July 2012

After the Great Recession: Law and Economics' Topics of Invention and Arrangement and Tropes of Style

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AFTER THE GREAT RECESSION:
LAW AND ECONOMICS’ TOPICS OF INVENTION AND
ARRANGEMENT AND TROPES OF STYLE

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 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.

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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. Law and economics has developed into a school of contemporary legal rhetoric that provides topics of invention and arrangement and tropes of style to test and improve general legal discourse in areas beyond the economic analysis of law. The rhetorical canons of law and economics—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—make law and economics a persuasive method of legal analysis and a powerful school of contemporary legal rhetoric, if used in the right hands.

My 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. I examine each of the rhetorical canons of law and economics and explain how each can be used to create meaning, inspire imagination, and improve the persuasiveness of legal discourse in every area of law. My conclusion is 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 only are as good as the user, and can be corrupted in ways that helped to bring about the current economic crisis.

INTRODUCTION

Law and economics is persuasive. The Great Recession\(^1\) is one by-product of the law and economics movement’s ability to

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\(^1\) I take the name, “Great Recession,” from none other than Nobel Laureate Professor Joseph Stiglitz, who recently discounted decades of neoclassical
persuade lawyers, legislators, and government officials to deregulate and remove restraints so as to allow a largely uninhibited operation of the financial markets and banking system.\(^2\) The discipline of law and economics has its admirers and 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.” \(^\text{Joseph E. Stiglitz, Freefall: America, Free Markets, and the Sinking of the World Economy xii (2010).}\)

\(^2\) Douglas M. Branson, Corporate Governance “Reform” and the New Corporate Social Responsibility, 62 U. PITT. L. REV. 605, 619 (2001) (\textquotedblleft In its more extreme forms, law and economics solutions to problems of human behavior were paradized 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.\textquotedblright;); 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) (“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; Chunlin Leonhard, Subprime Mortgages and the Case for Broadening the Duty of Good Faith, 45 U.S.F. L. REV. 621, 622 (2011); Lawrence E. Mitchell, The Morals of the Marketplace: A Cautionary Essay for Our Time, 20 STAN. L. & POL’Y REV. 171, 173 (2009); Lawrence E. Mitchell, The Board as a Path to Corporate Responsibility, in Doreen McBarnet, THE NEW CORPORATE ACCOUNTABILITY (2007). Even the unofficial dean of the Chicago School, Judge Richard Posner, has admitted the connection between neoclassical law and economics and 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. Alan Greenspan, as quoted in Edmund L. Andrews, Busted: Life Inside the Great Mortgage Meltdown 65 (2009). See also Alan Greenspan, The Crisis, BROOKINGS PAPERS ON ECON. ACTIVITY, Spring 2010, at 3, http://www.brookings.edu/~/media/Files/Programs/ES/BPEA/2010_spring_bpea_papers/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), copy on file with the author.
detractors, but modern history confirms that law and economics is persuasive beyond the confirmed members of the discipline: critics and supporters alike agreed that at its height law and economics had established itself as the dominant and most influential contemporary mode of analysis among American legal scholars. My thesis is that if the modes of persuasion of law and economics are to be used more generally in legal discourse outside the realm of economic analysis of law, the lessons of the Great Recession should serve as a caution toward the ethical and responsible use of these topics and tropes.

My goal here is to critically examine the potential of the law and economics’ topics of invention and arrangement and tropes of style as contemporary legal rhetorical devices in areas of law not currently served by the economic analysis of law. My goal is not

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3 Law and economics’ critics and proponents alike agree that at its height the movement had 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, 142–43 (2003) [hereinafter Hanson & Yosifon, The Situation], 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.

Id. (inner citations omitted). See also RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW xix (7th ed. 2007) [hereinafter POSNER, ECONOMIC ANALYSIS OF LAW] (“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) (law and economics surpasses other movements in legal analysis, including law and literature).

4 This article continues the conversation I have begun with my work, Law and Economics as a Rhetorical Perspective in Law, available at SSRN: http://ssrn.com/abstract=1830573 (May 3, 2011). I currently plan to release this work in two parts, the current article here and an article entitled, The Great Recession and the Rhetorical Canons of Law and Economics. My project pursues a new topic in the general conversation begun by other scholars who have examined the rhetoric of law and economics. E.g., Donald N. McCloskey,
to critique the neoclassical or contemporary law and economics\(^5\) analysis of law nor to examine the benefits or costs of the application of economic analysis in shaping law and social policy.\(^6\)

I seek to examine the potential uses and misuses of the rhetorical devices of law and economics in general legal discourse because the misuse of these devices played a role in bringing about the Great Recession.

A central focus of the discipline of law and economics is the study of human nature and human behavior\(^7\) in order to predict what incentives can be communicated to humans that will motivate them to act or react, and thus law and economics shares a common goal of rhetoric, the study of communication and persuasion. The

\(^5\) I use the term “contemporary law and economics” to mean twenty-first century law and economics that incorporates behavioral and socio-economic approaches to the study and analysis of law. This shall be distinguished from “new” or “neoclassical” law and economics that developed in the 1960s and 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 POSNER, ECONOMIC ANALYSIS OF LAW, at 31; Thomas F. 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. & LIB. 470, 470–72 (2007).

\(^6\) Not to mention 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).

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, and 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 recognition that the rhetoric of law and economics is persuasive—and not just to legal economists—reveals the enormous potential of law and economics as a lens on legal discourse through which to examine the structure and design of the discourse and as a source of *topoi* (topics) of invention and arrangement and tropes of style in the content of the discourse. 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 can join the other schools of contemporary rhetoric—modern argument theory, writing as a process theory, and discourse

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community theory—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**

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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
and tropes\textsuperscript{13} to construct meaning and to inform and persuade its audiences:

- 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.

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); Gabriele Knappe, Classical Rhetoric in Anglo-Saxon England, 27 Anglo-Saxon England 5, 25 (Cambridge 1998).

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 and Connors, supra note 10, at 20, 378; Knappe, supra note 10, at 25–26; Smith, Rhetoric Theory, supra note 7, at 129, 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 and Connors, supra, note 10, at 395–409; Berger, Law as Rhetoric, supra, at 51 & n.179. See also Michael R. Smith, Advanced Legal Writing 199–248 (metaphors), 328–40 (other tropes) (2d ed. 2008) [hereinafter SMITH, ADVANCED LEGAL WRITING].
The rhetorical canons of law and economics have prescriptive implications for legal discourse as topoi of invention and arrangement and tropes of style. Many of the topoi and tropes of law and economics operate on a different level of discourse than direct communication of economic information to expert members of the economic discourse community, therefore my discussion here will examine the concept of rhetorical levels of discourse. I will then examine each of the canons of law and economics as a source of rhetorical topoi and tropes for general legal discourse.

I. LEVELS OF DISCOURSE IN CONTEMPORARY RHETORIC

Rhetoric, in the most complete sense, is the study of effective communication. Effectiveness in communication is determined by the audience and the situation. There can be multiple audiences that receive a communication, some are direct targets within the conception and understanding of the author in preparing the discourse, and others are indirect receivers of the discourse. The level of communication, and thus the level of rhetoric, applied to the different audiences is not the same—not every audience will receive, decode, and draw meaning from the communication at the same level of understanding.

Building on the work of Wayne C. Booth, the late professor and a leading rhetorician from the University of Chicago (but not of the “Chicago School” of economics), I will explain the three levels of rhetorical persuasion:

Level 1 Rhetoric—Understanding of the Members of Discipline

Level 1 rhetoric (rhetoric-1) is true understanding and acceptance of the truth of the discourse by members of the discipline in which the discourse occurs, who are schooled and

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14 Gadamer, supra note 13, at 348; Mootz, supra note xx, at 317; White, Law as Rhetoric, supra note xx, at 695.
15 MAKAY, supra note xx, at 9; ROBBINS-TISCIONE, RHETORIC FOR LEGAL WRITERS, supra note xx, at 9; Wetlaufer, supra note xx, at 1546.
knowledgeable in the discipline and its theories. This level of understanding is reserved to experts in the field.\textsuperscript{16}

**Level 2 Rhetoric—Acceptance of the Persuasiveness of the Discourse by Understanding the Reliability of the Support**

Level 2 rhetoric (rhetoric-2) is not a complete understanding of the discourse such as the understanding of members of the discipline of the discourse; the audiences for rhetoric-2 are receivers or decision-makers who do not completely understand the doctrine and theories of the discipline of the discourse. However, level 2 reception of the discourse allows for the audience to accept the indicia of truth and reliability of the discourse based on an understanding of the reliability of the sources supporting the discourse that are used in the discourse\textsuperscript{17}—scientific results, scholarly sources, accepted forms of evidence, works with known reputations—or the reliability of sources external to the discourse that support the discourse—the character and testimony of trusted recommenders and the observation of peer-acceptance of the work and the author by members of the same discipline who presumably have rhetoric-1 understanding of the material in the discourse.\textsuperscript{18}

