Patternicity and Persuasion: Evolutionary Biology as a Bridge Between Economic and Narrative Analysis in the Law

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PATTERNICITY AND PERSUASION: EVOLUTIONARY BIOLOGY AS A BRIDGE BETWEEN ECONOMIC AND NARRATIVE ANALYSIS IN THE LAW

James D. Ridgway*

“We are not *Homo sapiens*, Wise Man . . . . We are *Pan narrans*, the storytelling ape.”

A defining characteristic of humanity is our pervasive use of tools to solve problems. Legal theory is an endeavor with its own toolbox: methods of construction and deconstruction that are applied to a huge spectrum of problems. In recent years, economics has been one of the law’s dominant analytical tools, and evolutionary biology has rapidly increased in its usage. Narrative theory—the study of storytelling and how it influences the decision-making process—is far less discussed as a tool of legal analysis, but has its own adherents. Although these tools are clearly useful, their foundations and persuasive power have not been fully explored. As demonstrated by this article, evolutionary biology can now explain how human beings instinctively approach legal analysis and what features from economic and narrative analysis are rooted in the information processing functions of the brain. As a result, the most effective aspects of each can be synthesized into a new tool: analysis of the archetypal interactions that can be used to dissect any legal problem.

On the surface, these tools may appear to be distinct. Yet, the connections between economics, narrative theory, and evolution run deep. Charles Darwin was aware of the power of narratives, and historians agree

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3. One classic account of narrative theory describes the narrative paradigm of human reasoning as one in which people make decisions based upon the coherence of the competing stories, and places it in opposition to the rational world paradigm, which treats people as making decisions based upon rational analysis. WALTER R. FISHER, HUMAN COMMUNICATION AS NARRATION: TOWARD A PHILOSOPHY OF REASON, VALUE AND ACTION 57–78 (1987).
that Darwin consciously patterned his story of evolution—natural selection—after Adam Smith’s Invisible Hand narrative of economics. During the twentieth century, the three disciplines traveled divergent paths. In the last decade, however, evolutionary biology has emerged to provide a new perspective—particularly into problems previously analyzed with economic tools. New insights into the causes of seemingly irrational decision making have sparked a reevaluation and reinterpretation of many problems previously analyzed under the “rational actor” model.

Despite these developments, there is a strain of evolutionary biology research that has not yet received the attention it deserves. Evolutionary biology has much to teach about how people form and share beliefs that guide their choices. These lessons are important because it remains true that human beings behave rationally in countless situations, and that they act in ways that make sense based upon their beliefs. Accordingly, the legal academy has much to gain from looking beyond the immediate decision-making process when trying to understand human behavior. As


this article demonstrates, this untapped potential occupies a middle ground that draws upon both narrative legal theory and economic legal theory.

More importantly, however, recognizing this previously unexplored strain of evolutionary biology provides a basis for identifying specific frameworks that human beings use to process and evaluate legal arguments. These frameworks are archetypal human interactions to which evolution has predisposed human beings when processing arguments about relationships. The three economic narratives are: (1) the story of cooperation, which describes maximizing the gain produced; (2) the story of competition, which describes the fairness of the process; and (3) the story of the accident, which describes the foreseeability of the unintended interaction. Using the archetypal stories to construct arguments allows the stories to be framed in ways that have both the intuitive power of strong narratives and the logical force of economic analysis. Similarly, deconstructing competing arguments in terms of the archetypal narratives at their core lays bare the underlying assumptions and allows them to be understood and weighed against each other more easily. Furthermore, even though the theory of archetypal interactions is not inherently normative, deeper implications are apparent to the extent that persuasive arguments tend to be correct. As a result, patternicity suggests a new perspective on substantive issues of legal theory, including the enduring divide between the law and economics movement and the law and society movement.

Part I of this article looks at the development of the economic analysis of the law and the recent influence of evolutionary analysis. Part II turns to the history of narrative analysis of the law and how it is related to the development of patternicity theory in evolutionary biology. Part III applies another level of evolutionary biology to patternicity theory, resulting in the three archetypal narratives of human interaction that identify the arguments human beings find instinctively appropriate in evaluating legal arguments. Part IV looks at the uses of these narratives by discussing certain common techniques to alter and deconstruct narratives. Part V reinforces the pervasiveness of these archetypal narratives by surveying a few of the many different levels and situations in which they operate. Part VI then considers how this theory of archetypal interactions relates to the dominant approaches to legal analysis if the theory’s arguments were viewed as normatively correct. Finally, Part VII concludes with some thoughts about what this previously overlooked aspect of evolutionary biology suggests.

regarding the relationship between human instincts and normative legal efforts.

I. ECONOMIC LEGAL ANALYSIS AND THE BIOLOGY OF HUMAN CHOICES

One common way to construct and deconstruct legal arguments is to examine the economic incentives of the parties and consider how they can maximize the benefit they obtain from an interaction. This type of utilitarian theory of law traces to the work of Jeremy Bentham in the seventeenth century. The modern law and economics movement began at the University of Chicago in the late 1940s, and important pillars soon followed. In 1950, Albert Tucker named and described the Prisoner’s Dilemma. In 1960, Ronald Coase published his canonical work describing the irrelevance of liability rules to outcomes in the absence of transaction costs. These works describing the incentives and expected behavior of “rational actors” spawned a field that enjoyed success due to its elegance and numerous accurate predictions of how people would respond to particular rules. However, the field truly reached critical mass after Ronald Reagan enshrined cost-benefit analysis in regulatory rulemaking by issuing Executive Order 12,291, which required that “[r]egulatory action shall not be undertaken unless the potential benefits to

10. DOUGLAS HOFSTADTER, The Prisoner’s Dilemma Computer Tournaments and the Evolution of Cooperation, in METAMAGICAL THÉMAS: QUESTING FOR THE ESSENCE OF MIND AND PATTERN 715 (1985). The essence of the two-person Prisoner’s Dilemma and the multi-party Tragedy of the Commons is a situation in which each participant maximizes his benefit by acting selfishly, even though all the participants will be worse off if they were uniformly selfish rather than cooperative. Id. at 715–17.
12. The idea of basing economic analysis on humans beings as “rationally calculating and maximally selfish machines” dates to at least the British historian Thomas Carlyle in the mid-nineteenth century. MIND OF THE MARKET, supra note 4, at xviii–xix.
13. Jones, supra note 4, at 290. Indeed, it is popular enough to support numerous textbooks. See, e.g., ROBERT COOTER & THOMAS ULEN, LAW AND ECONOMICS (5th ed. 2007); A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS (3d ed. 2007); RICHARD A. POSNER, ECONOMIC ANALYSIS OF THE LAW (7th ed. 2007).
society for the regulation outweigh the potential costs to society.”15 As a result, the last three decades have witnessed a flood of cost-benefit analysis scholarship.16

Although law and economics achieved success due to its analytical tools, it has long been subject to criticism for its failure to account accurately for the often emotional decision making process of flesh-and-blood human beings.17 Orthodox law and economics textbooks freely admit an aspect of this issue known as the “problem of valuation.”18 Beyond this admission, scholars have increasingly pointed to the field’s failure “to find a place where reason and fact prevail and ideology and moralism recede.”19 Wayne Eastman has compellingly shown that the normative lessons of law and economics are not products of the analytical tools themselves, but of the values used to construct the problems to which those tools are applied.20 The core tools, such as the Prisoner’s Dilemma and the Coase Theorem, can be used to support contradictory agendas simply by reframing the problems in alternative terms.21 Not only are the tools of the field arguably subject to manipulation, the foundational assumption that human beings will act rationally has been disproved for a large spectrum of decisions.22 As a result, much recent work has involved trying to integrate this new information.23


16. _Id._


18. _POLINSKY, supra note 13, at 135–38._ In short, the problem of valuation is the difficulty caused to legal analysis by the emotional value people place on items or experiences that is not easily reduced to a monetary value. In the absence of clear and consistent values on such objects, it is difficult to understand incentives and to predict behavior. Not surprisingly, recent work has been done in an effort to quantify happiness in a way to allow useful modeling and evaluation of behavior. _See, e.g._, Richard Layard, _Happiness: Lessons from a New Science_ (2005); Jeremy A. Blumenthal, _Law and Emotions: The Problems of Affective Forecasting_, 80 Ind. L.J. 155 (2005); J. Richard A. Easterlin, _Income and Happiness: Toward a Unified Theory_, 111 Econ. 465 (2001).


20. _Id._

21. _Id._

22. _See MIND OF THE MARKET, supra note 4._

23. _See, e.g._ Maurice E. Stucke, _Reconsidering Competition_ (Univ. of Tenn. Legal Studies Research Paper No. 123, 2010), _available at_ http://ssrn.com/abstract=1646151 (reimagining antitrust law without the assumption that market actors will behave rationally). One response has been to argue
A significant aspect of this retrenchment of law and economics has been the study of the implications of evolutionary biology on legal theory. During the middle of the twentieth century, the application of evolutionary principles to the social sciences was out of favor. However, new tools such as positron emission tomography scans in the 1980s and functional magnetic resonance imaging in the 1990s provided more sophisticated ways for understanding processes inside the brain, and have helped pave the way for a rise of a Darwinian understanding of human behavior. In particular, evolutionary biology has clarified that, in certain cases, people act irrationally because of deeply ingrained instincts, whereas, in other instances, seemingly irrational behavior makes sense in the context of the incredible complexity of human social interactions. On a deeper level, there is an increasing recognition that economic and evolutionary analyses that even if human beings were irrational in many circumstances, paternalistic legal regimes are inferior to allowing people the freedom to eventually develop rational responses to their cognitive constraints. See Yullie Foka-Kavalieraki & Aristides N. Hatzi, Rational After All: Toward an Improved Model of Rationality in Economics (Oct. 19, 2010) (unpublished manuscript), available at http://ssrn.com/abstract=1692441.


