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# Law and Economics as a Rhetorical Perspective in Law

Michael D. Murray<sup>1</sup>

## Abstract

This article introduces twenty-first century law and economics as a school of contemporary legal rhetoric—a rhetorical lens to test and improve general legal discourse in areas beyond the economic analysis of law. 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 topics of invention and arrangement and tropes of style in the content of the discourse.

This article presents my conception of the four rhetorical canons of law and economics:

- Mathematical and scientific methods of analysis and demonstration;
- The characterization of legal phenomena as incentives and costs;

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- The rhetorical economic concept of efficiency; and
- Rational choice theory as corrected by modern behavioral social sciences, cognitive studies, and brain science.

The rhetorical canons of law and economics have prescriptive implications for general legal discourse as topics of invention and arrangement and tropes of style. I examine each of the rhetorical canons and explain how each can be used to create meaning, inspire imagination, and improve the persuasiveness of legal discourse in every area of law.

### Introduction

Why is law and economics persuasive? Can the modes of persuasion of law and economics be used more generally in legal discourse outside the realm of economic analysis of law?

This article introduces law and economics as a school of contemporary legal rhetoric. My goal here is not to critique the contemporary law and economics<sup>2</sup> analysis of law nor to examine the benefits or costs of the application of economic

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<sup>2</sup> 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 1960’s 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* Richard A. Posner, *ECONOMIC ANALYSIS OF LAW* 31 (7th ed. 2007) [Posner, *Economic Analysis of Law*]; Donald C. Langevoort, *Monitoring: The Behavioral Economics of Corporate Compliance with Law*, 2002 *COLUM. BUS. L. REV.* 71, 73; Jon Hanson & David Yosifon, *The Situational Character: A Critical Realist Perspective on the Human Animal*, 93 *GEO. L.J.* 1, 77, 83, 138 (2004) [Hanson & Yosifon, *The Situational Character*]; Thomas F. Cotter, *Legal Pragmatism and the Law and Economics Movement*, 84 *GEO. L.J.* 2071, 2088 (1996); 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).

analysis in shaping law and social policy.<sup>3</sup> Instead, I seek to examine law and economics as a rhetorical perspective in law.

Rhetoric and law and economics do not often share the same paragraph in academic legal writing let alone the same article title,<sup>4</sup> but a central focus of the discipline of law and economics is the study of human nature and human behavior<sup>5</sup> 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 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. That law and economics is persuasive beyond the confirmed members of the discipline is supported by modern history: critics and supporters alike agree

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<sup>3</sup> 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 (5<sup>th</sup> ed. 2008) [Cooter & Ulen].

<sup>4</sup> An exception being, Donald N. McCloskey, *The Rhetoric of Law and Economics*, 86 *MICH. L. REV.* 752 (1988) [McCloskey, *Rhetoric of Law and Economics*], a very useful discussion to which I will refer below.

<sup>5</sup> Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 *CAL. L. REV.* 1051, 1055 (2000) [Korobkin & Ulen, *Law and Behavioral Science*] ("Law and economics is, at root, a behavioral theory, and therein lies its true power."); Christine Jolls, Cass R. Sunstein, Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 *STAN. L. REV.* 1471, 1474 (1998) [Jolls, Sunstein, and Thaler] ("law and economics analysis may be improved by increased attention to insights about actual human behavior").

that law and economics has established itself as the dominant and most influential contemporary mode of analysis among American legal scholars.<sup>6</sup>

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<sup>7</sup>—modern argument theory,<sup>8</sup> writing as a process

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<sup>6</sup> Law and economics' critics and proponents alike agree that the movement has become the most dominant method of legal analysis among legal scholars in at least the last fifty years. *See, e.g.*, Jon Hanson & David Yosifon, *The Situation: An Introduction to the Situational Character, Critical Realism, Power Economics, and Deep Capture*, 152 U. PA. L. REV. 129, 142-43 (2003) [Hanson & Yosifon, *The Situation*] ("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.") (inner citations omitted); Posner, *Economic Analysis of Law*, *supra* n.2, at xix ("[Law and economics is] the foremost interdisciplinary field of legal studies"); Kenji Yoshino, *The City and the Poet*, 114 YALE L.J. 1835, 1836 & n.6 (2005) (law and economics surpasses other movements in legal analysis, including law and literature).

<sup>7</sup> Basic sources on contemporary rhetoric include: James L. Kinneavy, *Contemporary Rhetoric*, in *THE PRESENT STATE OF SCHOLARSHIP IN HISTORICAL AND CONTEMPORARY RHETORIC* (Winifred B. Horner ed., rev. ed. 1990) [Kinneavy, *Contemporary Rhetoric*]; John B. Bender & David E. Wellbery, *Rhetorality: On the Modernist Return of Rhetoric*, in *THE ENDS OF RHETORIC: HISTORY, THEORY, PRACTICE* (John B. Bender & David E. Wellbery eds., 1990); *THE RHETORICAL TRADITION* (Patricia

theory,<sup>9</sup> and discourse community theory<sup>10</sup>— 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*<sup>11</sup> and *tropes*<sup>12</sup> to construct meaning and

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Bizzel & Bruce Herzberg eds., 1990); Peter Goodrich, *LEGAL DISCOURSE* (1987); Carroll C. Arnold, *Rhetoric in America since 1900*, in *RE-ESTABLISHING THE SPEECH PROFESSION: THE FIRST FIFTY YEARS* (Robert T. Oliver & Marvin G. Bauer eds., 1959). See also sources cited in nn.8-10, *infra*.

<sup>8</sup> See, e.g., Kathryn Stanchi, *Persuasion: An Annotated Bibliography*, 6 J. ASS'N L. WRITING DIRS. 75, 80-81 (2009) [Stanchi, Persuasion]; Michael R. Smith, *Rhetoric Theory and Legal Writing: An Annotated Bibliography*, 3 J. ASS'N L. WRITING DIRS. 129, 139 (2006) [Smith, Rhetoric Theory]; Linda L. Berger, *Of Metaphor, Metonymy, and Corporate Money: Rhetorical Choices in Supreme Court Decisions on Campaign Finance Regulation*, 58 MERCER L. REV. 949 (2007) (the corporate metaphor in modern argument theory); Linda L. Berger, *What is the Sound of a Corporation Speaking? How the Cognitive Theory of Metaphor Can Help Lawyers Shape the Law*, 2 J. ASS'N L. WRITING DIRS. 169 (2004) (use of metaphor in modern argument theory and cognitive studies); Jerome Bruner & Anthony Amsterdam, *MINDING THE LAW*, chs. 2-3, 6-7 (2002); Frans H. Van Eemeren et al., *FUNDAMENTALS OF ARGUMENTATION THEORY: A HANDBOOK OF HISTORICAL BACKGROUNDS AND CONTEMPORARY DEVELOPMENTS* (1996); Stephen Toulmin et al., *AN INTRODUCTION TO REASONING* (2d ed. 1984); Chaim Perelman & Lucie Olbrechts-Tyteca, *THE NEW RHETORIC: A TREATISE ON ARGUMENTATION* (John Wilkinson & Purcell Weaver trans., 1969).

<sup>9</sup> See Smith, *Rhetoric Theory*, *supra* n. 8, at 139; Linda L. Berger, *A Reflective Rhetorical Model: The Legal Writing Teacher as Reader and Writer*, 6 LEG. WRITING 57 (2000); Linda L. Berger, *Applying New Rhetoric to Legal Discourse: The Ebb and Flow of Reader and Writer, Text and Context*, 49 J. LEG. EDUC. 155 (1999); Carol McCrehan Parker, *Writing Throughout the Curriculum: Why Law Schools Need It and How to Achieve It*, 76 NEB. L. REV. 561 (1997); Leigh Hunt Greenhaw, *"To Say What the Law Is": Learning the Practice of Legal Rhetoric*, 29 VAL. U. L. REV. 861 (1995); Elizabeth Fajans & Mary R. Falk, *Against the Tyranny of Paraphrase: Talking Back to Texts*, 78 CORNELL L. REV. 163 (1993); Teresa Godwin Phelps, *The New Legal Rhetoric*, 40 SW. L.J. 1089 (1986).

<sup>10</sup> See Smith, *Rhetoric Theory*, *supra* n. 8, at 139; Susan L. DeJarnatt, *Law Talk: Speaking, Writing, and Entering the Discourse of Law*, 40 DUQ. L. REV. 489 (2002); Terrill Pollman, *Building A Tower of Babel or Building a Discipline? Talking About Legal Writing*, 85 MARQ. L. REV. 887 (2002); Brook K. Baker, *Language Acculturation Process and the Resistance to In "doctrine" ation in the Legal Skills Curriculum and Beyond: A Commentary on Mertz's Critical Anthropology of the Socratic, Doctrinal Classroom*, 34 JOHN MARSHALL L. REV. 131 (2000); Kathryn M. Stanchi, *Resistance is Futile: How Legal Writing Pedagogy Contributes to the Law's Marginalization of Outsider Voices*, 103 DICK. L. REV. 7 (1998); J. Christopher Rideout & Jill J. Ramsfield, *Legal Writing: A Revised View*, 69 WASH. L. REV. 35 (1994); Joseph M. Williams, *On the Maturing of Legal Writers: Two Models of Growth and Development*, 1 LEG. WRITING 1 (1991).

<sup>11</sup> In rhetoric, the *topoi* [Greek] or *loci* [Latin] (singular, *topos* or *locus* = "place") are the "topics" or "subjects" of argument that can be made in various situations. *Topoi* are developed in the process of *inventio* [Latin] or *heuresis* [Greek], which may be translated as "invention" or "discovery" of the type of argument that will be most persuasive in the situation, and in the *dispositio* [Latin] or *taxis* [Greek] of the argument, which translates as the "arrangement" or "organization" or "disposition" of

to inform and persuade its audiences: the priority of mathematical and scientific methods of analysis and demonstration, the characterization of legal phenomena as incentives and costs, the rhetorical economic concept of efficiency, and the lessons of rational choice theory as corrected by the empirical studies of behavioral social sciences, cognitive studies, and brain science. My examination of contemporary law and economics as a rhetorical perspective requires the discussion of the following theses in parts I, II, and III of this article:

- Part I — Law and economics is inherently rhetorical and uses its own rhetoric to persuade the members of the law and economics discourse community as well as the legal community as a whole.
- Part II— Law and economics uses a unique combination of modes of persuasion as rhetorical topoi and tropes—the rhetorical canons of law and economics—which are:
  - Mathematical and scientific methods of analysis and demonstration;
  - The characterization of legal phenomena as incentives and costs,
  - The rhetorical economic concept of efficiency; and

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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) [Corbett & Connors]; Gabriele Knappe, *Classical Rhetoric in Anglo-Saxon England*, 27 *Anglo-Saxon England* 5, 25 (Cambridge 1998).

<sup>12</sup> 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 Smith, *Rhetoric Theory*, at 129, 133-34 & n.2 (collecting sources on style in classical rhetoric); Corbett and Connors, *supra* n.11, at 20, 378; Knappe, *supra* n.11, at 25-26. 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 *L. Writing (J.L.W.I.)* 3, 51 & n.179 (2010) [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. Berger, *Law as Rhetoric*, *supra*, at 51 & n.179; Corbett and Connors, *supra*, n.11, at 395-409. See also Michael R. Smith, *ADVANCED LEGAL WRITING* 199-248 (metaphors), 328-40 (other tropes) (2d ed. 2008) [Smith, *Advanced Legal Writing*].

- Rational choice theory as corrected by the modern behavioral social sciences, cognitive studies, and brain science.
- Part III—The rhetorical canons of law and economics have prescriptive implications for legal discourse as topoi of invention and arrangement and tropes of style.