The acceptance of the reliability of the supporting sources allows


for persuasion of the truth and reliability of the discourse even without fully understanding the discourse.\textsuperscript{19}

**Level 3 Rhetoric—Persuasion by the Internal Consistency and Methodology of the Discourse**

The third level of rhetoric (rhetoric-3) again is one in which the audience of decision-makers does not completely understand the truth of the discipline and its theories, but the audience observes the internal consistency and logic and how the discourse tracks under the evaluation of the design and execution of the discourse\textsuperscript{20}—an evaluation that asks questions such as: Do the methods used appear to be sound, does the author appear to be competent in employing them, and is the end product logical and internally consistent?\textsuperscript{21} An example would be the evaluation of a scholarly journal article to determine if the author appears to be competent and the writing consistent with the standards for scholarly inquiry and discourse within the academy or within one institution, such as a university, as a whole.\textsuperscript{22} Another rhetorical way of understanding this level of rhetoric is whether the author displays the proper ethos of her role in the creation of the discourse.\textsuperscript{23}

\textsuperscript{19} Id. Professor Ellen P. Goodman, in *Stealth Marketing and Editorial Integrity*, 85 Tex. L. Rev. 83, 115 (2006), describes the communication theory of Jürgen Habermas that depends upon the existence of communicative action in discourse to “reach understanding” or “communicatively achieved agreement.” Jürgen Habermas, *The Theory of Communicative Action* 42, 286–87, 305 (orig. ed. 1981; Thomas McCarthy trans., 1984). Communicative action persuades by using a set of “validity claims.” Id. at 75, 308. News reporting of world events may make a “constative” utterance whose claim to validity is truth. Id. at 309, 323. Storytelling and narrative reasoning may be considered “expressive” utterances whose claim to validity is rooted in nothing more than sincerity. Id. at 174, 325–26. “Regulative” utterances have a claim to validity of “rightness.” Id. Participants to communicative action can either accept these validity claims or subject them to criticism and demand justification. Id. at 99.


\textsuperscript{21} See id.

\textsuperscript{22} Id.

\textsuperscript{23} Ethos embodies both moral and intellectual qualities. Jakob Wisse, Ethos and Pathos from Aristotle to Cicero 30 (1989). While virtue and high
In making recommendations for legal discourse based on the rhetoric of law and economics, I will mention the level of rhetoric of the device employed. In many instances, it will not be rhetoric-1 discourse, that which an economist would aim to achieve when communicating with other economists, and law and economics scholars would aim to achieve when communicating with other law and economics scholars. In most cases, the rhetorical devices described here will be modes of persuasion at the rhetoric-2 and moral character obviously are concepts relating to the advocate’s ethics and morality, the concept of practical wisdom suggests that the audience must perceive the advocate’s reasoning as sound, not simply from a formal logical standpoint but in a broader sense of perceiving that the advocate possesses credibility and common sense. ARISTOTLE, THE RHETORIC, supra note 16, at Book II, ch. 1 at 1378a; WISSE, supra, at 30. The concept of good will indicates that the advocate should evince good will and benevolence toward the audience as opposed to a spirit of malice revealed through attempted deception, obfuscation, or self-aggrandizement. ARISTOTLE, THE RHETORIC, supra note 16, at Book II, ch. 1 at 1378a; CORBETT & CONNORS, supra note 10, at 72–73; WISSE, supra, at 30–33. Classical rhetoric focused as much on projecting the right moral character as in possessing it. CORBETT & CONNORS, supra note 10, at 72; WISSE, supra, at 31; Michael Frost, Ethos, Pathos & Legal Audience, 99 DICK. L. REV. 85, 100–01 (1994) [hereinafter Frost, Ethos, Pathos & Legal Audience]. “[A] person seeming to have all these qualities is necessarily persuasive to the hearers.” ARISTOTLE, THE RHETORIC, supra note 16, at Book II, ch. 1 at 1378a (emphasis added). Good moral character can be projected through the discourse itself; it is not necessary that the advocate possess a widely-known reputation for uprightness and good moral character when entering into the proceedings or that the advocate self-consciously point out aspects and examples of his own good character in the discourse (although those means are recognized as being available to the advocate in proper circumstances if handled with appropriate delicacy). See CORBETT & CONNORS, supra note 10, at 72–73; Frost, Ethos, Pathos & Legal Audience, supra, at 100–101. The ethical appeal has particular importance in legal discourse because the modes of persuasion through enthymemes and examples present arguments based on probability not certainty of proof. CORBETT & CONNORS, supra note 10, at 72. Thus, it matters dearly when the audience weighs the persuasiveness of arguments and counter-arguments based on probability that the audience perceive the advocate as credible and believable, “possessing genuine wisdom and excellence of character.” Id. (quoting 3 QUINTILIAN, INSTITUTIO ORATORIA, supra note 17, sec. viii at 13). The slightest lapse in good sense, good will, or moral integrity might turn the audience away from acceptance of the arguments. Id. at 73.
rhetoric-3 levels of persuasion: persuasiveness based on the reliability of the support demonstrated in the rhetoric or persuasiveness based on the internal logic and methodology—in short, the ethos—of the discourse.

II. THE RHETORICAL CANONS OF LAW AND ECONOMICS

A. The Nature of the Rhetoric of Law and Economics

Contemporary law and economics is a discipline whose persuasion is built from the application of scientific analyses—especially mathematics and the quantitative analysis of empirical data—to social problems. Law is a discipline that attempts to deal with social problems, and legal issues and the social conditions created or imposed or perpetuated by the state of the law are problems or conditions that may be subjected to economic analyses “with coherent theory, precise hypotheses deduced from the theory, and empirical tests of the hypotheses.”

Economics provides scientific theories to predict the effects of legal rules on behavior that surpasses mere intuition, logic, or common sense concerning human behavior. The theories are behavioral theories that seek to predict how people will respond to laws when laws are viewed as a system of incentives. Legal economists assert that economics is a persuasive rhetorical lens on

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24 Heilbroner states:
Economics prides itself on its scienclike character, and economists on 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.”


25 Posner, Foreword, supra note xx, at 5.

26 See Cooter & Ulen, supra note 3, at 3, 4.

27 See id. at 4.
the law because it has mathematically precise theories (price theory and game theory) and empirically sound methods (statistics and econometrics) of analyzing the effects of legal rules and sanctions (viewed as incentives, prices, or costs) on (presumptively rational) human behavior to achieve desirable (efficient) results for individuals and for society.  

B. The Four Canons of Law and Economics

Economics combines mathematically precise theories and empirically sound methods of analyzing the effects of incentives and costs on presumptively rational human behavior to achieve efficient results for individuals and for society. From this, I derive the four canons of law and economics rhetoric:

Mathematics and Science

The primacy of mathematical and scientific methods of analysis and demonstration

Incentives and Costs

The characterization of law and the legal system in the language of incentives and costs

Efficiency

The rhetorical economic concept of efficiency

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28 See id. at 3, 4, 5. See also JEFFREY L. HARRISON, LAW AND ECONOMICS 2 (4th ed. 2007) [hereinafter HARRISON, LAW AND ECONOMICS]; Kritzer, supra note xx, at 42–43, 59.

29 See COOTER & ULEN, supra note 3, at 3, 4, 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.” 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) (quoted in Levine & Saunders, Thinking Like a Rhetor, supra note xx, at 114).
Contemporary Theory of Rational Choice

The contemporary rational choice theory as corrected by modern behavioral social sciences, cognitive studies, and brain science

Each of four canons of law and economics are used both as topics of invention and arrangement and tropes of persuasive discourse. The canons represent the fundamental assumptions upon and 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 members of the law and economics discipline—in other words, by the members of the law and economics discourse community. Therefore, these canons are described as rhetorical canons of law and economics.

30 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, 3, 4, 5, 41–43; POSNER, ECONOMIC ANALYSIS OF LAW, supra note 1, 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).

C. The Interaction of the Rhetorical Canons of Law and Economics

Canons of rhetoric are customarily expressed or depicted in a manner that reflects the interaction of the canons in a persuasive exercise; all of the canons work together and simultaneously to affect the persuasiveness of the discourse of the discipline or activity. Each canon also simultaneously 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, are often depicted as a rhetorical triangle to suggest the interaction of the factors one to another and the combined impact on the recipient of the discourse:

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

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33 WISSE, supra note xx, at 8.
James Kinneavy identifies these terms as Encoder – Signal – Decoder, linking the author, the language or message, and the reader or audience to reality. The author projects his ethos along with or, in optimal circumstance, as part of the logos of the message so as to influence the pathos of the audience.

The rhetorical pathways are fundamentally pragmatic. Aristotle sought to remind advocates that an argument is not one-dimensional. The most logically constructed argument still 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 still will not win the day if her argument is riddled with logical fallacies and comes apart at the seams with a single, gentle 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.

