷⁰ *Id.*

²⁷¹ *Id.* at 163, 169.

discussed below, such as the right of association, the right to choose one's mate, and the right of parents to raise their children as they please.

Liberty rights are the basis of many of our more detailed rights like the right to privacy or the right to free speech. "What makes liberty different from . . . other human goods is that it embraces more political goods than any other good can, and it leaves man to choose the goods which fit his particular circumstances and attributes."²⁷² Fundamental to liberty is the right of privacy. In *Lawrence v. Texas*, the Supreme Court formulated a broad concept of the right of privacy:

Liberty protects the person from unwarranted government intrusions into a dwelling or other private places. In our tradition the State is not omnipresent in the home. And there are other spheres of our lives and existence, outside the home, where the State should not be a dominant presence. Freedom extends beyond spatial bounds. Liberty presumes an autonomy of self that includes freedom of thought, belief, expression, and certain intimate conduct.²⁷³

This broad concept of privacy is consistent with the right to liberty which is intrinsic to human behavior and the social contract. The state should not be a dominant presence in areas where it has no interest; man did not give up all his natural freedom when he entered into society. The state should not interfere with a person's home, unless there is a significant reason to do so, such as protection of a child or a spouse. Because intimacy between human beings is an essential part of human nature, intimacy should be especially protected from state interference. Also, outside the home people should be able to do as they please, as long as it does not interfere with a significant state interest or another person's liberty. As *Lawrence* noted, freedom of thought, belief, and expression are essential to autonomous human beings. Man was free before the social contract to think, believe, and express himself as he pleased. Society does not have a reason to interfere with those natural freedoms except in extreme circumstances.

Another part of liberty is the right of free association. Free association furthers productivity and thus survival because it allows individuals to work with whomever they please. It allows an individual to develop a life plan with the help of others. It also helps hold society together because a lack of free association could cause individuals to exit that society.

Another part of liberty is the freedom to choose one's spouse. As noted above, mate selection is a central part of evolution because it affects reproductive success.²⁷⁴ A related liberty is the liberty for parents to raise their children as they please, unless the parents pose a risk of danger to the children. Experiments in kibbutzim where children were raised communally were failures because of human nature—mothers did not want to give up their children.²⁷⁵ In addition, children are better off with their

²⁷² Hall, *supra* note 183, at *10.

²⁷³ *Lawrence v. Texas*, 539 U.S. 558, 562 (2003).

²⁷⁴ ARNHART, *supra* note 115, at 132–33.

²⁷⁵ *Id.* at 95–101 ("Mammalian young need social interaction with a primary caretaker for their physical and emotional health, and most Mammalian mothers desire to provide such care."); Haidt & Bjorklund,

parents because parents give more attention to their children because they carry their genes.

E. RIGHT TO EQUAL TREATMENT

There is no equality in the natural world. The powerful rule, and the weak are eaten. This is, of course, part of the evolutionary process.

Equal treatment came into the biological picture when man created the social contract. As stated earlier, when mankind developed societies, individuals gave up some of their liberty in exchange for the survival benefits of living in a society. Although individuals gave up some liberty, equal treatment from the government was part of the bargain because no one would enter into a society to be treated as an inferior, especially if this would decrease survival chances. Professor Thomas Nagel has summarized this basis of equality best:

The pure ideal of political legitimacy is that the use of state power should be capable of being *authorized* by each citizen—not in direct detail but through acceptance of the principles, institutions, and procedures which determine how the power will be used. This requires the possibility of unanimous agreement at some significantly high level for if there are citizens who can legitimately object to the way state power is used against them or in their name, the state is not legitimate.²⁷⁶

Similarly, the sense of fairness discussed above requires that leaders treat their subjects equally. Individuals demand equal treatment from their sovereigns, and our emotions are brought into play when we see that others are not treated equally. Finally, equal treatment is required as part of the respect that autonomous human beings deserve—all persons are moral equals.²⁷⁷ Professor Dworkin wrote that “majoritarianism does not guarantee self-government unless all the members of the community in question are moral members”²⁷⁸ Further, as Professor Lloyd Weinreb has asserted: “Each person should be able to develop and grow as a person; he should have a sense of his own capacity as an actor in the world, who makes things happen according to his own plans.”²⁷⁹ This is Thomas Jefferson’s “pursuit of happiness.”

Equality under behavioral biology means equality of opportunity, not equality of outcome. Equality of outcome is contrary to the evolutionary

supra note 19, at 201 (“The resistance of children to arbitrary or unusual socialization has been the downfall of many utopian efforts.”); Hall, *supra* note 183, at 7.