## I. The Rhetorical Nature of Law and Economics

### A. Law and Economics is inherently rhetorical

Law and economics, like all disciplines of academic inquiry and study, uses rhetoric to explain and justify its assumptions, models, paradigms, assertions, and predictions.<sup>13</sup> To understand the assertion represented by the sub-heading of this section—law and economics is inherently rhetorical—one must understand the nature of rhetoric: Rhetoric is the “discovery and transmission of insight and knowledge.”<sup>14</sup> Rhetoric is the discipline that examines “ways of winning others over to our views, and of justifying those views to ourselves as well as others, when the

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<sup>13</sup> See McCloskey, Rhetoric of Law and Economics, *supra* n.4, at 760; Wayne C. Booth, THE RHETORIC OF RHETORIC: THE QUEST FOR EFFECTIVE COMMUNICATION xii (2004) [Booth, The Rhetoric of Rhetoric] (“[W]e are now invited to think hard about the rhetoric of *everything*; ‘the rhetoric of philosophy,’ ‘the rhetoric of sociology,’ ‘the rhetoric of religion,’ even ‘the rhetoric of science.’ Though these rhetorics are not all of the same kind, we should realize that all of these fields depend on rhetoric in their arguments. Most of them are in fact grappling with rhetorical issues, as they debate their professional claims.”) (emphasis in original).

<sup>14</sup> Francis J. Mootz, III, *Law In Flux: Philosophical Hermeneutics, Legal Argumentation, and The Natural Law Tradition*, 11 YALE J.L. & HUMAN. 311, 317 (1999) (quoting Hans-Georg Gadamer, *The Expressive Power of Language*, 107 PUBS. MOD. LANG. ASS'N AM. 348 (1992) [Gadamer, Expressive Power of Language]). See also James Boyd White, *Law as Rhetoric, Rhetoric as Law: The Arts of Cultural and Communal Life*, 52 U. Chi. L. Rev. 684, 695 (1985) [White, Law as Rhetoric] (“Like law, rhetoric invents; and, like law, it invents out of something rather than out of nothing. It always starts in a particular culture and among particular people. There is always one speaker addressing others in a particular situation, about concerns that are real and important to somebody, and speaking a particular language. Rhetoric always takes place with given materials.”).



question of how things in the world ought to work is contested or contestable.”<sup>15</sup>

“Rhetoric is primarily a verbal, situationally contingent, epistemic art that is both philosophical and practical and gives rise to potentially active texts.”<sup>16</sup> Much of the scholarly attention within the discipline of rhetoric has been directed to effective communication with a particular focus on techniques for persuasive communication and argumentation; thus, many familiar definitions of rhetoric revolve around persuasion in discourse.<sup>17</sup>

In this article, I am referring to the academic study of rhetoric, both in its classical<sup>18</sup> and contemporary<sup>19</sup> forms. Rhetoric as the study of persuasion and

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<sup>15</sup> Anthony G. Amsterdam & Jerome Bruner, *MINDING THE LAW* 14 (2002). *See also* White, *Law as Rhetoric*, *supra* n.14, at 684 (rhetoric establishes, maintains, and transforms the community and the culture); James Boyd White, *A Symposium: The Theology of the Practice of Law*, February 14, 2002 *Roundtable Discussion*, 53 *MERCER L. REV.* 1087, 1090 (2002) [White, *Theology of Law*] (“[T]he minute we begin to think and talk about anything at all we live in the world of language, a world of contingent resources for thought and speech, and rhetoric is a perfectly good term for how we do that.”).

<sup>16</sup> William A. Covino & David A. Joliffe, *What is Rhetoric?*, in *RHETORIC: CONCEPTS, DEFINITIONS, BOUNDARIES* 5 (1995).

<sup>17</sup> *See, e.g.*, Aristotle, *THE RHETORIC*, bk. 1, ch. 2 (W. Rhys Roberts transl. 1965) [Aristotle, *The Rhetoric*], available at <http://www.public.iastate.edu/~honeyl/Rhetoric/> (last accessed Nov. 22, 2010) (Lee Honeycutt ed.) (“Rhetoric may be defined as the faculty of observing in any given case the available means of persuasion.”); Aristotle, *ON RHETORIC: A THEORY OF CIVIC DISCOURSE* 1355B (George A. Kennedy transl. 1991); Gerald Wetlaufer, *Rhetoric and Its Denial in Legal Discourse*, 76 *VA. L. REV.* 1545, 1546 n.14 (1990) [Wetlaufer, *Rhetoric and Its Denial*] (“By ‘rhetoric,’ I mean the discipline . . . in which the objects of formal study are the conventions of discourse and argument.”); Kristen K. Robbins-Tiscione, *RHETORIC FOR LEGAL WRITERS: THE THEORY AND PRACTICE OF ANALYSIS AND PERSUASION* 9 (2009) [Robbins-Tiscione, *Rhetoric for Legal Writers*] (“[R]hetoric here refers to the art of persuasion through eloquent, inventive, and strategically organized discourse, both oral and written.”); John J. Makay, *SPEAKING WITH AN AUDIENCE: COMMUNICATING IDEAS AND ATTITUDES* 9 (3d ed. 1984) [Makay, *Speaking With an Audience*] (“Rhetoric is defined ‘as the process of human communication in which a speaker sorts, selects, and sends symbols for the specific purpose of evoking a precise response’ from an audience.”).

<sup>18</sup> “Classical rhetoric” was begun in the fifth century B.C.E. and continued on and perfected over the course of the next 1,000 years of Greco-Roman history by Aristotle, Cicero, and Quintilian. *See* Corbett & Connors, *supra* n.11, at 15-16, 18-19. Even after this reign as the defining study of public discourse in classical times, the scholarship and teachings of classical rhetoric were followed as the dominant discipline for developing legal arguments until the first quarter of the nineteenth century.

*See id.* at 2, 15. The origin of classical rhetoric as a discipline devoted to the study of legal discourse and argumentation is traced to Corax of Syracuse. *See, e.g.*, Michael Frost, *Introduction to Classical Legal Rhetoric: A Lost Heritage*, 8 S. CAL. INTERDISC. L.J. 613, 615 (1999) [Frost, Lost Heritage]. The early tenets of the discipline were critiqued by Socrates and by Socrates' student, Plato, *see infra* n.20, and subsequently they were refined by Plato's student, Aristotle. *See* John H. Mackin, CLASSICAL RHETORIC FOR MODERN DISCOURSE vii, 6-7, 17-18, 26 (1969). The most important writings of classical rhetoric are those of Aristotle, Aristotle, *The Rhetoric*, *supra* n.17, Cicero, Marcus Tullius Cicero, DE INVENTIONE 93, 104 (H.M. Hubbell transl., 1949); Marcus Tullius Cicero, DE ORATORE (E.W. Sutton transl., 1942), and Quintilian, 1 Marius Fabius Quintilian, INSTITUTIO ORATORIA 273 (H.E. Butler transl., 1954), which together define the canons of the discipline that serve as a rhetorical lens on legal discourse.

<sup>19</sup> The contemporary period of rhetoric begins in the Twentieth Century. Major movements in thought have broadened the study of rhetoric to include all aspects of communication, Robbins-Tiscione, *Rhetoric for Legal Writers*, *supra* n.17, at 61, including linguistics, ethics and persuasion, practical reasoning, human motivation, composition theories, cognitive studies, and socio-epistemic studies. *Id.* at 61-82. *See, e.g.*, I.A. Richards, *THE PHILOSOPHY OF RHETORIC* (1936) (language and meaning); C. K. Ogden & I.A. Richards, *THE MEANING OF MEANING* (1972) (language and meaning); Roland Barthes, *ELEMENTS OF SEMIOLOGY* (Annette Lavers & Colin Smith trans., 1968) (language as symbols); Umberto Eco, *A THEORY OF SEMIOTICS* (1976) (language as symbols); Lloyd F. Bitzer, *The Rhetorical Situation*, 1 PHIL. & RHETORIC 6-8, 389-92 (1968) [Bitzer, *The Rhetorical Situation*] (the impact of situation); Kenneth Burke, *A GRAMMAR OF MOTIVES* (1969) [Burke, *Grammar of Motives*] (impact of culture); Kenneth Burke, *A RHETORIC OF MOTIVES* (1950) [Burke, *Rhetoric of Motives*] (impact of culture); Marshall McLuhan, *UNDERSTANDING MEDIA: THE EXTENSIONS OF MAN* (1996) (modern media studies); Richard M. Weaver, *THE ETHICS OF RHETORIC* (1953) (ethics). Over time, the cognitive rhetoric group divided into the process theory cognitivists, who believe that the study of rhetoric should focus on the process of writing, a recursive rather than linear creative process, that teaches the writer how to reason and persuade and improve their communication by examining each stage of the writing process, *see* Robbins-Tiscione, *Rhetoric for Legal Writers*, *supra* n.17, at 79, and the discourse community cognitivists, who believe the study of rhetoric is a study of the writer's assimilation into and acceptance of the tenets, vocabulary, and expectations of a discourse community, such as the legal writing discourse community. *See, e.g.*, Robbins-Tiscione, *Rhetoric for Legal Writers*, *supra* n.17, at 80. The socio-epistemic group combines social theories of community with epistemological theories of learning to form a theory of communication that considers the interaction of speaker, subject matter, and audience. *See id.* at 81.

The common thread among these the schools of thought in the developing discipline of contemporary rhetoric was a shift in thinking on the nature of knowledge and truth. Kristen K. Robbins, *Philosophy v. Rhetoric in Legal Education: Understanding the Schism Between Doctrinal and Legal Writing Faculty*, 3 J. ASS'N L. WRITING DIRS. 108, 123 (2006) [Robbins, *Philosophy v. Rhetoric*]. Beginning in the 1950s, Stephen Toulmin and Chaim Perelman asserted that truth is relative. *Id.* *See, e.g.*, Stephen E. Toulmin, *USES OF ARGUMENT* (updated ed. 2003) [Toulmin, *Uses of Argument*]; Chaim Perelman, *THE REALM OF RHETORIC* (William Kluback trans., 1982) [Perelman, *Realm of Rhetoric*]; Perelman & Obrechts-Tyteca, *supra* n.8. Toulmin argued that people in everyday life do not use Aristotelian logic to establish conclusive proof, but "informal logic" to reason and to acquire knowledge. Toulmin, *supra* n.8, at 94-134. The knowledge acquired and the arguments made are only probable, not absolute. *Id.* Like Toulmin, Perelman argued that appeals to reason lead only to probable truths: "the appeal to reason must be identified not as an appeal to a single truth but instead as an appeal for the adherence of an audience. . . ." Chaim Perelman, *THE NEW RHETORIC: A THEORY OF PRACTICAL REASONING*, GREAT IDEAS TODAY 234-52 (1970) [Perelman, *The New Rhetoric*] (as reprinted in James L. Golden et al., *THE RHETORIC OF WESTERN THOUGHT* 234-52 (6th ed. 1997)). From these beginnings, three contemporary theories of rhetoric arose to focus on the construction of meaning, the creation of arguments, and the processes that allow the creation

argument has a noble and classical tradition, but the discipline has had difficulty shaking off a common but enduring slur that is traced to ancient sources: Socrates and Plato described the early study and practice of rhetoric by the ancient Greek Sophists as the art of flattery and trickery,<sup>20</sup> and throughout the ages the slur has stuck. I emphasize that this slur is not the subject of my study here. Rhetoric, the academic discipline, is not the study of hollow speech, not puffery designed to prop up specious assertions, not hyperbole employed to distract an audience from the truths or falsities of the speakers' position.<sup>21</sup> In short, it is nothing like the meaning of the commonplace phrase, "mere rhetoric."<sup>22</sup> I am not examining law and economics as a scheme of flattery and trickery but rather as a discipline with a well-developed system of argumentation and persuasion that has lessons for legal discourse beyond the realm of economic analysis of law.