The four canons of law and economics rhetoric interact together at the same time and toward the same audience. Proper economic discourse incorporates each canon for the persuasion of the audience. There is a connection and 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

35 Wisse, supra note xx, at 7–8.
37 See generally Corbett & Connors, supra note 10, at 72–73; Frost, Ethos, Pathos & Legal Audience, supra note xx.
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:

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 to achieve an efficient purpose is coded in the language of Incentives and Costs and is framed for the needs of the Audience according to the Rational Choice Theory, and the means used are chosen in reference to the rhetorical Situation with a distinct preference for the methods of Mathematics and Science. Therefore, I will realign the rhetorical diamond of the canons of law and economics by depicting the flow of the discourse wherein each canon feeds into and simultaneously draws from the other canons in alignment with the components of modern argument theory:
DISCOURSE DIAMOND of the RHETORICAL CANONS of LAW AND ECONOMICS

<table>
<thead>
<tr>
<th>INVENTION, ARRANGEMENT &amp; STYLE</th>
<th>SPEAKER</th>
<th>INVENTION, ARRANGEMENT &amp; STYLE</th>
</tr>
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<tbody>
<tr>
<td>SITUATION</td>
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<td>MESSAGE</td>
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<tr>
<td>Effiency</td>
<td>Math and Science</td>
<td>Incentives and Costs</td>
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<tr>
<td>Rational Choice</td>
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<td>AUDIENCE</td>
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<td>INVENTION, ARRANGEMENT &amp; STYLE</td>
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<td>INVENTION, ARRANGEMENT &amp; STYLE</td>
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The diagram indicates the rhetorical modes I discuss in Part III:

A. Mathematics and Science Used as Topics of Invention and Arrangement and as a Trope of Style.

B. Incentives and Costs Used as Topics of Invention and Arrangement and as a Trope of Style.

C. Efficiency Used as Topics of Invention and Arrangement and as a Trope of Style.

D. Rational Choice Used as Topics of Invention and Arrangement and as a Trope of Style.
III. THE CANONS OF LAW AND ECONOMICS AS RHETORICAL PERSPECTIVES IN LAW

A. Rhetoric-1-2-3 Uses of Mathematics and Science as Topics of Invention and Arrangement and a Trope of Style

Rhetoric under the modern argument theory of contemporary rhetorical theory is crafting discourse for the audience and the situation. Modern argument theory confronts the problem of the indeterminacy of language. The linguistic limitations of indeterminacy mean that arguments are not provable in the absolute unless the language used, such as the language of mathematics and formal logic, is determinate enough for absolute proof, at least “proof” within the language of that discipline. Outside the realms of mathematics and formal logic, language is only determinative of probabilities of meaning, so that when the discourse extends beyond pure mathematics and formal logic, argumentation depends on the construction of the most reasonable and probable argument that can be made in the social situation or institutional setting. The argument is not offered as incontrovertible proof, but instead as the most reasonable and probable outcome that can be advocated in the situation.

38 See generally Burke, Rhetoric of Motives, supra note 18; Perelman & L. Olbrechts-Tyteca, supra note 7; Toulmin, Uses of Argument, supra note 18; Bitzer, The Rhetorical Situation, supra note 18, at 6–8, 389–92; Greenhaw, supra note 8, at 875–80.
39 See Bruner & Amsterdam, supra note 7, at chs. 2–3, 6–7; Perelman & Olbrechts-Tyteca, supra note 7; Toulmin, Introduction to Reasoning, supra note 7; Frans H. Van Eemeren et al., supra note 7; Smith, Rhetoric Theory, supra note 7, at 139.
40 See Perelman & Olbrechts-Tyteca, supra note 7; Toulmin, Introduction to Reasoning, supra note 7; Smith, Rhetoric Theory, supra note 7, at 139.
41 See Perelman & Olbrechts-Tyteca, supra note 7; Toulmin, Introduction to Reasoning, supra note 7; Smith, Rhetoric Theory, supra note 7, at 139.
42 See generally Perelman & L. Olbrechts-Tyteca, supra note 7; Toulmin, Uses of Argument, supra note 18. In the legal arena, this theory accepts the fact that the advocate has a client whose facts and legal situation are not necessarily the best possible circumstances for a person legally to be
Invention and arrangement are the canons that directly confront the rhetorical problem of composing the language for a meaning and persuasion by the audience in the situation:

**Invention:** Invention is the canon that describes the means to create, devise, and conceive of persuasive discourse. The term invention is a translation of the Latin *inventio* and carries the same meaning as the Greek term for invention or discovery, *heuristic* (Ευρετική). The canon is divided into two parts, the modes of argument and persuasion that are invented or created by the author—the *entechnic pisteis* or “artistic” or “artificial” proofs known as logos, pathos, and ethos—and the modes of argument and persuasion that the author does not or cannot invent, but that are discovered or found—the *atechnic pisteis* or “non-artistic” or “non-artificial” proofs, including facts and data, statistics and reports, documents and contracts, sworn testimony (including expert testimony), interviews, polls, and surveys.

The canon of invention serves as a reminder to authors of legal discourse to consider the available means of persuasion and the interaction of the modes chosen so as not to leave out available means or employ self-contradictory or self-defeating means. The classical rhetoricians did not consider this canon to be a list of involved in; nevertheless, the advocate must offer the most reasonable, probable, and compelling argument in support of his or her client's position that can be raised in the situation, with the hope that the decision-maker will find the argument more reasonable and compelling than the opponent's arguments. Smith, *Rhetoric Theory*, supra note 7, at 139 (citing Kurt M. Saunders, *Law as Rhetoric, Rhetoric as Argument*, 44 J. LEGAL EDUC. 566, 567 (1994)).


required elements of argument. Ideally, using the classical rhetorical canon of invention, the discourse should be crafted to persuade through *logos*, a logical exposition of the argument, as well as by revealing the competence and integrity of the author to handle the exposition itself (*ethos*), and inspire emotions that put the audience in a frame of mind to be persuaded by the argument (*pathos*), by using the non-artificial facts and evidence made available by the rhetorical situation.

Classical rhetoric follows three paths simultaneously toward the goal of persuasion: *ethos* (persuasion accomplished through the perceived character or reputation of the speaker), *pathos* (persuasion accomplished through the emotional response of the audience to the communication), and *logos* (persuasion accomplished through logical reasoning embodied in the content of the communication). The interaction of the three means of persuasion may be depicted as a “rhetorical triangle” similar to the “communication triangle” discussed in contemporary rhetorical theory (see diagram below):

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48 See Smith, supra note 133.
52 Id.
53 Id.
In this conceptualization, the three paths of persuasion flow into one another: the logos of the argument affects the pathos in the audience and simultaneously affects the perception of the ethos of the author; the pathos of the audience members affects how they perceive the ethos of the author and how they receive the logos of the argument.

**Arrangement:** The classical rhetorical canon of arrangement (Latin dispositio; Greek taxis) pertains to the order and design of the discourse for persuasive effect.\(^55\) Arrangement is context and purpose driven—the proper and persuasive arrangement of discourse depends on the speaker, the speaker’s purpose, the setting or situation, the characteristics of the speaker’s audience, and the audience’s purpose, desire, or motivation.\(^56\) As a starting point, the classical rhetoricians developed a complex paradigm for arguments that still is applied in court rules\(^57\) for trial and appellate briefs: *Exordium* (introduction or statement of the issues presented), *Narratio* (statement of the case), *Partitio* (summary of

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\(^{55}\) See CORBETT & CONNORS, supra note 10, at 20, 256–92; Berger, Law as Rhetoric, supra note 11, at 50; Frost, Lost Heritage, supra note 17, at 617–19; Frost, Greco-Roman Legal Analysis, supra note xx, at 182–89.

\(^{56}\) See CORBETT & CONNORS, supra note 10, at 20, 256–92; MICHAEL H. FROST, INTRODUCTION TO CLASSICAL LEGAL RHETORIC 4, 34, 35 (2005) [hereinafter FROST, CLASSICAL LEGAL RHETORIC]; Berger, Law as Rhetoric, supra note 11, at 50.

\(^{57}\) E.g., U.S. Supreme Ct. Rules 14, 24; see FROST, CLASSICAL LEGAL RHETORIC, supra note xx, at 45; Berger, Law as Rhetoric, supra note 11, at 50.
the argument), **Confirmatio** (argument), and **Peroratio** (conclusion).⁵⁸

As with the other canons of rhetoric, arrangement was considered to be of high importance to the persuasiveness of the discourse. Sloppy, disorderly, or impenetrable arrangements defeat access to the demonstration of the workings of the argument, deny falsifiability, distract the audience’s attention from the communication of the discourse, and deflate the audience’s reception and reaction to the argument. All of this prevents persuasion.