²⁷⁶ NAGEL, *supra* note 185, at 8.

²⁷⁷ Writers have generally based equality on an individual’s humanity. WEINREB, *supra* note 3, at 167; RAWLS, *supra* note 267, at 442 (explaining that “the capacity for moral personality” is a sufficient condition for the entitlement to equal justice).

²⁷⁸ RONALD DWORKIN, FREEDOM’S LAW: THE MORAL READING OF THE AMERICAN CONSTITUTION 23 (1996) [hereinafter DWORKIN, FREEDOM’S LAW]. Professor Dworkin added that “[m]oral membership involved reciprocity: a person is not a member unless he is treated as a member by others, which means that they treat the consequences of any collective decision for his life as equally significant a reason for or against that decision as are comparable consequences for the life of anyone else.” *Id.* at 25.

²⁷⁹ WEINREB, *supra* note 3, at 175.

process.²⁸⁰ If everyone were made equal, the survival chances of all would diminish. Incentives to help society would disappear because individuals who worked hard would not reap the benefits of their work. Moreover, if individuals did not receive a significant portion of their labors, they would leave the society, and the social contract would fall apart. As Professor Hall argued: “[w]hile there are certainly evils in inequality, the coercion necessary to create absolute equality (if even possible) would be worse for human psychology and the overall quality of human life than the inequality which presently exists.”²⁸¹

Similarly, equality of outputs ignores individual autonomy, which is basic to humans and necessary for survival. As Professor Weinreb has asserted:

Unlike equality of opportunity, which recognizes persons as distinct actors who exercise individual capacities, the central significance of equality of result is that it denies the relevance of individuality in some respect. Where equality of result applies, persons are not actors who determine for themselves; they are recipients (or donors) who, whatever their individual characteristics, receive (or donate) according to a general rule that they are individually unable to vary.²⁸²

He added that “[o]ur common humanity does not consist of or depend on particular characteristics that all have alike. On the contrary, its essence is our common capacity for individual self-determination as a unique person.”²⁸³ Finally, differences in outputs is not unfair. As Professor F.A. Hayek noted, “[a] bare fact, or state of affairs, which no one can change, may be good or bad, but not just or unjust.”²⁸⁴ More specifically, Professor Paul Rubin has asserted that inequality exists generally because “some individuals are vastly more productive than others. . .” and that productivity is good for society as a whole.²⁸⁵

While a few scholars have noted that some hunter-gatherer societies were egalitarian, this is a different type of egalitarianism than is sometimes advocated for today.²⁸⁶ This egalitarianism was not a concern for others, but

²⁸⁰ In addition, Professor Weinreb believes that equality of result “is not a comprehensible human goal.” *Id.* at 161. He continues: “Since measures to eliminate various kinds of designated group inferiority, such as racial and sexual discrimination, are strongly supported on moral grounds, the principle of equality itself acquires moral credentials. Nevertheless, the achievement of equality between one human being and another or among human beings generally, *for its own sake*, is not a possible moral objective.” *Id.* at 179. Similarly, Professor Pinker has written, “[p]olicies that insist that people be identical in their outcomes must impose costs on humans who, like all living things, vary in their biological endowment.” PINKER, *supra* note 24, at 425.

²⁸¹ Hall, *supra* note 183, at 19. *See also* McGinnis, *supra* note 37, at 222 (“[R]edistributive efforts decrease the incentives to engage in productive activity because some of the property created will be taken by others.”).

²⁸² WEINREB, *supra* note 3, at 177. Professor Pinker has gone further: “Many atrocities of the twentieth century were committed in the name of egalitarianism, targeting people whose success was taken as evidence of their criminality.” PINKER, *supra* note 24, at 152. *See also* RUBIN, *supra* note 46, at 87.

²⁸³ WEINREB, *supra* note 3, at 180. *See also* PINKER, *supra* note 24, at 425 (“The ideal of political equality is not a guarantee that people are innately indistinguishable.”).

²⁸⁴ F. A. HAYEK, LAW, LEGISLATION AND LIBERTY VOLUME 2: THE MIRAGE OF SOCIAL JUSTICE 31 (1974).

²⁸⁵ RUBIN, *supra* note 46, at 28.

²⁸⁶ *Id.* at 70.

rather a desire not to be dominated.²⁸⁷ Thus, individuals banded together to avoid the creation of a dominant hierarchy.²⁸⁸ Accordingly, this dominance-avoiding type of egalitarianism supports the argument that human behavior resists attempts to impose artificial equality by dominance, as was argued in the previous paragraph.