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of meaning and argumentation. See Linda Levine & Kurt M. Saunders, *Thinking Like a Rhetor*, 43 J. LEGAL ED. 108, 118-21 (1993). These are: Modern Argument Theory, Writing as a Process Theory, and the Theory of Discourse Communities. See Michael Smith, Rhetoric Theory, *supra* n.8, at 139.

<sup>20</sup> Socrates did not devote his time to the publication of works, so we rely on Plato whose writings purport to represent Socrates' criticisms of rhetoric in such famous dialogues as Plato, PHAEDRUS, [http://www.classicallibrary.org/plato/dialogues/7\\_phaedrus.htm](http://www.classicallibrary.org/plato/dialogues/7_phaedrus.htm) (last accessed Dec. 27, 2010), Plato, GORGIAS, [http://www.classicallibrary.org/plato/dialogues/15\\_gorgias.htm](http://www.classicallibrary.org/plato/dialogues/15_gorgias.htm) (last accessed Dec. 27, 2010), and Plato, PHAEDO, [http://www.classicallibrary.org/plato/dialogues/14\\_phaedo.htm](http://www.classicallibrary.org/plato/dialogues/14_phaedo.htm) (last accessed Dec. 27, 2010).

<sup>21</sup> See, e.g., Wayne C. Booth, *The Rhetorical Stance*, in *Toward a New Rhetoric*, 14 COLL. COMP. & COM. 139, 139 (1963) [Booth, *The Rhetorical Stance*]; Wayne C. Booth, *The Idea of a University as Seen by a Rhetorician*, 1987 Ryerson Lecture, University of Chicago, available at <http://home.uchicago.edu/~ahkissel/booth/booth.htm> (last accessed Nov. 23, 2010) [Booth, *Idea of a University*]; Karlyn Kohrs Campbell, *THE RHETORICAL ACT* 3-4 (1982).

<sup>22</sup> See Eileen A. Scallen, *Evidence Law as Pragmatic Legal Rhetoric: Reconnecting Legal Scholarship, Teaching and Ethics*, 21 QUIN. L. REV. 813, 817, 829 (2003); Booth, *The Rhetorical Stance*, *supra* n.21, at 139; Booth, *The Rhetoric of Rhetoric*, *supra* n.13, at vii, x, 6-7.

**B. Excerpts from the History of the Rhetoric of Law and Economics**

The discipline of economics is rhetorical,<sup>23</sup> and the discipline of law and economics is rhetorical, too.<sup>24</sup> Adam Smith, the honorary father of economics, apparently understood the rhetorical imperatives of economics and the law when, in his *Lectures on Jurisprudence* concerning principle in the human mind and the division of labor, he commented on the topic of exchanges and self interest: “The offering of a shilling, which to us appears to have so plain and simple a meaning, is in reality offering an argument to persuade one to do so and so for it is in his interest. . . . Men always endeavour {sic} to persuade others to be of their opinion even when the matter is of no consequence to them. . . . And in this manner every one is practicing oratory on others thro {sic} the whole of his life.”<sup>25</sup> Robert L. Heilbroner interprets Smith to mean that “the basis for economic relationships lies not in a disinterested calculation of advantages, but in the ‘faculties of reason and speech’ that underlie the capacity for persuasion.”<sup>26</sup>

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<sup>23</sup> See Deirdre N. McCloskey, *THE RHETORIC OF ECONOMICS* xix-xx, 5 (2d ed. 1998) [McCloskey, *Rhetoric of Economics*] [Note that the author, Donald N. McCloskey, became Deirdre N. McCloskey; the two names refer to the same author, but in my citations I will use the name or names used at the time of publication of the works cited here]; Arjo Klamer & Donald N. McCloskey, *Economics in the Human Conversation*, in Arjo Klamer, Donald N. McCloskey & Robert M. Solow, *THE CONSEQUENCES OF ECONOMIC RHETORIC* 3-4, 11 (1988); see generally Donald N. McCloskey & Deirdre N. McCloskey, *KNOWLEDGE AND PERSUASION IN ECONOMICS* 38-52 (1994).

<sup>24</sup> McCloskey, *Rhetoric of Law and Economics*, *supra* n.4, at 760;

<sup>25</sup> Adam Smith, *Lectures on Jurisprudence*, as quoted in Robert L. Heilbroner, *Rhetoric and Ideology*, in Arjo Klamer, Donald N. McCloskey & Robert M. Solow, *THE CONSEQUENCES OF ECONOMIC RHETORIC* at 38 (1988) [Heilbroner, *Rhetoric and Ideology*].

<sup>26</sup> Heilbroner, *Rhetoric and Ideology*, *supra* n.25, at 38.

Oliver Wendell Holmes, as quoted in Cooter and Ulen's seminal text on law and economics,<sup>27</sup> held that: "For the rational study of the law the black-letter man may be the man of the present, but the man of the future is the man of statistics and master of economics. . . . We learn that for everything we have to give up something else, and we are taught to set the advantage we gain against the other advantage we lose, and to know what we are doing when we elect."<sup>28</sup>

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

[T]he most interesting aspect of the law and economics movement has been its aspiration to place the study of law on a scientific basis, with coherent theory, precise hypotheses deduced from the theory, and empirical tests of the hypotheses. Law is . . . amenable to scientific study. Economics is the most advanced of the social sciences, and the legal system contains many parallels to and overlaps with the systems that economists have studied successfully.<sup>29</sup>

[The economic] approach enables the law to be seen, grasped, and studied as a system—a system that economic analysis can illuminate, reveal as coherent, and in places improve. By the same token, the approach enables economics to be seen as a tool for understanding and reforming social practices, rather than merely as a formal system of daunting mathematical complexity.<sup>30</sup>

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<sup>27</sup> Robert Cooter & Thomas Ulen, *LAW & ECONOMICS* 1 (5<sup>th</sup> ed. 2008) [Cooter & Ulen].

<sup>28</sup> Oliver Wendell Holmes, *The Path of the Law*, 10 Harv. L. Rev. 457, 469, 474 (1897), as quoted in Cooter & Ulen, *supra* n.27, at 1.

<sup>29</sup> Richard A. Posner, *Foreword*, to Michael Faure & Roger Van den Bergh, *ESSAYS IN LAW AND ECONOMICS* 5, 5 (1989) [Posner, Foreword], quoted in Cooter & Ulen, *supra* n.27, at 1.

<sup>30</sup> Posner, *Economic Analysis of Law*, *supra* n.2, at xxi.

### C. 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.<sup>31</sup> 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.”<sup>32</sup>

Economics provides scientific theories to predict the effects of legal rules on behavior that surpasses mere intuition, logic, or common sense concerning human behavior.<sup>33</sup> The theories are behavioral theories that seek to predict how people will respond to laws when laws are viewed as a system of incentives.<sup>34</sup> Legal economists assert that economics is a persuasive rhetorical lens on 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

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<sup>31</sup> Heilbroner, *Rhetoric and Ideology*, *supra* n.25, at 38-39 (“Economics prides itself on its sciencelike 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.'”). *See also* Herbert M. Kritzer, *The Arts of Persuasion in Science and Law: Conflicting Norms in the Courtroom*, 72 L. & CONTEMP. PROBS. 41, 42-43, 59 (2009).

<sup>32</sup> Posner, Foreword, *supra* n.29, at 5.

<sup>33</sup> *See* Cooter & Ulen, *supra* n.27, at 3, 4.

<sup>34</sup> *See id.* at 4.

and sanctions (viewed as incentives, prices, or costs) on (presumptively rational) human behavior to achieve desirable (efficient) results for individuals and for society.<sup>35</sup>

#### **D. A Note about Levels of Rhetoric in Discourse**

Before discussing the rhetorical canons of law and economics and their application to general legal discourse, I must pause to explain a rhetorical concept concerning levels of rhetoric. Rhetoric, in the most complete sense, is the study of effective communication.<sup>36</sup> Effectiveness in communication is determined by the audience and the situation.<sup>37</sup> 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:

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<sup>35</sup> See *id.* at 3, 4, 5. See also Jeffrey L. Harrison, *LAW AND ECONOMICS 2* (4th ed. 2007) [Harrison, *Law and Economics*]; Kritzer, *supra* n.31, at 42-43, 59.

<sup>36</sup> White, *Law as Rhetoric*, *supra* n.14, at 695; Gadamer, *Expressive Power of Language*, *supra* n.14, at 348; Mootz, *supra* n.14, at 317.

<sup>37</sup> Wetlaufer, *Rhetoric and Its Denial*, *supra* n.17, at 1546; Robbins-Tiscione, *Rhetoric For Legal Writers*, *supra* n.17, at 9; Makay, *Speaking with an Audience*, *supra* n.17, at 9.

**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 knowledgeable in the discipline and its theories. This level of understanding is reserved to experts in the field.<sup>38</sup>

**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<sup>39</sup>—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

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<sup>38</sup> See Booth, *Idea of University*, *supra* n. 22, at 12.

<sup>39</sup> See Wayne C. Booth, *MODERN DOGMA AND THE RHETORIC OF ASSENT* xiii, 112 & n.19 (1974). See also M. Neil Browne & Ronda R. Harrison-Spoerl, *Putting Expert Testimony in its Epistemological Place: What Predictions of Dangerousness in Court Can Teach Us*, 91 MARQ. L. REV. 1119, 1128 & n.44, 1156 & n.170, 1161-62 (2008) (quoting Eileen A. Scallen & William E. Wiethoff, *The Ethos of Expert Witnesses: Confusing the Admissibility, Sufficiency and Credibility of Expert Testimony*, 49 HASTINGS L.J. 1143, 1143-44 (1998) (“[T]he testimonial discourse of experts, though not cast in the elegant form of oratory, has rhetorical tenor and effect. Expert testimony, even that based on natural or social science, is argumentation, made for, and in, a unique context—the law ....”).



discipline who presumably have rhetoric-1 understanding of the material in the discourse.<sup>40</sup> 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.<sup>41</sup>

### **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<sup>42</sup>—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?<sup>43</sup> 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

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<sup>40</sup> Booth, Idea of University, *supra* n.22, at 12-13.

<sup>41</sup> *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.” 1 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 which 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.

<sup>42</sup> Booth, Idea of University, *supra* n.22, at 13-14.

<sup>43</sup> *See id.*

discourse within the academy or within one institution, such as a university, as a whole.<sup>44</sup> 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.<sup>45</sup>

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

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<sup>44</sup> *Id.*

<sup>45</sup> Ethos embodies both moral and intellectual qualities. Jakob Wisse, *ETHOS AND PATHOS FROM ARISTOTLE TO CICERO* 30 (1989). While virtue and high 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. Rhetoric, 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. Rhetoric, Book II, ch. 1 at 1378a; Wisse, *supra*, at 30-33; Corbett & Connors, *supra* n.11, at 72-73. Classical rhetoric focused as much on projecting the right moral character as in possessing it. Michael Frost, *Ethos, Pathos & Legal Audience*, 99 Dick. L. Rev. 85, 100-01 (1994) [Frost, *Ethos, Pathos & Legal Audience*]; Corbett & Connors, *supra* n.11, at 72; Wisse, *supra*, at 31. "[A] person *seeming* to have all these qualities is necessarily persuasive to the hearers." Rhetoric, 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 Frost, *Ethos, Pathos & Legal Audience*, *supra*, at 100-101; Corbett & Connors, *supra* n.11, at 72-73. 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* n.11, 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 7, 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.

persuasion at the rhetoric-2 and rhetoric-3 level 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 Four Canons

If law and economics is inherently rhetorical, then what is the rhetorical nature of this discipline when used as a rhetorical lens in the law? I start with my summary of the rhetoric of the discipline introduced earlier: 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.<sup>46</sup> 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<sup>47</sup>**

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<sup>46</sup> See Cooter & Ulen, *supra* n.27, 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) [White, *Rhetoric and Law*] (quoted in Levine & Saunders, *Thinking Like a Rhetor*, *supra* n.19, at 114).