1. The **Entechnic Pisteis** (Artistic) Modes of Logos in Mathematical and Scientific Methods of Invention and Arrangement

Mathematics and science already tread the logos pathway to persuasive discourse through the logical deductive structure of the syllogism⁵⁹ and the logical inductive structure of the induction.⁶⁰

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Aristotle characterized all forms of deductive reasoning as belonging to the topic of syllogisms. *See* Aristotle, *The Rhetoric*, *supra* note 17, at Book I, ch. 1 at 1356. In a legal argument, a legal rule—a statement of the legal principles that govern a general set of circumstances—is applied to a new situation—a specific set of facts—to produce a conclusion about the outcome of this application. Murray & DeSanctis, *supra* note xx, at 8–9.
The same forms may be used in invention and arrangement in rhetoric to construct meaning and respond to the expectations of the legal writing discourse community.61

The syllogism and enthymeme (deductive forms)62 and the induction and example (inductive forms)63 are topoi of

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60 The process of induction finds a general proposition to be true because of its relationship to a number of other specific propositions that are known to be true. A certain genus of situations with identifiable characteristics can be defined from a synthesis of known situations (“species” of situations, or “precedents”) that all share these characteristics. See Rapp, supra note xx, at §§ 5(C), 7.4. Aristotle called a rhetorical induction an “example.” ARISTOTLE, THE RHETORIC, supra note 17, at Book I, ch. 2 at 1356b; Scharffs, supra note 52, at 752 & n.58; Schmidt, supra note xx, at 372–73.

61 The mathematical and scientific forms match the structure for legal discourse and rhetoric derived from the classical tradition, in which there are two permitted logical structures for an argument, the deductive and the inductive. ARISTOTLE, THE RHETORIC, supra note 17, at Book I, ch. 1 at 1355a; CICERO, DE INVENTIONE, supra note 17, at 93; QUINTILIAN, supra note 17, at 273. The forms for effective legal discourse, as opposed to mathematical, scientific proof, were the deductive, syllogistic rhetorical form known as an enthymeme, and the inductive rhetorical form known as an example or paradigm argument. ARISTOTLE, THE RHETORIC, supra note 17, at Book I, ch. 2 at 1356b. See also GEORGE A. KENNEDY, ARISTOTLE ON RHETORIC: A THEORY OF CIVIC DISCOURSE 40 & n.49 (1991) [hereinafter KENNEDY, ON RHETORIC]. Aristotle believed the enthymeme to be the superior of the two forms. ARISTOTLE, THE RHETORIC, supra note 17, at Book I, ch. 1 at 1355a; Book I, ch. 2 at 1356b.

62 In the deductive structure, both syllogisms and enthymemes begin with a major premise and follow with a minor premise so as to produce a conclusion. The difference between the two forms is that in a true syllogism each major premise must be a true statement of absolute certainty, and the minor premise also must be a true statement of absolute certainty, so that the conclusion is absolutely, irrefutably true. CORBETT & CONNORS, supra note 10, at 38–48. This is referred to by Aristotle as a “complete proof.” ARISTOTLE, THE RHETORIC, supra note 17, at Book I, ch. 2 at 1357. In an enthymeme, the major premise, whether it be explicitly stated or implied in the enthymeme, must be most probably true. CORBETT & CONNORS, supra note 10, at 53 (quoting ARISTOTLE, THE LOGIC: PRIOR ANALYTICS, Book II, ch. 27); Frost, LOST HERITAGE, supra note 17, at 635–36; Michael Frost, Justice Scalia’s Rhetoric of Dissent: a Greco-Roman Analysis of Scalia’s Advocacy in the VMI Case, 91 KY. L.J. 167, 168 n.6 (2002) [hereinafter Frost, Scalia’s Rhetoric]; Steven D. Jamar, Aristotle Teaches Persuasion: The Psychic Connection, 8 SCRIBES J. LEGAL WRITING 61, 77, 80, 81–84 (2001–2002). In other words, truth with absolute certainty is not required, only probability of truth. CORBETT & CONNORS, supra
arrangement in science, mathematics, and rhetorical demonstration. By borrowing the structure of mathematics and science, legal discourse can engage in open demonstration of the reasoning process in a form that is recognized as authoritative and persuasive. The structure of the argument takes the form of logical, scientific deduction and induction to prove the proposition. Focusing on the rhetoric-2 and rhetoric-3 uses of

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note 10, at 53–54. Similarly, the minor premise must be most probably true, not absolutely, necessarily true. CORBETT & CONNORS, supra note 10, at 53–54. Corbett and Connor’s definition of enthymeme in the Aristotelian sense is more appropriate for the evaluation of legal discourse than the more limited definition of an enthymeme as a truncated syllogism where one of the premises, usually the major premise, is implicit and unstated. Accord EUGENE E. RYAN, ARISTOTLE’S THEORY OF RHETORICAL ARGUMENTATION 29–34, 36, 38–41 (1984); JAMES A. GARDNER, LEGAL ARGUMENT: THE STRUCTURE AND LANGUAGE OF EFFECTIVE ADVOCACY 4–5, 8, 37–38 (1993). As these authors point out, the implicit major premise is one potential aspect of an enthymeme that would differentiate it from a true syllogism, but it is not a requirement of every enthymeme. This produces a conclusion that also is most probably true; but this is acceptable because the enthymeme’s purpose is to persuade, not to establish or define a proposition as a matter of scientific proof. Id. at 53. See Frost, Greco-Roman Legal Analysis, supra note xx, at 110.

In daily life, and particularly in the law, a rhetorician infrequently can state an induction with as much certainty as the above example. Aristotle anticipates this when he differentiates a rhetorical induction (an “example”) from a true induction. See Scharffs, supra note xx, at 752 & n.58. In an example, as in an enthymeme, the propositions induced by a representative sampling of species of situations (cases or precedents) are asserted to be true to a high degree of probability, not certainty. See ARISTOTLE, THE RHETORIC, supra note 17, at Book I, ch. 2 at 1356b, Book II, ch. 19 at 1392a–1392b. 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 17, at Book I, Ch. 1, at 1355a. In an enthymeme, a highly probable construction of the applicable legal principles is applied to a highly probable construction of the specific circumstances of the case at hand, so as to describe a highly probable conclusion or prediction about the application. Id. at Book I, ch. 1 at 1355a.

See COOTER & ULEN, supra note 3, at 3, 4; Robert L. Heilbroner, Rhetoric and Ideology, supra note xx, at 38–39; Kritzer, supra note xx, at 42–43, 59. GEORGE POLya, INDUCTION AND ANALOGY IN MATHEMATICS: VOLUME I OF MATHEMATICS AND PLAUSIBLE REASONING v–vi (1954); McCloskey, Rhetoric of Law and Economics, supra note 4, at 752, 760. The pros and cons of this rhetorical imperative are a lively topic of debate, and one that is growing.
mathematical forms and structure, this structure of argumentation is readily identifiable by audiences, and communicates a proper logical structure to support the discourse (rhetoric-2) as well as demonstrating internally consistent work of a competent author (rhetoric-3).

Induction can inform the major premise of the deductive structure—the process of development of the rules or standards through the process of rule synthesis and explanatory synthesis.

67 Rule synthesis is a synthesis of authorities found to be on point and controlling of a legal question in order to accurately determine and state the prevailing law—the rules—that govern a legal issue. Authorities that control the disposition of a legal issue must be reconciled for their explicit statements and pronouncements of the governing legal standards as well as examined for implicit requirements that are induced from the controlling authorities. See, e.g., Richard K. Neumann, Jr., Legal Reasoning and Legal Writing chs. 10–13 (5th ed. 2005); Deborah A. Schmeemann & Christina L. Kunz, Synthesis: Legal Reading, Reasoning, and Writing chs. 4, 6, 9 (3d ed. 2007); Helene S. Shapo, Elizabeth Fajans & Mary R. Falk, Writing and Analysis in the Law ch. 2(IV), ch. 5(III) (4th ed. 1999); Terrill Pollman, Building a Tower of Babel or Building a Discipline? Talking About Legal Writing, 85 Marq. L. Rev. 887, 909–10 (2002). Legal analysis employs synthesis of the rules to make a single coherent statement of the applicable legal principles that govern the legal issue at hand, and this becomes the “R” (Rule) section of the discourse, or the first half of the major premise of the legal reasoning syllogism. Murray & DeSanctis, Legal Writing and Analysis, supra note xx, chs. 2, 5, 6.

68 Explanatory synthesis, as distinguished from rule synthesis, is a separate process of induction of principles of interpretation and application concerning the prevailing rules governing a legal issue. The induction is from samples—namely case law—representing specific situations with concrete facts and in which the legal rules have been applied to produce a concrete outcome. While rule synthesis is the component of legal analysis that determines what legal standards apply to and control a legal issue, explanatory synthesis seeks to demonstrate and communicate how these legal standards work in various situations relevant to the legal issue at hand. See Murray & DeSanctis, chs. 6, 7 (discussing explanatory synthesis); Michael D. Murray, Rule Synthesis and Explanatory Synthesis: A Socratic Dialogue Between IREAC and TREAT, 8 Legal Comm. & Rhetoric 217 (2011) [hereinafter Murray, Rule Synthesis and Explanatory Synthesis].
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. The rhetorical logos structures of law and economics are a highly recommended form for persuasive discourse under modern argument theory and the contemporary rhetoric theory of discourse communities. This use of mathematical structure creates meaning and communicates persuasive discourse to each possible audience through level 1, 2, and 3 rhetoric.