25. Arguably, scientists were slow to apply evolutionary biology during the latter portion of the twentieth century due to some of the earlier egregious misuses of Social Darwinism, such as those in Nazi propaganda. MIND OF THE MARKET, supra note 4, at xviii. As recently as the 1970s, it was very controversial when self-titled “human sociobiologists” began applying evolutionary theory to human behavior again. Peter J. Richerson & Robert Boyd, Not by Genes Alone: How Culture Transformed Human Evolution 9 (2005).


27. See generally MIND OF THE MARKET, supra note 4. As Shermer’s book discusses at length, “[w]hen evolutionary thinking and modern psychological theories and techniques are applied to the study of human behavior in the marketplace, we find that the theory of Homo economicus—which has been the bedrock of traditional economics—is often wrong or woefully lacking in explanatory power.” Id. at xviii. Shermer defines the theory of Homo economicus as the belief that “‘Economic Man’ has unbounded rationality, self-interest, and free will, and that we are selfish, self-maximizing, and efficient in our decisions and choices.” Id. However, the term is not unique to Shermer’s work. See, e.g., Tanina Rostain, Educating Homo Economicus: Cautionary Notes on the New Behavioral Law and Economics Movement, 34 LAW & SOC’Y REV. 973 (2000); Lynn A. Stout, On the Proper Motives of Corporate Directors (Or, Why You Don’t Want to Invite Homo Economicus to Join Your Board), 28 DEL. J. CORP. L. 1 (2003).


are deeply related because the behaviors studied by economic analysis are the products of evolution.\textsuperscript{30}

Since these results emerged, much legal scholarship has analyzed the implications of this scholarship on legal theory.\textsuperscript{31} The lessons of this movement have also been applied to specific problems, such as the Endowment Effect\textsuperscript{32} and the Tragedy of the Commons.\textsuperscript{33} As a result, evolutionary biology has become an important subspecialty within law and economics. Despite this focus in current work, law and economics is not the only area that evolutionary biology informs.

II. NARRATIVE LEGAL THEORY AND THE BIOLOGY OF HUMAN BELIEFS

A. Narrative Theory and the Law

An alternative approach to the economic analysis of legal problems is to focus on the perceptions of the parties involved and the narratives they use to describe the interactions at issue. The pedigree of this approach is well established, for storytelling is likely as old as language itself, and not surprisingly then, the study of storytelling has been an ancient pursuit.\textsuperscript{34} One core concept popularized by Carl Jung is that of “archetypes”:

\begin{footnotesize}
\begin{enumerate}
\item Aristotle famously classified stories into tragedies and comedies. \textit{Christopher Booker, The Seven Basic Plots: Why We Tell Stories} 18 (2005). He also maintained that there were six elements of theater: character, action, ideas, language, music, and spectacle. \textit{Jeffrey Hatcher, The Art & Craft of Playwriting} 21 (2000).
\end{enumerate}
\end{footnotesize}
foundational stories of which other stories are merely elaborated versions of one of the basic tales.  

In 1949, a year before Tucker published his analysis of the Prisoner’s Dilemma, Joseph Campbell transported the archetype concept from psychology to anthropology in The Hero with a Thousand Faces. Campbell asserted that, in every culture around the world, “the basic outline of the universal mythological formula of the adventure of the hero is reproduced.” Campbell’s essential insight was that the existence of a common story across cultures indicates that the story reflects a deeper, universal truth about human nature that each society expresses in its own way.

Jung and Campbell’s compelling case that stories can serve as observable evidence of the hidden topology of human thought spurred further analysis of the relationship between narratives and cognition. A few began to believe that the idea of an objective reality was not useful, if not outright illusory, because people relate to their world based upon the narratives they construct to explain it to themselves. Regardless of the precise relationship between the world and the stories that are told about it, a number of authors have attempted to categorize all stories into a small number of archetypes. In 2007, Christopher Booker wrote a massive analysis on narrative theory, which asserted that all stories fall within seven archetypes. Others have argued that three types of stories emerge: stories that teach new beliefs, stories that reinforce held beliefs, and stories that challenge held beliefs. Although the fine points of these particular formulations may be debated, what is important is that the increasingly analytical view of narrative theory has made it more compatible with evaluative scholarship.

35. See CARL JUNG, THE ARCHETYPES AND THE COLLECTIVE UNCONSCIOUS (1959). This article uses the term “popularized” because Jung asserted that he was merely borrowing the term from classic sources, including Cicero, Pliny, and Augustine. JOSEPH CAMPBELL, THE HERO WITH A THOUSAND FACES 13 (3d ed. 2008).
37. CAMPBELL, supra note 35, at 16.
38. See BOOKER, supra note 34, at 553–58.
40. FOSTER-HARRIS, BASIC PATTERNS OF PLOT (1959) (asserting three basic patterns); GEORGES POLTI, THE THIRTY SIX DRAMATIC SITUATIONS (1917); RONALD TOBIAS, 20 MASTER PATTERNS (AND HOW TO BUILD THEM) (Jack Heffron ed., 1993).
41. BOOKER, supra note 34. In Booker’s view, the seven stories are “overcoming the monster,” “rags to riches,” “the quest,” “voyage and return,” “comedy,” “tragedy,” and “rebirth.” Id.
In the past, it was precisely this lack of concrete theory in narrative legal theory that allowed economic theory to move to the forefront in legal and social scientific thought. Narrative analysis of issues was largely abandoned by social scientists in the 1930s and 1940s in the pursuit of the authority associated with scientific rigor. Nonetheless, the study of the relationship between law and narrative theory began to develop with Robert Cover’s 1983 article, *Nomos and Narrative,* which asserted that “law and narrative are inseparably related” because “[n]o set of legal institutions or prescriptions exists apart from the narratives that locate it and give it meaning.” Cover’s assertion was first embraced by liberal scholars asserting the value of telling the stories of marginalized groups and their relationship with the law. Narrative theory has also been incorporated into the law and literature movement, including the application of literary theory to legal texts. However, the potential impact of narrative theory on the law has been blunted by “a common view of narrative by legal thinkers, that it is a vehicle of emotion opposed to logic and reasoning.”

Nonetheless, more recent scholarship has pointed to the power of narrative theory in describing how legal decisions are actually made. Lewis LaRue has persuasively argued that the process of creating judicial

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43. See Ewic & Silbey, supra note 39, at 197–98.
47. One aspect of the law and literature movement is that it seeks to understand legal actors in all their complexity instead of a collection of relevant facts. Kenworthy Bilz, We Don’t Want to Hear It: Psychology, Literature and the Narrative Model of Judging, 2010 U. Ill. L. Rev. 101, 110 (2010).
48. Brooks, supra note 45, at 5.
opinions is a form of storytelling, and is necessarily so because coherent opinions must filter and organize information to lead naturally to a conclusion, just as stories present events that build to a climax.\textsuperscript{50} Even more importantly, a compelling case can be made that juries actually function by weighing the relative plausibility of competing narratives rather than algebraically working through each element to determine whether a case has been proven.\textsuperscript{51} The Supreme Court has even given an approving nod toward narrative theory.\textsuperscript{52} Despite these advances, Peter Brooks lamented in 2006 that narrative legal study has yet to demonstrate that “it

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\textsuperscript{50} “This process of ordering by selecting is legitimate, of course, since it is necessary. Just as we must attribute motives to others and ourselves, so too we must select the relevant facts and ignore the irrelevant, or else we will be disabled from thinking about our world in an orderly fashion.” \textsc{Lewis H. LaRue}, \textit{Constitutional Law as Fiction: Narrative in the Rhetoric of Authority} 22 (1995). LaRue further argued that “one cannot be sensitive to ambiguities or absences without imagination, and furthermore, resolving ambiguities and resorting absences are creative, imaginative acts.” \textit{Id}. at 14. \textit{Cf.} Ewic & Silbey, supra note 39, at 200 (discussing the essential elements of narrative, including selecting elements, ordering them, and presenting them in a relationship, which is often an opposition or struggle). LaRue’s argument is supported by a recent study conducted by Kenneth Chestek, which indicates that judges find arguments with strong narratives more persuasive than those without. Kenneth D. Chestek, \textit{Judging by the Numbers: An Empirical Study of the Power of Story}, 7 J. OF THE ASS’N OF LEGAL WRITING DRS. 1 (2010).


\begin{quote}
When anyone tells me that he saw a dead man restored to life, I immediately consider with myself whether it be more probable, that this person should either deceive or be deceived, or that the fact, which he relates, should really have happened. I weigh one miracle against the other; and according to the superiority, which I discover, I pronounce my decision, and always reject the greater miracle.
\end{quote}

\textsc{David Hume}, \textit{An Enquiry Concerning Human Understanding} 174 (Tom L. Beauchamp ed., Oxford Univ. Press 1999) (1758).

\textsuperscript{52} In \textit{Old Chief v. United States}, the Court confronted the question of when the prosecution was required to accept a stipulation by a defendant. 519 U.S. 172 (1997). Although the Court ruled for the defendant, the opinion recognized at length the importance of “tell[ing] a colorful story with descriptive richness.” \textit{Id}. at 187. It recognized that “[e]vidence thus has force beyond any linear scheme of reasoning, and as its pieces come together a narrative gains momentum, with power not only to support conclusions but to sustain the willingness of jurors to draw the inferences, whatever they may be, necessary to reach an honest verdict.” \textit{Id}. Finally, the opinion acknowledged the importance of allowing the prosecution to “establish [the] human significance” of the story “so to implicate the law’s moral underpinnings and a juror’s obligation to sit in judgment.” \textit{Id}. at 187–88.
has analytic instruments in its toolkit that might actually be of some use with the legal plumbing.”

B. Narrative Theory and Evolutionary Biology

A response to Brooks’ lament emerges from the increasing application of evolutionary biology to narrative theory. Specifically, however, the thread of behavioral biology that relates to narrative theory is the one that looks not at why human beings make specific choices, but at the deeper issue of why they hold specific beliefs about legal issues. This thread, which has produced the discovery and validation of patternicity theory, has thus far been overlooked in legal scholarship.