Mankind does have a sense of minimal distributional fairness,²⁸⁹ which is probably the result of our theory of mind. Studies have suggested that mankind has adopted the “principle that maximized the overall resources of the group while preventing the worst off from dropping below some pre-established level of income.”²⁹⁰ This allows “for extra benefits to flow toward those who contribute more to society,” while providing “a safety net for those who are disadvantaged....”²⁹¹ In other words, while equality in human nature is equality of inputs, not outputs, there may be a right to minimum subsistence.

Establishing equality of opportunity as the basis of equal treatment does not entail the adoption of “Social Darwinism.” Social Darwinism, which is generally associated with Herbert Spencer, is not consistent with behavioral biology or for that matter with Darwin himself. Darwin’s theory was not a theory about progress, and his evolution was not to a positive end.²⁹² More importantly, Social Darwinism is contrary to the biological basis of rights set forth in this paper. A theory of human nature that views certain individuals as superior interferes with natural property rights, fairness rights, liberty rights, and equal treatment rights.

Equality means that society cannot discriminate based on superficial differences such as race. Behavioral biology demonstrates that one should be judged by individual characteristics, not as members of an artificial group to which one belongs. “One of the downsides to essentialist thinking and certain aspects of categorization more generally is that we readily develop stereotypes and prejudices.”²⁹³ Because there are an astronomical number of possible genetic combinations, each human is genetically unique. On the other hand, behavioral biology also demonstrates that there is little difference between the races.²⁹⁴ There has not been enough time in the human evolutionary process for significant differences to occur among localized populations.²⁹⁵ Professor Goldsmith averred, “Even when members of different human populations look different and when there are demonstrable difference in gene frequencies underlying physical characteristics, the presumption remains that cultural differences reflect

²⁸⁷ *Id.*

²⁸⁸ *Id.*

²⁸⁹ HAUSER, *supra* note 24, at 83.

²⁹⁰ *Id.* at 88.

²⁹¹ *Id.*

²⁹² GRAEFRATH, *supra* note 17, at 373.

²⁹³ HAUSER, *supra* note 24, at 212. *See also* Jones & Goldsmith, *supra* note 102, at 496 (“Yet biology offers no support for the existence of discrete genetically distinct populations of humans different from each other in important ways.”).

²⁹⁴ PINKER, *supra* note 24, at 143 (“People are qualitatively the same but may differ quantitatively. The quantitative differences are small in biological terms, and they are found to a far greater extent among the individual members of an ethnic group than between ethnic groups or races.”).

²⁹⁵ Jones & Goldsmith, *supra* note 102, at 477.

alternative phenotypic expressions of a common genetic heritage.”²⁹⁶ In other words, when one shows that the mind is the same in all humans, unimportant biological aspects like skin color become irrelevant.

In addition, equal treatment under behavioral biology should not be limited to a traitist approach, but should protect all individuals from differing treatment by the government. For example, the Jeffersonians stood for “equal rights for all, special privileges for none.”²⁹⁷ In other words, the minority should be protected from the majority, regardless of the characteristics of the minority and majority. As the court declared in *State v. Goodwill*:

[T]he rights of every individual must stand or fall by the same rule of law that governs every other member of the body politic under similar circumstances; and every partial or private law which directly proposes to destroy or affect individual rights, or does the same thing by restricting the privileges of certain classes of citizens and not others, when there is no public necessity for such discrimination, is unconstitutional or void. Were it otherwise, odious individuals or corporate bodies would be governed by one law, and the mass of the community, and those who make the law by another one.²⁹⁸

The court, of course, was stating a version of the rule of law.

F. SOME IMPLICATIONS

From the above, it should be clear that sometimes there is not just one right answer to rights questions. Different right-creating behaviors (from different modules in the brain) can conflict. In addition, different cultures realize fundamental rights in different ways.

For instance, behavioral biology sometimes does not supply an answer when equality rights and liberty rights clash. Both are vital for human survival and holding together the social contract. As Professor Weinreb remarked, “[i]n a just social order we believe, liberty and equality are consistent, because the law establishes what we call equality of opportunity: not equality as such but the proper bounds of liberty, within which all persons alike are allowed to exercise their individual capacities.”²⁹⁹ However, he also admitted that in any society there will inevitably be clashes between liberty and equality.³⁰⁰ While liberty rights are probably much older than equality rights since liberty rights probably existed before the social contract, equality rights are also important because, as stated above, they help hold the social contract together and they relate to mankind’s sense of fairness. In addition, the answer to the question of how liberty relates to equality varies by culture, with the

²⁹⁶ GOLDSMITH, *supra* note 165, at 125.