2. The Atechnic Pisteis or (Non-Artistic) Modes of Invention and Arrangement of Mathematics and Science

Mathematics and science plays a direct role in contemporary legal analysis of facts and data, statistics and reports, documents and contracts, sworn testimony (including expert testimony), interviews, polls, and surveys—in short, we have come a long way in the proper presentation of the atechnic pisteis or (non-artistic) modes of invention. In many areas of law (specific examples being antitrust, taxation, and securities law, and the calculation of damages in almost every area of contract, tort and property law), mathematical analysis informs or constructs the substantive element of the action—collusive effect, price manipulation, gains

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70 The legal writing discourse community has an expectation that the syllogistic structures of IRAC, IREAC, or TREAT will be employed, thus the rhetorical lesson is not to disappoint this audience with a non-syllogistic structure. See generally Susan L. DeJarnatt, Law Talk: Speaking, Writing, and Entering the Discourse of Law, 40 DUQ. L. REV. 489 (2002); Jill J. Ramsfield, Is “Logic” Culturally Based? A Contrastive, International Approach to the U.S. Law Classroom, 47 J. LEGAL EDUC. 157, 164–77 (1997).
or losses, or damages. In addition, at a second level of rhetoric, the use of scientific and mathematical tools as topoi for persuasion regarding the proof or establishment of elements of the case—e.g., surveys, statistical and quantitative analyses of empirical data, diagrammatical demonstration, and four-quadrant tabular presentation of data—is a well-established method of persuasion. In both categories, the direct proof of damages or an element of the case, or the persuasive ordering and presentation of evidence, the use is substantive, but it is employed as a language to convince the reader of the evidence or proof of the proposition, and thus is rhetorical.  

The use of such methods of persuasion has grown over the years:

![Chart](image)

This chart reports a single search in each decade for figures, charts, graphics, and tabular material, and there is no simple way to control for uses that are proof of elements (such as damages) or ordering of data and information for persuasion (e.g., evidence). But the point of the chart is that whatever uses are made of figures, charts, graphs, or tables, the uses are going up in cases and law

71 See Thomas Conley, Rhetoric in the European Tradition 15 (1990); Levine & Saunders, Thinking Like a Rhetor, supra note 18, at 118–21; Simpson & Selden, supra note xx, at 1011.
72 Westlaw search “SHOWN DEPICT! DISPLAY! PICTURED REFER! /4 FIGURE GRAPH! CHART TABULAR” with date restrictions for each decade, e.g., date(>1999) & date(<2010), in ALLCASES and JLR databases.
reviews in each decade, and markedly so in the last two decades in law review and journal articles.

The substantive use of mathematical forms to create meaning and communicate understanding is the topic in this section. The more artistic and stylistic use of mathematical forms is discussed in the next section.

3. Rhetoric-3 Uses of Mathematics and Science as a Trope of Style

Style (Latin *elocutio*; Greek *lexis*) pertains to the composition and wording of the discourse, including grammar, word choice, and figures of speech. Figures of speech were divided into schemes (artful deviations from the ordinary arrangements of words), and tropes (creative variations on the meanings of words). Style is dependent on the speaker, the context and setting, and the audience, and the classical rhetoricians made recommendations for dividing discourse into one of three levels of style: the low or plain style (Latin *infinum* or *humile*; Greek *ischnos*), the purpose of which is to teach the audience, the middle style (Latin *aequabile* or *mediocre*; Greek *mesos*), the purpose of which is to please the audience, and the grand style (Latin *supra* or *magniloquens*; Greek *adros*), the purpose of which is to move the audience.

The audience and the situation for the discourse are, of course, very important to the analysis of the best arguments that can be raised, so modern argument theory calls for advocates to pay

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73 See generally CORBETT AND CONNORS, supra note 10, at 20, 378; Smith, *Rhetoric Theory*, supra note 7, at 133–34 & n.2 (collecting sources on style in classical rhetoric).


75 See generally Frost, *Lost Heritage*, supra note 17, at 617–18; Frost, *Greco Roman Legal Analysis*, supra note xx, at 188–89;

particular attention to the audience and situation of their argument.  

Mathematical forms (charts, diagrams, four-quadrant tables, algebraic formulas) can stimulate thought and imagination, leading to rhetoric appreciation of the persuasiveness of the discourse.

Example 1:

This chart is intended to report “Ratings Of Challenges Facing Successful Operations Of A Business In Russia (Among Selected Major Brandholders And Trademark Owners Doing Business In Russia),” and it is offered to demonstrate that intellectual property protection is perceived to be a primary challenge confronting international companies doing business in Russia. The author describes the methodology in the following way:

In the survey, respondents were asked to rate a series of “challenges confronting the successful operations of your business in Russia” using a five-point scale, where one meant “least important” and five meant “most important.” More than one-half (52%) of selected major brandholders and trademark owners doing business in Russia gave a rating of five to intellectual property protection. This ranks intellectual property protection on virtually the same high

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77 Smith, *Rhetoric Theory*, supra note 7, at 139.
79 Id.
level of concern as customs (54%) and taxes (52%)—which have historically been perceived as presenting the greatest challenges to business success in Russia.\footnote{Id.}

Nothing in this chart is particularly mathematical except the fact that the author crunched some numbers to produce the chart, but the demonstration of the data in a bar graph with a superimposed variable line graph makes the presentation all the more authoritative in a rhetoric-3 sense because it appears that a complicated mathematical formula was applied to data to produce this graph.


I consider example 2 to be an excellent use of scientific charting (taking the form of an informational or decisional flow chart) to make a rhetorical-3 point: the procedure for acquiring a firearm in Quebec is too complicated.
Example 3:82

This chart discusses the rise and fall of city names in English language literature, and claims that this Google Lab chart reports the results of a search of city names in the vast amount of literature that Google has scanned and compiled for searching.83 The chart purports to tell us something about “the relative importance of different power centers in the public imagination.”84 The author could have stated (in plain English): when searching for “Paris, London, New York, Boston and Rome,” in the scanned English literature from 1750 to 2008, interest in London remained steady and at a higher level than Paris, Boston, and Rome, while interest in New York started at very low point but grew steadily, surpassing London in approximately 1910, and continued to rise in popularity until 1980, when it began a steady decline. This would have accurately stated the purported findings, but the graphing of the information sends a very different rhetoric-3 message—that

83 Id.
84 Id.
something scientific was done, and produced the results the readers see before them.

Mathematical forms are a persuasive tool, but the tool is only as good as the user, and the user must be careful about proper uses in proper situations. In general legal discourse, the use of law and economics mathematical and scientific forms and schemes as an artistic or stylistic mode comes with a word of caution that is grounded in the very discipline from which the rhetorical use of such forms is drawn: 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 the hypotheses, and analyzing the data, statistics, and information collected to test the hypotheses.85 Law and economics also assumes the rhetorical primacy of scientific and mathematical forms in discourse to openly demonstrate the analyses and reveal its theses about human behavior for examination and critique.86 The rhetorical power of a mathematical proof or a demonstration of a scientific deduction or induction lies is the openness and transparency of the demonstration. The premises (major and minor) and the nature of the hypothesis induced from the comparison of genus and species of data must be fully disclosed and described so as to allow the presentation to be analyzed and rebutted. The assertions made in reference to the information displayed must be falsifiable; tautological explication (the information is what it is) adds nothing to meaning or understanding, and does not contribute to the mode of persuasion that points to truth. At worst, using mathematical forms simply to dazzle or confuse the audience or obfuscate the relevant information pertinent to the issue is the worst form of


I may be wrong, but I don’t think the intention of the author of this chart was to make clear the available options offered under the health care reform initiative.

**B. Rhetorical Lessons in Defining Legal Phenomena as Incentives and Costs**

This section discusses: (1) rhetoric-3 uses of incentives and costs as a trope of style (i.e., a figure of speech using incentives and costs as a metaphor in discourse); and (2) the rhetoric-2 and rhetoric-3 concept of incentives and costs in the organization and presentation of the discourse as a topic of invention and
arrangement (i.e., the structure and composition of the discourse and whether it creates incentives or imposes costs on the reader).

1. Incentives and Costs as a Rhetoric-3 Trope of Style

Economics and behavioral science informs legal discourse and communication by pointing out that people respond to incentives. Contemporary law and economics, informed by the lessons of behavioral science, offers a rhetorical perspective on legal discourse and communication because the study of persuasion in legal communication involves an analysis of what an author (speaker, writer, communicator) can do to create incentives to attract or motivate the reader (listener, etc.) while avoiding imposing costs on the reader.