Although patternicity theory is a relatively recent discovery, it flows from decades of work in evolutionary biology. In 1965, Donald Campbell recognized the potential breadth of applications of evolutionary biology to human cognition when he argued that all intellectual endeavors can be modeled as operating by random variation and selective retention. In 1976, Richard Dawkins advanced the idea further when he argued that the selective retention of ideas in culture is a true evolutionary struggle. He labeled the fundamental unit of narrative the “meme,” and significant work has been performed in exploring the power of Campbell and Dawkins’ analogy. In 1980, George Lakoff and Mark Johnson argued that metaphors are the essential tool that human beings use to reason and understand their world. They asserted that metaphor was more than a convenient device, and that human beings are hard-wired to think narratively. Furthermore, scholars of “Literary Darwinism” have

53. Brooks, supra note 45, at 28.
54. Ironically, evolutionary analysis of the law has been maligned as “storytelling.” See Jeffrey J. Rachlinski, Comment: Is Evolutionary Analysis of Law Science or Storytelling?, 41 JURIMETRICS J. 223 (2001).
55. Recent work has been done to supplement rational choice theory with a model of how preferences are formed and changed. Franz Dietrich & Christian List, Where Do Preferences Come From? (Dec. 19, 2010) (unpublished manuscript), available at http://ssrn.com/abstract=1728510. However, this work offers a mathematical approach, rather than a biological one.
58. Id. at 192.
explained the evolutionary advantages of storytelling as a means of organizing, preserving, and exchanging information.61

What was missing from this discussion is an explanation of how narrative/metaphorical thinking would emerge in the first place. Fortunately, evolutionary biology now explains this as well. The story of the answer begins over a half-century ago. Although humans have long trained animals to respond to specific stimuli, in 1948, the preeminent behavioral psychologist B.F. Skinner decided to study how animals respond to stimuli beyond their control. What he discovered was that pigeons provided with food at predetermined intervals would repeat behavior that they had engaged in just prior to the arrival of the food in hopes that the repetition would produce more food.62 Skinner concluded that this instinct to repeat behavior that coincided with good fortune was the basis for the development of superstition.63

In 1998, Michael Shermer proposed an unprecedented interpretation of Skinner’s observations.64 In Why People Believe Weird Things,65 Shermer argued that the same intelligence that evolved to allow for rational thought also evolved to predispose people to irrational beliefs.66 The ability to recognize patterns is an evolutionary advantage, and natural selection for this advantage led to human intelligence after eons of refinement.67 However, this skill is imperfect. Evolutionarily speaking, false positives are much safer than false negatives.68 It is less costly to run from a shadow that is not a predator, or search near a bush that is not near fresh water, than it is to miss actual dangers or opportunities.69 Thus, humanity has evolved to search constantly for patterns and experience positive feedback from the sensation of having spotted a pattern—even if it proves not to be true. As a


63. Id. at 171.

64. See Kevin R. Foster & Hanna Kokko, The Evolution of Superstitious and Superstition-Like Behavior, 276 PROC. R. SOC. B. 31, 31 (2009) (noting that Shermer’s theory was not anticipated by the prior scientific papers in the area).

65. MICHAEL SHERMER, WHY PEOPLE BELIEVE WEIRD THINGS: PSEUDOSCIENCE, SUPERSTITION, AND OTHER CONFUSIONS OF OUR TIME (2d ed. 2002) [hereinafter WHY PEOPLE BELIEVE WEIRD THINGS].

66. Id. at 7.


68. WHY PEOPLE BELIEVE WEIRD THINGS, supra note 65, at 7.

69. Id.
result, human beings are predisposed to search every situation for familiar patterns and to be predisposed to seek confirmation once the fragments of a familiar pattern begin to appear. Shermer’s evolutionary theory of “patternicity” has recently been validated by several scientific studies.\(^70\)

Shermer’s point was that people’s tendency to believe “weird things”\(^71\) is a maladaptive byproduct of the otherwise incredibly useful skill of recognizing patterns. Thus, we should be skeptical of ideas that have not or cannot be empirically validated, as they may be false positive results of our overactive mental machinery. However, the mere existence of this mental machinery to internalize patterns and use them to process new information has profound implications.\(^72\) Although it has not yet been acknowledged, it is this evolved instinct to seek patterns that the narrative theory of argument seeks to exploit. Once a story has been internalized, it becomes another pattern against which new information may be tested. If an argument can be patterned after a story previously internalized by the audience, then it is likely to be accepted as correct because recognition of the pattern will result in positive mental feedback.\(^73\) This is the evolutionary basis for the power of narrative theory, and helps explain the discovery that “people accept ideas more readily when their minds are in story mode as opposed to an analytical mind-set.”\(^74\)

In other words, patternicity is not merely a novel observation that tends to explain some empirical observations. Rather, patternicity lies at the core of understanding human ideas, and it is a vital tool for anyone

\(^70\) See Jan Beck & Wolfgang Forstmeier, Superstition and Belief as Inevitable By-products of an Adaptive Learning Strategy, 18 HUM. NATURE 35 (2007); Foster & Kokko, supra note 64; Bruce R. Moore, The Evolution of Learning, 79 BIOLOGICAL REV. 301 (2007). See also Shaul Kimhi & Leeuh Zysberg, How People Understand Their World: Perceived Randomness of Rare Life Events, 143 J. OF PSYCHOL. 521 (2009).

\(^71\) Some of the “weird beliefs” examined by Shermer in the book include alien abductions, paranormal powers, creationism, and Holocaust denial. See WHY PEOPLE BELIEVE WEIRD THINGS, supra note 65.

\(^72\) To be clear, conceptual analysis is not new to the law or to the social sciences. See generally Aaron Rappaport, Conceptual Analysis in Science and the Law (Aug. 17, 2010) (unpublished manuscript), available at http://ssrn.com/abstract=1660715. Shermer’s work merely explains the origins of the mental machinery humans use to create and test concepts and—perhaps more importantly—demonstrates an evolved bias within that machinery.

\(^73\) Lakoff and Johnson argued that “[t]he essence of metaphor is understanding and experiencing one kind of thing in terms of another.” LAKOFF & JOHNSON, supra note 60, at 5. More recently, Lakoff wrote that people internalize some moral and political principles so deeply that they become part of their identities and structure how they view the world. GEORGE LAKOFF, WHOSE FREEDOM?: THE BATTLE OVER AMERICA’S MOST IMPORTANT IDEA 12 (2006). He labeled these deeply internalized beliefs “deep frames.” Id. Shermer’s insight reveals that patternicity explains the basis of this claim.

wishing to understand how human beings are persuaded effectively.\textsuperscript{75} Regardless of whether the field is morality, law and economics, or something else, it is the ability of arguments to take advantage of patternicity that shapes the outcome of debates.\textsuperscript{76} Furthermore, it is the increasing recognition within the law of patterns from other sources that drives the growing interdisciplinary development of the field.\textsuperscript{77}

Although the idea of patternicity has many important implications for legal theory,\textsuperscript{78} this article will begin by considering a specific question: Which patterns are most essential to understand when considering any kind of legal argument? Not surprisingly, the short answer to the question is: those patterns that have been incorporated into our brains by evolution. Although patternicity in human thought may be persuasive, the arguments that can best take advantage of the power of patternicity are those that exploit the most deeply ingrained patterns shared by all human beings. The more powerfully the internalized pattern is held, the more advantage there is to be gained by associating a new idea with it. Thus, by returning to evolutionary biology, it is possible to determine the most powerful and fundamental archetypes of legal argument.

III. THE THREE ARCHETYPAL NARRATIVES OF HUMAN INTERACTION

Human behavior is complicated and messy. However, these complexities inevitably become simplified in the process of distilling problems down to stories that can be used to guide the production of manageable rules of law.\textsuperscript{79} Fortunately, not all human stories result in legal intervention, and the true number of archetypal legal stories is even fewer

\textsuperscript{75} There is already some scholarship that can be interpreted as supporting the importance of patternicity in constructing persuasive legal arguments. See Kathryn M. Stanchi, \textit{The Science of Persuasion: An Initial Exploration}, 2006 Mich. St. L. Rev. 411 (2006) (arguing that effective persuasion in legal argument requires understanding the audience and building from accepted premises using a sequential request strategy).

\textsuperscript{76} This is not to say that patternicity is the only factor in persuasion. See, e.g., Gabriel H. Teninbaum, \textit{Who Cares?}, Drexel L. Rev. (forthcoming 2011) (examining the evidence that rhetorical questions are more effective at persuading audiences than declarative statements).


\textsuperscript{78} See infra Parts VI & VII.

\textsuperscript{79} This evolved tendency to simplify problems in order to apply shortcuts, called heuristics, is pervasive in how human beings are able to efficiently make countless daily decisions. See generally Wray Herbert, \textit{On Second Thought: Outsmarting Your Mind’s Hard-Wired Habits} (2010).
than Booker’s seven general ones. Law is invoked only to govern human interactions, and each archetypal narrative corresponds to a type of human interaction recognized by the law. In turn, each core type of human interaction has a basis in evolutionary biology.

When humans interact deliberately (at least on the part of one party), then they are either working together or in opposition; the phrase “you are either with us or against us” is a cliche for a reason. Alternatively, human interaction is often accidental rather than deliberate. This article maintains that these three types of interactions encompass all human relationships that the law would seek to manage, and that each of the three types has its own narrative rooted in evolutionary biology. As a result, these archetypes are not merely a convenient taxonomy based upon empirical observations or an artificial construct, but manifestations of evolved traits of human cognition. Moreover, because these archetypes are about the same types of interactions studied in economics, they demonstrate the common ground between economics and narrative.

80. This is not the first article to assert the law has archetypal stories. See Edwards, supra note 45, at 8 (suggesting that “there are at least six common myths about the law: creation or birth; rescue, slayer, journey, trickster, and betrayal”).

81. As Jones has noted, “anything law achieves, it achieves by effecting changes in human behavior.” Jones, Evolutionary Analysis in Law, supra note 31, at 208. It may be added that the law has no interest in modifying behavior unless some narrative can be devised describing how that behavior affects others. It must also be acknowledged that a great many “legal” disputes are actually factual disputes and, thus, beyond the scope of this article.

