THE GREAT RECESSION AND THE RHETORICAL CANONS OF LAW AND ECONOMICS

*Michael D. Murray**

ABSTRACT

The Great Recession of 2008 and onward has drawn attention to the American economic and financial system and has cast a critical spotlight on the theories, policies, and assumptions of the modern, neoclassical school of law and economics—often labeled the "Chicago School"—because this school of legal economic thought has had great influence on the American economy and financial system. The Chicago School's positions on deregulation and the limitation or elimination of oversight and government restraints on stock markets, derivative markets, and other financial practices are the result of decades of neoclassical economic assumptions regarding the efficiency of unregulated markets, the near-religious-like devotion to a hyper-simplified conception of rationality and self-interest with regard to the persons and

* Associate Professor of Law, Valparaiso University School of Law. Grad. Cert., Fudan University, 1986; B.A. (*summa cum laude*), Loyola University (Maryland), 1987; J.D., Columbia Law School, 1990. Professor Murray previously taught at the University of Illinois College of Law and Saint Louis University School of Law. Professor Murray thanks Professors Linda Edwards (UNLV), Thomas Ginsburg (Chicago), and Terri LeClercq (Texas) for their comments on this Article, and he thanks the participants in the *How Rhetoric Shapes the Law* Conference at American University, Washington College of Law, especially Professors Linda Berger (UNLV) and Terry Phelps (American), for their comments on the presentation of this Article. Professor Murray gratefully acknowledges the comments and input of Professor Thomas Ulen (Illinois) on the research leading up to this version of the Article, and he thanks his colleagues at Valparaiso, especially Professors Robert Blomquist, Paul Brietzke, David Herzig, JoEllen Lind, and Alan White, for their comments in two work-in-progress workshops. He thanks Professors Christy DeSanctis (George Washington), Michael Frost (Southwestern), James Levy (Nova Southeastern), and Mark Wojcik (John Marshall) for their comments on the earlier version of this Article posted on SSRN, and he thanks Jenna Throw (J.D., 2011, Valparaiso) for her research assistance with this Article.

institutions participating in the financial system, and a conception of laws and government policies as incentives and costs in a manner that excludes the actual conditions and complications of reality.

This Article joins the critical conversation on the Great Recession and the role of law and economics in this crisis by examining neoclassical and contemporary law and economics from the perspective of legal rhetoric. The Great Recession has already caused several of the stars of the Chicago School to recant their most definite statements concerning market efficiency and the necessity of non-regulation and zero government oversight (or interference) in the financial system. The law and economics movement is likely to regroup or reform itself under a revised conception of market efficiency, as indicated by the chastened admissions of the leaders of the old school, or move in the direction of a revised conception of rational choice theory represented by the thriving school of behavioral law and economics. To facilitate better understanding of the law and economics movement now and in the future, this Article joins the discussion by pointing out the fundamental rhetorical canons of law and economics. These canons have made law and economics a persuasive form of discourse:

- *Mathematical and scientific methods of analysis and demonstration;*
- *The characterization of legal phenomena as incentives and costs;*
- *The rhetorical economic concept of efficiency; and*
- *Rational choice theory as corrected by modern behavioral social sciences, cognitive studies, and brain science.*

Law and economics has developed into a school of contemporary legal rhetoric with a particular, effective combination of topics of invention and arrangement and tropes of style that are relevant to legal rhetoric beyond the economic analysis of law. This Article is the first to examine the prescriptive implications of the rhetoric of law and economics for general legal discourse as opposed to examining the benefits and limitations of the economic analysis of law itself. This Article advances the conversation in two areas:

first, as to the study and understanding of the persuasiveness of law and economics, particularly because that persuasiveness has played a role in influencing American economic and financial policy leading up to the Great Recession; and second, as to the study and understanding of the use of economic topics of invention and arrangement and tropes of style in general legal discourse when evaluated in comparison to the other schools of classical and contemporary legal rhetoric. The author concludes that the rhetorical canons of law and economics can be used to create meaning and inspire imagination in legal discourse beyond the economic analysis of law, but the canons are tools that are only as good as the user, and can be corrupted in ways that helped to bring about the current economic crisis.

I. INTRODUCTION: WHY HAVE LAW AND ECONOMICS' RECOMMENDATIONS AND PRESCRIPTIONS FOR THE ECONOMY AND THE BANKING AND FINANCIAL SYSTEM BEEN SO PERSUASIVE LEADING UP TO THE GREAT RECESSION[1]?

This Article examines law and economics as a school of contemporary legal rhetoric with a particular combination of rhetorical modes of communication and persuasion—the rhetorical canons of law and economics—that has made its recommendations and prescriptions for the economy and the banking and financial system persuasive to many audiences within and without the legal community. The Article's goal is to critique the rhetoric of the neoclassical and contemporary law and economics[2] analysis of law, not to examine the benefits or

1. The term "Great Recession" is borrowed from Nobel Laureate Professor Joseph Stiglitz, who recently discounted decades of neoclassical economic assumptions when he pointed out that "markets do not work well on their own[,]" and that, in the recent recession, the United States suffered because the economy lost its "balance between the role of markets and the role of government." JOSEPH E. STIGLITZ, FREEFALL: AMERICA, FREE MARKETS, AND THE SINKING OF THE WORLD ECONOMY xii (2010).

2. The term "contemporary law and economics" refers to twenty-first century law and economics that incorporates behavioral and socio-economic approaches to the study and analysis of law. Contemporary law and economics has evolved from "new" or "neoclassical" law and economics that developed in the 1960s, which applied neoclassical economic principles and methodologies to the analysis of law. New or neoclassical law and economics is also referred to as "traditional" or "conventional" law and economics. *See generally* RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 31 (7th ed. 2007) [hereinafter POSNER, ECONOMIC ANALYSIS OF LAW]; Thomas F.

costs of the application of one form of economic analysis or another in shaping law and social policy.[3] This Article seeks to examine law and economics as a rhetorical perspective in law so as to reveal and demonstrate the combination of rhetorical canons that helped bring about the Great Recession.[4]

Cotter, *Legal Pragmatism and the Law and Economics Movement*, 84 GEO. L.J. 2071, 2088 (1996); Jon Hanson & David Yosifon, *The Situational Character: A Critical Realist Perspective on the Human Animal*, 93 GEO. L.J. 1, 77, 83, 138 (2004) [hereinafter Hanson & Yosifon, *The Situational Character*]; Donald C. Langevoort, *Monitoring: The Behavioral Economics of Corporate Compliance with Law*, 2002 COLUM. BUS. L. REV. 71, 73; Joshua D. Wright, *Behavioral Law and Economics, Paternalism, and Consumer Contracts: An Empirical Perspective*, 2 N.Y.U. J. L. & LIBR. 470, 470–72 (2007).

3. Neither does this Article examine the *Pareto* superiority or *Kaldor-Hicks* efficiency obtained through contemporary economic analysis of law. *See* ROBERT COOTER & THOMAS ULEN, LAW & ECONOMICS 18 (5th ed. 2008) (introducing the *Pareto* superiority and *Kaldor-Hicks* efficiency concepts in economics).

4. *See* Douglas M. Branson, *Corporate Governance "Reform" and the New Corporate Social Responsibility*, 62 U. PITT. L. REV. 605, 619 (2001) (one canon of law and economics rhetoric is the marked preference for scientific and mathematical methods of analysis, which sometimes were applied to human conditions that are not properly reduced to simple equations: "In its more extreme forms, law and economics solutions to problems of human behavior were paraded as 'science' (not as social science but as 'science'), the findings of which were unassailable. Those who questioned were made to appear ignorant or foolish."); *see also* Timothy A. Canova, *The Failing Bubble Economy: American Exceptionalism and the Crisis in Legitimacy*, 102 AM. SOC'Y INT'L L. PROC. 237, 238 (2008) (the canons were used to suppress criticism of economic policy: "Lawyers and legal scholars have tended not to question the economic assumptions of orthodox economic models"); Timothy A. Canova, *Legacy of the Clinton Bubble*, DISSENT, Summer 2008, at 41, *available at* http://www.dissentmagazine.org/article/?article=1229 (charting the economic policies that played a role in bringing about the Great Recession); Chunlin Leonhard, *Subprime Mortgages and the Case for Broadening the Duty of Good Faith*, 45 U.S.F. L. REV. 621, 622 (2011) (same); Lawrence E. Mitchell, *The Morals of the Marketplace: A Cautionary Essay for Our Time*, 20 STAN. L. & POL'Y REV. 171, 173 (2009) (same); Lawrence E. Mitchell, *The Board as a Path to Corporate Social Responsibility*, *in* THE NEW CORPORATE ACCOUNTABILITY: CORPORATE SOCIAL RESPONSIBILITY AND THE LAW (Doreen McBarnet et al. eds., 2007) (same). Even the unofficial dean of the Chicago School, Judge Richard Posner, has admitted the connection between neoclassical law and economics and the present economic crisis. *See* RICHARD POSNER, A FAILURE OF CAPITALISM: THE CRISIS OF '08 AND THE DESCENT INTO DEPRESSION xii, 270 (2009):

> We are learning from [the crisis] that we need a more active and intelligent government to keep our model of a capitalist economy from running off the rails . . . . [T]he market can be blamed for recessions, which without government intervention would often turn into depressions, as they often did before the government learned (we thought!) in the after-math of the Great Depression how to prevent that from happening.

Alan Greenspan, previously a staunch advocate of non-regulation of the financial markets, has recently recanted his faith in the self-correcting power of free markets.

Rhetoric does not often share the same paragraph in academic legal writing with law and economics, let alone the same article title.[5] Notably, however, a central focus of the discipline of law and economics is the study of human nature and human behavior[6] in order to predict what incentives can be communicated to humans that will motivate them to act or react; for this reason, law and economics shares a common goal with rhetoric—the study of communication and persuasion. The advocates of the economic analysis of law must persuade their own cohorts of the truth of their discoveries, and use the rhetoric of their discipline to do so. They must also seek to communicate the lessons of their economic analysis of law to the wider legal community, and again use the rhetoric of their discipline to persuade the wider audience. The fact that law and economics is persuasive beyond the confirmed members of the discipline is supported by modern history: critics and supporters alike agree that law and economics has established itself as the dominant and most influential contemporary mode of analysis among American legal scholars.[7]

EDMUND L. ANDREWS, BUSTED: LIFE INSIDE THE GREAT MORTGAGE MELTDOWN 65 (2009) (quoting Alan Greenspan). *See also* Alan Greenspan, *The Crisis*, BROOKINGS, 202 (Spring 2010), http://www.brookings.edu/~/media/Projects/BPEA/Spring%202010/2010a_bpea_greenspan.PDF). Critics have noted that the Chicago School has worked its effects not only on the United States economy, but globally. *See* Paul H. Brietzke, *Law and Economics Meets the Great Recession* (2012) (on file with the author).

5. One exception is Donald N. McCloskey, *The Rhetoric of Law and Economics*, 86 MICH. L. REV. 752 (1988) [hereinafter McCloskey, *Rhetoric of Law and Economics*], a very useful discussion to which this Article refers *infra*.

6. *See* Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1471 (1998) ("[L]aw and economics analysis may be improved by increased attention to insights about actual human behavior"); Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051, 1055 (2000) [hereinafter Korobkin & Ulen, *Law and Behavioral Science*] ("Law and economics is, at root, a behavioral theory, and therein lies its true power.").

7. Law and economics' critics and proponents alike agree that the law and economics movement has become the most dominant method of legal analysis among legal scholars in at least the last fifty years. *See, e.g.*, Jon Hanson & David Yosifon, *The Situation: An Introduction to the Situational Character, Critical Realism, Power Economics, and Deep Capture*, 152 U. PA. L. REV. 129, 143 (2003) [hereinafter Hanson & Yosifon, *The Situation*] (quoting Joyce S. Sterling, *The State of American Sociology of Law*, *in* DEVELOPING SOCIOLOGY OF LAW: A WORLD-WIDE DOCUMENTARY ENQUIRY 805, 809 (Vincenzo Ferrari ed., 1990), and Marc Galanter & Mark Alan Edwards, *Law and Society & Law and Economics: Common Ground,*

The recognition that the rhetoric of law and economics is persuasive—and not only to legal economists—reveals the enormous potential of law and economics as a lens through which to examine the structure and design of legal discourse, and as a source of *topoi* (topics) of invention and arrangement and *tropes* of style in the content of the discourse. It also helps to explain why so many persons in the academy, the legal profession, the courts, and the government could be persuaded to alter the economy and financial system of the United States in accordance with the prescriptions of law and economics in ways that helped to bring about the Great Recession.

The *topoi* and *tropes* of law and economics inspire inventive thinking about the law that constructs meaning for the author and the audience. For many members of the legal writing discourse community—judges, practitioners, government agencies, and academics—the modes of persuasion of law and economics can provide a critical perspective to construct meaning and improve the persuasiveness of legal discourse generally in content, arrangement, and style. As such, law and economics rhetoric should be recognized as a new school of contemporary rhetoric[8] that joins the existing schools—modern argument theory,[9] writing as a process theory,[10] and discourse community

Irreconcilable Differences, New Directions: Introduction: The Path of the Law Ands, 1997 WIS. L. REV. 375, 378 (1997)) which states:

> The law and economics movement is quite strongly entrenched in the law schools, and is more powerful there than any of the other social sciences . . . . [T]he flourishing of law and economics [is] undeniable . . . . Economic analysis of law . . . has transformed American legal thought, . . . [and] enjoyed unparalleled success in the legal academy and in the judiciary . . . [making it] the most important development in legal scholarship of the twentieth century.