²⁹⁷ V. F. Nourse & Sarah A. Maguire, *The Lost History of Governance and Equal Protection*, 58 DUKE L.J. 955, 963–64 (2009) (quoting Michael les Benedict, *Laissez-Faire and Liberty: A Re-Evaluation of the Meaning and Origins of Laissez-Faire Constitutionalism*, 3 LAW & HIST. REV. 293, 318 (1985)).

²⁹⁸ *State v. Goodwill*, 10 S.E. 285, 286 (W. Va. 1889).

²⁹⁹ WEINREB, *supra* note 3, at 10.

³⁰⁰ *Id.*

emphasis on liberty or equality probably being determined by that culture's combination of the Haidt-Joseph five moral modules.

Another implication from the above is that anthropocentric rights should generally prevail over utilitarianism (cost-benefit analysis).³⁰¹ Darwinists are individual oriented.³⁰² Under Darwinism, society grows out of the individual, not the other way around. While the social contract is important, under behavioral biology, individuals are more important because they are autonomous beings and they had total liberty before the social contract. Individuals are the basic unit of the social contract. In addition, utilitarianism can interfere with property rights, liberty rights, fairness rights, and the right to equal treatment. For example, while it may be socially beneficial for the government to turn over an individual's house to a developer who will build a mall that will economically improve the neighborhood, this violates an individual's property rights as discussed above. As Professor Rawls declared, "[e]ach person possesses an inviolability founded on justice that even the welfare of society as a whole cannot override."³⁰³ In other words, "utilitarianism does not take seriously the distinction between persons."³⁰⁴ In addition, a neuroscientific study of patients with damage to the ventrodorsal prefrontal cortex, a part of the brain involved with social emotions, supports the proposition that humans value the individual over the utilitarian answer.³⁰⁵ These brain damaged patients acted in a much more utilitarian manner than normal individuals when faced with a high conflict personal dilemma, such as the trolley problem.³⁰⁶

Thus, a system of rights based on human behavior will adopt the Kantian notion of not using an individual as a mean to an end.³⁰⁷ In addition, "[t]he concept of morality's producing the greatest good for the greatest number is consistent with evolutionary principles only when the interests of individuals are very similar."³⁰⁸ On the other hand, when basic behavioral rights are not involved, it is perfectly legitimate to adopt a cost-benefit utilitarian approach to law making.³⁰⁹

³⁰¹ Professor Greene has shown that emotions cause us to value our non-utilitarian intuitions over a cost benefit analysis. Joshua Greene, *Cognitive Neuroscience and the Structure of the Moral Mind*, in *THE INNATE MIND: STRUCTURE AND CONTENTS* 338, 344-50 (Peter Carruthers et. al. eds., 2005). In addition, utilitarian rights do not protect minorities, while rights based on human behavior are for all individuals. Thus, rights based on human behavior are better at providing protection against racism, sexism, etc., than other bases of rights, especially those rights that are considered social constructs.

³⁰² Kuklin, *Politics*, *supra* note 35, at 1216. *See also* McGinnis, *supra* note 37, at 225.

³⁰³ RAWLS, *supra* note 267, at 3. *See also* DERSHOWITZ, *supra* note 8, at 156 ("The greatest crises for a constitutional democracy occur when the majority demands that minority rights be abridged in the name of strongly held preferences or claims of necessity.").

³⁰⁴ NAGEL, *supra* note 185, at 66-67.

³⁰⁵ Michael Koenigs et. al., *Damage to the Prefrontal Cortex Increases Utilitarian Moral Judgements*, 446 *NATURE* 908 (2007).

³⁰⁶ *Id.*

³⁰⁷ MURPHY & COLEMAN, *supra* note 3, at 79.

³⁰⁸ GOLDSMITH, *supra* note 165, at 123.

³⁰⁹ For example, a city may have several acres of vacant land that it wants to put to a productive use. Some citizens want to employ the land for a basketball stadium so that the city can attract an NBA team. Others may think that the best use for the land would be as an industrial park to improve the city's economy. Still others may want it to be a public park for recreation. None of these reasons involve basic human rights. Therefore, the city can make its decision based on democratic and/or cost/benefit grounds.