82. Thus, there are two key reasons why the number of legal narratives is smaller than the number of literary narratives. First, literary narratives often involve stories of individuals’ many types of interactions with nature or objects, instead of just other people. Second, legal narratives focus on discrete interactions, which can be resolved by the application of a specific rule, whereas literary narratives usually involve a series of interactions, which allow for more permutations. Of course, legal issues—like literature—often involve multiple, intertwined narratives.


84. To see how these three types of interactions encompass all human interactions, imagine a two-dimensional space divided into four quadrants. One axis of the space measures the level of intent of the actor, and is accidental on one side and deliberate on the other. The second axis measures the expected outcome for the affected party, and is positive on one side and negative on the other. On the intentional side of the space, cooperative interactions define the intentional-positive quadrant, while competitive interactions define the intentional-negative quadrant. The two quadrants on the accidental side of the space share the same narrative. Accordingly, all human interactions can be described by one of the three narratives, although it is not necessarily simple where to locate any real-life situation on the grid.

85. However, this is not to say that it would be impossible to subdivide these three categories further. More refined categories may allow for more targeted narratives, but it is not immediately obvious that such divisions could be rooted in evolutionary biology.
A. Cooperative Behavior and the Efficiency Narrative

Cooperative interactions are ones in which the actors are voluntarily working together to make their pie bigger so that all involved can have a bigger slice. The end result may not be successful, but the initial intent is that each party will end up happier than when it began. The core value of cooperation is maximizing the expected increase in value resulting from the interaction. Accordingly, the archetypal narrative associated with this interaction is efficiency. Thus, a story about cooperation naturally leads to an assertion of an efficient outcome, whereas a story about efficiency assumes that the parties are—or should be—trying to cooperate.

The evolutionary basis of this archetype is clear. Although evolution is often summarized as the survival of the fittest, complete selfishness is not a favored trait. Evolution favors symbiotic behavior that improves the survival chances of the organisms involved. The greater the advantage that can be achieved by cooperation, the more evolution will favor the organisms involved. This principle also applies to the evolution of human societies. “If you are a hunter-gatherer with few or no individuals who are deeply engaged in your welfare, then you are extremely vulnerable to the volatility of events—a hostage to fortune.” By working well together, individuals increase their likelihood of survival. Thus, efficiency is favored by evolution, and human beings gain an advantage by being predisposed to cooperate efficiently.

Efficiency narratives in the law are extremely common. The number of articles applying cost-benefit analysis now numbers several hundred each year. They are particularly common in areas that have an explicit

87. Alternatively, it may be summarized as at least the tendency of the fittest to survive when a sufficiently large population is studied for an adequate number of generations.
89. The argument for the evolutionary advantage of cooperation dates to at least Pyotr Kropotkin’s 1902 book, Mutual Aid, challenging the contrary views of Herbert Spencer and Thomas Henry Huxley. MIND OF THE MARKET, supra note 4, at 20–21. However, even though the general premise that evolution favors cooperation is accepted, there are still aspects that are hotly debated. For example, Edward O. Wilson, who proposed the idea of “inclusive fitness” to explain the evolutionary benefits of altruism in his seminal 1975 book, Sociobiology, recently renounced his own theory as based upon an invalid mathematical construct. See Martin A. Nowak, Corina E. Tarnita & Edward O. Wilson, The Evolution of Eusociality, 466 NATURE 1057 (2010).
90. It should be noted that the cooperation instinct does not extend to all members of our species, but only to our in-group. Id. at 12–13. We are, of course, capable of tremendous selfishness and violence with regard to “others.” Id. Accordingly, competing narratives are often based on competing group definitions.
cooperation component, such as contracts and regulation. However, they are used in a myriad of settings, including national security, social justice, and criminal law. Accordingly, efficiency can no longer be regarded as a purely economic narrative.

B. Competitive Behavior and the Fairness Narrative

The second archetypal interaction is the competitive interaction. Competitive interactions are ones in which each actor cares merely about obtaining the largest possible slice of pie for him or herself. The interaction may be voluntary on the part of the actors, such as applying for the same job, or it may be involuntary, such as an intentional tort or a crime. In addition, the “pie” involved may not be economic at all, but rather may be some form of emotional zero-sum game. The archetypal narrative of competitive interactions is fairness. Thus, stories about competition tend toward the conclusion that the competition was or was not fair, and stories about fairness implicitly assert that the parties are in competition.

The evolutionary basis of the fairness narrative is not quite as obvious as that of the efficiency narrative, but is still well supported. An experiment called the Ultimatum Game conducted across cultures shows that human beings have an innate sense of fairness, even though different cultures vary in what is considered fair. The experiment is a zero-sum game involving two people in which the first player decides how to divide a pot of money and the second player decides whether both players are able to keep the money or both receive nothing. If human beings were purely rational, then it should not matter how unfair the division by the first player may be. The second player should agree to the windfall for both players even if the first player were to receive a larger share. However, experiments across cultures show that the first player routinely offered a close to even split, and that if the division offered were more unequal than a 70/30 split, then the second player would frequently reject the offer, and both players would receive nothing. Thus, human beings’ hard-wired

96. COLIN CAMERER, BEHAVIORAL GAME THEORY 68–74 (2003).
97. Id. at 8.
98. Id. at 9.
99. Id. at 9–11.
fairness instinct will routinely cause people to make a seemingly irrational decision to reject free money.  

This instinct is not unique to humans. In 2003, Megan van Wolkenten, Sarah Brosnan, and Frans B.M. de Waal demonstrated that primates have an innate sense of fairness. In the experiment, capuchin monkeys happily gave small rocks to human trainers in exchange for a food reward. However, if one monkey could see that another monkey nearby was being provided a superior payment—a grape instead of a cucumber slice—then it would become upset and refuse the inferior reward. Other experimental results have reinforced the idea that primates have a sense of fairness. As with the efficiency narrative, evolution is also related to cooperation and reciprocal altruism. As noted above, access to certain types of food in the wild is often inconsistent. Animals that learn to share insure each other against starvation regardless of variances in the capture of food—particularly prey. However, the member of the group that actually secures the food routinely receives a premium. The premium provides an incentive to hunt actively for food and not merely rely on free-riding. This pattern of hunt sharing also has been observed in primitive hunter-gatherer societies. It demonstrates that our sense of fairness is an

100. At first blush, it may not seem obvious that human beings would necessarily use fairness—or any other framework—to evaluate arguments involving others, even if they insist on fairness in their personal interactions. However, neuroscience has demonstrated that human beings evaluate the behavior of others using “mirror neurons” in their brains in a process that essentially involves the observer imagining themselves in the position of the actor whom they are observing. See Timothy P. O’Neill, Mirror Neurons, the New Neuroscience, and the Law: Some Preliminary Observations, 39 SW. U. L. REV. 499, 504–05 (2010). Thus, there is a strong basis for believing that human beings evaluate interactions involving others using the same criteria they use for evaluating personal interactions. See id. at 510–12 (discussing the neuroscience of decision making by some juries).


102. Id. at 298.


104. In other words, those groups that best balance individual incentives to maximize incoming resources, against sharing norms to maximize the efficient use of those resources, will gain the greatest survival advantage. Thus, evolution favors those who have the best instincts for the proper balance between incentives and sharing. For more on the evolution of prosocial behavior, see generally LYNN A. STOUT, CULTIVATING CONSCIENCE: HOW GOOD LAWS MAKE GOOD PEOPLE, 122–50 (2010).

105. MIND OF THE MARKET, supra note 4, at 17 (citing PETER FREUCHEN, BOOK OF THE ESKIMOS (Dagmar Freuchen ed., 1961); K. Hawkes, Showing Off: Tests of an Hypothesis About Men’s Foraging Goals, 12 ETHNOLOGY & EVOLUTIONARY BIOLOGY 29 (1990); Hillard Kaplan & Kim
evolved instinct that balances our collective interest in cooperation against the need to provide incentives to reward productive behavior. We naturally accept the right of the successful to enjoy the fruits of their labors, but not past the point that it threatens the advantages provided by cooperation among those we identify as members of our group.\(^{106}\)

Of course, the relationship between law and fairness is a subject of deep philosophical analysis and disagreement.\(^{107}\) The authority of law stems from the idea that everyone in a society that is governed by a set of laws is cooperating through the law and, thus, are part of the same group at some level. There is no natural sense of fairness when different groups compete. Without some sense of common identity, there can be neither law nor a sense of fairness. For example, the concept that war could be governed by laws only emerges from a belief that all human beings form a group even when subgroups are in conflict. Similarly, the belief in animal rights is grounded in the idea that animals can be included with human beings in a larger community of living beings.

Fairness narratives in the law are also common. Procedural issues are usually defined by fairness.\(^{108}\) Fairness is also invoked when important values appear to be in competition,\(^{109}\) and to argue that systems are unfair due to the outcomes produced.\(^{110}\) However, these categories are far from inclusive. Fairness is such a fundamental concept in the law that a search for recent scholarly articles with “fair” or “fairness” in the title produces

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\(^{107}\) This may also be related to the kin-selection theory of altruism. The kin-selection theory maintains that genes associated with altruism have a competitive advantage because, even if the altruistic acts do not help the survival of the individual, they confer a survival advantage on the larger kin group, which benefits from the altruism and shares the altruism trait. Richerson & Richerson & Boyd, supra note 25, at 197–203. In fact, empirical observation indicates that “cooperation is mainly restricted to relatively small kin groups” in primates. Kaplan & Hill, supra note 105, at 203.

\(^{108}\) See, e.g., John Rawls, A Theory of Justice 303 (1971) (arguing that “justice” is “fairness,” that fairness requires that inequalities must be slanted to benefit the least-advantaged, and that offices and positions must be fairly open to everyone); Amartya Sen, The Idea of Justice (2009) (arguing that no theory of ideal justice is necessary to recognize ways to make society more just than it currently is). Cf. Ronald Dworkin, Law’s Empire 192–95 (1986) (arguing that John Rawls’ definition of “fairness” is ambiguous and unreasonable).


several hundred results. Moreover, the word itself has such strong narrative force that politicians routinely use it in the popular titles of legislation.