A trope is “a deviation from the ordinary and principal signification of a word.” Metaphor is a trope of style in rhetoric, one of the figures of speech described and applied within the canon of style. Metaphor is one of the “master tropes,” the others being metonymy, synecdoche, and irony. Numerous disciplines have

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88 EDWARD P.J. CORBETT, CLASSICAL RHETORIC FOR THE MODERN STUDENT 461 (1971).
89 Professor Stephanie A. Gore defines a metaphor as follows: A “metaphor” is defined as a “figure of speech in which a word or phrase that ordinarily designates one thing is used to designate another, thus making an implicit comparison.” THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (4th ed. 2000). A metaphor may also be defined as “an implied analogy imaginatively identifying one object with another and ascribing to the first object one or more of the qualities of the second.” C. HUGH HOLMAN & WILLIAM HARMON, A HANDBOOK TO LITERATURE 298 (5th ed. 1986). The Princeton Encyclopedia of Poetry and Poetics elegantly defines metaphor as “[a] condensed verbal relation in which an idea, image, or symbol may, by the presence of one or more other ideas, images, or symbols, be enhanced in vividness, complexity, or breadth of implication.” PRINCETON ENCYCLOPEDIA OF POETRY AND POETICS 490 (Ales Preminger ed., enlarged ed., 1974).”

90 BURKE, GRAMMAR OF MOTIVES, supra note 18, at Appx. D. Burke described the master tropes as follows: For metaphor we could substitute perspective; for metonymy we could substitute reduction; for synecdoche we
studied the power of metaphor in discourse, including linguistics, philosophy, rhetoric, cognitive psychology, and literary theory. Recent literary and cognitive studies of metaphor have shown that:

could substitute representation; for irony we could substitute dialectic. Id. (emphasis omitted).


Literary analysis and cognitive psychology theory analyze the use and effect of metaphors in ways that resemble the techniques of their Greco-Roman counterparts. In some recent discussions of metaphors' place in legal discourse, analysts reject the view that metaphors are merely superficial stylistic devices. They assert, with Haig Bosmajian, that “it is now well established that the tropes, especially the metaphor, are not simply rhetorical flourishes used to embellish discourse.”93 Instead, these analysts maintain that metaphors are essential devices for achieving certain sorts of intellectual insights. Classical rhetoricians' recognized that metaphors provide insights or “fresh knowledge”94 that can “scarcely be conveyed”95 by other means. Under this view, metaphors become important intellectual components of legal analysis rather than mere mnemonic or focusing devices.96

Nevertheless, Judge Cardozo warned that "[m]etaphors in law are to be narrowly watched, for starting as devices to liberate thought, they end often by enslaving it."97

The rhetorical path that uses incentives and costs as a metaphor for conditions and effects in the law is a well-traveled path in legal discourse.98 Every time an author writes about a cost-benefit analysis, the use of the term “cost” stands in as a metaphor, a rhetorical trope that attempts to transfer the concept of a cost onto to the understanding of the actual action or condition described. The word “benefit” similarly stands in to communicate a beneficial

93 Id. (citing HAIG BOSMAJIAN, METAPHOR AND REASON IN JUDICIAL OPINIONS 441 (1992). See also Haig Bosmajian, “The Judiciary's Use of Metaphors, Metonymies and Other Tropes to Give First Amendment Protection to Students and Teachers,” 444 J.L. & EDUC. 443 (1986)).
94 Id. (citing ARISTOTLE, THE RHETORIC, supra note 17, at 206).
95 Id. (citing CICERO, DE ORATORE, supra note 17, at 123).
96 Id. at 135–37.
97 Berkey v. Third Ave. Ry. Co., 244 N.Y. 84, 94, 155 N.E. 58, 61 (1926) (Cardozo, J.). Thus, Judge Cardozo used a metaphor (liberation or enslavement of thought) to criticize the use of metaphors in law.
98 Note the metaphor I am using here. Metaphors are unavoidable in legal discourse.
meaning to the reader concerning the actual effect or change in condition discussed in the discourse. Every time a change in the law is said to “incentivize” certain conduct, the concept of “incentive” is a metaphor for the intention of the actor to motivate a certain reaction by offering something desired by the recipient. Every time a license or permit application process is said to provide a “disincentive” to an activity, the term “disincentive” is used to convey the negative effects of the condition described in the discourse. Every time a change in procedural rules is said to impose an “externality” on the cost of litigation, the author uses “externality” as a figure of speech to suggest that the law imposes a “cost” that is not internalized by one or more of the parties in the discussion. This is in fact a metaphor within a metaphor—both “cost” and “internalize” are used metaphorically in this example.

By using the terms “incentives” and “costs” metaphorically, legal authors can discuss laws and legal conditions as incentives or costs in contexts that are not necessarily business or contract settings or do not involve the calculation of pecuniary sums or damages. This expansion in language may improve communication—the enlightening aspect of metaphor in discourse. Of course, with regard to proper ethos, the recommendation to use metaphor in rhetoric-3 applications comes with Judge Cardozo’s highly metaphorical warning not to let the metaphor enslave the reader’s thinking on the topic.

99 In many areas of law (specific examples being antitrust, taxation, and securities law, and the calculation of damages in almost every area of law), mathematical analysis informs or constructs the substantive element of the action—collusive effect, price manipulation, gains or losses, or damages. In addition, at the level rhetoric-2, the use of scientific and mathematical tools as topoi for persuasion regarding the proof or establishment of elements of the case—e.g., surveys, statistical and quantitative analyses of empirical data, diagrammatical demonstration, and four-quadrant tabular presentation of data—is a well established method of persuasion. In both categories, the direct proof of damages or an element of the case, or the persuasive ordering and presentation of evidence, the use is substantive, but it is employed in a language to convince the reader of the evidence or proof of the proposition, and thus is rhetorical. See, e.g., THOMAS CONLEY, RHETORIC IN THE EUROPEAN TRADITION 15 (1990); Levine & Saunders, Thinking Like a Rhetor, supra note 18, at 118–21; Simpson & Selden, supra note xx, at 1011.
2. Rhetoric-2 and Rhetoric-3 Incentives and Costs of Organization and Presentation of the Discourse as Topics of Invention and Arrangement

The economic rhetorical use of incentives and costs also has rhetoric-2 and rhetoric-3 application in the organization and presentation of the discourse as topics of invention and arrangement (i.e., the structure and composition of the discourse and whether it creates incentives or imposes costs on the reader). Contemporary law and economics informs contemporary rhetorical studies of invention, arrangement, and style adding to the knowledge-base of studies of writing as a process and discourse community theory. The rhetorical perspective of economics and behavioral science informs the study and understanding of effective legal communication by demonstrating the means by which an author can create incentives to attract or motivate the reader while avoiding imposing costs on the reader. As one example, incentives can be created in legal communication and transaction costs can be avoided in legal communication by compositional choices made by the author through the use of a helpful, reader-oriented organizational paradigm such as the TREAT paradigm. Incentives can be created and costs can be avoided in legal communication by organization of the contents of communications into rule formation (rule section) and separate explanation of how the rule works (explanation section). Incentives can be created and costs can be imposed in legal communication by the method of syntheses of authorities used to demonstrate both the legal rules that govern the issue and how those legal rules work in actual, concrete situations by the use of explanatory synthesis.

C. Rhetorical Use of Efficiency in Legal Discourse

As specifically applied to the rhetorical canons of invention, arrangement, and style, the rhetorical perspective of economics and

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100 Murray & Desanctis, supra note xx, at ch. 6.
101 Id.
102 See Murray, Rule Synthesis and Explanatory Synthesis, supra note xx..
behavioral science can inform the discussion by demonstrating that efficiency supports the persuasiveness of legal discourse.

1. Rhetoric-3 Use of Efficiency in Invention and Creation of Meaning

Economic or productive efficiency is the application of the term “efficiency” that is best known to non-economists. The advice for legal authors seeking rhetoric-3 recognition of the meaning of the term when used outside of strict economic analysis is to use the term “efficiency” or “efficient” to refer to an avoidance of waste, a reduction in costs (transaction costs, collateral costs, or externalities), or other savings in time or money that have been or would be brought about by a change in the law. Saving money or time is nearly universally valued as a goal in life and in the law. Emphasis of efficiency—the phrasing and defining of elements of the circumstance in terms of efficiency in the time or cost saving sense—is rhetorically valuable.

2. Rhetoric-2 and Rhetoric-3 Efficiency in Arrangement and Style

Law and economics advocates elegance and efficiency in the form, structure, and composition of economic discourse. This lesson from the canons of law and economics teaches legal authors to follow a prescription to make their discourse clear, concise, succinct, and elegant in form. The formal use of the term efficiency benefits clarity and promotes comprehension of meaning over confusion and frustration. It opens doors to falsifiability because the material is more accessible for analysis and criticism if it is clear and succinct. The door to falsifiability is closed by complexity, density, prolixity, and obfuscation in legal discourse. Falsifiable assertions that are not rebutted are highly persuasive.