See also POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at xix ("[Law and economics is] the foremost interdisciplinary field of legal studies"); Kenji Yoshino, *The City and the Poet*, 114 YALE L.J. 1835, 1836 n.6 (2005) (arguing that law and economics surpasses other movements in legal analysis, including law and literature).

8. For basic sources on contemporary rhetoric, see generally PATRICIA BIZZEL & BRUCE HERZBERG, THE RHETORICAL TRADITION (Patricia Bizzel & Bruce Herzberg eds., 1990); PETER GOODRICH, LEGAL DISCOURSE (1987); Carroll C. Arnold, *Rhetoric in America since 1900*, *in* RE-ESTABLISHING THE SPEECH PROFESSION: THE FIRST FIFTY YEARS (Robert T. Oliver & Marvin G. Bauer eds., 1959); John B. Bender & David E. Wellbery, *Rhetoricality: On the Modernist Return of Rhetoric*, *in* THE ENDS OF RHETORIC: HISTORY, THEORY, PRACTICE (John B. Bender & David E. Wellbery eds., 1990); James L. Kinneavy, *Contemporary Rhetoric*, *in* THE PRESENT STATE OF SCHOLARSHIP IN HISTORICAL AND CONTEMPORARY RHETORIC (Winifred Bryan Horner ed., rev. ed. 1990). *See also* sources cited *infra* at notes 9-11.

9. *See, e.g.,* JEROME BRUNER & ANTHONY AMSTERDAM, MINDING THE LAW,

theory[11]—as a lens through which to examine and improve the persuasiveness of legal discourse.

Law and economics is a discipline that brings a unique combination of modes of persuasion used both as rhetorical *topoi*[12]

chs. 2-3, 6-7 (2002); CHAIM PERELMAN & LUCIE OBRECHTS-TYTECA, THE NEW RHETORIC: A TREATISE ON ARGUMENTATION (John Wilkinson & Purcell Weaver trans., 1969); STEPHEN TOULMIN ET AL., AN INTRODUCTION TO REASONING (2d ed. 1984) [hereinafter TOULMIN, INTRODUCTION TO REASONING]; FRANS H. VAN EEMEREN ET AL., FUNDAMENTALS OF ARGUMENTATION THEORY: A HANDBOOK OF HISTORICAL BACKGROUNDS AND CONTEMPORARY DEVELOPMENTS (1996); Linda L. Berger, *Of Metaphor, Metonymy, and Corporate Money: Rhetorical Choices in Supreme Court Decisions on Campaign Finance Regulation*, 58 MERCER L. REV. 949 (2007) (discussing the corporate metaphor in modern argument theory); Linda L. Berger, *What is the Sound of a Corporation Speaking? How the Cognitive Theory of Metaphor Can Help Lawyers Shape the Law*, 2 J. ASS'N LEGAL WRITING DIRECTORS 169 (2004) (discussing the use of metaphors in modern argument theory and cognitive studies); Michael R. Smith, *Rhetoric Theory and Legal Writing: An Annotated Bibliography*, 3 J. ASS'N LEGAL WRITING DIRECTORS 129, 139 (2006) [hereinafter Smith, *Rhetoric Theory*]; Kathryn Stanchi, *Persuasion: An Annotated Bibliography*, 6 J. ASS'N LEGAL WRITING DIRECTORS 75, 80–81 (2009).

10. *See* Linda L. Berger, *A Reflective Rhetorical Model: The Legal Writing Teacher as Reader and Writer*, 6 LEGAL WRITING 57 (2000); Linda L. Berger, *Applying New Rhetoric to Legal Discourse: The Ebb and Flow of Reader and Writer, Text and Context*, 49 J. LEGAL EDUC. 155 (1999); Elizabeth Fajans & Mary R. Falk, *Against the Tyranny of Paraphrase: Talking Back to Texts*, 78 CORNELL L. REV. 163 (1993); Leigh Hunt Greenhaw, *"To Say What the Law Is": Learning the Practice of Legal Rhetoric*, 29 VAL. U. L. REV. 861, 866 (1995); Carol McCrehan Parker, *Writing Throughout the Curriculum: Why Law Schools Need It and How to Achieve It*, 76 NEB. L. REV. 561 (1997); Teresa Godwin Phelps, *The New Legal Rhetoric*, 40 SW. L.J. 1089 (1986); Smith, *Rhetoric Theory*, *supra* note 9, at 139.

11. *See* Brook K. Baker, *Language Acculturation Process and the Resistance to In "doctrine" ation in the Legal Skills Curriculum and Beyond: A Commentary on Mertz's Critical Anthropology of the Socratic, Doctrinal Classroom*, 34 J. MARSHALL L. REV. 131 (2000); Susan L. DeJarnatt, *Law Talk: Speaking, Writing, and Entering the Discourse of Law*, 40 DUQ. L. REV. 489 (2002); Terrill Pollman, *Building a Tower of Babel or Building a Discipline? Talking About Legal Writing*, 85 MARQ. L. REV. 887, 890 (2002); J. Christopher Rideout & Jill J. Ramsfield, *Legal Writing: A Revised View*, 69 WASH. L. REV. 35 (1994); Smith, *Rhetoric Theory*, *supra* note 9, at 139; Kathryn M. Stanchi, *Resistance is Futile: How Legal Writing Pedagogy Contributes to the Law's Marginalization of Outsider Voices*, 103 DICK. L. REV. 7, 9 (1998); Joseph M. Williams, *On the Maturing of Legal Writers: Two Models of Growth and Development*, 1 LEGAL WRITING 1 (1991).

12. In rhetoric, the *topoi* [Greek] or *loci* [Latin] (singular, *topos* or *locus* = place) are the "topics" or "subjects" of argument that can be made in various situations. *Topoi* are developed in the process of *inventio* [Latin] or *heuresis* [Greek], which may be translated as "invention" or "discovery" of the type of argument that will be most persuasive in the situation, and in the *dispositio* [Latin] or *taxis* [Greek] of the argument, which translates as the "arrangement" or "organization" or "disposition" of the contents of the argument. *See* EDWARD P.J. CORBETT & ROBERT J. CONNORS, CLASSICAL RHETORIC FOR THE MODERN STUDENT 17, 20, 89-91 (4th ed. 1999);

and *tropes*[13] to construct meaning and to inform and persuade its audiences. The examination of contemporary law and economics as a rhetorical perspective requires discussion of the following theses:

- Law and economics is inherently rhetorical and uses its own rhetoric to persuade the members of the law and economics discourse community as well as the legal community as a whole.
- Law and economics uses a unique combination of modes of persuasion as rhetorical *topoi* and *tropes*—the rhetorical canons of law and economics—which are:
  - Mathematical and scientific methods of analysis and demonstration;
  - The characterization of legal phenomena as incentives and costs;
  - The rhetorical economic concept of efficiency; and
  - Rational choice theory as corrected by the modern behavioral social sciences, cognitive studies, and brain science.

The rhetorical canons of law and economics alone did not cause the Great Recession. Canons of rhetoric are tools for legal

Gabriele Knappe, *Classical Rhetoric in Anglo-Saxon England*, 27 ANGLO-SAXON ENGLAND 5, 25 (1998).

13. Tropes are developed in the rhetorical process of style (Latin *elocutio*; Greek *lexis*), which pertains to the composition and wording of the discourse, including grammar, word choice, and figures of speech. *See generally* CORBETT & CONNORS, *supra* note 12, at 20, 378; Knappe, *supra* note 12, at 25-26; Smith, *Rhetoric Theory*, *supra* note 9, at 133-34 n.2 (collecting sources on style in classical rhetoric). Figures of speech were divided into tropes (creative variations on the meanings of words) and schemes (artful deviations from the ordinary arrangements of words). Linda L. Berger, *Studying and Teaching "Law as Rhetoric": A Place to Stand*, 16 J. LEGAL WRITING INST. 3, 51 n.179 (2010) [hereinafter Berger, *Law as Rhetoric*]. Professors Berger, Corbett, and Connors identify the classically identified tropes as metaphor, simile, synecdoche, and metonymy; puns; antanaclasis (or repetition of a word in two different senses); paronomasia (use of words that sound alike but have different meanings); periphrasis (substitution of a descriptive word for a proper name or of a proper name for a quality associated with the name); personification; hyperbole; litotes (deliberate use of understatement); rhetorical question; irony; onomatopoeia; oxymoron; and paradox. CORBETT & CONNORS, *supra*, note 12, at 395-409; Berger, *Law as Rhetoric*, *supra*, at 51 n.179. *See also* MICHAEL R. SMITH, ADVANCED LEGAL WRITING: THEORIES AND STRATEGIES IN PERSUASIVE WRITING 199-248 (metaphors), 328-40 (other tropes) (2d ed. 2008).

discourse, not universal goals or perfect solutions. The Law should be communicated to people in a manner that maximizes the audience's incentives to accept and to be persuaded by the legal communication, and that minimizes the costs that the communication imposes on the audience. Law and economics provides a rhetorical lens through which a legal author might examine and improve the persuasiveness of his or her discourse regarding the economy, governmental regulation, or any other topic of the law. But a lens, like any other tool, is only as good as its user. This Article concludes that the rhetorical canons of law and economics can be used to create meaning and inspire imagination in legal discourse beyond the economic analysis of law, but the choice to employ the canons must be made with regard to the rhetorical concept of ethos and the needs, demands, and limitations of the rhetorical situation at hand.[14]

II. THE RHETORICAL NATURE OF LAW AND ECONOMICS

A. LAW AND ECONOMICS IS INHERENTLY RHETORICAL

Law and economics, like all disciplines of academic inquiry and study, uses rhetoric to explain and justify its assumptions, models, paradigms, assertions, and predictions.[15] To understand why law and economics is inherently rhetorical, one must understand the nature of rhetoric: Rhetoric is the "discovery and transmission of insight and knowledge."[16] Rhetoric is the

14. A situation is rhetorical when the audience of the message in the situation has the opportunity to alter reality. When the audience has no choice, the situation is not rhetorical. A situation is made up of: subject—place—time—audience—speaker. *See* Lloyd F. Bitzer, *The Rhetorical Situation* 1 PHIL. & RHETORIC 6-8, 389–92 (1968); Greenhaw, *supra* note 10, at 875-80.

15. *See* McCloskey, *Rhetoric of Law and Economics*, *supra* note 5, at 760. As one scholar states:

> [W]e are now invited to think hard about the rhetoric of *everything*; "the rhetoric of philosophy," "the rhetoric of sociology," "the rhetoric of religion," even "the rhetoric of science." Though these rhetorics are not all of the same kind, we should realize that all of these fields depend on rhetoric in their arguments. Most of them are in fact grappling with rhetorical issues, as they debate their professional claims.

WAYNE C. BOOTH, THE RHETORIC OF RHETORIC: THE QUEST FOR EFFECTIVE COMMUNICATION xii (2004) [hereinafter BOOTH, THE RHETORIC OF RHETORIC] (emphasis in original).

16. Francis J. Mootz, III, *Law in Flux: Philosophical Hermeneutics, Legal Argumentation, and The Natural Law Tradition*, 11 YALE J.L. & HUMAN. 311, 317 (1999) (quoting Hans-Georg Gadamer, *The Expressive Power of Language*, 107 PUBLICATIONS MOD. LANGUAGE ASS'N AM. 348 (1992)). *See also* James Boyd White,

discipline that examines "ways of winning others over to our views, and of justifying those views to ourselves as well as others, when the question of how things in the world ought to work is contested or contestable."[17] "Rhetoric is primarily a verbal, situationally contingent, epistemic art that is both philosophical and practical and gives rise to potentially active texts."[18] Much of the scholarly attention within the discipline of rhetoric has been directed to effective communication with a particular focus on techniques for persuasive communication and argumentation; thus, many familiar definitions of rhetoric revolve around persuasion in discourse.[19]

This Article refers to the academic study of rhetoric, both in its classical[20] and contemporary[21] forms. Rhetoric as the study of

Law as Rhetoric, Rhetoric as Law: The Arts of Cultural and Communal Life, 52 U. CHI. L. REV. 684, 695 (1985) [hereinafter White, *Law as Rhetoric*]:

> Like law, rhetoric invents; and, like law, it invents out of something rather than out of nothing. It always starts in a particular culture and among particular people. There is always one speaker addressing others in a particular situation, about concerns that are real and important to somebody, and speaking a particular language. Rhetoric always takes place with given materials.

17. BRUNER & AMSTERDAM, *supra* note 9. *See also* White, *Law as Rhetoric*, *supra* note 16, at 684 (stating that rhetoric establishes, maintains, and transforms the community and the culture); James Boyd White, *A Symposium: The Theology of the Practice of Law February 14, 2002 Roundtable Discussion*, 53 MERCER L. REV. 1087, 1090 (2002) ("[T]he minute we begin to think and talk about anything at all we live in the world of language, a world of contingent resources for thought and speech, and rhetoric is a perfectly good term for how we do that.").

18. William A. Covino & David A. Jolliffe, *What is Rhetoric?*, *in* RHETORIC: CONCEPTS, DEFINITIONS, BOUNDARIES 5 (1995).