C. Accidental Behavior and the Foreseeability Narrative

The final archetypal interaction is the accidental interaction, which comes in two types, negative and positive. Accidental interactions are those in which the actors did not foresee the specific interaction happening beforehand. Accidents are frequently thought of as negative events, such as car crashes. However, the law also deals with positive accidents, such as providing intellectual property protection so that ideas can be circulated publicly, where they can inspire others to build upon them in unexpected ways. The essential narrative of accidental interactions is foreseeability, and foreseeability narratives implicitly assume that the specific interaction involved was not intentional.

Foreseeability has even deeper roots in evolution than cooperation or competitive behavior. The ability to foresee the consequences of actions is the essential first step from moving beyond instinct to truly intelligent behavior. It is hardly a coincidence that “Prometheus” (the name of the mythical Greek figure who stole the tool of fire from the gods) translates to “forethought.”

111. For example, running the search “ti(“fair” “fairness”) & da(last 3 years)” in Westlaw’s Journals and Law Reviews Database on December 26, 2010, produced 780 results.


115. Christopher David Bird & Nathan John Emery, Rooks Use Stones to Raise the Water to Reach a Floating Worm, 19 CURRENT BIOLOGY 1410 (2009).
has no apparent explanation except that the birds can foresee the favorable results before embarking on the tasks.\textsuperscript{116} Other examples also convincingly demonstrate the birds’ ability to foresee the consequences of actions.\textsuperscript{117}

Foreseeability is central to legal narratives because it corresponds to responsibility. The classic foreseeability legal narrative is the tort case of \textit{Palsgraff v. Long Island Railroad Co.}\textsuperscript{118} In \textit{Palsgraff}, the court rejected attaching liability to all injuries that were proximately caused by negligence, but instead limited it to those that were foreseeable.\textsuperscript{119} The foreseeability narrative is also central to the discussion of positive accidents. An essential element of a patent is that the invention was “non-obvious,” i.e., not foreseeable. Similarly, trademark law is grounded on whether it is foreseeable that a mark “is likely to cause a mental state of confusion in an appreciable number of consumers.”\textsuperscript{121}

Of course, what is foreseeable is not only subject to debate, but can change over time. The debate over gene patents is an example. Decades ago, identifying a gene with a specific function was a laborious and rare event. Such discoveries were not predictable, so to encourage work in this area, it made sense to provide patent protections. With modern technology, “discovering” genes can feel more like a simple matter of brute-force computational power.\textsuperscript{122} Such discoveries are no longer viewed as deserving protection when viewed as simply a race towards an inevitable discovery.\textsuperscript{123}

\textsuperscript{116} Id. at 1411–12.
\textsuperscript{117} For example, experiments show that the birds would frequently re-hide stored food if they thought another bird had observed the stashing, which showed that they could envision the food being stolen if left in the location known to another. Wohforth, supra note 114, at 46–47.
\textsuperscript{119} “If the harm was not willful, he must show that the act as to him had possibilities of danger so many and apparent as to entitle him to be protected against the doing of it though the harm was unintended.” Id. at 101.
\textsuperscript{122} \textit{See Sec’y of Health and Human Servs. Advisory Comm. on Genetics, Health, and Soc’y, \textit{Public Consultation Draft Report on Gene Patents and Licensing Practices and Their Impact on Patient Access to Genetic Tests}, 28 BIOTECHNOLOGY L. REP. 417, 418 n.6 (2009) (noting that certain genes were “discovered by brute force,” and that in a few instances “inventors were not even aware of the function of their gene technology”).
IV. TECHNIQUES FOR USING NARRATIVES

Although these three archetypal narratives can be used for their simple rhetorical power, one essential purpose of focusing on these archetypes is to construct stories that can be weighed against each other. Multiple narratives can often be created to describe the same issue. To intelligently compare competing narratives, it helps to understand the narrative shifts that are frequently used to create different stories about the same set of operative facts.

A. Redefining the Narrative Relationship

The most straightforward way to alter a narrative is simply to redefine the relationship between the parties. Perhaps the most ancient legal tradition of recasting the narrative of the interaction is the law of unconscionable contracts. The doctrine dates to biblical times, and its application is usually rooted in the conclusion that there was some impairment of capacity or disparity of knowledge, power, or sophistication that rendered the bargain an unfair competition rather than any type of cooperation. In one exceptionally clear example of the narrative shift, English chancery courts characterized unconscionable contracts as a type of fraud “apparent from the intrinsic nature and subject of the bargain itself.”

Similarly, accidental narratives can be recast as intentional. For example, Christine Hurt has recently argued that the term “windfall” has been widely overused to characterize events that were not unforeseen. The essence of her argument is that politicians, journalists, and others unfairly label many types of profits as windfalls in order to justify taxing or appropriating the gains of others. However, many of the profits were actually foreseen—at least as potentially possible—by the individuals who invested the energy in positioning themselves to profit and, therefore, those individuals should not be unfairly deprived of the product of their entrepreneurship simply because others did not have the vision to foresee the same potential. In other words, Hurt’s point is that it is unfair, in the

125. Id. at 338–43.
126. Id. at 337 (quoting Earl of Chesterfield, 28 Eng. Rep. at 100 (1750)) (internal quotation marks omitted).
128. Id. at 2–3.
129. Id. at 69.
competition to define profits, to use an outsider’s perspective in telling the story of what was foreseeable.

B. Deconstructing a Narrative

Narratives can also be recast by deconstructing them rather than simply proposing an alternative. For example, Daniel Ortiz has criticized the arguments of those who advocate rules for minimizing conflict in the public sphere.\(^{130}\) The position challenged by Ortiz is that society can be happier and work more constructively on problems if people can simply agree on how to avoid exhaustive public discussions of divisive topics.\(^{131}\) Ortiz pointed out that “[n]iceness . . . does not so much avoid as settle conflict—and in a particular way.”\(^{132}\) Devising rules about what topics may “fairly” be discussed without giving offense necessarily involves choosing the winners of contentious debates by labeling viewpoints as publicly acceptable or unacceptable.\(^{133}\) Thus, those who advocate cooperation in defining which topics are appropriate for civil discourse are masking the imposition of their preferences behind a disingenuous narrative of cooperation.\(^{134}\) To restate Ortiz’s point in archetypal terms: Any interaction that is predicated on fairness is fundamentally competitive, not cooperative. Those whose views are labeled unacceptable are losers in the competition for public acceptance. Therefore, the arguments about defining rules for civil discourse are not narratives of cooperation, but rather are really competitive narratives in disguise.

C. Shifting the Scope of the Narrative

Narratives can be changed by means other than simply telling the same story from a different perspective. Another way to change a narrative is to alter the scope of the analysis of the relationship. For example, in certain cases, the nature of the relationship appears different when another portion of the applicable timeline is used. A classic example would be the idea of efficient breach.\(^{135}\) Classically, the validity of a liquidated damages clause was judged based upon the apparent fairness of the clause at the time.

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131. *Id.* at 2–3.
132. *Id.* at 3.
133. *Id.* at 46.
134. *Id.*
of the ensuing litigation. However, as Charles Goetz and Robert Scott pointed out, this ex post facto fairness analysis often interferes with the parties’ ex ante attempts at cooperating to achieve a mutually desirable agreement. Thus, a rule enforcing liquidated damages clauses, without regard to whether they appear fair in retrospect, improves the overall ability of contract law to facilitate cooperation. In archetypal terms, a fundamentally cooperative interaction should be evaluated for efficiency rather than viewed through the prism of the adversarial proceeding that unfortunately followed.

D. Changing the Cast of the Narrative

A narrative can also be altered by changing the cast of the story. What looks fair or efficient can easily change by altering the scope of the interactions being evaluated. For example, Ronen Perry has attempted to resolve the tension in liability rules regarding punitive damages by changing the cast of plaintiffs. Perry noted that punitive damages are often an unsatisfactory tool because they unfairly compensate one party in the name of fairly punishing another. This leads to a tension that deters the use of a principal tool against reckless conduct. Perry’s solution to this unfairness is to relax the normal rule against compensation for purely economic damages in cases in which greater damages are required to satisfy the law’s need for retribution and deterrence. Allowing a normally excluded class of victims to collect compensation when punitive damages are appropriate reverses the fairness narrative by making the punitive damages more fair to an expanded cast of victims, rather than a windfall to a smaller group.

The cast can also be altered by substitution. For example, Matthew Lister has presented an alternative view of immigration policy that moves away from the common, rights-of-citizens-versus-aliens storyline. Lister noted that “family-based immigration is the largest form of legal immigration in the world.” He then argued “that the way to think about family-based immigration is to look at it primarily through the perspective of the current citizen, rather than the would-be immigrant.” Using this

136. Id. at 555–56.
137. Id. at 578–83.
139. Id. at 43.
140. Id. at 51–54.
142. Id. at 5.
narrative shift, he was able to make a more powerful argument for immigration by reframing the debate as a competition between the interests of one group of citizens and those of another. This shift is also noteworthy because it demonstrates that a strong narrative shift need not change the type of interaction when it changes the focus of the story.

V. ARCHETYPAL NARRATIVES IN PRACTICE

At this point, it must be admitted that the claim that these three archetypes exist is not a claim that they are simple to identify and apply in practice. In many instances, the parties involved will disagree about the nature of their interaction. In can even be difficult to determine whether two parties are interacting at all, as far as the law is concerned. Furthermore, problems frequently involve a multitude of parties and numerous relationships. In such situations, it may be empirically difficult to determine which relationships will be affected by a legal rule and to what degree. There may also be philosophical differences over how the law should respect intertwined relationships.

These ambiguities are inherent in free-market democracy, as the premise of Adam Smith’s Invisible Hand is that competition at the individual level is the best way for societies to cooperate in maximizing the benefits to consumers generally. Therefore, it is to be expected that the line between individual competition and societal cooperation will often be blurred and highly debatable. To make matters worse, the complex and often ambiguous interactions of modern society are so far removed from the simple bands of our ancestors that in many ways our instincts betray our best interests.