<sup>47</sup> Discussed in subsection 1 of this section.

### Incentives and Costs

**The characterization of law and the legal system in the language of incentives and costs**<sup>48</sup>

### Efficiency

**The rhetorical economic concept of efficiency**<sup>49</sup>

### Contemporary Theory of Rational Choice

**The contemporary rational choice theory as corrected by modern behavioral social sciences, cognitive studies, and brain science**<sup>50</sup>

Each of four canons of law and economics are used both as topics of invention and arrangement and tropes of style in 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<sup>51</sup>—in other

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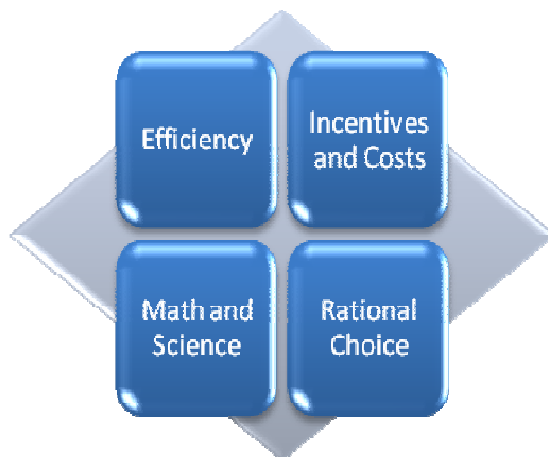
<sup>48</sup> Discussed in subsection 2 of this section.

<sup>49</sup> Discussed in subsection 3 of this section.

<sup>50</sup> Discussed in subsection 4 of this section.

<sup>51</sup> The sources I have consulted to derive these four canons are many and varied, but for general reference, *see* Posner, *Economic Analysis of Law*, *supra* n.2, at 3-4, 9, 13, 21, 24-25, 495-96; Cooter & Ulen, *supra* n.27, at 2, 3, 4, 5, 41-43; Grant M. Hayden & Stephen E. Ellis, *Law and Economics after Behavioral Economics*, 55 U. KAN. L. REV. 629 (2007); and the sources cited in subsections 1-4 of this section.

words, by the members of the law and economics discourse community.<sup>52</sup> Therefore, these canons are described as *rhetorical* canons of law and economics.



### 1. **The Primacy of Mathematical and Scientific Methods of Analysis and Demonstration**

The practitioners of law and economics—those who follow the conventional and the contemporary approaches—rely on the inherent persuasiveness of mathematics and the methodologies of scientific proof both as a method of analysis and a form for the demonstration<sup>53</sup> of the analysis.<sup>54</sup> Members of the economic

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<sup>52</sup> Discourse community being a term that grounds this discussion as to the rhetoric of law and economics. *See, e.g.*, Lawrence Lessig, *Understanding Changed Readings: Fidelity and Theory*, 47 STAN. L. REV. 395, 419-38 (1995) (economic representing a change in discourse); Gary Minda, *The Jurisprudential Movements of the 1980s*, 50 OHIO ST. L.J. 599, 611 & n.53 (1989) (describing the discourse of law and economics).

<sup>53</sup> Demonstration and dialectic are the two principle forms of reasoning recognized by Aristotle. *See* Aristotle, *The Rhetoric*, Book I, ch. 1 at 1354a; George A. Kennedy, *CLASSICAL RHETORIC AND ITS CHRISTIAN AND SECULAR TRADITION FROM ANCIENT TO MODERN TIMES* 80 (1999) [Kennedy, *Classical Rhetoric*]. *See also* P. Christopher Smith, *THE HERMENEUTICS OF ORIGINAL ARGUMENT: DEMONSTRATION, DIALECTIC, RHETORIC* (1998). Rhetoric is the form of demonstration used in argumentative persuasion or “continuous discourse,” whereas dialectic is more appropriate to debate. Kennedy, *Classical Rhetoric*, *supra* at 66. Demonstration provides the rhetorical process of arrangement with two paradigms of deductive reasoning, *sullogismos* (syllogisms) and *enthumema* (enthymemes), Corbett & Connors, *supra* n.11, at 38-60; Kennedy, *Classical Rhetoric*, *supra*, at 83-84; Christof Rapp, *Aristotle's Rhetoric*, in *The Stanford Encyclopedia of Philosophy* (Summer 2002 ed.), Edward N. Zalta (ed.), available at <<http://plato.stanford.edu/archives/sum2002/entries/aristotle-rhetoric/>> (accessed Feb. 7, 2008) (last substantive edit May 2, 2002), and two paradigms of inductive reasoning, the induction and the example. *See* Aristotle, *The Rhetoric*, *supra* n.18, at Book

disciplines hold themselves out as scientists, applying logical, scientific deduction and induction to *prove* propositions.<sup>55</sup> The syllogism and enthymeme (deductive forms) and the induction and example (inductive forms) are topoi of invention and arrangement in science, mathematics, and rhetorical demonstration.<sup>56</sup>

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.<sup>57</sup> Law and economics also assumes the

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I, ch. 2 at 1356b; Brett G. Scharffs, *The Character of Legal Reasoning*, 61 WASH. & LEE L. REV. 733, 752 & n.58 (2004); Robert H. Schmidt, *The Influence of the Legal Paradigm on the Development of Logic*, 40 S. TEX. L. REV. 367, 372-73 (1999).

<sup>54</sup> See Robert L. Heilbroner, *Rhetoric and Ideology*, *supra* n.25, at 38-39; Cooter & Ulen, *supra* n.27, at 3, 4; Kritzer, *supra* n.31, at 42-43, 59;

<sup>55</sup> George Pólya, *INDUCTION AND ANALOGY IN MATHEMATICS: VOLUME I OF MATHEMATICS AND PLAUSIBLE REASONING* v-vi (1954); McCloskey, *Rhetoric of Law and Economics*, *supra* n.4, at 752, 760. The pros and cons of this rhetorical imperative are a lively topic of debate, and one that is growing in the wake of the economic meltdown of 2009-10. *E.g.*, Samuel Gregg, *Smith versus Keynes: Economics and Political Economy in the Post-Crisis Era*, 33 HARV. J.L. & PUB. POL'Y 443, 445, 451-52, 455-56 (2010).

<sup>56</sup> 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*, Bk. I, Ch. 1, at 1355a. The deductive structure of the syllogism and enthymeme provides the framework for each of the organizational paradigms of legal discourse, including IRAC, IREAC, and TREAT. Michael D. Murray & Christy H. DeSanctis, *LEGAL WRITING AND ANALYSIS*, chs. 2, 6, 7 (2009) (discussing IRAC and TREAT); Linda H. Edwards, *LEGAL WRITING: PROCESS, ANALYSIS, AND ORGANIZATION*, chs. 10, 11, 19, 20 (5th ed. 2010) (discussing IREAC and variations for objective and persuasive discourse); Kristen K. Robbins, *Paradigm Lost: Recapturing Classical Rhetoric to Validate Legal Reasoning*, 27 VT. L. REV. 483, 484-87, 492 (2003) [Robbins, *Paradigm Lost*] (discussing IRAC and IREAC); James M. Boland, *Legal Writing Programs and Professionalism: Legal Writing Professors Can Join the Academic Club*, 18 ST. THOMAS L. REV. 711, 719-23 (2006) (discussing IRAC and IREAC).

<sup>57</sup> See Posner, *Foreword*, *supra* n.29, at 5; Posner, *Economic Analysis of Law*, *supra* n.2, at 15-16; Richard A. Posner, *Volume One of The Journal of Legal Studies—An Afterword*, 1 J. LEGAL STUD. 437, 437 (1972). See also Thomas Earl Geu, *Chaos, Complexity, and Coevolution: The Web of Law, Management Theory, and Law Related Services at the Millennium*, 66 TENN. L. REV. 137, 190 n.493 (1998); Gary Minda, *supra* n.52, at 611-12.

rhetorical primacy of scientific and mathematical forms in discourse to demonstrate the analyses and communicate its theses about human behavior.<sup>58</sup>

In contemporary law and economics, predictions and prescriptions are informed by scientific testing and mathematical analysis of data not just by logic, intuition, common sense, ideology, or philosophy.<sup>59</sup> The methods of examination and the assumptions made that are supported by the rhetoric of contemporary law and economics and law and behavioral science are those that are susceptible to scientific proof through the application of mathematical and scientific methods of analysis of empirical data to confirm or rebut hypotheses and assumptions about human behavior in the context of the law.<sup>60</sup> But the propositions chosen to be proved, and especially the design of the experiments or studies that will be adequate and reliable to *prove* the propositions, rely on rhetoric—the rhetoric being that which is held within the disciplines to be reasonable, reliable, and provable using a scientific, mathematical, or quantitative methodology.<sup>61</sup>

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<sup>58</sup> See Bryant G. Garth, *Strategic Research in Law and Society*, 18 FLA. ST. U. L. REV. 57, 59 (1990); Morton J. Horwitz, *Law and Economics: Science or Politics?*, 8 HOFSTRA L. REV. 905, 912 (1980).

<sup>59</sup> *E.g.*, Cooter & Ulen, *supra* n.27, at 3, 4, 5.

<sup>60</sup> See, *e.g.*, Howell E. Jackson, Louis Kaplow, *et al.*, ANALYTICAL METHODS FOR LAWYERS 372, 375-77 (2003).

<sup>61</sup> Compare Anthony T. Kronman, *Rhetoric*, 67 U. CIN. L. REV. 677, 678-79, 682 (1999), and John M. Rogers & Robert E. Molzon, *Some Lessons about the Law from Self-Referential Problems in Mathematics*, 90 MICH. L. REV. 992 (1992), and Mark R. Brown & Andrew C. Greenberg, *On Formally Undecidable Propositions of Law: Legal Indeterminacy and the Implications of Metamathematics*, 43 HASTINGS L.J. 1439 (1992), with Mike Townsend, *Implications of Foundational Crises in Mathematics: A Case Study in Interdisciplinary Legal Research*, 71 WASH. L. REV. 51, 54, 61-63, 121-124 (1996) [Townsend, *Implications of Foundational Crises*], and David R. Dow, *Godel and Langdell - A Reply to Brown and Greenberg's Use of Mathematics in Legal Theory*, 44 HASTINGS L.J. 707 (1993), and Kevin W. Saunders, *Realism, Ratiocination, and Rules*, 46 OKLA. L. REV. 219 (1993).