19. *See, e.g.*, ARISTOTLE, ON RHETORIC: A THEORY OF CIVIC DISCOURSE 1355b (George A. Kennedy trans., 1991); ARISTOTLE, THE RHETORIC, bk. 1, ch. 2 (W. Rhys Roberts trans., Lee Honeycutt ed., 1965), *available at* http://www.public.iastate.edu/~honeyl/Rhetoric/ [hereinafter ARISTOTLE, THE RHETORIC] ("Rhetoric may be defined as the faculty of observing in any given case the available means of persuasion."); JOHN J. MAKAY, SPEAKING WITH AN AUDIENCE: COMMUNICATING IDEAS AND ATTITUDES 9 (3d ed. 1984) ("Rhetoric is defined 'as the process of human communication in which a speaker sorts, selects, and sends symbols for the specific purpose of evoking a precise response' from an audience."); KRISTEN K. ROBBINS-TISCIONE, RHETORIC FOR LEGAL WRITERS: THE THEORY AND PRACTICE OF ANALYSIS AND PERSUASION 9 (2009) [hereinafter ROBBINS-TISCIONE, RHETORIC FOR LEGAL WRITERS] ("[R]hetoric here refers to the art of persuasion through eloquent, inventive, and strategically organized discourse, both oral and written."); Gerald Wetlaufer, *Rhetoric and Its Denial in Legal Discourse*, 76 VA. L. REV. 1545, 1546 (1990) ("By 'rhetoric,' I mean the discipline . . . in which the objects of formal study are the conventions of discourse and argument.").

20. Classical rhetoric began in the fifth century B.C.E. and was continued over the course of the next 1,000 years of Greco-Roman history by Aristotle, Cicero, and

Quintilian; this constitutes the defining study of public discourse in classical times. *See* CORBETT & CONNORS, *supra* note 12, at 15-16, 18-19. The scholarship and teachings of classical rhetoric were followed as the dominant discipline for developing legal arguments until the first quarter of the nineteenth century. *See id.* at 2, 15. The origin of classical rhetoric as a discipline devoted to the study of legal discourse and argumentation is traced to Corax of Syracuse. *See, e.g.,* Michael Frost, *Introduction to Classical Legal Rhetoric: A Lost Heritage*, 8 S. CAL. INTERDISC. L.J. 613, 615 (1999) [hereinafter Frost, *Lost Heritage*]. Socrates and his student, Plato, critiqued the early tenets of the discipline, see text accompanying note 22 *infra*, and Plato's student, Aristotle, subsequently refined those tenets. *See* JOHN H. MACKIN, CLASSICAL RHETORIC FOR MODERN DISCOURSE vii, 6-7, 17-18, 26 (1969). The most important writings of classical rhetoric are those of Aristotle, ARISTOTLE, THE RHETORIC, *supra* note 19; Cicero, MARCUS TULLIUS CICERO, DE INVENTIONE 93, 104 (H.M. Hubbell trans., 1949); MARCUS TULLIUS CICERO, DE ORATORE (E.W. Sutton trans., 1942); and QUINTILIAN, 1 MARIUS FABIUS QUINTILIAN, INSTITUTIO ORATORIA 273 (H.E. Butler trans., 1954), which together define the canons of the discipline that serve as a rhetorical lens on legal discourse.

21. The contemporary period of rhetoric began in the twentieth century. Major movements in thought have broadened the study of rhetoric to include all aspects of communication. ROBBINS-TISCIONE, RHETORIC FOR LEGAL WRITERS, *supra* note 19, at 61. This includes linguistics, ethics and persuasion, practical reasoning, human motivation, composition theories, cognitive studies, and socio-epistemic studies. *Id.* at 61-82. *See, e.g.*, ROLAND BARTHES, ELEMENTS OF SEMIOLOGY (Annette Lavers & Colin Smith trans., 1968) (language as symbols); KENNETH BURKE, A GRAMMAR OF MOTIVES (1969) [hereinafter BURKE, A GRAMMAR OF MOTIVES] (impact of culture); KENNETH BURKE, A RHETORIC OF MOTIVES (1950) [hereinafter BURKE, A RHETORIC OF MOTIVES] (impact of culture); UMBERTO ECO, A THEORY OF SEMIOTICS (1976) (language as symbols); MARSHALL MCLUHAN, UNDERSTANDING MEDIA: THE EXTENSIONS OF MAN (1996) (modern media studies); C. K. OGDEN & I.A. RICHARDS, THE MEANING OF MEANING (1972) (language and meaning); I.A. RICHARDS, THE PHILOSOPHY OF RHETORIC (1936) (language and meaning); RICHARD M. WEAVER, THE ETHICS OF RHETORIC (1953) (ethics); Bitzer, *supra* note 14, at 6-8, 389-92 (the impact of situation). Over time, the cognitive rhetoric group divided into two separate groups: the process theory cognitivists and the discourse community cognitivists. The process theory cognitivists believe that the study of rhetoric should focus on the process of writing, a recursive creative process rather than a linear one. The process of writing teaches writers how to reason, persuade, and improve their communication by examining each stage of the writing process. *See* ROBBINS-TISCIONE, RHETORIC FOR LEGAL WRITERS, *supra* note 19, at 79. On the other hand, the discourse community cognitivists believe the study of rhetoric is a study of the writer's assimilation into and acceptance of the tenets, vocabulary, and expectations of a discourse community, such as the legal writing discourse community. *See id.* A third school of thought, the socio-epistemic group, combines social theories of community with epistemological theories of learning to form a theory of communication that considers the interaction of speaker, subject matter, and audience. *See id.* at 81. The common thread among these schools of thought in the developing discipline of contemporary rhetoric was a shift in thinking regarding the nature of knowledge and truth. Kristen K. Robbins, *Philosophy v. Rhetoric in Legal Education: Understanding the Schism Between Doctrinal and Legal Writing Faculty*, 3 J. ASS'N LEGAL WRITING DIRECTORS 108, 123 (2006). Beginning in the 1950s, Stephen Toulmin and Chaim Perelman asserted that truth is relative. *Id.*; *see, e.g.*, STEPHEN E. TOULMIN, USES OF ARGUMENT (2003); CHAIM PERELMAN, THE REALM OF

persuasion and argument has a noble and classical tradition, but the discipline has had difficulty shaking off a common but enduring slur that is traced to ancient sources: Socrates and Plato described the early study and practice of rhetoric by the ancient Greek Sophists as the art of flattery and trickery, and the slur has stuck throughout the ages.[22] However, this slur is not the subject of this Article. Rhetoric, the academic discipline, is not the study of hollow speech, nor is it puffery designed to prop up specious assertions, nor hyperbole employed to distract an audience from the truths or falsities of the speakers' position.[23] In short, it is nothing like the meaning of the commonplace phrase, "*mere* rhetoric."[24] This Article does not examine law and economics as a scheme of flattery and trickery but rather as a discipline with a well-developed system of argumentation and persuasion that offers lessons for legal discourse beyond the

RHETORIC (William Kluback trans., 1982) [hereinafter PERELMAN, REALM OF RHETORIC]; PERELMAN & OBRECHTS-TYTECA, *supra* note 9. Toulmin argued that people in everyday life do not use Aristotelian logic to establish conclusive proof, but rather use "informal logic" to reason and to acquire knowledge. TOULMIN, INTRODUCTION TO REASONING, *supra* note 9, at 94-134. The knowledge acquired and the arguments made are only probable, not absolute. *Id.* Like Toulmin, Perelman argued that appeals to reason lead only to probable truths: "the appeal to reason must be identified not as an appeal to a single truth but instead as an appeal for the adherence of an audience . . . ." CHAIM PERELMAN, THE NEW RHETORIC: A THEORY OF PRACTICAL REASONING, GREAT IDEAS TODAY 234-52 (1970), *reprinted in* JAMES L. GOLDEN ET AL., THE RHETORIC OF WESTERN THOUGHT 234-52 (6th ed. 1997). From these beginnings, three contemporary theories of rhetoric arose to focus on the construction of meaning, the creation of arguments, and the processes that allow the creation of meaning and argumentation. *See* Linda Levine & Kurt M. Saunders, *Thinking Like a Rhetor*, 43 J. LEGAL EDUC. 108, 118-21 (1993). These contemporary theories are: Modern Argument Theory, Writing as a Process Theory, and the Theory of Discourse Communities. *See* Smith, *Rhetoric Theory*, *supra* note 9, at 139.

22. Socrates apparently did not devote his time to the publication of works, so we rely on Plato whose writings purport to represent Socrates' criticisms of rhetoric in such famous dialogues as PLATO, PHAEDRUS, *available at* http://www.classicallibrary.org/plato/ dialogues/7_phaedrus.htm, PLATO, GORGIAS, *available at* http://www.classicallibrary.org/plato/dialogues/15_gorgias.htm, and PLATO, PHAEDO, *available at* http://www.classicallibrary.org/plato/ dialogues/14_phaedo.htm.

23. *See, e.g.*, KARLYN KOHRS CAMPBELL, THE RHETORICAL ACT 3-4 (1982); Wayne C. Booth, *The Rhetorical Stance*, *in Toward a New Rhetoric,* 14 C. COMPOSITION & COMM. 139, 139 (1963) [hereinafter Booth, *The Rhetorical Stance*]; Wayne C. Booth, 1987 Ryerson Lecture: The Idea of a *Uni*versity as Seen by a Rhetorician (1987), *available at* http://home.uchicago.edu/~ahkissel/booth/booth.htm).

24. *See* BOOTH, THE RHETORIC OF RHETORIC, *supra* note 15, at vii, x, 6-7; Booth, *The Rhetorical Stance*, *supra* note 23, at 139; Eileen A. Scallen, *Evidence Law as Pragmatic Legal Rhetoric: Reconnecting Legal Scholarship, Teaching and Ethics*, 21 QUINNIPIAC. L. REV. 813, 817, 829 (2003).

realm of economic analysis of law.

B. A BRIEF HISTORY OF THE RHETORIC OF LAW AND ECONOMICS

The discipline of economics is rhetorical,[25] as is the discipline of law and economics.[26] Adam Smith, the honorary father of economics, apparently understood the rhetorical imperatives of economics and the law when, in his *Lectures on Jurisprudence*—concerning principle in the human mind and the division of labor—he commented on the topic of exchanges and self-interest:

> The offering of a shilling, which to us appears to have so plain and simple a meaning, is in reality offering an argument to persuade one to do so and so for it is in his interest . . . . Men always endevour [sic] to persuade others to be of their opinion even when the matter is of no consequence to them . . . . And in this manner every one is practicing oratory on others thro [sic] the whole of his life.[27]

Robert L. Heilbroner interprets Smith to mean that "the basis for economic relationships lies not in a disinterested calculation of advantages, but in the 'faculties of reason and speech' that underlie the capacity for persuasion."[28]

Oliver Wendell Holmes, who is quoted in Cooter and Ulen's seminal text on law and economics,[29] explained that:

> For the rational study of the law the black-letter man may be the man of the present, but the man of the

25. *See* DEIRDRE N. MCCLOSKEY, THE RHETORIC OF ECONOMICS xix-xx, 5 (2d ed. 1998) [MCCLOSKEY, RHETORIC OF ECONOMICS]; *see generally* Arjo Klamer & Donald N. McCloskey, *Economics in the Human Conversation*, *in* ARJO KLAMER, DONALD N. MCCLOSKEY & ROBERT M. SOLOW, THE CONSEQUENCES OF ECONOMIC RHETORIC 3-4, 11 (1988); DONALD N. MCCLOSKEY & DEIRDRE N. MCCLOSKEY, KNOWLEDGE AND PERSUASION IN ECONOMICS 38-52 (1994). Note that the author, Donald N. McCloskey, became Deirdre N. McCloskey; the two names refer to the same author, but in my citations I will use the name or names used at the time of publication of the works cited herein.

26. McCloskey, *Rhetoric of Law and Economics*, *supra* note 5, at 760.

27. Robert L. Heilbroner, *Rhetoric and Idealogy*, *in* ARJO KLAMER, DONALD N. MCCLOSKEY & ROBERT M. SOLOW, THE CONSEQUENCES OF ECONOMIC RHETORIC 38 (1988) [hereinafter Heilbroner, *Rhetoric and Idealogy*] (quoting Adam Smith, *Lectures on Jurisprudence*, (1762)).

28. Heilbroner, *Rhetoric and Idealogy*, *supra* note 27, at 38.

29. COOTER & ULEN, *supra* note 3.

> future is the man of statistics and master of economics . . . . We learn that for everything we have to give up something else, and we are taught to set the advantage we gain against the other advantage we lose, and to know what we are doing when we elect.[30]

Judge Richard Posner summarizes the foundational rhetoric of law and economics as follows:

> [T]he most interesting aspect of the law and economics movement has been its aspiration to place the study of law on a scientific basis, with coherent theory, precise hypotheses deduced from the theory, and empirical tests of the hypotheses. Law is . . . amenable to scientific study. Economics is the most advanced of the social sciences, and the legal system contains many parallels to and overlaps with the systems that economists have studied successfully.[31]

> [The economic] approach enables the law to be seen, grasped, and studied as a system—a system that economic analysis can illuminate, reveal as coherent, and in places improve. By the same token, the approach enables economics to be seen as a tool for understanding and reforming social practices, rather than merely as a formal system of daunting mathematical complexity.[32]

These excerpts confirm the rhetorical nature of law and economics and point to the nature of the persuasion inherent in this rhetoric.