D. Rhetorical Lessons from Contemporary Rational Choice Theory

The lessons for rhetorical discourse using the definition of rational choice in contemporary law and economics have become more complicated as our understanding of human behavior grows,
but the consequences of the contemporary theories of rational choice ultimately coincide with lessons learned from classical rhetoric and modern studies of cognition and brain science. I will discuss the rhetorical lessons of contemporary rational choice theory in three areas: (1) rhetoric-1 framing of legal issues to respond to biases and heuristics and to situational conditions on rational choice as a mode of invention and arrangement; (2) rhetoric-2 topics of arrangement and invention (synthesis and syllogistic structure) to appeal to the rational audience; and (3) rhetoric-3 uses of pathos-centric modes of argument—metaphor, parable/mythical/fable forms, character archetypes, and other forms of narrative reasoning—as topics of invention and tropes of style to address anchoring, endowment effects, and other heuristics and biases of legal audiences based on the lessons of pathos from modern cognitive studies and brain science.

1. The Rhetoric-1 Importance of Framing in Invention and Arrangement

It is challenging to manage the modeling and framing of broad concepts such as fairness and justice in economic theory, but the rhetorical implications of the empirical observations in law and economics, cognitive studies, and brain science reveal that people respond to justice and fairness in legal discourse. These studies confirm what has been predicted by the advocates of the modes of persuasion of logos, ethos, and pathos. Arguments framed from a more general perspective of how the law and the public policy behind the law supports the argument are, of course, a necessary part of legal discourse, and a legal author does not need law and economics to tell her that.

Other theories developed through empirical testing of rational choice biases and heuristics with a predictable effect on decision-making, such as the endowment effect, the status quo bias, and risk/loss aversion, can be used to frame arguments. For example, if an author combines two lessons from the experiments of behavioral science—the experiments indicating that framing of
choice matters because decision-making is context-based, and the experiments indicating that the endowment effect or status quo bias plays a strong role in contract negotiation—creates a rhetorical prescription for advocates: advocates should work to carefully and advantageously define the starting point terms of a negotiation (which will, as indicated by the experiments, be perceived and responded to as the status quo) or the status of the current law from which the tribunal must move forward to adjudicate the client’s matter (which, again, will be perceived as the status quo), and simultaneously work to frame the choices of departure in such a way that the preferred outcome for a client is framed as an appropriate compromise choice—not the most extreme or most expensive departure from the status quo starting positions (as defined by the advocate), but not the smallest departure either.

2. Rhetoric-1 and Rhetoric-2 Logos Topics of Arrangement and Invention (Inductive Synthesis and Syllogistic Structures) for the Rational Audience (the Legal Writing Discourse Community)

The overall structure of legal discourse, both in terms of invention and arrangement, should be drafted with regard to the logos topics of syllogistic structure and inductive synthesis. The rhetoric-1 audience of legal discourse is law-trained readers—the legal writing discourse community. The expectations of this group manifestly support using a logical syllogistic structure for the overall architecture of the discourse, and the Anglo-American theory of precedent and stare decisis support the inductive

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105 Id. at 136.
106 Id. at 137.
107 Kelman, Rottenstreich, & Tversky, supra note xx, at 74–76.
structure of a synthesis of authorities to determine the legal standards governing an issue. The lessons of modern cognitive studies and brain science that challenge many of the assumptions, premises, and paradigms of traditional rational choice theory in law and economics do not wipe the slate clean from the expectations of the legal writing discourse community and its basic conventions for organization and demonstration. Even if indirect audiences are contemplated, in rhetoric-2 persuasion, the logical syllogistic structure is a widely accepted method of demonstration. If used properly with appropriate attention to the ethos of the discussion, the structure opens up the premises and evidence of the discussion to examination and potential criticism or rebuttal. A proper synthesis identifies the species that are examined as well as the newly identified genus principles that are induced from the species, or it identifies the existing genus principles that are applied to the newly identified species of the genus depending on which side of the induction the discussion falls. In short, in invention and arrangement, there is no ready substitute for the logical syllogistic structure of legal discourse and the inductive structure of synthesis.

3. Rhetoric-3 Rational Choice Lessons Concerning Pathos-Based Modes of Persuasion to Address Cognitive and Situational Effects on Decision-making

A significant part of contemporary law and economics’ rational choice theory is under examination to challenge the assertion that legal decision-makers are autonomous individuals weighing costs and benefits in individualistic terms, unaffected by context and situation. Under the traditional and still prevailing doctrine of rational choice, rational decision-making should not be affected by situation, meaning that choices that maximize the decision-makers’ ends should not be affected by situation. The values and interests implicated by a choice may be different from individual to individual, but once identified, the choices made in recognition of the same values and interests should not change from situation to situation. Cognitive studies and brain science on situational decision-making take the opposite tack based on empirical evidence and argue that decisions are affected by biases and
heuristics that are connected to the context and situation of the decision-making.\footnote{See Hanson & Yosifon, The Situation, supra note 5; Hanson & Yosifon, The Situational Character, supra note 1; Gregory Mitchell, Why Law and Economics’ Perfect Rationality Should Not Be Traded for Behavioral Law and Economics’ Equal Incompetence, 91 GEO. L.J. 67, 105–09 (2002).}

Cognitive studies and brain science have worked a similar correction in contemporary rhetoric’s modern argument theory: the assumptions and premises of classical and traditional theories of rhetoric regarding audience have been refined by modern social science and cognitive studies that redefine the concept of the rhetorical situation in a way that affects every part of persuasive discourse, the audience, the message, and the speaker.\footnote{See, e.g., MAKAY, SPEAKING WITH AN AUDIENCE, supra note 16, at 9; ROBBINS-TISCIONE, RHETORIC FOR LEGAL WRITERS, supra note 16, at 9; Bitzer, The Rhetorical Situation, supra note 18, at 6–8, 389–92; White, Law as Rhetoric, supra note 13, at 695; Wetlaufer, Rhetoric and Its Denial, supra note 16, at 1546.}

The lessons learned in both contemporary law and economics and contemporary rhetoric can inform both disciplines to improve theories, predictions, and prescriptions about changes in economic analysis of law and legal discourse.

Situational decision-making often implicates the different values that people assign to different choices depending on the context and situation in which the decision is to be made,\footnote{Chris Guthrie, Panacea or Pandora’s Box?: The Costs of Options in Negotiation, 88 IOWA L. REV. 601, 607 & n.24, 614–15, 625–26, 644–45 (2003); Jack L. Knetsch, The Endowment Effect and Evidence of Nonreversible Indifference Curves, in CHOICES, VALUES, AND FRAMES 171 (Daniel Kahneman & Amos Tversky eds., 2000); Mitchell, supra note 106, at 101–10, 160–64. See also Itamar Simonson & Amos Tversky, Choice in Context: Tradeoff Contrast and Extremeness Aversion, 29 J. MARKETING RES. 281, 281 (1992); Amos Tversky & Itamar Simonson, Context-Dependent Preferences, 39 MGMT. SCI. 1179, 1179 (1993).}

and a rhetorical examination of values leads to the analysis of pathos\footnote{Pathos is one of the three artistic topoi of invention, an essential mode of persuasion in classical rhetoric. See ENCYCLOPEDIA OF RHETORIC 99 (Thomas O. Sloan ed., 2001); Robert F. Blomquist, Dissent Posner-Style: Judge Richard}—the emotional response to persuasive discourse\footnote{See also Itamar Simonson & Amos Tversky, Choice in Context: Tradeoff Contrast and Extremeness Aversion, 29 J. MARKETING RES. 281, 281 (1992); Amos Tversky & Itamar Simonson, Context-Dependent Preferences, 39 MGMT. SCI. 1179, 1179 (1993).}—
because values in contemporary brain science appear to be the most important trigger of emotional conviction. \textsuperscript{113} Contemporary