Mathematics is a language, and like any other language, is rhetorical.<sup>62</sup>

Mathematics is a wonderful tool of analysis, but the elevation of mathematical forms and models as the primary method of demonstration in economic rhetoric comes with a warning for the application of this trope in general legal discourse: it is not realistic to assume that every legal issue and social condition can be subjected to mathematical analysis.<sup>63</sup> Albert Einstein once said, “As far as the laws of mathematics refer to reality, they are not certain; and as far as they are certain, they do not refer to reality.”<sup>64</sup>

The very word, *proof*, as in what the economist or behavioral scientist has *proved*, is inherently rhetorical in nature,<sup>65</sup> and it is a powerfully persuasive word. An assertion that something is *proved* or even *can be proved* is a rhetorical assertion because even in mathematics, there are some assertions and propositions that cannot be proved within a known mathematical system.<sup>66</sup> The differences in

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<sup>62</sup> See Mike Townsend & Thomas Richardson, *Probability and Statistics in the Legal Curriculum: A Case Study in Disciplinary Aspects of Interdisciplinarity*, 40 DUQ. L. REV. 447, 483-84 (2002); Donald N. McCloskey, *The Lawyerly Rhetoric of Coase's The Nature Of The Firm*, 18 J. CORP. L. 425, 425-26, 428-31 (1993); Joan C. Williams, *Critical Legal Studies: The Death of Transcendence and the Rise of the New Langdells*, 62 N.Y.U. L. REV. 429, 439 (1987); Townsend, *Implications of Foundational Crises*, *supra* n.61, at 62-63, 141; David N. Haynes, *The Language and Logic of Law: A Case Study*, 35 U. MIAMI L. REV. 183, 186-87, 220 (1981).

<sup>63</sup> See generally Michael S. Moore, *The Interpretive Turn in Modern Theory: A Turn for the Worse?*, 41 STAN. L. REV. 871, 881, 889-90 (1989); Laurence H. Tribe, *Trial by Mathematics: Precision and Ritual in the Legal Process*, 84 HARV. L. REV. 1329, 1331-32 (1971); Eric R. Claeys, *Jefferson Meets Coase: Land-Use Torts, Law and Economics, and Natural Property Rights*, 85 NOTRE DAME L. REV. 1379, 1383-84 (2010).

<sup>64</sup> Albert Einstein, quoted in F. Capra, *THE TAO OF PHYSICS* 27 (1975).

<sup>65</sup> McCloskey, *Rhetoric of Law and Economics*, *supra* n.4, at 752, 760.

<sup>66</sup> See Susan K. Houser, *Metaethics and the Overlapping Consensus*, 54 OHIO ST. L.J. 1139, 1152 (1993); Nancy Levit, *Ethereal Torts*, 61 GEO. WASH. L. REV. 136, 136 n.3 (1992); Anthony D'Amato,



opinions as to what are reasonable, reliable, and provable assumptions and predictions in economics using a scientific, mathematical, or quantitative methodology has led to internal divisions within the law and economics community, and led directly to the creation of the law and behavioral science discipline, as discussed in subsection 4 below.

The rhetorical use of mathematical forms in law and economics—the use of mathematics as a trope of arrangement and style in the demonstration—is to this author the most intriguing aspect of this canon, and the most delicate topic from which to draw prescriptions for legal discourse. The appearance of mathematical certainty in law and economics rhetoric is an attractive tool, but is it too seductive? Critics have challenged legal economists for adopting complex mathematical formulae to demonstrate findings whose relevance to actual legal problems and social conditions is said to be specious.<sup>67</sup> Nevertheless, the a priori, ex ante, positivist application of mathematical formulas to legal topics and problems has led the practitioners of neoclassical law and economics to claim their greatest successes.<sup>68</sup>

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*Can Legislatures Constrain Judicial Interpretation of Statutes?*, 75 VA. L. REV. 561, 597 (1989); Rudolph J. Peritz, *Computer Data and Reliability: A Call for Authentication of Business Records Under the Federal Rules of Evidence*, 80 NW. U. L. REV. 956, 999 n.214 (1986); Steven P. Goldberg, *On Legal and Mathematical Reasoning*, 22 JURIMETRICS 83, 87 n.26 (1981); Roy Stone, *Affinities and Antinomies in Jurisprudence*, 1964 CAMBRIDGE L.J. 266, 281.

<sup>67</sup> *E.g.*, Marjorie E. Kornhauser, *The Rhetoric of the Anti-Progressive Income Tax Movement: A Typical Male Reaction*, 86 MICH. L. REV. 465, 485-90 (1987); Heilbroner, *Rhetoric and Ideology*, *supra* n.25, at 38; McCloskey, *The Rhetoric of Economics*, *supra* n.23, at 44-45.

<sup>68</sup> Posner, *Economic Analysis of Law*, *supra* n.2, at xix (championing the unity, simplicity, and power, but also the subtlety, of economic principles); Richard Posner, *The Sociology of the Sociology of Law: A View from Economics*, 2 EUR. J.L. & ECON. 265, 274 (1995); James R. Hackney, Jr., *Law and Neoclassical Economics: Science, Politics, and the Reconfiguration of American Tort Law Theory*, 15

I explained above that my purpose here is not to critique the benefits or costs of the use of the canons of law and economics in the economic analysis of law. My purpose is to explore the application of these rhetorical canons in legal discourse generally. On the one hand, mathematics is a language, and thus rhetorical, and its particular form of persuasion is an appeal to certainty by the open demonstration of the truth and logic of its workings.<sup>69</sup> On the other hand, mathematical forms of demonstration may be employed to attempt to overcome “the difference between truth in mathematics and truth in law—between logical truths and rhetorical or dialectical or polemical truths”<sup>70</sup>—by cloaking the legal discourse in the rhetorical garb of mathematics<sup>71</sup> and science,<sup>72</sup> making the findings appear to be more certain

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L. & HIST. REV. 275, 287-88 (1997); Herbert Hovenkamp, *The Limits of Preference-Based Legal Policy*, 89 NW. U. L. REV. 4, 5 (1994) (“Assumptions about preference have enabled neoclassical economics and public choice theory to describe both private and public markets by means of mathematical models that have great elegance and rhetorical power.”).

<sup>69</sup> See McCloskey, *The Rhetoric of Law and Economics*, *supra* n.4, at 761, 763; Schmidt, *supra* n.53, at 395-96; Kronman, *supra* n.61, at 679.

<sup>70</sup> See Peter Westen, *The Meaning of Equality in Law, Science, Math, and Morals: A Reply*, 81 MICH. L. REV. 604 (1983) (citing two of the most influential modern rhetoricians, Kenneth Burke, *Politics as Rhetoric*, 93 ETHICS 45, 46-47 (1982); and Chaim Perelman, JUSTICE, LAW, AND ARGUMENT: ESSAYS ON MORAL AND LEGAL REASONING 120-74 (1980); Chaim Perelman, THE NEW RHETORIC AND THE HUMANITIES 1-61, 117-33 (1979)). The difference between formal logic and the absolute proof of the syllogism, and informal logic used in everyday discourse to assert the most probable arguments in everyday situations, is one of the primary impetuses that motivated the move to contemporary schools of rhetoric building on the work of Burke and Perelman. See also Burke, *A Grammar of Motives*, *supra* n.19; Burke, *A Rhetoric of Motives*, *supra* n.19; Perelman, *Realm of Rhetoric*, *supra* n.19; Perelman & Obrechts-Tyteca, *The New Rhetoric*, *supra* n.19. Pigou, one of the forefathers of neoclassical law and economics, pointed out the distinction between formal logic and pure mathematics on the one side and the “realistic sciences” on the other, as to which economics was to be a realistic science. A. C. Pigou, *THE ECONOMICS OF WELFARE* 5 (4th ed. 1962) (“On the one side are the sciences of formal logic and pure mathematics, whose function it is to discover implications. On the other side are the realistic sciences, such as physics, chemistry and biology, which are concerned with actualities.”).

<sup>71</sup> *E.g.*, McCloskey, *Rhetoric of Law and Economics*, *supra* n.4, at 753-54; James R. Hackney, Jr., *UNDER COVER OF SCIENCE: AMERICAN LEGAL-ECONOMIC THEORY AND THE QUEST FOR OBJECTIVITY* (2007); Joseph Vining, *The Gift of Language*, 73 NOTRE DAME L. REV. 1581, 1583-84 (1998). See also

and absolute than they really are. This possibility sends a significant message of caution for the ethos-minded use of mathematical and scientific forms in general legal discourse.

With what I hope is appropriate caution dictated by this discussion, in section III(A), I will describe the canon of mathematics and science in: (1) rhetoric-1-2-3 uses of mathematical scientific forms as a topic of invention and arrangement (mathematical and logical structures and modeling of information) at all three levels of rhetorical persuasion; and (2) rhetoric-3 uses of mathematical and scientific forms as a trope of style (mathematical structures and forms used as a metaphor to stimulate thinking and imagination).<sup>73</sup>

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Gary Becker, *Irrational Behavior and Economic Theory*, 70 J. POL. ECON. 1, 4; Dan Ariely, George Loewenstein, & Drazen Prelec, *Coherent Arbitrariness: Stable Demand Curves Without Stable Preferences*, 118 Q.J. ECON. 73-106 (2003) (demonstrating how the illusion of stable, ordered preferences can be created with arbitrary anchors).

<sup>72</sup> McCloskey, *The Rhetoric of Economics*, *supra* n.4, at 147; Morton J. Horwitz, *Law and Economics: Science or Politics?*, 8 HOFSTRA L. REV. 905, 912 (1980); Arthur Leff, *Economic Analysis of Law: Some Realism About Nominalism*, 60 VA. L. REV. 451, 478-81 (1974). The excessively persuasive effect of scientific demonstration is a problem in non-economic legal settings, too, such as evidence law. See, e.g., Christopher B. Mueller & Laird C. Kirkpatrick, MODERN EVIDENCE: DOCTRINE AND PRACTICE § 7.8, at 992 (1995) (“Scientific proof may suggest unwarranted certainty to lay factfinders, especially if it comes dressed up in technical jargon, complicated mathematical or statistical analysis, or involves a magic machine (‘black box’) that may seem to promise more than it delivers”); John William Strong, *Language and Logic in Expert Testimony: Limiting Expert Testimony by Restrictions of Function, Reliability, and Form*, 71 OR. L. REV. 349, 367 n.81 (1992) (“There is virtual unanimity among courts and commentators that evidence perceived by jurors to be ‘scientific’ in nature will have particularly persuasive effect.”). See also *United States v. Addison*, 498 F.2d 741, 744 (D.C. Cir. 1974) (scientific evidence “assume[s] a posture of mythic infallibility in the eyes of a jury of laymen”); *United States v. Amaral*, 488 F.2d 1148, 1152 (9th Cir. 1973) (describing scientific testimony’s “aura of special reliability and trustworthiness”). But see Michael S. Jacobs, *Testing the Assumptions Underlying the Debate About Scientific Evidence: A Closer Look at Juror “Incompetence” and Scientific “Objectivity,”* 25 CONN. L. REV. 1083 (1993) (jurors are able to evaluate competing scientific and technical testimony).

<sup>73</sup> Michael I. Meyerson, *Mathematics and the Legal Imagination: A Response to Edelman*, 19 CONST. COMMENT. 477, 478 (2002) (“mathematics can trigger a non-mathematical imagination and create mental images that permit new ways of thinking about non-mathematical topics”).

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

The rhetoric of traditional and contemporary law and economics begins with a seminal insight of economics: that people respond to incentives<sup>74</sup> and that the law (legal rules and the legal system) can create incentives that can influence human behavior in one direction and can create disincentives that can influence human behavior in the other direction.<sup>75</sup> Legal rules and the legal system can “encourage socially desirable conduct and discourage undesirable conduct” by rewarding or subsidizing certain behavior and punishing or taxing other behavior.<sup>76</sup> Legal rules and the legal system can increase the costs of certain behavior or lesson the costs of other behavior.<sup>77</sup>

The premise that people respond to incentives is rhetorical;<sup>78</sup> it is both an assumption and a presumption that shapes the predictions that analysts using the

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<sup>74</sup> Korobkin & Ulen, *Law and Behavioral Science*, *supra* n.5, at 1054; Yuval Feldman & Doron Teichman, *Are All Legal Probabilities Created Equal?*, 84 N.Y.U. L. REV. 980, 987 (2009).