C. THE NATURE OF THE RHETORIC OF LAW AND ECONOMICS

Law and economics' persuasion is built from the application of scientific analyses, especially mathematics and the quantitative analysis of empirical data, to cure social problems.[33]

30. COOTER & ULEN, *supra* note 3, at 1 (quoting Oliver Wendell Holmes, *The Path of the Law*, 10 HARV. L. REV. 457, 469, 474 (1897)).

31. *Id.* at 1 (quoting Richard A. Posner, *Foreword* to MICHAEL FAURE & ROGER VAN DEN BERGH, ESSAYS IN LAW AND ECONOMICS 5, 5 (1989)) [hereinafter Posner, *Foreword*].

32. POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at xxi.

33. Heilbroner states:

> Economics prides itself on its sciencelike character, and economists on

The discipline of law attempts to deal with such problems; the legal issues and social conditions that are imposed and perpetuated by the state of the law may be subjected to economic analyses "with coherent theory, precise hypotheses deduced from the theory, and empirical tests of the hypotheses."[34]

Economics provides scientific theories to predict the effects of legal rules on behavior. These behavioral theories surpass mere intuition, logic, and common sense concerning human behavior; they seek to predict how people will respond to laws when laws are viewed as systems of incentives.[35] Legal economists assert that economics is a persuasive rhetorical lens with which to view the law because it has mathematically precise theories, such as price theory and game theory. Economists also declare that economics has empirically sound methods of analyzing the effects of legal rules and sanctions, such as statistics and econometrics, when legal rules and sanctions are viewed as incentives, prices, or costs influencing presumptively rational human behavior. Economics thereby achieves desirable and efficient results for individuals and for society.[36]

III. THE RHETORICAL CANONS OF LAW AND ECONOMICS

A. THE FOUR CANONS

If law and economics is inherently rhetorical, What is the rhetorical nature of this discipline when it analyzes and forms recommendations and prescriptions concerning laws and regulations affecting the economy and the banking and financial system? To examine this question, it is helpful to recall that economics combines mathematically precise theories and

> their ability to speak like scientists, without color, passion, or values, preferably in the language of mathematics . . . . [M]ost [economics] articles are "written" in matrix algebra, complex econometrics, formal lemmas, and four-quadrant diagrammatics. They would be incomprehensible to anyone not trained in the vocabulary and techniques of advanced economics . . . . [T]he language of formalism and mathematics is still a language, and therefore inescapably "rhetorical."

Heilbroner, *Rhetoric and Idealogy*, *supra* note 27, at 38-39. *See also* Herbert M. Kritzer, *The Arts of Persuasion in Science and Law: Conflicting Norms in the Courtroom*, 72 LAW & CONTEMP. PROBS. 41-43, 59 (2009).

34. Posner, *Foreword*, *supra* note 31, at 5.

35. *See* COOTER & ULEN, *supra* note 3, at 3-4.

36. *See id.* at 3-5. *See also* JEFFREY L. HARRISON, LAW AND ECONOMICS 2 (4th ed. 2007); Kritzer, *supra* note 33, at 42-43, 59.

empirically sound methods of analyzing the effects of incentives and costs on presumptively rational human behavior for the purpose of achieving efficient results for individuals and for society.[37] Thus, the four canons of law and economics rhetoric are:[38]

> (1) Mathematics and Science, which are used as the primary method of analysis and demonstration;[39]
>
> (2) Incentives and Costs as a language used to characterize law and the legal system;[40]
>
> (3) Efficiency, a rhetorical economic concept;[41] and
>
> (4) The Contemporary Theory of Rational Choice, as corrected by modern behavioral social sciences, cognitive studies, and brain science.[42]

Each of these four canons of law and economics are used both as topics of invention and arrangement, and as tropes of style in persuasive discourse. The canons represent the fundamental assumptions from which propositions regarding law and economics will be measured as persuasive in both conception and design, and according to which theses concerning law and economics will be accepted as reliable and authoritative by the

37. *See* COOTER & ULEN, *supra* note 3, at 3-5. The rhetorician James Boyd White channeled the rhetoric of law and economics when he characterized the legal system in the following way: "The overriding metaphor is that of the machine; the overriding value is that of efficiency, conceived of as the attainment of certain ends with the smallest possible costs." Levine & Saunders, *Thinking Like a Rhetor*, *supra* note 21, at 113-14 (quoting James Boyd White, *Rhetoric and Law: The Arts of Cultural and Communal Life*, *in* THE RHETORIC OF THE HUMAN SCIENCES: LANGUAGE AND ARGUMENT IN SCHOLARSHIP AND PUBLIC AFFAIRS 298, 300 (John S. Nelson et al. eds., 1987)).

38. The sources I have consulted to derive these four canons are many and varied, but for general reference, see COOTER & ULEN, *supra* note 3, at 2-5, 41-43; POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at 3-4, 9, 13, 21, 24-25, 495-96; Grant M. Hayden & Stephen E. Ellis, *Law and Economics after Behavioral Economics*, 55 U. KAN. L. REV. 629 (2007).

39. See discussion *infra* Part III.B.1.

40. See discussion *infra* Part III.B.2.

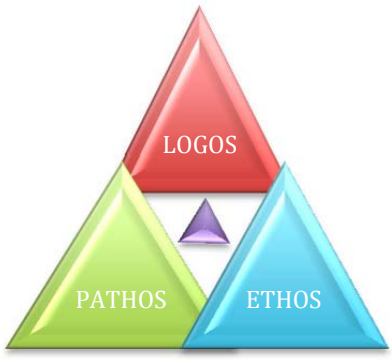
41. See discussion *infra* Part III.B.3.

42. See discussion *infra* Part III.B.4. Rational choice theory in simple terms is the economic theory that humans will act rationally when confronted with choices, and to act rationally means that the humans will act in furtherance of their self-interest. Part III.B.4 discusses the recent developments of this theory in behavioral social sciences, cognitive studies, and brain science.

members of the law and economics discourse community.[43] Because the canons determine whether propositions and theses are persuasive and reliable, they can be aptly described as the *rhetorical* canons of law and economics.

B. THE INTERACTION OF THE FOUR RHETORICAL CANONS

Canons of rhetoric are customarily depicted as interacting together in a persuasive exercise, simultaneously affecting the persuasiveness of the discourse within a discipline. Each canon affects the operation of the other canons, making them more or less persuasive. In classical rhetoric, the three canons of invention (aspects of persuasion that must be devised or "invented" by the author or speaker), known as *logos*, *ethos*, and *pathos*,[44] are often depicted as a rhetorical triangle to suggest the interaction of the factors and the combined impact on the recipient of the discourse. For example:



43. "Discourse community" is a term that grounds this discussion in the rhetoric of law and economics. *See, e.g.,* Lawrence Lessig, *Understanding Changed Readings: Fidelity and Theory*, 47 STAN. L. REV. 395, 419-38 (1995) (discussing the economics representing a change in discourse); Gary Minda, *The Jurisprudential Movements of the 1980s*, 50 OHIO ST. L.J. 599, 611 n.53 (1989) (describing the discourse of law and economics).

44. *See* CORBETT & CONNORS, *supra* note 12, at 71-84; GEORGE A. KENNEDY, CLASSICAL RHETORIC AND ITS CHRISTIAN AND SECULAR TRADITION FROM ANCIENT TO MODERN TIMES 68, 75, 82, 89 (1999) [hereinafter KENNEDY, CLASSICAL RHETORIC]; Covino & Joliffe, *supra* note 18, at 20, 52; Frost, *Lost Heritage*, *supra* note 20, at 617-18; Michael Frost, *Greco-Roman Legal Analysis: The Topics of Invention*, 66 ST. JOHN'S L. REV. 107, 127 (1992); Robin Smith, *Aristotle's Logic*, *in* THE STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Edward N. Zalta ed., 2004), *available at* http://plato.stanford.edu/archives/ sum2002/entries/aristotle-logic/.

With regard to the classical modes of invention, Jakob Wisse presents the concept as a linear flow-chart:[45]

James Kinneavy identifies these terms as Encoder – Signal – Decoder, linking each canon of invention to reality, including the author, the language or message, and the reader or audience.[46] The author projects his ethos along with, or optimally as part of, the logos of the message so as to influence the pathos of the audience.[47]

The rhetorical pathways are fundamentally pragmatic.[48] Aristotle sought to remind advocates that an argument is not one-dimensional. The most logically constructed argument will not persuade an audience if the audience questions the knowledge, skill, or credibility of the author. Similarly, the most respected author whose reputation is beyond question will not win the day if her argument is riddled with logical fallacies and comes apart at the seams with a single tug at one of its logical flaws. An ironclad argument may be delivered in such a way as to antagonize the audience, or the effect of the argument may be squandered if the audience begins to question the integrity and credibility of the author.[49]

Similarly, when employed properly, the four rhetorical canons of law and economics interact simultaneously to persuade an audience. Proper economic discourse incorporates each canon for the persuasion of the audience. There is a connection and

45. JAKOB WISSE, ETHOS AND PATHOS FROM ARISTOTLE TO CICERO 8 (1989).

46. *See* JAMES L. KINNEAVY, A THEORY OF DISCOURSE: THE AIMS OF DISCOURSE 19 (1971); Linda L. Berger, *A Reflective Rhetorical Model: The Legal Writing Teacher as Reader and Writer*, 6 J. LEGAL WRITING INST. 57, 67 (2000); Phelps, *supra* note 10, at 1091.

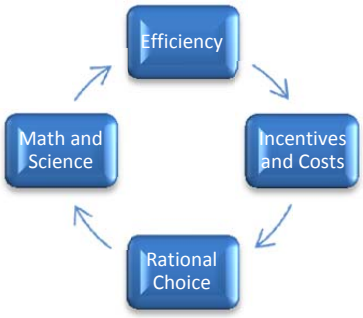
47. WISSE, *supra* note 45, at 7-8.

48. *See* Frost, *Lost Heritage*, *supra* note 20, at 614, 624-25, 627; Eileen A. Scallen, *Classical Rhetoric, Practical Reasoning, and the Law of Evidence*, 44 AM. U. L. REV. 1717, 1728-29 (1995).

49. *See generally* CORBETT & CONNORS, *supra* note 12, at 72-73; Michael Frost, *Ethos, Pathos & Legal Audience*, 99 DICK. L. REV. 85 (1994).

interaction in the discourse of each canon to the others that influences the persuasion of the audience—one cannot alter or abandon the canons of efficiency, mathematical and scientific certainty, response to incentives, and even rational choice without affecting the persuasiveness and effectiveness of the economic discourse. An incorrect, overstated, or deceptive message regarding one canon puts the others at risk of suspicion or rejection by the audience. As with classical rhetorical modes of invention, the interaction of the canons of law and economics may be depicted visually, although with four canons it shall be a rhetorical diamond, not a triangle:

DISCOURSE DIAMOND OF THE RHETORICAL CANONS OF LAW AND ECONOMICS

<table>
<tr><td>Invention, Arrangement, & Style</td><td>Speaker</td><td>Invention, Arrangement, & Style</td></tr>
<tr><td>Situation</td><td> 
</td><td>Message</td></tr>
<tr><td>Invention, Arrangement, & Style</td><td>Audience</td><td>Invention, Arrangement, & Style</td></tr>
</table>

In modern argument theory, the author of the discourse (Speaker) codes the discourse (Message) for a particular receiver

(Audience) according to the conditions, requirements, and limitations of the context of the discourse (Situation). In law and economics rhetorical discourse, the Speaker's purpose is most closely aligned with the canon of Efficiency. The Message is meant to achieve an efficient purpose; it is coded in the language of Incentives and Costs and framed for the needs of the Audience according to the Rational Choice Theory. The means used are chosen in reference to the rhetorical Situation with a distinct preference for the methods of Mathematics and Science. Therefore, the interactive pattern of the rhetorical canons of law and economics is designed to depict the flow of the discourse wherein each of the four canons feeds into and simultaneously draws from the others in alignment with modern argument theory. This Article will next discuss each of the four canons in turn.

1. MATHEMATICS AND SCIENCE: PRIMARY METHODS OF ANALYSIS AND DEMONSTRATION

Practitioners of law and economics who follow the conventional and contemporary approaches rely on the inherent persuasiveness of mathematics and the methodologies of scientific proof both as methods of analysis and as vehicles for the demonstration[50] of that analysis.[51] Members of the economic disciplines hold themselves out as scientists, applying logical, scientific deduction and induction to "prove" propositions.[52] Two

50. Demonstration and dialectic are the two principle forms of reasoning recognized by Aristotle. *See* ARISTOTLE, THE RHETORIC, *supra* note 19, at 1354a; KENNEDY, CLASSICAL RHETORIC, *supra* note 44, at 80. *See also* P. CHRISTOPHER SMITH, THE HERMENEUTICS OF ORIGINAL ARGUMENT: DEMONSTRATION, DIALECTIC, RHETORIC (1998). Rhetoric is the form of demonstration used in argumentative persuasion or "continuous discourse," whereas dialectic is more appropriate to debate. *Id.* Demonstration provides the rhetorical process of arrangement with two paradigms of deductive reasoning, *sullogismos* (syllogisms) and *enthumema* (enthymemes), CORBETT & CONNORS, *supra* note 12, at 38-60; KENNEDY, CLASSICAL RHETORIC, *supra* note 44, at 80-84; Christof Rapp, *Aristotle's Rhetoric*, *in* THE STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Edward N. Zalta ed., 2002), *available at* http://plato.stanford.edu/archives/sum2002/entries/ aristotle-rhetoric/, and two paradigms of inductive reasoning, the induction and the example. *See* ARISTOTLE, THE RHETORIC, *supra* note 19, at 1356b; Brett G. Scharffs, *The Character of Legal Reasoning*, 61 WASH. & LEE L. REV. 733, 752 n.58 (2004); Robert H. Schmidt, *The Influence of the Legal Paradigm on the Development of Logic*, 40 S. TEX. L. REV. 367, 372-73 (1999).