Accordingly, this article claims only that understanding the archetypal narratives allows arguments to be crafted in a way that will have the most rhetorical power when presented to decision makers who will (at least implicitly) be judging arguments by weighing the relative plausibility of competing stories. A strong but poorly packaged argument can easily lose to a weaker argument that successfully taps into the pattern-recognition instincts of the target audience. With that in mind, it is useful to survey the levels at which archetypal narratives can be employed. Although it would

143. See infra notes 155–58 and accompanying text.
144. See infra notes 160–62 and accompanying text.
145. See infra notes 163–70 and accompanying text.
146. See infra note 159 and accompanying text.
147. MIND OF THE MARKET, supra note 4, at 14–23.
148. This is no different than saying that categorizing stories is not necessarily easy, even if Booker were correct that there are really only seven of them.
be impractical to address every application, a few examples begin to flesh out the possibilities.

A. Conduct Narratives

Perhaps the most common use of archetypes is to describe primary conduct: the behavior of parties that the law may choose to regulate. However, even within this category, there are many different uses of narrative.

1. Narratives in Factual Analysis

One use of narrative is to characterize what happened. In certain circumstances—particularly in litigation—the key issue is what the actual relationship was between the parties at the time in dispute. Often, there will be agreement over many of the facts, and sometimes the dispute may involve only the mental state of one of the actors. For example, one side of a commercial transaction may view it as a cooperative endeavor, whereas the party on an unanticipated losing end may come to regard the interaction as fraud.

The proper treatment of these competing factual narratives is usually governed by evidence law. In certain instances, the law encourages consideration of evidence that may provide an alternative narrative of the events in dispute. The classic example is prior similar acts evidence. This type of evidence is perhaps most frequently used to show that an occurrence in dispute was not an accident, i.e., that the interaction was competitive rather than accidental. However, in certain cases, evidence law also works to exclude a contradictory narrative. For example, a party disputing the terms of a contract may be barred from presenting evidence of external promises by the parol evidence rule. In such circumstances, the law cares less about whether the immediate interaction was competitive, and more about the benefit of certainty provided by cooperating, in order to enforce a bright-line rule of interpretation.

The fact that evidence law treats various narratives in different manners highlights two related points about narratives in general. First, although it is entirely natural to make assertions through narratives,
asserting something is not the same as proving it. Thus, the fact that a narrative can be created does not automatically make it correct or even worthy of consideration. Second, even though fact finders are likely to resolve disputes by determining which narrative is more probable, particular types of narratives may be encouraged or excluded for a variety of reasons. For example, narratives may be excluded because they have too much power, such as prior-bad-acts evidence, or because the law simply has higher priorities than correctly determining the best narrative to describe a particular case, such as when it excludes evidence of subsequent remedial measures. Thus, there is always the potential that the cooperative interaction of lawmaking will trump the narrative of any individual case. Nonetheless, the Supreme Court has recognized the importance of narrative in how facts are generally presented at trial.

2. Narratives in Policy Analysis

To the extent that the law devises new rules or alters existing rules, narratives are also used in policy justifications. Regardless of the narratives that the parties tell themselves and others about what happened, judges and academics often struggle with how a relationship ought to be viewed. However, it is not always simple to characterize the relationship between the parties. For example, the application of the insanity defense in criminal law may be viewed as a competition between the interests of the accused and those seeking fair punishment, or it can be characterized as an effort to cooperate in providing the best possible outcome for both society and a disturbed individual. Paternalism is another thorny area. Those imposing paternalism usually view it as a cooperative effort on the part of the enforcers for the benefit of all, including the subjects. However, those subject to paternalism may view it as an imposition that benefits the interests of those in authority at the expense of those regulated. Law and

152. Posner, supra note 46, at 743.
153. See supra note 51 and accompanying text.
154. See Fed. R. Evid. 404(b) ("Evidence of other crimes, wrongs, or acts is not admissible to prove the character of a person in order to show action in conformity therewith. It may, however, be admissible for other purposes, such as proof of motive, opportunity, intent, preparation, plan, knowledge, identity, or absence of mistake or accident...").
156. See supra note 52 (discussing Old Chief v. United States, 519 U.S. 172 (1997)).
157. See Arnold H. Loevy, The Two Faces of Insanity, 42 Tex. Tech. L. Rev. 513, 513 (2009) ("One of the great debates surrounding insanity is whether it is an excuse for criminal defendants designed to exculpate otherwise guilty people or whether it is a device used by the government to inculpate otherwise innocent people.").
158. See, e.g., Nicole E. Lombard, Paternalism vs. Autonomy: Steps Toward Resolving the Conflict Over Experimental Drug Access Between the Food and Drug Administration and the Terminally
economics itself even provides one of the most classic examples of narrative ambiguity in describing human interaction: the Prisoner’s Dilemma, which is frequently invoked when different viewpoints produce different answers to whether parties are involved in a competitive or cooperative interaction. Even where interactions are relatively clear, there is often disagreement over which interaction is of primary importance. A few cases are easy. For example, laws prohibiting racially restrictive housing covenants represent a belief that the triumph of tolerance in the competition for acceptance by American society should trump the desire of individuals on the losing side to engage in cooperative prejudice. Other cases are much harder, such as eminent domain cases, which pit owners’ competitive interests in retaining property they refuse to sell against the government’s cooperative interest in putting that property to a more efficient public use.

It may even be debated whether there is an interaction. On one hand, as our understanding of the world has grown more sophisticated, activities that were once considered non-interactive (such as burning carbon-based fuels) are now widely considered to have an effect on others (including foreigners and future generations) and, thus, are fair subjects for potential regulation. On the other hand, privacy advocates often fight the notion that certain behaviors have enough of an effect on others to justify intervention. In another example, Mark Lemley and Mark McKenna have argued that trademark owners and consumers are not injured by others “free riding” on a known mark in an unrelated market. In each of these areas, the force of the policy argument depends heavily on how it characterizes the interactions of flesh-and-blood human beings.

159. See supra note 10.
160. See, e.g., David S. Law, Appointing Federal Judges: The President, the Senate, and the Prisoner’s Dilemma, 26 CARDOZO L. REV. 479 (2005); Neil S. Siegel, State Sovereign Immunity and Stare Decisis: Solving the Prisoners’ Dilemma Within the Court, 89 CALIF. L. REV. 1165 (2001).
164. Mark A. Lemly & Mark P. McKenna, Owning Mark(e)s, 109 MICH. L. REV. 137 (2010).
3. Narratives in Empirical Analysis

To the extent the law evaluates past rules, it also uses narratives to explain how the law has operated in practice. Certain stories explain how an overlooked interaction undermined the intended interaction in practice. For example, Jide Nzelibe argues that humanitarian intervention does not actually improve conditions, but rather provokes atrocities that will attract intervention.\textsuperscript{165} Using Kosovo and Darfur as examples, Nzelibe asserts that the full story of intervention is more than just the cooperation between donors and victims, but must include the competition between the interests of oppressed minorities and the leaders of rebel groups.\textsuperscript{166} In Nzelibe’s narrative, the devastating consequences of providing an incentive to compete for attention outweigh the positive value in providing assistance intended to relieve suffering.\textsuperscript{167} As a result, so-called humanitarian assistance does not increase the size of the pie for victimized groups in practice because it incentivizes rebel leaders to inflict greater costs on the groups they control in order to reap political benefits.

Other stories explain that regulated parties sometimes do not agree with the narratives of policy makers. For example, Gaia Bernstein has reported on the results of laws against donor anonymity in sperm and gamete donation for fertility treatments.\textsuperscript{168} Laws in several countries have been enacted to require that donor information be available to children conceived with donated sperm or gametes once they become adults.\textsuperscript{169} The essential rationale behind these laws was to facilitate cooperation between children and donors so that the children could receive information valuable to understanding their health and identity.\textsuperscript{170} However, the net result of eliminating the option to donate anonymously has caused donation rates to plummet.\textsuperscript{171} This data demonstrates that many donors place a significant negative value on disclosing their identity. Thus, the results show that, regardless of the perspective of those that designed the laws, access to this information is a competitive, rather than a cooperative, endeavor. In other words, donors believe that disclosing this information does not make the pie

\textsuperscript{166} Id. at 1196–1208. This agency problem is a classic example of redefining the narrative of an interaction. In such problems, agents should be cooperating with their principals, but actually compete against them when their interests diverge.
\textsuperscript{167} Id. at 1172 (arguing that “a legalistic humanitarian intervention approach might perversely spawn a vicious cycle of even greater atrocities”).
\textsuperscript{169} Id. at 1205–06.
\textsuperscript{170} Id. at 1206.
\textsuperscript{171} Id. at 1207–13.
bigger, but rather provides a benefit to someone else at their expense. This result is also another example of the deconstructive power of archetypes: if individuals will not voluntarily participate in an interaction, then it is a strong sign that they are thinking about the situation using a competitive narrative.\(^\text{172}\)

B. Authority Narratives

Of course, a great many arguments do not debate the situation at issue directly, but rather address whether existing authorities specify an outcome. However, authorities themselves are produced through human interaction, and also represent an interaction between the creators of the authority and the governed. Thus, authority narratives can be recast with the same archetypes.

1. Narratives of Creation

In certain cases, the authority creation process is at issue. Of course, the plain language of authorities is critically important. However, if the language itself cannot resolve an issue, the intent of the drafters is an important secondary consideration. The three different narratives can be used to frame this intent by characterizing the interaction that created the authority, such as the legislative process. Sometimes a piece of legislation or regulation is clearly the product of compromise, whereas at other times it represents a clear victory for one interest over another. These different descriptions of authority creation lead to very different ways to interpret the authority.\(^\text{173}\) Alternatively, it may be clear that the present issue was simply unforeseen when the authority was drafted. Different narratives can lead to different results.