<sup>75</sup> *See* Owen D. Jones & Timothy H. Goldsmith, *Law and Behavioral Biology*, 105 COLUM. L. REV. 405, 412-14 (2005); Paul J. Heald & James E. Heald, *Mindlessness and Law*, 77 VA. L. REV. 1127, 1132 (1991); Korobkin & Ulen, *Law and Behavioral Science*, *supra* n.5, at 1043.

<sup>76</sup> Korobkin & Ulen, *Law and Behavioral Science*, *supra* n.5, at 1054. *See* Eric M. Zolt, *Deterrence Via Taxation: A Critical Analysis of Tax Penalty Provisions*, 37 UCLA L. REV. 343, 343-47 (1989); Eric A. Posner, *The Regulation of Groups: The Influence of Legal and Nonlegal Sanctions on Collective Action*, 63 U. CHI. L. REV. 133, 164-65 (1996); Lior Jacob Strahilevitz, *Reputation Nation: Law in an Era of Ubiquitous Personal Information*, 102 NW. U. L. REV. 1667, 1711 (2008).

<sup>77</sup> Posner, *Economic Analysis of Law*, *supra* n.2, at 84; Korobkin & Ulen, *Law and Behavioral Science*, *supra* n.5, at 1054; Steven Garber, *Product Liability, Punitive Damages, Business Decisions and Economic Outcomes*, 1998 WIS. L. REV. 237, 284-86 (1998); Peter Reuter, *A Just Use of Economics or Just Use Economics*, 70 CAL. L. REV. 850, 853-54 (1982).

<sup>78</sup> *See generally* Stewart E. Sterk, *Rhetoric and Reality in Copyright Law*, 94 MICH. L. REV. 1197 (1996) (discussing the rhetoric of incentives in copyright law); Shyamkrishna Balganesh, *Foreseeability and Copyright Incentives*, 122 HARV. L. REV. 1569 (2009) (same).

methodology of law and economics can make about the effects of law and the recommendations that these analysts are willing to make about changes to the law.<sup>79</sup> Law and economics imported this assumption from economics, along with the assumption that people react rationally to incentives.<sup>80</sup>

Economists' examination of human behavior within various legal and social environments of the world involves the characterization of many phenomena as either incentives or costs.<sup>81</sup> The canon of incentives and costs states that humans and human institutions facing a choice in conditions of scarce resources (thus requiring a choice) will act in ways that achieve or realize (maximize) the incentives and avoid (minimize) the costs.<sup>82</sup> When the actor under examination is government, the rhetoric of the discipline defines the benefits and rewards offered or imposed by government as incentives and the costs imposed or perpetuated by government as taxes or externalities.<sup>83</sup> When the actors under examination are private parties, the

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<sup>79</sup> See Gregory Mitchell, *Tendencies Versus Boundaries: Levels of Generality in Behavioral Law and Economics*, 56 VAND. L. REV. 1781, 1795-96 & nn.42-44 (2003) (discussing "overadvocacy" of legal incentives); Korobkin & Ulen, *Law and Behavioral Science*, *supra* n.5, at 1054.

<sup>80</sup> George Stigler, *Economists and Public Policy*, 1982 REGULATION 13-16 (May-June 1982); Russell Korobkin, *Possibility and Plausibility in Law and Economics*, 32 FLA. ST. U. L. REV. 781, 781, 795 (2005); Korobkin & Ulen, *Law and Behavioral Science*, *supra* n.5, at 1054.

<sup>81</sup> See Balganesch, *supra* n.78, at 1591-92; Nuno Garoupa & Thomas S. Ulen, *The Market for Legal Innovation: Law and Economics in Europe and the United States*, 59 ALA. L. REV. 1555, 1589-92 (2008); Owen D. Jones, *Time-Shifted Rationality and the Law of Law's Leverage: Behavioral Economics Meets Behavioral Biology*, 95 Nw. U. L. Rev. 1141, 1141-42, 1198-99 (2001); Korobkin & Ulen, *supra* n.5, at 1058.

<sup>82</sup> Francesco Parisi & Jonathan Klick, *Functional Law and Economics: The Search for Value-Neutral Principles of Lawmaking*, 79 CHI.-KENT L. REV. 431, 448-49 (2004); Philip B. Heymann, *The Problem of Coordination: Bargaining and Rules*, 86 HARV. L. REV. 797, 829-30, 848-49 (1973); Posner, *Economic Analysis of Law*, *supra* n.2, at 4.

<sup>83</sup> See generally Jeffrey Evans Stake, *Status and Incentive Aspects of Judicial Decisions*, 79 GEO. L.J. 1447, 1463-64 (1991); W. Keller, *TAX INCIDENCE: A GENERAL EQUILIBRIUM APPROACH* (1980); Richard

rhetoric of the discipline defines incentives and costs in economic terms such as offers, inducements, price, or rent.<sup>84</sup> The presumption is that human actions are motivated to alter their behavior in response to incentives and costs.<sup>85</sup>

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

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A. Epstein, *The Social Consequences of Common Law Rules*, 95 HARV. L. REV. 1717, 1740 (1982); Posner, *Economic Analysis of Law*, *supra* n.2, at 22.

<sup>84</sup> Jonathan R. Macey, *Transaction Costs and the Normative Elements of the Public Choice Model: An Application to Constitutional Theory*, 74 VA. L. REV. 471, 492-94 (1988); Joseph F. Brodley & Ching-to Albert Ma, *Contract Penalties, Monopolizing Strategies, and Antitrust Policy*, 45 STAN. L. REV. 1161, 1167-68 (1993); Roger G. Noll, *“Buyer Power” and Economic Policy*, 72 ANTITRUST L.J. 589, 600-01 (2005); Richard S. Markovits, *Second-Best Theory and the Standard Analysis of Monopoly Rent Seeking: A Generalizable Critique, a “Sociological” Account, and Some Illustrative Stories*, 78 IOWA L. REV. 327, 329-30 & n.3 (1993).

<sup>85</sup> George Stigler, *supra* n.80, at 13-16; Korobkin, *supra* n.80, at 781, 795; Posner, *Economic Analysis of Law*, *supra* n.2, at 4.

| Database <sup>86</sup> | Cases or Articles using the term “cost” with “benefit” <sup>87</sup> | Cases or Articles using the term “incentive” with “law” “legal” or “government” <sup>88</sup> | Cases or Articles using the term “disincentive” with “law” “legal” or “government” <sup>89</sup> | Cases or Articles using the term “externality(ies)” <sup>90</sup> | Cases or Articles using the term “economic(s)” with “law” or “analysis” <sup>91</sup> |
|------------------------|--|---|--|---|---|
| <b>ALLFEDS</b>         | 5225   | 2093  | 186  | 170   | 4303  |
| <b>ALLSTATES</b>       | 3423   | 924   | 88   | 86  | 1935  |
| <b>JLR</b>             | 10,000+ <sup>92</sup>  | 10,000+   | 1447   | 10,000+   | 10,000+   |
| <b>BRIEFS</b>          | 1465   | 536   | 58   | 43  | 1014  |

This chart (a taxonomy, an economic-friendly demonstration of data—a topos of arrangement or trope of style) indicates that the language (*i.e.*, the rhetoric) of costs and incentives is fairly common in legal analysis among courts and in legal scholarship. Legal authors—judges, scholars, and practitioners—already are employing incentives and costs language in substantive legal discourse with significant frequency. Every time an author writes about a cost-benefit analysis, every time a change in the law is said to “incentivize” certain conduct, every time a license or permit application process is said to provide a disincentive to an activity, every time a change in procedural rules is said to impose an “externality” on the

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<sup>86</sup> Westlaw database for all federal cases since 1945, all state cases since 1945, all journals and law review articles, and appellate briefs filed in ten state courts of appeals (Arizona, California, Connecticut, Illinois, Indiana, Maryland, Ohio, North Carolina, Washington, and Wisconsin) with coverage of appellate briefs ranging by state; the earliest coverage is 1991-present (Washington) and the latest is 2006-present (Arizona).

<sup>87</sup> Westlaw search terms used: cost /2 benefit.

<sup>88</sup> Westlaw search terms used: incentive /5 law legal government.

<sup>89</sup> Westlaw search terms used: disincentive /5 law legal government.

<sup>90</sup> Westlaw search terms used: externalit!

<sup>91</sup> Westlaw search terms used: economic /2 law analysis

<sup>92</sup> Entries marked 10,000+ indicate search results exceeding 10,000 documents (articles).

cost of litigation, the author uses a rhetorical trope of style (a figure of speech) to 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.<sup>93</sup>

The basic statement that humans respond favorably to incentives and not favorably to costs disguises the rhetorical complexity of this presumption when it comes to making predictions about human behavior in legal situations and in response to legal conditions. First, incentives or costs must be designed, communicated, and recognized by human actor or institution; government must correctly design and communicate its actions so as to offer the benefit or impose the tax that government intends to offer to or impose on its audience of citizens, and private actors must correctly design and communicate their actions so as to offer the correct intended inducement or impose the intended price or rent.<sup>94</sup> Second, and equally important to the rhetoric of the discipline, is the fact that the action must be perceived and understood by the human audience, the object or recipient of

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<sup>93</sup> 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 elements of the action—collusive effect, price manipulation, gains or losses, or damages. In addition, at the level of 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.,* Levine & Saunders, *supra* n.19, at 118-21; Thomas Conley, RHECTORIC IN THE EUROPEAN TRADITION 15 (1990); Fred A. Simpson & Deborah J. Selden, *When to Welcome Greeks Bearing Gifts—Aristotle and the Rules of Evidence*, 34 TEX. TECH L. REV. 1009, 1011 (2003).

<sup>94</sup> *See* subsection 4 *infra*.



government's or a private actor's action, and what should be perceived and understood as an incentive as opposed to a cost is not always a simple process for humans.<sup>95</sup>

The rhetorical canon of incentives and cost is most closely associated with the canon of rational choice: the design, communication, perception, and motivation concerning incentives and costs requires analysis and an understanding of the rhetorical audience and the rhetorical situation.<sup>96</sup> Scientific empirical analysis of human behavior indicates that there are limitations on humans' abilities to understand and appreciate benefits and costs.<sup>97</sup> These limitations are assumed and represented in the rhetorical statement that humans are creatures of "bounded" abilities – bounded rationality, bounded ability to gather information, bounded perception, and bounded cognition. These bounds limit humans' abilities to perceive and understand the incentives and costs set before them, which in turn complicates the predictions and prescriptions of economists regarding the

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<sup>95</sup> See subsection 4 *infra*.

<sup>96</sup> When is a situation "rhetorical"? —When the audience of the message in the situation has the opportunity to alter reality. When the audience has no choice, the situation is not rhetorical. A situation is made up of: subject—place—time—audience—speaker. See Bitzer, *The Rhetorical Situation*, *supra* n.19, at 6-8, 389-92; Greenhaw, *supra* n.9, at 875-80.

<sup>97</sup> *E.g.*, Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: The Problem of Market Manipulation*, 74 N.Y.U. L. REV. 630, 640 (1999) [Hanson & Kysar]; Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q. J. ECON. 99 (1955); Jolls, Sunstein, Thaler, *supra* n.5, at 1471; *Symposium: The Legal Implications of Psychology: Human Behavior, Behavioral Economics, and the Law*, 51 VAND. L. REV. 1495 (1998); John Conlisk, *Why Bounded Rationality?*, 34 J. ECON. LIT. 669 (1996); Daniel Kahneman et al., *Experimental Tests of the Endowment Effect and the Coase Theorem*, 98 J. POL. ECON. 1325 (1990); Donald C. Langevoort, *Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review*, 51 VAND. L. REV. 1499, 1502 (1998).

motivational effect of incentives and costs. This is the rhetorical “audience” consideration with incentives and costs.