IV. BIOLOGICAL RIGHTS IN PARTICULAR CULTURES

A. BIOLOGICAL RIGHTS AND THE AMERICAN CONSTITUTION

Judge Hoffman believes that there is an evolutionary link between justice and democracy:

The ability of any justice system to accommodate the biological tension between individual freedom and social norms depends to a great extent on its own ability to develop those norms as a free expression of social consensus. The best laws work because they efficiently confer, and express, enough long-term benefits on enough individuals that those individuals are willing to remain in the group and pay the short-term price of compliance. The genius of democracy is that it provides a continuous feedback mechanism on those social norms, constantly recalibrating them to current individual preferences.³¹⁰

Thus, “democracy creates a market for the governed, in which conflicting preferences for individual freedom and social restraint compete freely to obtain optimal results.”³¹¹ This connection between justice and democracy is not an artificial social construct, but rather shows the effect that conflicting notions of individual freedom and social constraints have had on the evolution of mankind.³¹² In addition, a free market economy furthers this connection because it allows for reciprocal exchanges, which, as noted above, are essential to human nature.³¹³

More specifically, Professor McGinnis believes that “biology—the interaction of genetically shaped behavior with particular environments—better explains the structure of the [United States] Constitution than other theories”³¹⁴ He continues, “[t]he vocabulary with which the Framers discussed human nature is in fact close to that now used to describe the elements of human nature from an evolutionary viewpoint.”³¹⁵ Similarly, “Jefferson argued that American colonists ‘felt their rights before they had thought through their explanation.’”³¹⁶

We actually have two constitutions: 1) the original Constitution, which mainly dealt with the imperfections of human nature through a division of sovereignty; and 2) the Bill of Rights and other amendments, which granted specific rights. In the original Constitution, the Framers tried to address four human factors (all of which have been discussed above): 1) that self-interest created limitations on altruistic behavior among unrelated individuals; 2) that self-interest could be consistent with “gains from trade

³¹⁰ Hoffman, *supra* note 109, at 1674.

³¹¹ *Id.*

³¹² *Id.*

³¹³ *Id.*

³¹⁴ McGinnis, *supra* note 37, at 212.

³¹⁵ *Id.* at 212–13.

³¹⁶ Dershowitz, *supra* note 8, at 42. Professor Strahlendorf has elaborated: “Natural-law philosophers have stated that there are a set of basic human values that are ‘self-evident.’ This means that humans sense that these values are good. . . . The point here . . . is . . . to suggest that there must be sets of biological mechanisms (epigenetic rules and Darwinian algorithms) that make things ‘self-evidently’ good.” Strahlendorf, *supra* note 104, at 154.

through cooperation because man has a natural sense of exchange and property”; 3) that “individuals have substantial differences in their natural endowments, creating peculiar risks of expropriation through politics”; and 4) that “the natural desire to increase status may, in some circumstances, be less beneficial to society as a whole than wealth production.”³¹⁷ Stated differently, “[t]he Framers’s whole new science of politics was premised on this view of human psychology: government could not depend on man’s benevolence or virtue.”³¹⁸ In particular, “[w]hat was unique about James Madison and the Founding Fathers, however, was not just that they based government on the consent of the people, but that they based government on individuals and a people that they understood to be not always virtuous.”³¹⁹

On one hand, the Framers believed that man’s self-interest worked well in the private sphere because it created gains in commerce. They protected the private sphere by giving Congress the authority to regulate trade through the Commerce Clause, rather than allowing states to do this separately, and by protecting property and trade through the Contracts Clause and the Takings Clause (part of the Bill of Rights).³²⁰ On the other hand, the Framers feared factions and abuses of power in the public sphere.³²¹ The Framers were particularly concerned about the protection of property.³²² As Professor McGinnis has written, “[u]nder the Framers’ system, national democracy was primarily an attempt to preserve wealth from public expropriation that could result from coalition building.”³²³ In other words, “[n]atural inequality exacerbates the danger of factions because it creates a reserve of individuals readily persuaded to expropriate the property of the more talented.”³²⁴ The Framers dealt with this problem through separation of power between the federal and state governments (federalism), bicameralism, and separation of power between the federal government’s three branches.

³¹⁷ McGinnis, *supra* note 37, at 231.

³¹⁸ *Id.* at 232.

³¹⁹ JAMES H. RUTHERFORD, *The Moral Foundations of United States Constitutional Democracy*, in MORAL AND POLITICAL PHILOSOPHY 76 (2004).

³²⁰ McGinnis, *supra* note 37, at 232.