For example, in *Ragsdale v. Wolverine World Wide, Inc.*,\(^\text{174}\) the Supreme Court’s middle-of-the-road interpretation of the Family Medical Leave Act was controlled by its conclusion that the provision at issue “was the result of compromise between groups with marked but divergent interests in the contested provision.”\(^\text{175}\) In contrast, in *Astrue v. Ratliff*,\(^\text{176}\)
the fact that an issue was unforeseen by Congress was a powerful narrative discouraging three members of the Court from placing themselves ahead of the legislative process, even when the result appeared inconsistent with the overall legislative aims.¹⁷⁷

2. Narratives of Applicability

Another common issue is whether the authority at issue—statute, regulation, or case—was intended to govern the circumstances in dispute. In such circumstances, insight may be gained by comparing the relationship at issue with the types of interactions clearly governed by the authority. If the parties at issue were engaged in a cooperative relationship, but the authority was clearly focused on managing a competitive interaction, then a compelling case can be made that the authority was not intended to govern.

One of the great advantages of shifting the focus of the argument to the applicability of the authority is that if the authority is successfully invoked, then the policy preferences of the decision maker cease to matter. This is particularly useful when the interaction at issue is competitive. It is frequently debatable what outcome is fair in a competitive interaction. Indeed, it is precisely the issues for which fairness is debatable that are likely to lead to litigation. However, if a legislature or superior court has already determined the outcome of the competition, then there is no need for a lower court to determine what is fair.

An example of this use of authority is the litigation over the asylum applications for the infamous “child soldiers” of Sierra Leone. The asylum statute forbids granting asylum from persecution to those who were guilty of committing persecution themselves.¹⁷⁸ The difficult question posed by the child soldiers was whether it was fair to enforce this rule for those who had been brutally forced to become persecutors. The Fifth Circuit avoided the fairness issue by concluding that it had already been decided by Congress in crafting the statute.¹⁷⁹ The Supreme Court recently disagreed, but only as to the relevant authority.¹⁸⁰ In the Court’s view, the statute is ambiguous and, therefore, the issue needs to be resolved by the agency in

¹⁷⁷. Id. at 2530 (Sotomayor J., concurring) (concluding that “it is likely both that Congress did not consider that question and that, had it done so, it would not have wanted [the result reached],” but concurring because of the conclusion that it is Congress’ responsibility to clarify the result it intends).
¹⁷⁹. Bah v. Ashcroft, 341 F.3d 348, 351 (5th Cir. 2003). But see Miranda Alvarez v. Gonzales, 449 F.3d 915, 927 (9th Cir. 2006) (holding that it is for the courts to make a “particularized evaluation” of the applicant’s culpability).
the first instance. Nonetheless, in both decisions, the courts were able to avoid resolving the fair outcome of the competition between the asylum applicants and their victims in their inconsistent quests for justice by deferring the problem to an external authority.

3. Narratives of Ambiguity

In other circumstances, it is clear that the authority is controlling, but it is not clear how to interpret an ambiguity. Guidance in resolving the ambiguity may be obtained by looking at how the authority viewed the overall relationship at issue. If the authority clearly viewed the situation as cooperative, then it makes sense to resolve the ambiguity by looking at which outcome is most efficient. However, if the authority characterized the relationship as adversarial, then fairness arguments may be appropriate. Similarly, to the extent that parties may have different views of efficiency or fairness, then it makes sense to determine what values were used by the authority to determine efficiency and/or fairness.

A classic example of courts using Congress’s narrative of a situation to resolve ambiguity is the remedial purposes doctrine. To look at one application, in *S.E.C. v. Zandford*, the Supreme Court reiterated that Section 10(b) of the Securities Exchange Act, which broadly prohibits deceptive practices in the sale of securities, should be “construed not technically and restrictively, but flexibly to effectuate its remedial purposes.” Using this rationale, the Court concluded that the Act applied to any scheme to defraud using securities as a tool, even if there was no intent to manipulate any particular security. In doing so, the opinion emphasized the “objectives” and “philosophy” of the legislation, which focused on ensuring that the interaction between investors and brokers was honest and cooperative.

The doctrine has also been invoked in a variety of other areas, such as interpreting the Comprehensive Environmental Response, Compensation, and Liability Act and the Americans with Disabilities Act. Similarly, in veterans law, the Supreme Court has

181. *Id.* at 1164.
182. Posner advises that, when precedent is not controlling, advocates should identify the purpose behind the authority at issue and how it can be advanced by ruling in favor of the advocate’s client. *Richard A. Posner, How Judges Think* 220 (2008).
185. 535 U.S. at 819 (internal quotations omitted).
186. *Id.* at 820–22.
187. *Id.* at 819.
189. *See, e.g.*, Castellano v. City of New York, 142 F.3d 58, 69 (2d Cir. 1998).
established “that interpretive doubt is to be resolved in the veteran’s favor,” without expressly invoking the remedial purposes doctrine.  

VI. ARCHETYPAL INTERACTIONS AS A NORMATIVE APPROACH TO THE LAW

It should now be clear that the archetypal patterns of interaction can be used across the entire spectrum of conduct and authority arguments. Given its universality, a natural, next question to ask about the new tool is where it fits among other general approaches to the law. At first glance, the patternicity analysis and the archetypes of human interaction do not have an obvious home. One key reason is that the theory outlined above describes which arguments are likely to be persuasive, not which arguments are likely to be correct. In this narrow formulation, the tools merely suggest how to frame an argument after a conclusion has been predetermined. More broadly, the implications of patternicity and archetypal interactions would be more interesting if the arguments they suggest were actually correct. Such a bold presumption would require rigorous examination beyond the scope of this article. However, it is not unreasonable to work with the provisional presumption that the arguments that are the most persuasive would be correct a significant portion of the time. If they were frequently correct, then the analysis outlined would be important as a useful—if not perfect—litmus test.

This begs the question of how archetypal-interaction analysis compares to other major approaches to substantive legal issues. The dominant conflict in analytical methods is currently between the law and economics approach and the law and society approach. As outlined below, archetypal interaction analysis does not fall neatly into either one of these schools. Instead, it occupies a middle ground that may be best suited

191. See infra notes 214–16 and accompanying text.
192. Even if the most persuasive argument were not correct, the fact that they would likely be accepted means that they must be carefully considered and addressed.
to bridging the gap between the two. In order to see this, it is necessary to examine the divide.

The rift between law and economics and law and society has existed for decades. Indeed, many of the prominent critiques of the law and economics movement listed above come from law and society scholars, and these critiques help define the differences between the two camps. The law and society movement is harder to define than the law and economics movement, but has been described as “the scholarly enterprise that explains or describes legal phenomena in social terms.” This vague description encompasses “sociologists of law, anthropologists of law, political scientists who study judicial behavior, historians who explore the role of nineteenth century lawyers, psychologists who ask why juries behave as they do, and so on.” The common thread of the movement is that its members “share a commitment to explain legal phenomena . . . in terms of their social setting.” Like evolutionary biology, the law and society movement traces its origins to the mid-nineteenth century, when scholars began to challenge the notion that law had either a divine or a natural origin.

Both the law and economics and the law and society movements began to coalesce in the early second-half of the twentieth century, and the aspiration to bridge the gap between the two movements is not new. Recently, prominent scholars have argued for more serious efforts to find a common ground between the rational approach of game theory and the

197. Id.
198. Id.
199. Id. at 764.
200. See McAdams, supra note 194, at 254.
humanitarian approach of narrative theory. Initially, Richard McAdams argued that the pervasive—and frequently flawed—use of the Prisoner’s Dilemma to describe problems has obscured the tremendous potential of game theory for law and society scholars. McAdams argued that, although issues described by the Prisoner’s Dilemma may be of little interest to law and society scholars, numerous variations of that game have outcome matrices that are relevant for those scholars. Games such as the Stag Hunt, the Battle of the Sexes, and the Hawk-Dove can help explain important issues, such as the origins of inequality and the difficulties involved in coordinating a social movement to challenge an unjust equilibrium.

In response to McAdams, Carol Rose asserted, in essence, that the reverse is true: narrative theory is relevant to those that specialize in game theory. Rose argued that game theorists can benefit from understanding narrative theory because it is the human narratives of a situation that are crucial to giving power to the conclusions generated by game theory. Furthermore, it is human virtues and vices that explain why people make the choices they do in the real world and how they are most likely to be influenced by the law to change their behavior.

However, the central argument of both McAdams and Rose is that each discipline could gain from crossing over to the territory inhabited by the other. So far, no effort has proposed a tool to bridge the gap without being beholden to either specialty. Fortunately, archetypal interactions analysis offers the promise of such a tool because this analysis has characteristics that appeal to both sides.

First, although law and economics scholars seek insights in simplified models of complex problems, critics assert that they assume away the difficult aspects of legal problems in order to produce models that are simple enough with which to work. Accordingly, one key divide is over how much problems can be usefully simplified. One appeal to law and economics scholars of using archetypal interactions analysis is that it is a tool that allows for some level of simplification and modeling. However, it

203. Id. at 211–12.
204. Id. at 220.
205. Id. at 222.
206. Id. at 223.
207. Id. at 241–42.
208. Id. at 249.
210. Id. at 390–91.
211. Id. at 388–89.
is a method of simplification that also does not allow the scholar easily to assume away all the difficulties of understanding the social aspects of problems. This, in turn, is the appeal of archetypal interactions analysis to the law and society movement: although the tool allows for focus, it is a focus on the essential relationship of the parties and how they are likely to behave. Nonetheless, this characteristic may be even more appealing to law and economics scholars.

Second, whereas law and economics analysis famously focuses on efficiency, law and society scholars argue that it often ignores the problem that an efficient distribution of goods, resources, or rights can also be deeply inequitable. In this regard, archetypal interaction analysis should appeal to law and economics scholars because its core perspective focuses on characterizing interactions in a way that is strongly economic in nature. However, law and society scholars should appreciate that such analysis does not assume that all relationships are cooperative endeavors aimed at efficiency, but rather that it holds many interactions as irreducibly competitive, and that fairness is a deeply ingrained human value in any competitive interaction. In this regard, archetypal interaction analysis does not favor either camp, as both schools try to understand and predict human behavior as accurately as possible.