Separately, there is the mounting scientific empirical evidence of the social, cognitive, and brain sciences that indicates that humans are situational decision-makers.<sup>98</sup> A consideration of the rhetorical problems of audience and situation are commonplace in rhetoric, and contemporary rhetoric in particular has covered this ground well.<sup>99</sup>

Section III(B) will describe the canon of incentives and costs in: (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 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).

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<sup>98</sup> See generally Hanson & Yosifon, *The Situation*, *supra* n.6; Hanson & Yosifon, *The Situational Character*, *supra* n.2; Hanson & Kysar, *supra* n.102, at 640.

<sup>99</sup> *E.g.*, White, *Law as Rhetoric*, *supra* n.14, at 695 (“Like law, rhetoric invents; and, like law, it invents out of something rather than out of nothing. It always starts in a particular culture and among particular people. There is always one speaker addressing others in a particular situation, about concerns that are real and important to somebody, and speaking a particular language. Rhetoric always takes place with given materials.”); Bitzer, *The Rhetorical Situation*, *supra* n.19, at 6-8, 389-92; Greenhaw, *supra* n.9, at 875-80.

The contemporary analysis of communication produces a formula for the speaker’s invention of discourse crafted for a given situation: Exigence (a/k/a the rhetorical problem, the reason for speaking, and the urgency thereof) + Audience (mediators of change—those who may be moved from one point to another in the situation) + Constraints (the physical or psychological limitations or opportunities of the situation) = Fitting response (the speaker’s purpose and objectives). See Bitzer, *The Rhetorical Situation*, *supra* n.19, at 6-8, 390-92; Greenhaw, *supra* n.9, at 875-80. This model easily can be applied to economic analysis—if the object of the incentive has no choice, then there is no opportunity for theorizing rational choice of incentives in that situation.

### 3. The rhetorical economic concept of efficiency

There are two kinds of efficiency in the rhetoric of law and economics:

(1) formal efficiency as a preference for simple, elegant formulae and solutions (Rhetoric-3 Efficiency), and (2) the substantive economic concepts of efficiency as a standard and goal of law and policy (Rhetoric-1 and Rhetoric-2 Efficiency). Both modes employ a highly rhetorical turn. The adoption and application of the rhetorical primacy of science and mathematics carries other implications for the discipline, including, for example, that a more efficient (elegant) solution to a problem is preferred under the rhetoric of mathematics and science and subsequently under the rhetoric of economics and the rhetoric of law and economics.<sup>100</sup> The formal desire for efficiency in structure and form leads to a rhetoric-3 level of priority for elegance and simplicity in the equations and formulae of the discipline.<sup>101</sup> Naturally, elegant and effective formulae that are substantively correct make an important impact on the rhetoric-1 level of understanding of economists, but I describe this mode as offering rhetoric-3 persuasion because non-economists can appreciate the persuasiveness of an elegant formula and simple solution because this mode of presentation promotes clarity and openness, revealing the workings and falsifiability of the reasoning.

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<sup>100</sup> “Mathematical elegance often becomes the primary goal, with usefulness in the realm of law, that combines logic with human experience, a mere afterthought.” Korobkin & Ulen, *Law and Behavioral Science*, *supra* n.5, at 1054.

<sup>101</sup> *See, e.g.*, Herbert Hovenkamp, *The Limits of Preference-Based Legal Policy*, 89 *Nw. U. L. Rev.* 4, 5 (1994); Posner, *Economic Analysis of Law*, *supra* n.2, at 16.

In substantive terms, law and economics assumes and advocates efficiency over more abstract concepts of fairness, morality, and justice.<sup>102</sup> This is not to say that fairness, morality, and justice are never incorporated into an economic analysis, but that economists find it preferable to assume such concepts into the rhetorical economic concepts of efficiency—in other words, assuming for purposes of a model or prescription that a fair, moral, and just solution will be more efficient according to one of the economic conceptions of efficiency.<sup>103</sup> Efficiency (or parsimony) in the rhetoric of law and economics is not just a formal imperative for methods and procedures of modeling paradigms and the formulation of hypotheses and theses, but it also has been advanced as a substantive and instrumental imperative in positive examination of conditions, normative analysis of possible conditions, and prescriptions for future conditions.<sup>104</sup> Efficiency, therefore, has become a rhetorical imperative in and of itself in law and economics.<sup>105</sup>

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<sup>102</sup> *E.g.*, Russell B. Korobkin & Thomas S. Ulen, *Efficiency and Equity: What can be Gained by Combining Coase and Rawls?*, 73 WASH. L. REV. 329, 329-30 (1998) [Korobkin & Ulen, *Efficiency and Equity*].

<sup>103</sup> *See, e.g.*, Michael I. Swygert & Katherine Earle Yanes, *A Unified Theory of Justice: The Integration of Fairness Into Efficiency*, 73 WASH. L. REV. 249, 284-86, 316-17 (1998); Henrik Lando, *An Attempt to Incorporate Fairness into an Economic Model of Tort Law*, 17 INT'L REV. L. & ECON. 575 (1997); Ugo Mattei, *Efficiency as Equity: Insights from Comparative Law and Economics*, 18 HASTINGS INT'L & COMP. L. REV. 157 (1994). *See generally* Ken Binmore, *PLAYING FAIR: GAME THEORY AND THE SOCIAL CONTRACT* (1994); Ken Binmore, *JUST PLAYING: GAME THEORY AND THE SOCIAL CONTRACT* (1998); Daniel M. Hausman and Michael S. McPherson, *ECONOMIC ANALYSIS AND MORAL PHILOSOPHY* (1996); Hervé Moulin, *COOPERATIVE MICROECONOMICS: A GAME-THEORETIC INTRODUCTION* 3, 8 (1995); H. Peyton Young, *EQUITY: IN THEORY AND PRACTICE* 8 (1994).

<sup>104</sup> *See* Posner, *Economic Analysis of Law*, *supra* n.2, at 13-16; Michael J. Trebilcock, *THE LIMITS OF FREEDOM OF CONTRACT* 3-6 (1993); Thomas S. Ulen, *The Efficiency of Specific Performance: Toward a Unified Theory of Contract Remedies*, 83 MICH. L. REV. 341, 345-46 (1984); Robert D. Cooter, *Law and the Imperialism of Economics: An Introduction to the Economic Analysis of Law and a Review of the Major Books*, 29 UCLA L. REV. 1260, 1263 (1982) (“A process is efficient when it yields the maximum output from given input, or equivalently, when it yields a given output with the minimum input.”); Frank I. Michelman, *A Comment on Some Uses and Abuses of Economics in Law*, 46 U. CHI.

The elevation of efficiency over other concepts associated with the law, such as fairness, morality, and justice, makes the work of law and economics simpler and easier in many ways,<sup>106</sup> but more difficult in other ways.<sup>107</sup> The substantive meaning of efficiency in the rhetoric of law and economics is a clever twist on a common word to add a very specific, and nonintuitive meaning for efficiency in law and economics—and not just one meaning. In the rhetoric of economics, substantive and instrumental “efficiency” is defined in three, carefully crafted ways: *productive efficiency* (sometime referred to by the undistinguishing term of *economic efficiency*), in which a process or action produces the intended result with maximum utility and minimum costs;<sup>108</sup> *Pareto efficiency*<sup>109</sup> (allocative efficiency), in which

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L. REV. 307, 309 (1979) [Michelman, Comment]; Frank I. Michelman, *Norms and Normativity in the Economic Theory of Law*, 62 MINN. L. REV. 1015, 1032-35 (1978) [Michelman, Norms].

<sup>105</sup> “Although efficiency need not be the sole or primary goal of legal policy, economic analysis of law teaches that policymakers ignore the efficiency implications of their actions at society’s peril. Legal rights that are unobjectionable in the abstract are not free but rather must be measured against their opportunity costs.” Korobkin & Ulen, *Law and Behavioral Science*, *supra* n.5, at 1054 (inner citations omitted).

<sup>106</sup> Cass R. Sunstein, *On Philosophy and Economics*, 19 QUINN. L. REV. 333, 335-36, 348 (2000); A. Mitchell Polinsky, AN INTRODUCTION TO LAW AND ECONOMICS 3-4, 9-10 (2d ed. 1989) [Polinsky, *Law and Economics*]; Richard A. Posner, *Some Uses and Abuses of Economics in Law*, 46 U. CHI. L. REV. 281, 301 (1979).

<sup>107</sup> *E.g.*, Jolls, Sunstein, and Thaler, *supra* n.5, at 1508-09 (“laws may be efficient solutions to the problems of organizing society . . . [but] [t]he notion that laws emerge from considerations of efficiency and conventional rent seeking would probably strike most citizens as odd. . . . many laws on the books appear to be difficult to justify on efficiency grounds (for example, those that prohibit mutually beneficial exchanges without obvious externalities) and seem to benefit groups that do not have much lobbying power (such as the poor or middle class)”).

<sup>108</sup> R. Quentin Grafton, Dale Squires & Kevin J. Fox, *Private Property and Economic Efficiency: A Study of a Common-Pool Resource*, 43 J. L. & ECON. 679, 690-91 (2000); Joseph F. Brodley, *The Economic Goals of Antitrust: Efficiency, Consumer Welfare, and Technological Progress*, 62 N.Y.U. L. REV. 1020, 1025, 1028-29 (1987). *See also* Walter Nicholson, MICROECONOMIC THEORY: BASIC PRINCIPLES AND EXTENSIONS 611-20 (9th ed. 2004); Cooter & Ulen, *supra* n.27, at 17.

the situation cannot be altered to benefit one of the parties in the situation without making the other party worse off—better or worse off referring to the individual, subjective perceptions and preferences of the parties;<sup>110</sup> and *potential Pareto improvements* or *Kaldor-Hicks efficiency*, in which incremental gains in benefits or incentives created by a change in action exceed incremental losses or costs imposed by the change in action.<sup>111</sup>

The language of efficiency is intended to facilitate rhetoric-1 level communication within the economics discourse community and rhetoric-2 level communication to facilitate the advocacy of the discipline to the outside world. Within the discipline, the rhetoric of law and economics assumes that it is easier to conceive of models of efficiency and form hypotheses of efficiency and to test these models and hypotheses of efficiency through scientific and mathematical methods of analysis than it would be to test fairness, morality, and justice using scientific and mathematical analyses. As rhetoric-2 discourse, the models and forms that are developed give the appearance of rigorous scientific analysis that “proves” the hypotheses that a certain course or change in law produces efficient results,

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<sup>109</sup> See Vilfredo Pareto, 4 THE MIND AND SOCIETY: THE GENERAL FORM OF SOCIETY 1459, 1465-69 (1907) (Andrew Bongiorno et al. trans., 1935) (1907); Vilfredo Pareto, MANUAL OF POLITICAL ECONOMY (1906) (Ann. S. Schwier trans., 1971); Posner, Economic Analysis of Law, *supra* n.2, at 12.

<sup>110</sup> See Polinsky, Law and Economics, *supra* n.111, at 7 n. 4; Posner, Economic Analysis of Law, *supra* n.2, at 13, 14, 26; Richard A. Posner, *The Ethical & Political Bases of the Efficiency Norm in Common Law Adjudication*, 8 HOFSTRA L. REV. 487, 491 (1980); Cooter & Ulen, *supra* n.27, at 17; Jules L. Coleman, *Efficiency, Utility and Wealth Maximization*, 8 HOFSTRA L. REV. 509 (1980); Jules L. Coleman, *Efficiency, Exchange and Auction: Philosophical Aspects of the Economic Approach to Law*, 68 CAL. L. REV. 221 (1980). See also Hal R. Varian, MICROECONOMIC ANALYSIS 160-71 (3d ed. 1992); Alfred Marshall, PRINCIPLES OF ECONOMICS 103-10, 433-35 (8th ed. 1920); Arthur Cecil Pigou, THE ECONOMICS OF WELFARE 31-43 (1952).