51. *See* COOTER & ULEN, *supra* note 3, at 3-4; Robert L. Heilbroner, *Rhetoric and Idealogy*, *supra* note 27, at 38-39; Kritzer, *supra* note 33, at 42-43, 59.

52. GEORGE PÓLYA, INDUCTION AND ANALOGY IN MATHEMATICS: VOLUME I OF

deductive forms, syllogism and enthymeme, and two inductive forms, induction and example, are topoi of invention and arrangement in science, mathematics, and rhetorical demonstration.[53] Contemporary law and economics assumes and advocates the rhetorical primacy of scientific and mathematical methods of analysis in forming hypotheses, designing the methods for testing those hypotheses, and analyzing the data, statistics, and information collected for testing.[54] Law and economics also assumes the rhetorical primacy of scientific and mathematical forms in discourse to demonstrate the discipline's analyses, and to communicate its theses about human behavior.[55]

In contemporary law and economics, predictions and prescriptions are informed by scientific testing and mathematical

MATHEMATICS AND PLAUSIBLE REASONING v-vi (1954); McCloskey, *Rhetoric of Law and Economics*, *supra* note 5, at 752, 760. The pros and cons of this rhetorical imperative are a lively topic of debate, and one that is growing in the wake of the economic meltdown of 2009–2010. *E.g.,* Samuel Gregg, *Smith versus Keynes: Economics and Political Economy in the Post-Crisis Era*, 33 HARV. J.L. & PUB. POL'Y 443, 445, 451-52, 455-56 (2010).

53. The structural form of pure logic and scientific or mathematical proof is the syllogism, while the structural form of rhetorical demonstration and legal argument is the enthymeme. *See* ARISTOTLE, THE RHETORIC, *supra* note 19, at 1355a. The deductive structure of the syllogism and enthymeme provides the framework for each of the organizational paradigms of legal discourse, including IRAC, IREAC, and TREAT. LINDA H. EDWARDS, LEGAL WRITING: PROCESS, ANALYSIS, AND ORGANIZATION, chs. 10, 11, 19, 20 (5th ed. 2010) (discussing IREAC and variations for objective and persuasive discourse); MICHAEL D. MURRAY & CHRISTY HALLAM DESANCTIS, LEGAL WRITING AND ANALYSIS, chs. 2, 6, 7 (2009) (discussing IRAC and TREAT); James M. Boland, *Legal Writing Programs and Professionalism: Legal Writing Professors Can Join the Academic Club*, 18 ST. THOMAS L. REV. 711, 719-23 (2006) (discussing IRAC and IREAC); Kristen K. Robbins, *Paradigm Lost: Recapturing Classical Rhetoric to Validate Legal Reasoning*, 27 VT. L. REV. 483, 484-87, 492 (2003) (discussing IRAC and IREAC).

54. *See* POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at 15-16 (examples of taking scientific and mathematical approach to social problems); Posner, *Foreword*, *supra* note 31, at 5 (discussing priority of mathematical and scientific forms of analyses in economic analyses of legal problems); Richard A. Posner, *Volume One of The Journal of Legal Studies—An Afterword*, 1 J. LEGAL STUD. 437, 437-38 (1972) [hereinafter Posner, *Afterword*] (same). *See also* Thomas Earl Geu, *Chaos, Complexity, and Coevolution: The Web of Law, Management Theory, and Law Related Services at the Millennium*, 66 TENN. L. REV. 137, 190 n.493 (1998) (discussing the concept of law as a scientific discipline and the application of scientific and mathematical forms of analysis to legal problems); Minda, *supra* note 43, at 613-14 (discussing law and economics' use of scientific and mathematical methods of analysis in law).

55. *See* Bryant G. Garth, *Strategic Research in Law and Society*, 18 FLA. ST. U. L. REV. 57, 59 (1990); Morton J. Horwitz, *Law and Economics: Science or Politics?*, 8 HOFSTRA L. REV. 905, 912 (1980).

analysis of data, not only by logic, intuition, common sense, ideology, or philosophy.[56] The rhetoric of contemporary law and economics and law and behavioral science supports assumptions and methods of examination that can be scientifically proved through the application of mathematics and science, which are used to analyze empirical data to confirm or rebut hypotheses and assumptions about human behavior in the context of the law.[57] It is important to note, however, that the propositions that practitioners chose to "prove," as well as the designs of the experiments and studies that they deem adequate and reliable to "prove" the propositions, rely on rhetoric—the rhetoric that selects those theories that the discipline holds to be reasonable, reliable, and provable using scientific, mathematical, or quantitative methodology.[58]

Mathematics is a language, and, like any other language, is rhetorical in nature.[59] Mathematics is a valuable analytical tool, but the elevation of mathematical forms and models as the

56. *E.g.*, COOTER & ULEN, *supra* note 3, at 3-5.

57. *See, e.g.*, HOWELL E. JACKSON, LOUIS KAPLOW ET AL., ANALYTICAL METHODS FOR LAWYERS 372, 375-77 (2003).

58. *Compare* Mark R. Brown & Andrew C. Greenberg, *On Formally Undecidable Propositions of Law: Legal Indeterminacy and the Implications of Metamathematics*, 43 HASTINGS L.J. 1439 (1992) (critiquing ability of formal mathematics to "solve" legal issues), Anthony T. Kronman, *Rhetoric*, 67 U. CIN. L. REV. 677, 678-79, 682 (1999) (discussing that mathematics is suited to immutable, infinite proofs, not to variable human conditions), *and* John M. Rogers & Robert E. Molzon, *Some Lessons about the Law from Self-Referential Problems in Mathematics*, 90 MICH. L. REV. 992 (1992) (drawing analogy between lessons from incompleteness of axiomatic systems of mathematical logic and incompleteness of legal systems), *with* David R. Dow, *Godel and Langdell - A Reply to Brown and Greenberg's Use of Mathematics in Legal Theory*, 44 HASTINGS L.J. 707 (1993) (critiquing the analogy that law is comparable to science or mathematics, and arguing that is it much more like religion), *and* Kevin W. Saunders, *Realism, Ratiocination, and Rules*, 46 OKLA. L. REV. 219 (1993) (critiquing the attempt to apply theories regarding the indeterminacy of mathematics to law in order to show that law must also be indeterminate), *and* Mike Townsend, *Implications of Foundational Crises in Mathematics: A Case Study in Interdisciplinary Legal Research*, 71 WASH. L. REV. 51, 54, 61-63, 121-24 (1996) [hereinafter Townsend, *Implications of Foundational Crises*] (critiquing the analogy that law is comparable to science or mathematics, and arguing that there is more to gain from examining law as a discipline—a science, an art, and a technology).

59. *See* David N. Haynes, *The Language and Logic of Law: A Case Study*, 35 U. MIAMI L. REV. 183, 188-89, 220 (1981); Townsend, *Implications of Foundational Crises*, *supra* note 58, at 62-63, 141; Mike Townsend & Thomas Richardson, *Probability and Statistics in the Legal Curriculum: A Case Study in Disciplinary Aspects of Interdisciplinarity*, 40 DUQ. L. REV. 447, 483–84 (2002); Joan C. Williams, *Critical Legal Studies: The Death of Transcendence and the Rise of the New Langdells*, 62 N.Y.U. L. REV. 429, 439 (1987).

primary method of demonstration in economic rhetoric comes with a warning for the application of this trope in general legal discourse: it is not realistic to assume that every legal issue and social condition can be subjected to mathematical analysis.[60] Albert Einstein once said, "As far as the laws of mathematics refer to reality, they are not certain; and as far as they are certain, they do not refer to reality."[61]

The very word, *proof,* as in what the economist or behavioral scientist has "proved," is inherently rhetorical in nature,[62] and it is a powerfully persuasive word. An assertion that something is "proved" or even "can be proved" is a rhetorical assertion because, even in mathematics, there are some assertions and propositions that cannot be proved within a known mathematical system.[63] The differences in opinions as to which assumptions and predictions in economics are reasonable, reliable, and "provable" using a scientific, mathematical, or quantitative methodology have led to internal divisions within the law and economics community, and to the creation of the law and behavioral science discipline.[64]

The rhetorical use of mathematical forms as a trope of arrangement and style in demonstrative discourse in the discipline of law and economics is the most intriguing aspect of the first rhetorical canon, and the most delicate topic from which

60. *See generally* Eric R. Claeys, *Jefferson Meets Coase: Land-Use Torts, Law and Economics, and Natural Property Rights*, 85 NOTRE DAME L. REV. 1379, 1383-84 (2010); Michael S. Moore, *The Interpretive Turn in Modern Theory: A Turn for the Worse?*, 41 STAN. L. REV. 871, 881, 888-90 (1989); Laurence H. Tribe, *Trial by Mathematics: Precision and Ritual in the Legal Process*, 84 HARV. L. REV. 1329, 1331-32 (1971).

61. FRITJOF CAPRA, THE TAO OF PHYSICS: AN EXPLORATION OF THE PARRALLELS BETWEEN MODERN PHYSICS AND EASTERN MYSTICISM 41 (1975) (quoting Albert Einstein).

62. McCloskey, *Rhetoric of Law and Economics*, *supra* note 5, at 752, 760.

63. *See* Anthony D'Amato, *Can Legislatures Constrain Judicial Interpretation of Statutes?*, 75 VA. L. REV. 561, 597 (1989); Steven P. Goldberg, *On Legal and Mathematical Reasoning*, 22 JURIMETRICS 83, 87 n.26 (1981); Susan K. Houser, *Metaethics and the Overlapping Consensus*, 54 OHIO ST. L.J. 1139, 1152 (1993); Nancy Levit, *Ethereal Torts*, 61 GEO. WASH. L. REV. 136, 136 n.3 (1992) (collecting sources to draw parallels between mathematical incompleteness theorem and the inherent uncertainty in social policy, the sciences, and literature); Rudolph J. Peritz, *Computer Data and Reliability: A Call for Authentication of Business Records Under the Federal Rules of Evidence*, 80 NW. U. L. REV. 956, 999 n.214 (1986); Roy Stone, *Affinities and Antinomies in Jurisprudence*, 1964 CAMBRIDGE L.J. 266, 281.

64. *See* discussion *infra* Part III.B.4.

to draw prescriptions for legal discourse. The appearance of mathematical certainty in law and economics rhetoric is an attractive tool, but it may be too seductive—in the sense of it being confusing, misleading, or unjustifiably convincing—when used in discourse intended for non-economist legal audiences. Critics have challenged legal economists for adopting complex mathematical formulae to demonstrate findings that carry only specious relevance to actual legal problems and social conditions.[65] Nevertheless, the practitioners of neoclassical law and economics have claimed their greatest successes through the a priori, ex ante, positivist application of mathematical formulas to legal topics and problems.[66] Unfortunately, this has come at a cost—namely, a string of mathematically verifiable prescriptions that brought about policies that contributed to the severity of the Great Recession.

As explained above, the purpose of this Article is not to critique the benefits or costs of the use of the four canons of law and economics in the economic analysis of law. Rather, the purpose is to explore the application of these rhetorical canons in legal discourse generally. On the one hand, mathematics is a language, and thus rhetorical, and its particular form of persuasion is an appeal to certainty by the open demonstration of the truth and logic of its workings.[67] On the other hand, mathematical forms of demonstration may be employed to attempt to overcome "the difference between truth in mathematics and truth in law—between logical truths . . . and rhetorical or dialectical or polemical truths"[68]—by cloaking the

65. *E.g.*, MCCLOSKEY, THE RHETORIC OF ECONOMICS, *supra* note 25, at 44-45; Heilbroner, *Rhetoric and Idealogy*, *supra* note 27, at 38; Marjorie E. Kornhauser, *The Rhetoric of the Anti-Progressive Income Tax Movement: A Typical Male Reaction*, 86 MICH. L. REV. 465, 485-90 (1987).

66. POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at xix (championing the unity, simplicity, and power, but also the subtlety, of economic principles); James R. Hackney, Jr., *Law and Neoclassical Economics: Science, Politics, and the Reconfiguration of American Tort Law Theory*, 15 LAW & HIST. REV. 275, 287-88 (1997); Herbert Hovenkamp, *The Limits of Preference-Based Legal Policy*, 89 NW. U. L. REV. 4, 5 (1994) ("Assumptions about preference have enabled neoclassical economics and public choice theory to describe both private and public markets by means of mathematical models that have great elegance and rhetorical power."); Richard Posner, *The Sociology of the Sociology of Law: A View from Economics*, 2 EUR. J.L. & ECON. 265, 274 (1995).

67. *See* McCloskey, *Rhetoric of Law and Economics*, *supra* note 5, at 761, 763; Kronman, *supra* note 58, at 679; Schmidt, *supra* note 50, at 395-96.