³²¹ *Id.* at 232–235. See also G. Edward White, *Revisiting the Ideas of the Founding*, 77 U. CIN. L. REV. 969, 979 (“It was only when Americans began to reflect upon factionalism in state legislatures, and to consider how to avoid the evils of that phenomenon, in a revised federal government, that more robust concentrations of separate branches and powers in a single government began to emerge.”). As James Madison wrote:

[i]n the compound republic of America, the power surrendered by the people is first divided between two distinct governments, and then the portion allotted to each subdivided among distinct and separate departments. Hence a double security arises to the rights of the people. The different governments will control each other, at the same time that each will be controlled by itself.

THE FEDERALIST No. 51, at 357 (James Madison) (Benjamin Fletcher Wright ed., 1961).

³²² White, *supra* note 321, at 981–984. Professor White continues: “the idea of protection for the property rights of individuals can be said to have been implicitly understood by Americans as part of their heritage as British subjects. . . . As resistance to British policy toward the colonies widened in the 1770s, Americans began to assert that because they were not represented in Parliament that body had no authority over them at all. In the evolution of this argument, protection of property rights of individuals became a way of concretizing the theory that government existed to secure the ‘natural’ rights of citizens, and when it transgressed on those rights it lost its legitimacy.” *Id.* at 981–982.

³²³ McGinnis, *supra* note 37, at 235.

³²⁴ *Id.* at 234.

While the original Constitution mainly protected against human nature by division of authority, the Bill of Rights directly created rights, some of which are very specific while others are abstract. As this part will show, these rights are details of the rights discussed in Part III based on the culture of late eighteenth-century America.

Our freedom of speech right in the First Amendment flowed from the natural right to liberty. As noted in Part III, freedom of thought and expression are part of man in the EEA, and man did not give up this liberty when he entered into the social contract. However, this liberty can be limited when harm to others is involved, such as defamation or falsely shouting fire in a crowded theater. Freedom of speech also arises from individual autonomy and dignity. “We retain our dignity, as individuals, only by insisting that no one—no official and no majority—has the right to withhold an opinion from us on the ground that we are not fit to hear and consider it.”³²⁵ Likewise, government interferes with our autonomy and dignity when it prevents us from expressing our opinions to others. Finally, free speech promotes reciprocity and cooperation.³²⁶

The details of freedom of speech differ among cultures. For example, the United States generally limits speech less than European nations. “[T]he U.S. First Amendment is far more protective than other countries’ laws of hate speech, libel, commercial speech, and publication of national security information,” and this greater protection grew out of America’s “peculiar social, political, and economic history.”³²⁷

Other constitutional rights are less obviously grounded in biology, but most of the Bill of Rights relates to human behavior. The Third Amendment states, “No soldier shall, in time of peace be quartered in any house, without the consent of the Owner, nor in time of war, but in a manner to be prescribed by law.”³²⁸ Obviously, there was no specific right against quartering soldiers in a home on the savannah.³²⁹ However, this right is a specification of the right to liberty and privacy. The British quartering soldiers in colonists’ homes was a specific problem related to liberty, which the Founders protected against in the Constitution. Notice that this right is narrower in war time when greater incursions on liberty might be justified for survival.

Similarly, our Second Amendment right to bear arms³³⁰ was not a part of mankind’s early rights. Nevertheless, it relates to an individual’s interest in personal autonomy and liberty. Under these concepts, an individual has the right to protect oneself.³³¹ As Professor Hauser has stated, “[w]e can

³²⁵ DWORKIN, FREEDOM’S LAW, *supra* note 278, at 200.

³²⁶ Jason Mazzone, *Speech and Reciprocity: A Theory of the First Amendment*, 34 CONN. L. REV. 405, 406 (2002).

³²⁷ Harold Hongju Koh, *On American Exceptionalism*, 55 STAN. L. REV. 1479, 1483 (2003). *See also* DWORKIN, FREEDOM’S LAW, *supra* note 278, at 195.

³²⁸ U.S. CONST. amend. III.

³²⁹ As Professor Dershowitz has noted, “[t]here can be no rational claim to a natural right not to have troops quartered in one’s home except during wartime.” Dershowitz, *supra* note 8, at 50.

³³⁰ “A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear arms, shall not be infringed.” U.S. CONST. amend. II.

³³¹ Professor Dershowitz has declared that “[i]f the right to bear arms is narrowed to include only the right to defend oneself and one’s family—thus excluding the right to revolt, hunt, collect guns, and

break self-defense down into factors that feed into our moral faculty” because “[t]he agent’s intention . . . is not to kill the thief but to defend himself from being killed.”³³² Thus, the Second Amendment right to bear arms is a late eighteenth century manifestation of the right to protect oneself. Likewise, the criminal procedure rights in the Fourth, Fifth, and Sixth Amendments and the Seventh Amendment right to a trial by jury are manifestations of the rights to fairness and liberty discussed above. For example, while the right to a jury trial is not universal,³³³ it is one of America’s methods of insuring the biological right to fairness.