\textit{A. Posner’s First Decade of Dissenting Opinions}, 69 Mo. L. Rev. 73, 158 (2004). Quintilian put great stock in emotional appeals, Frost, \textit{Ethos, Pathos & Legal Audience}, supra note xx, at 91, claiming that, “this emotional power . . . dominates the court [...] it is this form of eloquence that is queen of all.” \textit{2 Quintilian, Institutio Oratoria}, supra note 17, at 419. Quintilian, like Aristotle, thought that “the duty of the [advocate] is not merely to instruct: the power of eloquence is greatest in emotional appeals.” \textit{Id.} at 139; \textit{see} Frost, \textit{Ethos, Pathos & Legal Audience}, supra note xx, at 91. Over-reliance on the logos, the logical presentation, of an argument may be a myopic tendency of lawyers, but it is likewise clear that pathos cannot be controlled directly by legal argument. \textit{Corbett & Connors, supra} note 10, at 78. \textit{See also} Kenneth D. Chestek, \textit{Judging by the Numbers: An Empirical Study of the Power of Story}, 7 J. ALWD 1, 3, 5, 29–30 (2010) (an empirical study of the persuasiveness of logos-centric vs. pathos-centric briefs). The classical rhetoricians recognized that our emotions are not entirely under the control of our will and our intellect. \textit{Corbett & Connors, supra} note 10, at 78. We cannot use logic to argue an audience into an emotional state any more than we can will ourselves into an emotional reaction based on an intellectual conviction that we should have a certain emotional reaction to a certain set of facts or a particular logical appeal. \textit{See id.} An advocate that explicitly announces that he or she will play on the audience’s emotions in the presentation of the discourse will inevitably achieve the opposite result; the audience, made wary of emotional manipulation, will at best steel themselves not to be manipulated and at worst will discount the advocate’s presentation on the grounds that the advocate has engaged in trickery and subterfuge. \textit{See id.} at 78–79. Thus, the advocate must not openly play upon the audience’s heart strings, but instead must carefully and subtly arrange the facts and narrative reasoning of the case in conjunction with the logic and legal reasoning of the argument. \textit{See id.}; Chestek, \textit{supra}, at 2, 3, 5, 29–32; Frost, \textit{Ethos, Pathos & Legal Audience, supra} note xx, at 94.


rhetoric encompasses examination and consideration of the values of the audience, as well as their passions and biases, in its study of the use of practical reasoning and informal logic, narrative reasoning (and its many sub-categories—storytelling, mythical forms, parable forms, hero-antihero archetypes), and the schemes and tropes of composition in analogical and literary forms (e.g., schemes and figures of speech, metaphor theory, and literary allusion). Contemporary law and economics describes the same


Damasio describes the brain process of somatic marking which is used to evaluate experience of the world, tagging certain facts as useful and valuable toward an objective, and rejecting many others. In decision-making, such as the task of jurors, the process involves the somatic marking of evidence for its salience toward the decision, winnowing down the possible choices and their consequences based on the somatic marker (loosely characterized as a "gut feeling") assigned to the evidence. (Contemporary legal economists and behavioral scientists would characterize this as the application of affect heuristics.) E.g., Melissa L. Finucane et al., The Affect Heuristic in Judgments of Risks and Benefits, 13 J. Behav. Decision Making 1, 2 (2000)). Jurors then seek a narrative that makes sense fitting the marked evidence into a coherent, lifelike, believable story. Jurors can supply their own narrative, or the advocate can supply a lifelike, believable storyline that fits the facts (and assists the client), which emphasizes the need for storytelling as a tool of narrative reasoning in legal discourse. See generally DAMASIO, DESCARTES’ ERROR, supra, at 170–75; Todd E. Pettys, The Emotional Juror, 76 Fordham L. REV. 1609, 1628, 1631–33 (2007).

type of phenomena as biases and heuristics—anchoring, status quo bias, endowment effect bias, risk/loss aversion, representativeness heuristic, availability heuristic, and probability assessment dysfunctionality. \(^{115}\) Contemporary rhetoric applies cognitive studies and brain science to inform the predictions of audience reaction and motivation produced by the use of certain topics of invention or tropes of style, \(^{116}\) much in the same way that contemporary law and economics looks to cognitive studies and brain science for the same lessons in audience reaction and motivation. \(^{117}\)

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\(^{116}\) For example, the evaluation of the use of metaphor as a method of pathos-based persuasion and transmission of meaning has caused rhetoricians to look to social science and cognitive studies to study the effects of metaphor in communication. _E.g._, OWEN BARFIELD, _POETIC DICTION: A STUDY IN MEANING_ 63–64 (1964); HAIG BOSMAJIAN, _METAPHOR AND REASON IN JUDICIAL OPINIONS_ 152, 441 (1992); JAMES B. WHITE, _THE LEGAL IMAGINATION: STUDIES IN THE NATURE OF LEGAL THOUGHT AND EXPRESSION_ 695, 707 (1973); Haig Bosmajian, _The Judiciary’s Use of Metaphors, Metonymies and Other Tropes to Give First Amendment Protection to Students and Teachers_, 444 J. L. & EDUC. 443 (1986); Frost, _Greco-Roman Metaphor_, _supra_ note xx, at 135–38; Burr Henly, “_Penumbra_”: The Roots of a Legal Metaphor, 15 HASTINGS CONST. L.Q. 82 (1987); Edward L. Murray, _The Phenomenon of the Metaphor: Some Theoretical Considerations_, 2 DUQUESNE STUDIES IN PHENOMENOLOGICAL PSYCHOLOGY 288 (A. Giorgi, C. Fischer & E. Murray, eds., 1975); Steven L. Winter, _Death is the Mother of Metaphor_, 105 HARV. L. REV. 745, 759 (1992) (reviewing THOMAS C. GREY, _THE WALLACE STEVENS CASE: LAW AND THE PRACTICE OF POETRY_ (1991)).

\(^{117}\) Most if not all of the sources on behavioral law and economics indicate a trend toward incorporating cognitive studies, and the most cutting edge of these sources point toward new ways of understanding incentives and motivation through brain science. _See_, _e.g._, John N. Drobak & Douglass C. North, _Understanding Judicial Decision-Making: The Importance of Constraints on Non-Rational Deliberations_, 26 WASH. U. J.L. & POL’Y 131 (2008); Terrence
There are two rhetorical lessons to be drawn from this observation: first, that a single rhetorical approach to discourse may miss the audience and fall short of the rhetorical situation. Discourse should be crafted in layers, and by this I do not simply mean the rhetoric-1, -2, or -3 levels pertaining to different audiences, but rather the use of multiple layers using different modes of persuasion directed toward the same audience for the same level of rhetorical communication; second, that a writer should consider pathos-based modes of persuasion, such as narrative theory and storytelling modes to target the values of the audience in the situation and present discourse that the audience will identify and accept, perhaps not as the sole mode of persuasion, but as one layer in the communication.

CONCLUSION

The rhetorical canons of law and economics are tools for legal discourse, not universal goals and not perfect solutions. Law and economics provides a rhetorical lens through which a legal author might examine and improve the persuasiveness of her discourse. But a lens, like any other tool, is only as good as its user. The critics of the role of neoclassical law and economics in removing or blocking restraints on and limiting measures to oversee the American financial markets and banking system\(^\text{118}\) give us a sobering reminder that law and economics rhetoric can be used to persuade highly intelligent, lawyers, judges, academics, legislators, and government officials to allow and even to put into place conditions that precipitated the most severe economic crisis since the Great Depression.

Modern and contemporary rhetoric has advanced and improved upon the basic perceptions of human behavior and knowledge of human nature of the ancient rhetoricians, but the more complex models of reasoning in contemporary rhetoric have not replaced

\[^{118}\] See sources cited in notes 1-2 supra.

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 emotional reaction of the audience 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 designing 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 the new school of contemporary rhetoric, 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 allows better understanding of the advantages and disadvantages of laws and legal policy; its widespread acceptance in the law is only further evidence of the rhetorical power of the language across many areas of the law and many legal situations. The persuasiveness of mathematics and science extends to their forms and the substance of their proofs, and the use of the 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 they are used to attempt to avoid a primary question of fairness or justice. The intuitive uses of efficiency in form (elegance, openness, and clarity) and in the elimination of costs
and waste may be widely persuasive, but other economic rhetorical turns on efficiency (Pareto and Kaldor-Hicks efficiency) are best left to rhetoric-1 discourse of economists. Incentives and costs is a language, and many rhetorical situations accept this language, but the general application 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 situation 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, many of which were stated well before the Great Recession, have asserted that mathematical and scientific methods of daunting complexity are used in law and economics to hide the workings of the 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 not persuasion. The formula might hide the workings of the reasoning rather than openly demonstrate the reasoning for falsification or rebuttal, all under an implied challenge and a dare to rebut the force of such a powerful device. Charts and diagrammatics 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, when little or no math or science was involved. Quantitative analysis may crunch data the true meaning of which is buried in the assumptions made that chose what data to collect and what to exclude, and in the premises drawn from the assumptions that determined the possible conclusions that could be drawn from the experiment or analysis.

Law and economics relies on mathematics and science, efficiency, incentives and costs, and rational choice theory for rhetoric-1 communication with legal economists, but often uses the same topics and tropes as powerful props in rhetoric-2 and rhetoric-3 communication with lawmakers and policy-makers—again, rightly or wrongly according to the ethos of the speaker and
The canons of law and economics rhetoric, like the canons of the other schools of contemporary rhetoric, may be employed to promote effective communication for the purpose of persuasion, or be used as mere rhetoric, to distract, confuse, obfuscate, or coerce the audience. This is a lesson for all rhetoricians, those of law and economics and of general legal discourse, made all the more clear by the example of the use of the rhetoric of law and economics in ways that helped to bring about the Great Recession.

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