68. *See* Peter Westen, *The Meaning of Equality in Law, Science, Math, and*

legal discourse in the rhetorical garb of mathematics[69] and science,[70] making the findings appear to be more certain and absolute than they truly are. It seems highly likely that government policy was shifted because of the perceived certainty

Morals: A Reply, 81 MICH. L. REV. 604 (1983) (citing two of the most influential modern rhetoricians, Kenneth Burke, *Politics as Rhetoric*, 93 ETHICS 45, 46-47 (1982); and CHAIM PERELMAN, JUSTICE, LAW, AND ARGUMENT: ESSAYS ON MORAL AND LEGAL REASONING 120-74 (1980); CHAIM PERELMAN, THE NEW RHETORIC AND THE HUMANITIES 1-61, 117-33 (1979)). The difference between formal logic and the absolute proof of the syllogism, and informal logic used in everyday discourse to assert the most probable arguments in everyday situations, is one of the primary impetuses that motivated the move to contemporary schools of rhetoric building on the work of Burke and Perelman. *See also* BURKE, A GRAMMAR OF MOTIVES, *supra* note 21; BURKE, A RHETORIC OF MOTIVES, *supra* note 21; PERELMAN, REALM OF RHETORIC, *supra* note 21; PERELMAN & OBRECHTS-TYTECA, THE NEW RHETORIC, *supra* note 9. Pigou, one of the forefathers of neoclassical law and economics, pointed out the distinction between formal logic and pure mathematics on the one side and the "realistic sciences" on the other; in this classification, economics was a "realistic science." A. C. PIGOU, THE ECONOMICS OF WELFARE 5 (4th ed. 1962) ("On the one side are the sciences of formal logic and pure mathematics, whose function it is to discover implications. On the other side are the realistic sciences, such as physics, chemistry and biology, which are concerned with actualities.").

69. *E.g.*, JAMES R. HACKNEY, JR., UNDER COVER OF SCIENCE: AMERICAN LEGAL-ECONOMIC THEORY AND THE QUEST FOR OBJECTIVITY (2007); McCloskey, *Rhetoric of Law and Economics*, *supra* note 5, at 752-54; Joseph Vining, *The Gift of Language*, 73 NOTRE DAME L. REV. 1581, 1583-84 (1998). *See also* Dan Ariely, George Loewenstein & Drazan Prelec, *"Coherent Arbitrariness": Stable Demand Curves Without Stable Preferences*, 118 Q. J. ECON. 73-106 (2003) (demonstrating how the illusion of stable, ordered preferences can be created with arbitrary anchors); Gary S. Becker, *Irrational Behavior and Economic Theory*, 70 J. POL. ECON. 1, 4 (1962).

70. MCCLOSKEY, THE RHETORIC OF ECONOMICS, *supra* note 25, at 147; Horwitz, *supra* note 55, at 912; Arthur Leff, *Economic Analysis of Law: Some Realism About Nominalism*, 60 VA. L. REV. 451, 469-81 (1974). The excessively persuasive effect of scientific demonstration is also a problem in non-economic legal settings, such as evidence law. *See, e.g.*, CHRISTOPHER B. MUELLER & LAIRD C. KIRKPATRICK, MODERN EVIDENCE: DOCTRINE AND PRACTICE § 7.8, at 992 (1995) ("Scientific proof may suggest unwarranted certainty to lay factfinders, especially if it comes dressed up in technical jargon, complicated mathematical or statistical analysis, or involves a magic machine ('black box') that may seem to promise more than it delivers"); John William Strong, *Language and Logic in Expert Testimony: Limiting Expert Testimony by Restrictions of Function, Reliability, and Form*, 71 OR. L. REV. 349, 367 n.81 (1992) ("There is virtual unanimity among courts and commentators that evidence perceived by jurors to be 'scientific' in nature will have particularly persuasive effect."). *See also* United States v. Addison, 498 F.2d 741, 744 (D.C. Cir. 1974) (scientific evidence "assume[s] a posture of mystic infallibility in the eyes of a jury of laymen"); United States v. Amaral, 488 F.2d 1148, 1152 (9th Cir. 1973) (describing scientific testimony's "aura of special reliability and trustworthiness"). *But see* Michael S. Jacobs, *Testing the Assumptions Underlying the Debate About Scientific Evidence: A Closer Look at Juror "Incompetence" and Scientific "Objectivity,"* 25 CONN. L. REV. 1083 (1993) (jurors are able to evaluate competing scientific and technical testimony).

of the formulas that supported law and economics' prescriptions regarding unregulated markets and government non-interference in financial systems. This possibility sends a significant message of caution for the ethos-minded use of mathematical and scientific forms in general legal discourse.

2. INCENTIVES AND COSTS: A LANGUAGE USED TO CHARACTERIZE LAW AND THE LEGAL SYSTEM

The rhetoric of traditional and contemporary law and economics begins with a seminal insight of economics: that people respond to incentives[71] and that legal rules and the legal system can create incentives that will influence human behavior in one direction and can create disincentives that will influence human behavior in the other direction.[72] The law can "encourage socially desirable conduct and discourage undesirable conduct" by rewarding or subsidizing certain behavior and punishing or taxing other behavior.[73] Legal rules and the legal system can increase the costs of certain behavior and lessen the costs of other behavior.[74]

The premise that people respond to incentives is rhetorical;[75] it is both an assumption and a presumption that shapes the predictions that analysts using the methodology of law and economics can make about the effects of law, as well as the

71. Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1054; Yuval Feldman & Doron Teichman, *Are All Legal Probabilities Created Equal?*, 84 N.Y.U. L. REV. 980, 987 (2009).

72. *See* Paul J. Heald & James E. Heald, *Mindlessness and Law*, 77 VA. L. REV. 1127, 1132 (1991); Owen D. Jones & Timothy H. Goldsmith, *Law and Behavioral Biology*, 105 COLUM. L. REV. 405, 412-14 (2005); Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1054.

73. Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1054. *See* Eric A. Posner, *The Regulation of Groups: The Influence of Legal and Nonlegal Sanctions on Collective Action*, 63 U. CHI. L. REV. 133, 164-65 (1996); Lior Jacob Strahilevitz, *Reputation Nation: Law in an Era of Ubiquitous Personal Information*, 102 NW. U. L. REV. 1667, 1711 (2008); Eric M. Zolt, *Deterrence Via Taxation: A Critical Analysis of Tax Penalty Provisions*, 37 UCLA L. REV. 343, 343-47 (1989).

74. POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at 84; Steven Garber, *Product Liability, Punitive Damages, Business Decisions and Economic Outcomes*, 1998 WIS. L. REV. 237, 284-86 (1998); Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1054; Peter Reuter, *A Just Use of Economics or Just Use Economics*, 70 CAL. L. REV. 850, 852-54 (1982).

75. *See generally* Shyamkrishna Balganesh, *Foreseeability and Copyright Incentives*, 122 HARV. L. REV. 1569 (2009) (discussing the rhetoric of incentives in copyright law); Stewart E. Sterk, *Rhetoric and Reality in Copyright Law*, 94 MICH. L. REV. 1197 (1996) (same).

recommendations that they are willing to make about changes to the law.[76] Law and economics imported this assumption from the discipline of economics, along with the assumption that people react rationally to incentives.[77]

Economists' examination of human behavior within various legal and social environments of the world involves the characterization of many phenomena as either incentives or costs.[78] The canon of incentives and costs states that humans and human institutions facing choices in conditions of scarce resources—conditions that consequently require making choices—will act in ways that achieve or maximize the incentives and avoid or minimize the costs.[79] When the actor under examination is government, the rhetoric of the discipline defines the benefits and rewards offered or imposed by government as incentives and the costs imposed or perpetuated by government as taxes or externalities.[80] When the actors under examination are private parties, the rhetoric of the discipline defines incentives and costs in economic terms such as offers, inducements, price, or rent.[81] The presumption is that humans

76. *See* Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1054; Gregory Mitchell, *Tendencies Versus Boundaries: Levels of Generality in Behavioral Law and Economics*, 56 VAND. L. REV. 1781, 1795-96 nn.42-44 (2003) (discussing "overadvocacy" of legal incentives).

77. Russell Korobkin, *Possibility and Plausibility in Law and Economics*, 32 FLA. ST. U. L. REV. 781, 795 (2005); Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1054-55; George J. Stigler, *Economists and Public Policy*, 1982 REGULATION 13-16 (May-June 1982).

78. *See* Balganesh, *supra* note 75, at 1591-92; Nuno Garoupa & Thomas S. Ulen, *The Market for Legal Innovation: Law and Economics in Europe and the United States*, 59 ALA. L. REV. 1555, 1589-92 (2008); Owen D. Jones, *Time-Shifted Rationality and the Law of Law's Leverage: Behavioral Economics Meets Behavioral Biology*, 95 NW. U. L. REV. 1141, 1141-42, 1198-99 (2001); Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1058.

79. POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at 4; Philip B. Heymann, *The Problem of Coordination: Bargaining and Rules*, 86 HARV. L. REV. 797, 829-30, 848–49 (1973); Francesco Parisi & Jonathan Klick, *Functional Law and Economics: The Search for Value-Neutral Principles of Lawmaking*, 79 CHI.-KENT L. REV. 431, 448-49 (2004).

80. *See generally* WOUTER J. KELLER, TAX INCIDENCE: A GENERAL EQUILIBRIUM APPROACH (1980); POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at 22; Richard A. Epstein, *The Social Consequences of Common Law Rules*, 95 HARV. L. REV. 1717, 1740-41 (1982); Jeffrey Evans Stake, *Status and Incentive Aspects of Judicial Decisions*, 79 GEO. L.J. 1447, 1463-64 (1991).

81. Joseph F. Brodley & Ching-to Albert Ma, *Contract Penalties, Monopolizing Strategies, and Antitrust Policy*, 45 STAN. L. REV. 1161, 1167-68 (1993); Jonathan R. Macey, *Transaction Costs and the Normative Elements of the Public Choice Model:*

are motivated to alter their behavior in response to incentives and costs.[82]

The language of economics—cost, benefit, incentives, disincentives, externalities, and economics—already is widely embraced in the law. Courts and scholars alike have widely accepted the use of economic considerations in legal analysis and often use the language of incentives and costs in their discussions of law and legal analysis, as suggested by the following chart:

Database[83]	Cases or articles using the term *cost* with *benefit*[84]	Cases or Articles using the term *incentive* with *law*, *legal*, or *government*[85]	Cases or Articles using the term *disincentive* with *law*, *legal*, or *government*[86]	Cases or Articles using the term *externality (ies)*[87]	Cases or Articles using the term *economic (s)* with *law* or *analysis*[88]
ALLFEDS	5225	2093	186	170	4303
ALL-STATES	3423	924	88	86	1935
JLR	10,000+[89]	10,000+	1447	10,000+	10,000+
BRIEFS	1465	536	58	43	1014

An Application to Constitutional Theory, 74 VA. L. REV. 471, 492-94 (1988); Richard S. Markovits, *Second-Best Theory and the Standard Analysis of Monopoly Rent Seeking: A Generalizable Critique, a "Sociological" Account, and Some Illustrative Stories*, 78 IOWA L. REV. 327, 329-30 n.3 (1993); Roger G. Noll, *"Buyer Power" and Economic Policy*, 72 ANTITRUST L.J. 589, 600-01 (2005).

82. POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at 4; Korobkin, *supra* note 77, at 781, 795; Stigler, *supra* note 77, at 13-16.

83. Westlaw databases: ALLFEDS includes all federal cases since 1945; ALLSTATES includes all state cases since 1945; JLR includes all journals and law review articles, and BRIEFS includes appellate briefs filed in ten state courts of appeals (Arizona, California, Connecticut, Illinois, Indiana, Maryland, Ohio, North Carolina, Washington, and Wisconsin) with coverage of appellate briefs ranging by state; the earliest coverage is 1991-present (Washington) and the latest is 2006-present (Arizona).

84. Westlaw search terms used: cost /2 benefit.

85. Westlaw search terms used: incentive /5 law legal government.

86. Westlaw search terms used: disincentive /5 law legal government.

87. Westlaw search terms used: externalit!.

88. Westlaw search terms used: economic /2 law analysis.

89. Entries marked 10,000+ indicate search results exceeding 10,000 documents (articles).

This chart, which is a taxonomy—an economic-friendly demonstration of data in the form of a topos of arrangement and a trope of style—indicates that the language (i.e., the rhetoric) of costs and incentives is fairly common in legal analysis among courts and throughout legal scholarship. Judges, legal scholars, and practitioners employ the language of incentives and costs in substantive legal discourse with great frequency. Every time an author writes about a cost-benefit analysis, every time a change in the law is said to "incentivize" certain conduct, every time a license or permit application process is said to provide a disincentive to an activity, and every time a change in procedural rules is said to impose an externality on the cost of litigation, the author uses a rhetorical trope of style. In this instance, the trope is a figure of speech to discuss laws and legal conditions as incentives or costs in contexts that are not necessarily appropriate, such as contexts that do not involve business, contracts, or the calculation of pecuniary sums or damages.[90]

The basic statement that humans respond favorably to incentives and unfavorably to costs disguises the rhetorical complexity of this presumption when it comes to making predictions about human behavior in legal situations and in response to legal conditions. First, incentives and costs must be designed, communicated, and recognized by the human actor or institution; government must correctly design and communicate its actions so as to offer the benefit or impose the tax that it intends to bestow upon its audience of citizens, and private actors must correctly design and communicate their actions so as to accurately offer the intended inducement or impose the intended price or rent.[91] Second, and equally important to the rhetoric of the discipline, is that the human audience must perceive and understand the action of the government or private actor, and determining what should be perceived and understood as an incentive as opposed to a cost is not always a simple process for humans.[92]

90. *See, e.g.*, THOMAS CONLEY, RHETORIC IN THE EUROPEAN TRADITION 15 (1990) (discussing application of rhetorical appeal through ethos, pathos, and logos, in situations beyond business, contracts, or the calculation of pecuniary sums or damages); Levine & Saunders, *supra* note 21, at 118-21 (same); Fred A. Simpson & Deborah J. Selden, *When to Welcome Greeks Bearing Gifts—Aristotle and the Rules of Evidence*, 34 TEX. TECH L. REV. 1009, 1011 (2003) (same).