Finally, the Ninth Amendment supports the proposition that, for the Founders, rights are in the people (individuals), and individuals do give up their basic rights when they enter society. The Ninth Amendment states: “The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people.”³³⁴ Thus, the people created the government and gave it its authority. The government did not grant rights to individuals; they already had these rights. As Professor Randy Barnett has written, the Founders’ view was “first come rights, and then comes the Constitution.”³³⁵ Professor Barnett believes those rights to be liberty rights, and he has proposed a “Presumption of Liberty” when interpreting the Constitution.³³⁶ This corresponds with the arguments above that one gives up only a necessary portion of liberty when entering into the social contract.

B. LIBERTY IN AMERICAN AND GERMAN LAW

One can see how different cultures create different kinds of liberty by comparing our Constitution’s idea of liberty with that of the German Constitution. Our constitutional liberty is a negative liberty (a freedom from government)—“the freedom to pursue one’s own vision in life, as one chooses.”³³⁷ American liberty is value-neutral and is based on individuality and personal choice.³³⁸

In contrast, German freedom is based on the Kantian notion of human dignity—“that each person is valuable per se as an end in himself, which government and fellow citizens must give due respect.”³³⁹ German rights are based upon the free development of personality and thus on a person’s

possess them for other reasons—a stronger case can be made for its near-universality....” Dershowitz, *supra* note 8, at 55.

³³² HAUSER, *supra* note 24, at 149.

³³³ Dershowitz, *supra* note 8, at 52.

³³⁴ U.S. CONST. amend. IX.

³³⁵ RANDY E. BARNETT, RESTORING THE LOST CONSTITUTION: THE PRESUMPTION OF LIBERTY 4 (2004). The main argument against including a bill of rights in the original Constitution was that it was unnecessary because rights were in the people. For example, Alexander Hamilton argued that bills of right “have no application to constitutions professedly founded upon the power of the people, and executed by their immediate representatives and servants. Here, in strictness, the people surrender nothing, and as they retain everything, they have no need of particular reservations.” THE FEDERALIST No. 84, at 534 (Alexander Hamilton) (Benjamin Fletcher Wright, ed., 1961).

³³⁶ BARNETT, *supra* note 335, at 253–69.

³³⁷ Edward J. Eberle, *The German Idea of Freedom*, 10 OR. REV. INT’L L. 1, 2–3 (2008).

³³⁸ *Id.* at 3.

³³⁹ *Id.* at 3–4.

integrity and security.³⁴⁰ For example, in one case, the German Constitutional Court “invalidated a court-ordered sampling of a defendant’s spinal column to test his involvement in a crime on the ground it violated his physical integrity.”³⁴¹ Similarly, confidentiality and inquiry into certain personal matters are carefully protected under the German system.³⁴² This idea of dignity affects both public and private law.³⁴³ For instance, the German Constitutional Court recast “the private law interests of reputation and privacy into the capacious language of human dignity and personality, thereby constitutionalizing the doctrine.”³⁴⁴ In addition, German freedom rejects the American notion of the atomistic individual, and instead it views individuals as being connected.³⁴⁵ In other words, “[i]ndividual choice is bounded by community, civility norms and a sense of the responsibility.”³⁴⁶

Consequently, unlike American liberty, German freedom creates both rights against the state and duties for citizens.³⁴⁷ Under the German conception of freedom, “people are spiritual-moral beings who act freely, but their actions are bound by a sense of moral duty. Actions are to be guided by a sense of social solidarity, human and social need, and personal responsibility.”³⁴⁸ This coupling of rights and duties developed from Kant’s notion of universal law that applies to all.³⁴⁹ Examples include a parent’s rights and duties in raising children and the German notion of academic freedom that does not release anyone from his allegiance to the Constitution.³⁵⁰

The German version of the rule of law (Rechtsstaat) applies to both law and justice, and justice can include natural or moral law.³⁵¹ Another important idea under German freedom is the “Social State (Sozialstaat), which obligates the state to provide for the security of its citizens, including a minimal level of existence.”³⁵²

In sum, in Germany, “[t]he state became the focus for the fount of freedom, in comparison to the American idea that the state is the object against which freedom is directed: limiting state power to empower individual liberty.”³⁵³ This is because, under the American system, “man comes from the state of nature and then forms a social contract,” while the German system “does not exclusively rely upon a social foundation for a view of man as the founding element of society . . .”; “[r]ather, man is conceived as a social animal who is part of a community.”³⁵⁴

³⁴⁰ *Id.* at 4.