Finally, a more subtle, but very crucial, difference is that law and economics scholars assume that the law itself is a powerful tool for reshaping human behavior, whereas law and society scholars are skeptical that the law can accomplish significant change unless it embodies a larger social movement. In this regard, Shermer’s patternicity work suggests

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213. See, e.g., Jeffrey M. Shaman, On the 100th Anniversary of Lochner v. New York, 72 TENN. L. REV. 455 503 (2005); Jon D. Hanson & Melissa R. Hart, Law and Economics, in A COMPANION TO PHILOSOPHY OF LAW AND LEGAL THEORY 311, 330 (Dennis Patterson ed., 1996) (“Perhaps the most common criticism of law and economics is that it overlooks or, worse, displaces questions of distribution or equity.”); Laurence H. Tribe, Constitutional Calculus: Equal Justice or Economic Efficiency?, 98 HARV. L. REV. 592, 594 (1985) (“This disregard of the distributional dimension of any given problem is characteristic of the entire law-and-economics school of thought . . . .”). Although these critiques may seem academic, some critics are more vociferous; they go so far as to assert that the popularization of the self-centered rational actor model has undermined the ideal of virtuous citizenship and has led directly to the recent institutional failures that set off the current global economic crisis. John Mixon, Neoclassical Economics and the Erosion of Middle-Class Values: An Explanation for Economic Collapse, 24 NOTRE DAME J.L. ETHICS & PUB. POL’Y 327 (2010).

that it can cut both ways. Initially, the familiarity of the status quo is a strong source of inertia, but the law is also capable of rapidly shifting human perspectives on issues when it succeeds in reframing problems to tap into the power of the three archetypal interactions. Therefore, relationships between changing legal rules and social regimes must be examined on a case-by-case basis to determine the patterns of interaction involved.\textsuperscript{215} However, on balance, this is not a legal-centric view of the law, because it suggests the persuasive power of the law is dependent upon its ability to reflect human preferences. Thus, this characteristic is more closely associated with the law and society movement.

Accordingly, an initial breakdown of archetypal interaction analysis places it squarely between the two major approaches to legal analysis. It is clearly an approach that focuses on simplifying complex problems down to key aspects. However, the outcome of the analysis is not rooted in the rational-actor model, but in a more robust and realistic view of how human beings interact with each other. As a result, it should not be unrealistic to hope that both camps would find such analysis useful both within their own approaches and as a method of relating to the approaches of the other.

Archetypal interaction analysis may not lead to a grand unification of law and economics with law and society. In many ways, the dominant concerns and goals of the two movements are too inconsistent. Perhaps a kinder way to view the problem is that law is just one part of a web of human interactions that is so complex that no school of thought or tool of analysis is capable of capturing the complete picture in a manageable way. Nonetheless, the impossibility of dealing with legal problems in a manner that is both complete and simple is not an excuse for tribalizing the study of law. Instead, the most important and enduring benefits to the law and to the human beings who use it are most likely to come from scholars with different perspectives working to join their individual pieces of the puzzle together. Analyzing legal issues through the prism of evolutionary biology, in general, and archetypal human interactions, in particular, is worth exploring to the extent that doing so might facilitate that process.

\section*{VII. CONCLUSION}

Improved dialogue between the law and economics and the law and society movements is merely one part of the potential of this previously overlooked aspect of evolutionary theory. Patternicity raises even deeper

questions about the law. Despite the assumption above, it is certainly true that the most persuasive argument will not always be the correct one. We must remember that Shermer developed his theory of patternicity to explain why people believe “weird things.”216 His point was that human beings evolved to respond so positively to the perception of recognizing a pattern that we will sometimes cling to the perception, even in the face of compelling evidence that the perception is false.217 Therefore, persuasive arguments are not necessarily correct. Nonetheless, this does not render archetypal interaction analysis useless. As Shermer also reminds us, the reason we evolved to respond strongly to patterns is that we tend to be correct often enough that pattern recognition is a real competitive advantage.

So if the patterns that people perceive were frequently, but not universally, correct, then when should the law strive to reflect those patterns and when should it seek to impose better ones? Although the answer is not obvious, the dilemma is familiar. Natural law theorists maintain that law must reflect the patterns of recognized morality. Yet, legal theory has a pervasive normative component that seeks to use the law to establish new patterns of behavior and thought. It would seem, then, that the concept of patternicity can reframe the conflict between natural law theory and legal positivism.218

It is yet to be determined what insights this aspect of evolutionary biology has to offer on this enduring struggle, but it is likely again to suggest some sort of middle-ground approach.219 Beyond that, evolutionary theory may also suggest a new approach to understanding the role of human preferences in defining the law. Although this article has focused on the archetypal human interactions, they are far from the only patterns that influence people. In fact, culture-based patterns are certainly more prevalent than biological ones, even if they were more malleable.220 As noted above, evolutionary theory has been applied to understanding the

216. See supra notes 64–70 and accompanying text.
217. For a more in depth examination of the relation among belief, truth, and modern neuroscience, see Susan Haack, Belief in Naturalism: An Epistemologist’s Philosophy of Mind, 1 LOGOS EPISTEME 67 (2010).
218. Shermer himself has reflected on the problems of grounding morality in human nature and concluded that it is required, even though we are not evolved to be perfect beings. See MICHAEL SHERMER, THE SCIENCE OF GOOD AND EVIL (2004).
219. In this vein, Danny Priel has recently argued that analysis of this dispute would benefit from separating the issue of the concept of law from issues of psychology and the practice of law. See Danny Priel, Jurisprudence and Psychology (Osgoode CLPE Research Paper No. 49, 2010), available at http://ssrn.com/abstract=1715647.
220. An interesting empirical issue that is ripe for future study is the circumstances under which cultural or experiential patterns are more persuasive than biological patterns.
development of culture,\textsuperscript{221} and—given the rapid evolution of culture compared to biology—may be more important in this regard to understanding the proper role of human preferences to defining legal rules and norms.

For example, patternicity suggests a new prism for understanding structural issues within the law. It seems likely that legislative, executive, and judicial bodies would have different approaches to the balance between reflecting patterns from society and imposing patterns on it. To the extent that each branch of government has its own relationship and dialogue with society, each would also have its own approach to the patterns seen there.\textsuperscript{222} Furthermore, these relationships may depend heavily on the nature, strength, and types of patterns involved. Indeed, the enduring debate over what constitutes “judicial activism” may well be better served by examining the nature of the patterns that judges are perceived as ignoring or as imposing in the face of public skepticism.\textsuperscript{223}

Ultimately, this article advances the idea of archetypal stories as a means to facilitate discussion. As a species, we evolved to cooperate, at least with our in-group. However, cooperation in this modern world is not easy.\textsuperscript{224} In the generations recorded by history, human society has advanced in complexity to a degree that is difficult to comprehend.\textsuperscript{225}

\textsuperscript{221} See supra notes 56–61 and accompanying text.

\textsuperscript{222} Of course, the relationships between the public and the branches of government—and the judiciary in particular—are already a subject of scholarly analysis. See, e.g., Lawrence B. Solum, \textit{Narrative, Normativity, and Causation}, MICH. ST. L. REV. (forthcoming 2011), available at http://ssrn.com/abstract=1689144 (examining the theoretical foundations of the view that the Supreme Court’s constitutional jurisprudence is heavily influenced by popular opinion).

\textsuperscript{223} For example, one historical analysis of the term concluded that it is properly defined as “as any departure from cultural norms of judicial role.” Craig Green, \textit{An Intellectual History of Judicial Activism}, 58 EMORY L.J. 1195, 1260–61 (2009). This definition merely begs the question of when society expects judges to reflect its patterns, versus when it will tolerate judicial imposition of counter-majoritarian patterns. Although some scholars study activism by examining the situations in which courts invalidate statutes and regulations, see Lori A. Ringhand, \textit{Judicial Activism: An Empirical Examination of Voting Behavior on the Rehnquist Court}, 24 CONST. COMMENT. 43 (2007), others would argue that such rulings are not a valid measure of activism, see Eric J. Segall, \textit{Reconceptualizing Judicial Activism as Judicial Responsibility: A Tale of Two Justice Kennedys}, 41 ARIZ. ST. L.J. 709, 710–11 (2009). Patternicity and archetypal interaction analysis may be able to provide a better framework for understanding the phenomena because they are more closely tied to understanding the origins of social norms. See generally Richard H. Pildes, \textit{Is the Supreme Court a “Majoritarian Institution?”} 2010 SUP. CT. REV. 1 (2010) (discussing theories that describe the degree to which the Court reflects or ignores societal preferences).

\textsuperscript{224} See \textsc{Roger Fisher et al.}, GETTING TO YES (2d ed. 1991) (asserting that negotiations often fail because the parties lack the tools to address and explore each other’s interests).

\textsuperscript{225} See \textsc{Eric D. Beinhocker}, \textit{The Origin of Wealth: Evolution, Complexity, and the Radical Remaking of Economics} 8–9 (2006) (noting that members of a primitive Brazilian tribe have about 300 different items of all types in their village, including tools, baskets, clothing,
complexity is digested and transformed into stories by people who trade them, challenge them, elaborate on them, and use them to make decisions. We have produced law as a specialized tool for resolving these narratives into rules for handling complex problems of cooperation, including cooperatively designing rules to govern competitive and accidental interactions. However, to efficiently use this tool, we must understand its relationship with the basic narratives of interactions that existed long before there were even human beings to imagine laws.

Economic analysis has advanced the law by providing theoretical and empirical foundations for understanding how human beings work, both with and against each other, to manage goods, services, and risks. Narrative theory has advanced the law by explaining how people form and share the beliefs that motivate these interactions with others. Evolutionary science has advanced both areas by showing that the lessons of these fields are not indiscriminate observations, but rather the products of the development of our brains. As a result, it is now clear that law is an evolved method by which we relate stories to each other about our interactions. The three archetypal interactions at the core of these stories do not provide the answer to every problem, but they do facilitate the goal of living by Spinoza’s Proverb, to “make a ceaseless effort not to ridicule, not to bewail, not scorn human actions, but to understand them.”

and weapons, whereas individuals in New York City are surrounded by ten billion different products).


227. MIND OF THE MARKET, supra note 4, at xxiv (translating from Baruch Spinoza’s TRACTATUS POLITICUS (1667)) (internal quotation marks omitted).