91. *See infra* Part III.B.4.

92. *Id.*

The rhetorical canon of incentives and cost is closely associated with the canon of rational choice: the design, communication, perception, and motivation concerning incentives and costs require analysis and an understanding of the rhetorical audience and the rhetorical situation. Scientific empirical analysis of human behavior indicates that there are limitations on humans' abilities to understand and appreciate benefits and costs. These limitations are assumed and represented in the rhetorical statement that humans are creatures of bounded abilities—bounded rationality, bounded ability to gather information, bounded perception, and bounded cognition.[93] These bounds limit a human audience's ability to perceive and understand the incentives and costs set before it, which in turn complicates the predictions and prescriptions of economists regarding the motivational effect of incentives and costs. This is the principal rhetorical audience consideration involved in the formulation of incentives and costs. As a separate consideration, empirical evidence gathered from the social, cognitive, and brain sciences indicates that humans are situational decision-makers.[94] A consideration of the rhetorical problems of audience and situation are commonplace in rhetoric, and contemporary rhetoric in particular, has covered this ground well.[95]

93. *E.g.*, John Conlisk, *Why Bounded Rationality?*, 34 J. ECON. LITERATURE 669 (1996); Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: The Problem of Market Manipulation*, 74 N.Y.U. L. REV. 630, 640 (1999); Jolls, Sunstein & Thaler, *supra* note 6, at 1471; Stephen D. Hurd, *Symposium: The Legal Implications of Psychology: Human Behavior, Behavioral Economics, and the Law*, 51 VAND. L. REV. 1497 (1998); Daniel Kahneman et al., *Experimental Tests of the Endowment Effect and the Coase Theorem*, 98 J. POL. ECON. 1325 (1990); Donald C. Langevoort, *Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review*, 51 VAND. L. REV. 1499, 1502 (1998); Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q. J. ECON. 99 (1953).

94. *See generally* Hanson & Kysar, *supra* note 93, at 640; Hanson & Yosifon, *The Situation*, *supra* note 7; Hanson & Yosifon, *The Situational Character*, *supra* note 2.

95. *E.g.*, White, *Law as Rhetoric*, *supra* note 16, at 695: Bitzer, *The Rhetorical Situation*, *supra* note 14, at 6-8, 389-92; Greenhaw, supra note 10, at 875-80. The contemporary analysis of communication produces a formula for the speaker's invention of discourse crafted for a given situation: Exigence (a/k/a the rhetorical problem, the reason for speaking, and the urgency thereof) + Audience (mediators of change—those who may be moved from one point to another in the situation) + Constraints (the physical or psychological limitations or opportunities of the situation) = Fitting response (the speaker's purpose and objectives). *See* Bitzer, *The Rhetorical Situation*, *supra* note 14, at 6-8, 390-92; Greenhaw, *supra* note 10, at 875-80. This model easily can be applied to economic analysis: if the object of the incentive has no choice, then there is no opportunity for theorizing rational choice of incentives in that situation.

3. EFFICIENCY: A RHETORICAL ECONOMIC CONCEPT

There are two kinds of efficiency in the rhetoric of law and economics: (1) formal efficiency as a preference for simple, elegant formulae and solutions, and (2) the substantive economic concepts of efficiency as a standard and goal of law and policy. Both modes employ a highly rhetorical device. The adoption and application of the rhetorical primacy of science and mathematics carries other implications for the discipline, including, for example, that a more efficient and elegant solution to a problem is preferred under the rhetoric of mathematics and science and subsequently under the rhetorical systems of economics and law and economics.[96] The formal desire for efficiency in structure and form leads to a marked preference for elegance and simplicity in the equations and formulae of the discipline.[97] Naturally, when the first kind of efficiency produces elegant and effective formulae that are substantively correct, this promotes the understanding and persuasion of economists, but this Article describes this kind of efficiency as offering a different layer of persuasion for non-economists. Non-economists can appreciate the persuasiveness of an elegant formula and a simple solution because this mode of presentation promotes clarity and openness, revealing the workings and falsifiability of the underlying reasoning.

In substantive terms, law and economics assumes and advocates efficiency over more abstract concepts of fairness, morality, and justice.[98] This is not to say that fairness, morality, and justice are never incorporated into an economic analysis, but rather that economists find it preferable to assume such concepts into the rhetorical economic concepts of efficiency. In other words, when devising a model or prescription, economists prefer to assume that a fair, moral, and just solution will be more efficient according to one of the economic conceptions of efficiency.[99] Efficiency, or parsimony, in the rhetoric of law and

96. "Mathematical elegance often becomes the primary goal, with usefulness in the realm of law, that combines logic with human experience, a mere afterthought." Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1054.

97. *See, e.g.*, POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at 16; Herbert Hovenkamp, *The Limits of Preference-Based Legal Policy*, 89 NW. U. L. REV. 4, 5 (1994).

98. *E.g.*, Russell B. Korobkin & Thomas S. Ulen, *Efficiency and Equity: What Can Be Gained by Combining Coase and Rawls?*, 73 WASH. L. REV. 329, 329-30 (1998).

99. *See, e.g.*, Henrik Lando, *An Attempt to Incorporate Fairness into an Economic Model of Tort Law*, 17 INT'L REV. L. & ECON. 575 (1997); Ugo Mattei, *Efficiency as*

economics is not just a formal imperative for methods and procedures of modeling paradigms and the formulation of hypotheses and theses, but has also been advanced as a substantive and instrumental imperative in positive examination of conditions, normative analysis of possible conditions, and prescriptions for future conditions.[100] Efficiency, therefore, has become a rhetorical imperative in and of itself in the discipline of law and economics.[101]

The elevation of efficiency over other concepts associated with the law, such as fairness, morality, and justice, makes the work of law and economics simpler and easier in many ways,[102] but more difficult in other ways.[103] "Efficiency" has more than

Equity: Insights from Comparative Law and Economics, 18 HASTINGS INT'L & COMP. L. REV. 157 (1994); Michael I. Swygert & Katherine Earle Yanes, *A Unified Theory of Justice: The Integration of Fairness into Efficiency*, 73 WASH. L. REV. 249, 284-86, 316–17 (1998). *See generally* KEN BINMORE, 1 PLAYING FAIR: GAME THEORY AND THE SOCIAL CONTRACT (1994); KEN BINMORE, 2 JUST PLAYING: GAME THEORY AND THE SOCIAL CONTRACT (1998); DANIEL M. HAUSMAN & MICHAEL S. MCPHERSON, ECONOMIC ANALYSIS AND MORAL PHILOSOPHY (1996); HERVÉ MOULIN, COOPERATIVE MICROECONOMICS: A GAME-THEORETIC INTRODUCTION 3, 8 (1995); H. PEYTON YOUNG, EQUITY: IN THEORY AND PRACTICE 8 (1994).

100. *See* POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at 13-16; MICHAEL J. TREBILCOCK, THE LIMITS OF FREEDOM OF CONTRACT 3-6 (1993); Robert D. Cooter, *Law and the Imperialism of Economics: An Introduction to the Economic Analysis of Law and a Review of the Major Books*, 29 UCLA L. REV. 1260, 1263 (1982) ("A process is efficient when it yields the maximum output from given input, or equivalently, when it yields a given output with the minimum input."); Frank I. Michelman, *A Comment on Some Uses and Abuses of Economics in Law*, 46 U. CHI. L. REV. 307, 309 (1979); Frank I. Michelman, *Norms and Normativity in the Economic Theory of Law*, 62 MINN. L. REV. 1015, 1032–35 (1978); Thomas S. Ulen, *The Efficiency of Specific Performance: Toward a Unified Theory of Contract Remedies*, 83 MICH. L. REV. 341, 345-46 (1984).

101. Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1054 (internal citations omitted):

> Although efficiency need not be the sole or primary goal of legal policy, economic analysis of law teaches that policymakers ignore the efficiency implications of their actions at society's peril. Legal rights that are unobjectionable in the abstract are not free but rather must be measured against their opportunity costs.

102. A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 3-4, 9-10 (2d ed. 1989) [hereinafter POLINSKY, LAW AND ECONOMICS]; Richard A. Posner, *Some Uses and Abuses of Economics in Law*, 46 U. CHI. L. REV. 281, 301 (1979); Cass R. Sunstein, *On Philosophy and Economics*, 19 QUINNIPIAC L. REV. 333, 335-36, 348 (2000).

103. *E.g.,* Jolls, Sunstein & Thaler, *supra* note 6, at 1508-09:

> [L]aws may be efficient solutions to the problems of organizing society . . . [but] [t]he notion that laws emerge from considerations of efficiency and conventional rent seeking would probably strike most

one meaning in the rhetoric of law and economics. The rhetoric has employed a clever twist on a common word to add three specific, carefully crafted, and nonintuitive meanings for substantive and instrumental efficiency in law and economics: (1) "Productive efficiency" (sometimes referred to by the undistinguishing term of "economic efficiency"), in which a process or action produces the intended result with maximum utility and minimum costs;[104] (2) "Pareto efficiency"[105] or "allocative efficiency," in which the situation cannot be altered to benefit one of the parties without causing a detriment to the other party—benefit and detriment being defined by the parties according to their subjective perceptions and preferences;[106] and (3) "Potential Pareto improvements" or "*Kaldor-Hicks* efficiency," in which a change in action causes incremental gains in benefits or incentives that exceed incremental losses or costs imposed by the change in action.[107]

The language of efficiency is intended to facilitate full and complete communication to members of the economics discourse community, as well as to create persuasive communication to advocate the findings of the discipline to the outside world. Within the discipline, the rhetoric of law and economics assumes

> citizens as odd . . . . [M]any laws on the books appear to be difficult to justify on efficiency grounds (for example, those that prohibit mutually beneficial exchanges without obvious externalities) and seem to benefit groups that do not have much lobbying power (such as the poor or middle class).

104. Joseph F. Brodley, *The Economic Goals of Antitrust: Efficiency, Consumer Welfare, and Technological Progress*, 62 N.Y.U. L. REV. 1020, 1025, 1028-29 (1987); R. Quentin Grafton, Dale Squires & Kevin J. Fox, *Private Property and Economic Efficiency: A Study of a Common-Pool Resource*, 43 J. L. & ECON. 679, 690-91 (2000). *See also* COOTER & ULEN, *supra* note 3, at 17; WALTER NICHOLSON, MICROECONOMIC THEORY: BASIC PRINCIPLES AND EXTENSIONS 611-20 (9th ed. 2004).

105. *See* VILFREDO PARETO, 4 THE MIND AND SOCIETY: THE GENERAL FORM OF SOCIETY 1459, 1465–69 (1907) (Andrew Bongiorno et al. trans., 1935) (1907); VILFREDO PARETO, MANUAL OF POLITICAL ECONOMY (Ann. S. Schwier trans., 1971) (1906); POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at 12.

106. *See* COOTER & ULEN, *supra* note 3, at 17; POLINSKY, LAW AND ECONOMICS, *supra* note 102, at 7 n.4; POSNER, ECONOMIC ANALYSIS OF LAW, *supra* note 2, at 13-14, 26; Jules L. Coleman, *Efficiency, Exchange and Auction: Philosophical Aspects of the Economic Approach to Law*, 68 CAL. L. REV. 221 (1980); Richard A. Posner, *The Ethical & Political Bases of the Efficiency Norm in Common Law Adjudication*, 8 HOFSTRA L. REV. 487, 491 (1980); Jules L. Coleman, *Efficiency, Utility and Wealth Maximization*, 8 HOFSTRA L. REV. 509 (1980). *See also* ALFRED MARSHALL, PRINCIPLES OF ECONOMICS 103-10, 433-35 (8th ed. 1920); ARTHUR CECIL PIGOU, THE ECONOMICS OF WELFARE 31-43 (1952); HAL R. VARIAN, MICROECONOMIC ANALYSIS 160-71 (3d ed. 1992).

107. *See* COOTER & ULEN, *supra* note 3, at 18.

that it is easier to use science and mathematics to conceive of models of efficiency, form hypotheses regarding efficiency, and test those models and hypotheses than it would be to use the same tools to test actual fairness, morality, and justice. The models and forms that are developed give the appearance of rigorous scientific analysis that "proves" the hypotheses that a certain change in the law will produce efficient results, whichever of the three forms of "efficient" results are assumed in the models and hypotheses.