³⁴¹ *Id.* at 17.

³⁴² *Id.* at 25.

³⁴³ *Id.* at 5.

³⁴⁴ *Id.* at 31.

³⁴⁵ *Id.* at 14.

³⁴⁶ *Id.*

³⁴⁷ *Id.* at 4–5.

³⁴⁸ *Id.* at 13.

³⁴⁹ *Id.* at 36.

³⁵⁰ *Id.* at 38.

³⁵¹ *Id.* at 46.

³⁵² *Id.* at 5–6, 52. Of course, American law deals with welfare through legislation. *Id.* at 52.

³⁵³ *Id.* at 59.

³⁵⁴ *Id.* at 65–66.

Neither the American concept of liberty based on freedom from government nor the German concept of freedom based on dignity is superior. Rather, each developed from human behavior based on the needs of the particular society. Americans were rebelling from an English king and parliament, which limited their freedom. They also feared factions within their own country. Consequently, they were most interested in protection from government. Based on the existence of slavery, the eighteenth century status of women, and differences between landowners and non-landowners and other class differences, the idea of universal human dignity was not central to the Founders.³⁵⁵ Similarly, because individuals had abundant access to land they could farm and other natural resources, providing for each member of society was a foreign concept.

The German idea of dignity is based both on the German reaction to the atrocities of Nazism and Germany's intellectual history.³⁵⁶ After World War II, Germans had to face the horrors of Nazism. The country's reaction was to emphasize the dignity and autonomy of human beings. Freedom from government was not enough to protect society; rather, positive action from the government and duties of citizens were necessary. Also, part of the Nazi intrusion was into the private sphere, which helped them identify Jews and other "undesirables." Further, in an industrialized society with a greater population, equality is a greater problem and not all people have access to basic resources.

V. CONCLUSION

Rabbi Joseph Telushkin declared, "[t]o this day there is ultimately no philosophically compelling answer to the question 'Why was Hitler wrong?,' aside from 'Because God said so.'³⁵⁷ This Article has tried to counter this argument by showing that there is a universal, innate set of rights that evolved to help mankind survive. While the details of rights differ by culture, the fundamental rights that exist in all societies, especially the autonomy of all humans, demonstrates that Hitler was wrong.

Similarly, Professor Dershowitz has argued against natural law: "[b]ut we must remind ourselves that natural law has also been invoked in support of slavery, racism, sexism, homophobia, terrorism, the blocking of abortion clinics, and the refusal to pay taxes."³⁵⁸ First, almost all philosophies have been used to justify evil. If a philosophy is misused, it doesn't make that philosophy bad. More importantly, earlier versions of natural law were mainly based on opinion, not science. For example, homosexuality is not against scientifically supported natural law or natural morality, but rather homosexuality may serve a natural function.³⁵⁹ The anthropocentric version of rights employed in this Article is based on extensive scientific studies.

³⁵⁵ Professor White has noted that modern civil liberties were not a concern of the drafters and that the idea of equality was muted in the founding era. White, *supra* note 321.

³⁵⁶ *Id.* at 18.

³⁵⁷ JOSEPH TELUSHKIN, *JEWISH WISDOM* (1994).

³⁵⁸ Dershowitz, *supra* note 8, at 67.

³⁵⁹ Professor Wilson has stated, "[h]omosexuality is above all a form of bonding." EDWARD O. WILSON, *ON HUMAN NATURE* 144-145 (1978). He has conjectured that close relatives of homosexuals may have

Science has given us a better view of human nature, and legal scholars can use that better view to create a better legal system. While there is still much work to be done, any investigation of law that ignores the facts of human nature will be seriously flawed. As Professor Alasdair MacIntyre declared, “[t]he notion that the moral philosopher can study *the* concepts of morality merely by reflecting, Oxford armchair style, on what he or she and those around him or her say and do is barren.”³⁶⁰

been able to have more children as a result of their presence: “The homosexual members of primitive societies could have helped members of the same sex, either while hunting and gathering or in more domestic occupations at the dwelling sites. Freed from special obligations of parental duties, they would have been in the position to operate with special efficiency in assisting close relatives.” *Id.*

³⁶⁰ ALASDAIR C. MACINTYRE, *AFTER VIRTUE: A STUDY IN MORAL THEORY* ix (1981).