It is highly desirable to be able to observe the success or failure of any practical study, and models and hypotheses of fairness, morality, and justice might suffer from the fact that they might be tautological and non-falsifiable within the rhetorical definitions of law, philosophy, and ethics. It is easier to observe the success or failure of models and hypotheses concerning one or more of the economic definitions of efficiency through the use of scientific and mathematical methods of analyzing statistics and econometric data than it would be through the use of models that tested fairness, morality, or justice. However, rational humans embrace concepts of fairness, morality, and justice and act on them, which complicates economics predictions and prescriptions as to the effect of law and legal conditions. The result of prescriptions concerning unregulated, unconstrained, but "efficient" financial markets is revealed in stark detail in the Great Recession. The "efficiency" of non-regulation or under-regulation of banking practices regarding the extension of mortgage credit and the under-regulation of securities practices regarding the collateralization of mortgage obligations led to a very real problem of valuation of major banking and securities institutions, which in turn caused a crisis of confidence that brought down the stock market, tied up the financial insurance sector, tightened credit in every sector of the economy, and further threatened the banking and securities industry with a general, sustained economic downturn.

4. THE CONTEMPORARY THEORY OF RATIONAL CHOICE: A THEORY CORRECTED BY MODERN BEHAVIORAL SCIENCES, COGNITIVE STUDIES, AND BRAIN SCIENCE

Law and economics presumes that human actors will respond to legal conditions in rational ways. The early adopters of the law and economics analysis of law accepted a rhetorical assumption that when faced with choices, humans will respond

rationally rather than randomly and capriciously; most importantly for the discipline of law and economics, it is assumed that humans will act *predictably*.[108] The rhetoric of this position is known generally as rational choice theory.[109]

Over the last five decades, rational choice theory employed by law and economics analysts has produced marked success in explaining and predicting human behavior when humans are confronted by incentives, costs, and opportunities, and many of these successes have been used to make accurate predictions of the effect of existing laws or changes in the law on human behavior.[110] The successes produced by the rational choice theory lead some scholars to argue that this theory is all that an economic approach to the law requires, as long as the theory is defined broadly enough and is shaped to encompass all areas where predictions are reliable and verifiable and to exclude all areas where predictions are unreliable and refutable.[111] In fact, some scholars argue that the "correction" that behavioral science applies to economics—rejecting many, if not most, of the assumptions that the rational choice theory represents—means that a behavioral approach to law and economics does not fit within the rhetoric of economics or law and economics at all.[112] They argue that analysts of behavioral science may be applying psychological, sociocultural, or cognitive theories to the law, but they are not applying economics.[113] This is indeed a crisis within the rhetoric of the discipline.

The definition of what it means to be "rational" in response to legal conditions and the weight given to the presumption of rationality differs depending on the legal situation that is being studied and the legal economist preforming the study. Cognitive

108. *See* Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1055.

109. *Id.*

110. *See id.* at 1053-54.

111. Richard A. Posner, *Rational Choice, Behavioral Economics, and the Law*, 50 STAN. L. REV. 1551, 1553-58 (1998) [hereinafter Posner, *Rational Choice*].

112. *Id.* at 1558 ("If there is any theory in their approach, it is not an economic theory."). *See infra* Part III.C.

113. *See* Posner, *Rational Choice, supra* note 111, at 1558:

> They take a psychological approach to phenomena that are sociological and psychological as much as they are economic, yet call their approach economic .... [Their approach] would be easier to understand if it were offered to the reader as a contribution to the psychological analysis of law rather than to the economic analysis of law.

science has indicated that in some situations, humans make decisions against their self-interest, which is contrary to the traditional neoclassical rational choice theory that humans always act to maximize their self-interest.[114] A large part of the correction that the behavioral sciences impose in the rhetoric of traditional law and economics is a correction in the definition of "rationality" and the weight given to the presumption of rationality in the face of various legal conditions.[115] The behavioral approach asserts that this definition and assessment of weight must be modified with the knowledge and understanding gained from behavioral science, which gives a clearer picture of the nature and limits of human rationality in response to legal situations.

The acceptance, or at least the acknowledgement, that rational choice is more bounded than traditional rational choice theory has predicted presents a problem for the rhetoric of the discipline and creates complexity in the use of rational choice theory as a rhetorical lens for legal discourse. The rhetoric of the discipline can redefine its theories and definitions of rationality so as to incorporate the empirical observations of seemingly non-traditional, irrational behavior in legal situations requiring a choice.[116] For example, in response to the ultimatum game studies,[117] the definition of rationality may be modified from a

114. *See generally* Hanson & Yosifon, *The Situation*, *supra* note 7; Hanson & Yosifon, *The Situational Character*, *supra* note 2.

115. *See* Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1055 (internal citations omitted):

> There is considerable debate within both the economics and law-and-economics communities about precisely what rational choice theory is and is not. As it is applied implicitly or explicitly in the law-and-economics literature, however, it is understood alternatively as a relatively weak, or "thin", presumption that individuals act to maximize their expected utility, however they define this, or as a relatively strong, or "thick", presumption that individuals act to maximize their self-interest.

116. In fact, it is only rational for law and economics scholars to attempt to preserve the theory of rational choice by expanding the definition of "rational," as this will avoid throwing out the entire canon of rational choice as an operative foundation for economic models, theories, and predictions.

117. Ultimatum game studies test human action in the following situation: A person is assigned a sum and asked to offer a portion of the sum to another person with the understanding that if the other person accepts the offer, both will gain something—the offeror keeps the remainder of the sum not offered, and the offeree keeps what was offered and accepted—but if the other person rejects the offer, neither will gain anything. Traditional rational choice theory predicted that the offeror would offer a tiny sum because this would maximize the offeror's pecuniary

strict proposition that humans will act to maximize selfish pecuniary interests to a broader definition that humans will act to maximize their own interests of whatever kind, one interest being the motivation to be fair in bargaining and to be perceived as being fair.

The rational choice theory may be definitional, providing that humans rationally make choices to maximize their self-interest.[118] It may also be based on a conception that humans make choices to maximize their expected utility,[119] or on an assumption of human self-interest,[120] or on humans' motivation toward wealth maximization.[121] Either way, the consequences for legal discourse point to the same goal: Law should be

self-interest while allowing the offeree to gain something, however small. Ultimatum game studies belied this prediction by showing that offerees routinely rejected small offers, such as offers less than 20% of the total sum, and that offerors tended to offer much larger sums, frequently in the range of 40-50% of the total sum. Theories arising from these empirical data revolve around the concept of fairness and the parties' perception of what is fair in the situation—that offerees will not accept an offer that is perceived to be unfair even though any offer, no matter how small, increased their pecuniary well-being, and offerors offered a greater portion with an apparent motivation of trying to be fair or at least to be perceived as being fair. This prompts researchers to include fairness and the perception of fairness as factors in conceptions of rational self-interest. *See, e.g.*, Richard Birke & Craig R. Fox, *Psychological Principles in Negotiating Civil Settlements*, 4 HARV. NEGOT. L. REV. 1, 33-39 (1999); Kent Greenfield & Peter C. Kostant, *An Experimental Test of Fairness Under Agency and Profit-Maximization Constraints (With Notes on Implications for Corporate Governance)*, 71 GEO. WASH. L. REV. 983 (2003); Peter H. Huang, *Reasons Within Passions: Emotions and Intentions in Property Rights Bargaining*, 79 OR. L. REV. 435, 474-75 (2000); Russell Korobkin, *A Positive Theory of Legal Negotiation*, 88 GEO. L.J. 1789, 1818-19 (2000); Thomas S. Ulen, *Firmly Grounded: Economics in the Future of the Law*, 1997 WIS. L. REV. 433, 459.

118. *See* Richard A. Posner, *Are We One Self or Multiple Selves?: Implications for Law and Public Policy,* 3 LEGAL THEORY 23, 24-28 (1997) (discussing definitional problems caused by apparent "multiple selves" whose interests are served); Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1061.

119. *See* DONALD P. GREEN & IAN SHAPIRO, PATHOLOGIES OF RATIONAL CHOICE THEORY: A CRITIQUE OF APPLICATIONS IN POLITICAL SCIENCE 18 (1994); SCOTT PLOUS, THE PSYCHOLOGY OF JUDGMENT AND DECISION MAKING 83 (1993); Geoffrey Brennan, Comment, *What Might Rationality Fail to Do*, *in* THE LIMITS OF RATIONALITY 51, 52 (Karen Schweers Cook & Margaret Levi eds., 1990); Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1062.

120. Jennifer Arlen, Comment, *The Future of Behavioral Economic Analysis of Law*, 51 VAND. L. REV. 1765, 1766 (1998); Jeffrey L. Harrison, *Egoism, Altruism, and Market Illusions: The Limits of Law and Economics*, 33 UCLA L. REV. 1309, 1320 (1986); Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1065.

121. COOTER & ULEN, *supra* note 3, at 26; POLINSKY, LAW AND ECONOMICS, *supra* note 102, at 10; Korobkin & Ulen, *Law and Behavioral Science*, *supra* note 6, at 1066.

communicated to people in a manner that maximizes the audience's incentives to accept and to be persuaded by the legal communication, and that minimizes the costs that the communication imposes on the audience.

V. CONCLUSION

The rhetorical canons of law and economics did not cause the Great Recession. Canons of rhetoric are tools for legal discourse, not universal goals or perfect solutions. Law and economics provides a rhetorical lens through which legal authors might examine and improve the persuasiveness of their discourse, but a lens, like any other tool, is only as good as its user. This Article's critique of the four rhetorical canons of law and economics seeks to reveal the interconnected relationships among the canons to enable the reader to trace those canons, as well as the assumptions and theories that they represent, in ongoing legal economic discourse.

Modern and contemporary rhetoric has advanced and improved upon the ancient rhetoricians' basic perceptions of human behavior and knowledge of human nature, but the more complex models of reasoning in contemporary rhetoric have not replaced the classical rhetorical concept of ethos. Contemporary rhetoric has learned lessons from cognitive studies and brain science that confirm the importance of the classical rhetorical concept of pathos and the necessity that rhetoric examine the values of the audience in the rhetorical situation so as to anticipate the audience's emotional reaction to the discourse. Similar lessons are being learned in contemporary law and economics as brain science and cognitive studies add to our "understanding of understanding" and motivate our study of motivation, adding to the behavioral science that seeks to improve the design of incentives in the face of new conceptions of rational choice. Each discipline can learn lessons from the other about the motivation and persuasion of different audiences in different situations.

Contemporary rhetoric can learn much from law and economics. Efficiency, when used in appropriate ways in appropriate rhetorical situations, can improve discourse in style, arrangement, and invention. The expression of legal conditions and legal effects in the language of incentives and costs inspires imagination that facilitates better understanding of the advantages and disadvantages of laws and legal policy; the

widespread acceptance of the language of incentives and cost in the law is further evidence of the rhetorical power that the language has in many areas of the law. The persuasiveness of mathematics and science extends to their forms and the substance of their proofs, and the use of those methods and forms may create meaning and inspire imagination that improves comprehension and understanding. The forms of mathematics and science can promote clarity and open demonstration, permitting examination of the workings of the discourse and promoting the opportunity for falsification and rebuttal.

The rhetorical tools of law and economics are powerful, but not universally persuasive. A topic of invention is a single place to find a method of argumentation, not the only place. Many audiences will not respond to mathematical and scientific forms, especially if those forms are used to avoid a primary question of fairness or justice. The intuitive uses of efficiency in form, *i.e.*, elegance, openness, and clarity, and in the elimination of costs and waste may be widely persuasive, but other economic rhetorical takes on efficiency (*Pareto* and *Kaldor-Hicks* efficiency) are best left to the discourse of economists. The language of incentives and costs may be applied to facilitate communication in many rhetorical situations in the law, but the general application of that language must fit the topic and the situation; simply identifying something as an incentive or a cost will not be persuasive if the audience or the particular circumstance demands a different topos for argument or a more apt trope of style.

The ethos of the speaker remains critical in the rhetoric of law and economics. Many of the sharpest and deepest criticisms of contemporary economics start with the assertion that mathematical and scientific methods of daunting complexity are used to hide the workings of the underlying reasoning, not to promote understanding or persuasion. The method is not rhetoric but a resort to the cudgel, used to overpower the audience with coercion instead of persuasion, and a refusal to openly demonstrate the reasoning for falsification or rebuttal, all under an implied threat to any person who would dare to rebut the force of the powerful device of rhetoric. Charts and diagrams may be used to distract the audience or trick them into believing a mathematical or scientific analysis was performed to produce the assertions made in the rhetoric, even when little or no mathematics or science was truly involved. Quantitative analysis

may crunch data, the true meaning of which is clouded by the assumptions that were made in choosing which data to collect or exclude and in the premises drawn from the assumptions that determined the possible conclusions that the experiment could reasonably be expected to produce.

Practitioners of law and economics rely on mathematics and science, efficiency, incentives and costs, and rational choice theory for full and complete communication with legal economists. However, these practitioners often use the same topics and tropes as powerful props in communication with lawmakers and policy-makers—a process which may be either right or wrong according to the ethos of the speaker and the type of communication used.[122] The lesson for all rhetoricians, those of the law and economics discipline, as well as those of general legal discourse, is this: The four rhetorical canons of law and economics, like the canons of the other schools of contemporary rhetoric, may be employed to promote effective communication for the purpose of persuasion, or they may be used as *mere* rhetoric designed to distract, confuse, obfuscate, or coerce the audience. The decision whether to use the topics and tropes to inspire the imagination and promote understanding or to obscure the underlying reasoning and confuse the ability to understand the communication is itself a rhetorical situation in which all rhetoricians must choose which course to follow. By revealing these potential uses and misuses of the topics and tropes represented by the four canons of laws and economics rhetoric, this Article concludes with an expression of hope that the reader will choose wisely.

122. My colleague, David Herzig, summarized this lesson by repeating the apt comment, "Statistics never lie—but liars use statistics."