<sup>111</sup> See Cooter & Ulen, *supra* n.27, at 18.

whichever of the three forms of “efficient” results are assumed in the models and hypotheses.

The success or failure of models and hypotheses concerning one or more of the economic definitions of efficiency is easier to observe through scientific and mathematical methods of analysis of statistics and econometric data than it would be to test a model or hypothesis of fairness, morality, or justice. Success or failure is a highly desirable observation of any practical study, and models and hypotheses of fairness, morality, and justice may suffer from the fact that they may be tautological and non-falsifiable within the rhetorical definitions of fairness, morality, and justice in the law, philosophy, or ethics. However, rational humans embrace concepts of fairness, morality, and justice, and act on them, which complicates economics predictions and prescriptions as to the effect of law and legal conditions.

Therefore, Section III(C) will discuss the following prescriptions for legal discourse: (1) rhetoric-1 substantive uses of the term efficiency that are employed in the *economic efficiency*-sense where it is evident that simple avoidance of waste and reduction in costs (transactional, collateral, or externalities) is a valued goal in the area of law under analysis;<sup>112</sup> (2) rhetoric-3 coding of language relevant to the substantive analysis to emphasize efficiency—i.e., the framing, phrasing, and defining of elements of the analysis in terms of efficiency in ways that are

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<sup>112</sup> Many areas of law are compatible with this goal, not just environmental law or contract law, but careful consideration to preeminent considerations of justice and fairness, for example, in criminal law, may dominate the rhetorical decision whether to advocate efficiency.

persuasive and rhetorically valuable; (3) rhetoric-3 formal applications of composition, arrangement, and style of legal discourse, elevating elegance and efficiency in form, structure, and composition to benefit clarity and falsifiability.<sup>113</sup>

#### 4. The Contemporary Theory of Rational Choice

Law and economics presumes that human actors in legal situations are rational and will act in rational ways in response to legal conditions. The early adopters of the law and economics analysis of law accepted a rhetorical assumption that when faced with choices, humans will respond rationally in making their choices, rather than acting randomly, capriciously, and, most importantly for the discipline of law and economics, *predictably*.<sup>114</sup> The rhetoric of this position is known generally as rational choice theory.<sup>115</sup>

Over the last five decades, rational choice theory employed by law and economics analysts has produced marked success in explaining and predicting human behavior when humans are confronted by incentives, costs, or opportunities, and many of these successes have been applied to make accurate predictions of the effect of existing laws or changes in the law on the behavior of humans subject to the laws.<sup>116</sup> The successes produced under the rational choice theory lead some to argue that rational choice theory, defined broadly enough, and shaped to encompass

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<sup>113</sup> Formal applications of efficiency will benefit persuasion by promoting clarity and comprehension of meaning over confusion and frustration. They also open doors to falsifiability—doors that are closed by complexity, density, prolixity, and obfuscation. Falsifiable assertions that are not rebutted are highly persuasive.

<sup>114</sup> See Korobkin & Ulen, *Law and Behavioral Science*, *supra* n.5, at 1055.

<sup>115</sup> *Id.*

<sup>116</sup> See *id.* at 1053-54.



all areas where predictions are reliable and verifiable and to exclude the areas and phenomenon where predictions are unreliable and refutable, is all that an economic approach to the law requires.<sup>117</sup> In fact, some argue that the “correction” applied to economics by behavioral science—to reject many if not most of the assumptions represented by the rational choice theory—means that a behavioral approach to law and economics does not fit within the rhetoric of economics or law and economics at all.<sup>118</sup> They argue that analysts of behavioral science may be applying psychology, or sociocultural, or cognitive theories to the law, but they are not applying economics.<sup>119</sup> This is indeed a crisis within the rhetoric of the discipline.

The definition of what it means to be “rational” in response to legal conditions and the weight given to the presumption of rationality differs depending on the legal situation that is being studied and the legal economist that is studying the situation. Cognitive science has indicated that situations affect decision making in ways that are contrary to traditional rational choice theory of maximizing self interest.<sup>120</sup> A large part of the correction in the rhetoric of traditional law and economics advanced by the proponents of a behavioral approach to law and

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<sup>117</sup> Richard A. Posner, *Rational Choice, Behavioral Economics, and the Law*, 50 STAN. L. REV. 1551, 1553-58 (1998) [Posner, Rational Choice].

<sup>118</sup> *Id.* at 1558 (“If there is any theory in their approach, it is not an economic theory.”). *See* section C *infra*.

<sup>119</sup> Posner, Rational Choice, *supra* n.122, at 1558 (“They take a psychological approach to phenomena that are sociological and psychological as much as they are economic, yet call their approach economic. . . . [Their approach] would be easier to understand if it were offered to the reader as a contribution to the psychological analysis of law rather than to the economic analysis of law.”).

<sup>120</sup> *See generally* Hanson & Yosifon, The Situation, *supra* n.6; Hanson & Yosifon, The Situational Character, *supra* n.2.

economics is a correction in the definition of rationality and the weight given to the presumption of rationality in the face of various legal conditions.<sup>121</sup> The behavioral approach asserts that the definition of rationality and its weight in making predictions about human behavior in the face of legal conditions must be modified with the knowledge and understanding gained from behavioral science, which gives a clearer picture of the nature and limits of human rationality in response to legal situations.

The acceptance or at least the acknowledgement that rational choice is more bounded than traditional rational choice theories and models have predicted presents a problem for the rhetoric of the discipline and complexity in the use of rational choice theory as a rhetorical lens for legal discourse. The rhetoric of the discipline can redefine its theories and definitions of “rational” so as to incorporate the empirical observations of seemingly non-traditional, irrational behavior in legal situations requiring a choice.<sup>122</sup> For example, in response to the ultimatum game studies,<sup>123</sup> “rational” as a definition may be modified from a strict position that one

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<sup>121</sup> “There is considerable debate within both the economics and law-and-economics communities about precisely what rational choice theory is and is not. As it is applied implicitly or explicitly in the law-and-economics literature, however, it is understood alternatively as a relatively weak, or thin, presumption that individuals act to maximize their expected utility, however they define this, or as a relatively strong, or thick, presumption that individuals act to maximize their self-interest.” Korobkin & Ulen, *supra* n.5, at 1055 (inner citations omitted).

<sup>122</sup> In fact, it is only rational for law and economics scholars to attempt to preserve the theory of rational choice by expanding the definition of “rational” as this will avoid throwing out the entire canon of rational choice as an operative foundation for economic models, theories, and predictions.

<sup>123</sup> Ultimatum game studies test the theory that when a person is assigned a sum and asked to offer a portion of the sum to another person with the understanding that if the other person accepts the offer, both will take away something—the offeror keeps the remainder of the sum not offered, and the offeree keeps what was offered and accepted—but neither person will take away anything if the offer is not accepted. Traditional rational choice theory predicted that a tiny sum would be offered

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

Whether the rational choice theory is definitional (*e.g.*, humans rationally make choices to maximize their ends),<sup>124</sup> or based on a conception that humans make choices to maximize their expected utility from the choices made,<sup>125</sup> or based on an assumption of human self-interest,<sup>126</sup> or humans' motivation toward wealth maximization,<sup>127</sup> the consequences for legal discourse points to the same goal: that

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

<sup>124</sup> *See* Richard A. Posner, *Are We One Self or Multiple Selves?: Implications for Law and Public Policy*, 3 LEG. THEORY 23, 24 (1997); Korobkin & Ulen, at 1061.

<sup>125</sup> *See* Donald P. Green & Ian Shapiro, PATHOLOGIES OF RATIONAL CHOICE THEORY: A CRITIQUE OF APPLICATIONS IN POLITICAL SCIENCE 18 (1994); Geoffrey Brennan, Comment, *What Might Rationality Fail to Do*, in THE LIMITS OF RATIONALITY 51, 52 (Karen Schweers Cook & Margaret Levi eds., 1990); Scott Plous, THE PSYCHOLOGY OF JUDGMENT AND DECISION MAKING 83 (1993); Korobkin & Ulen, *supra* n.5, at 1062.

<sup>126</sup> Jennifer Arlen, *Comment: The Future of Behavioral Economic Analysis of Law*, 51 VAND. L. REV. 1765, 1766 (1998); Jeffrey L. Harrison, *Egoism, Altruism, and Market Illusions: The Limits of Law and Economics*, 33 UCLA L. REV. 1309, 1320 (1986); Korobkin & Ulen, *supra* n.5, at 1065.

<sup>127</sup> Korobkin & Ulen, *supra* n.5, at 1066; Cooter & Ulen, *supra* n.27, at 26; Polinsky, *Law and Economics*, *supra* n.111, at 10.

law should be communicated to people in a manner that maximizes the incentives to the reader to accept and be persuaded by the legal communication, and minimizes the costs imposed by the communication. In Section III(D), 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 a rational audience; and (3) rhetoric-3 uses of metaphor, parable/mythical/fable forms, character archetypes, and other forms of narrative reasoning as 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.

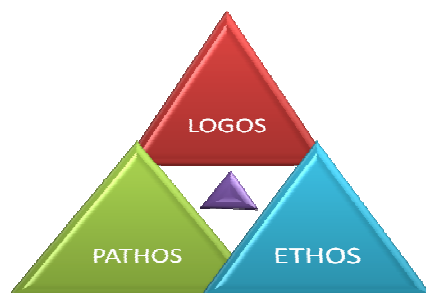
#### **B. The Interaction of the Rhetorical Canons of Law and Economics**

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*,<sup>128</sup> are often depicted as a

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<sup>128</sup> See Covino & Joliffe, *supra* n.16, at 17, 52; Frost, Lost Heritage, *supra* n.18, at 617-18; Michael Frost, *Greco-Roman Legal Analysis: The Topics of Invention*, 66 ST. JOHN'S L. REV. 107, 127 (1992) [Frost, Greco-Roman Legal Analysis]; Robin Smith, *Aristotle's Logic*, in The Stanford Encyclopedia of Philosophy (Fall 2004 ed.), Edward N. Zalta (ed.), available at <<http://plato.stanford.edu/archives/>

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<sup>129</sup>:



James Kinneavy identifies these terms as Encoder – Signal – Decoder, linking the author, the language or message, and the reader or audience to reality.<sup>130</sup> 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.<sup>131</sup>

The rhetorical pathways are fundamentally pragmatic.<sup>132</sup> Aristotle sought to remind advocates that an argument is not one-dimensional. The most logically

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sum2002/entries/aristotle-logic/> (last accessed Jan. 2, 2011) (last substantive edit Oct. 5, 2000) [Smith, Aristotle's Logic]; Corbett & Connors, *supra* n.11, at 71-84; Kennedy, *Classical Rhetoric*, *supra* n.54, at 68, 75, 82, 89.

<sup>129</sup> Wisse, *supra* n.45, at 8.

<sup>130</sup> See James L. Kinneavy, A THEORY OF DISCOURSE: THE AIMS OF DISCOURSE 19 (1971) [Kinneavy, *Theory of Discourse*]; Phelps, *supra* n.9, at 1091; Linda L. Berger, *A Reflective Rhetorical Model: The Legal Writing Teacher as Reader and Writer*, 6 J. LEGAL WRITING INST. 57, 67 (2000) [Berger, *Reflective Rhetorical Model*].

<sup>131</sup> Wisse, *supra* n.45, at 7-8.

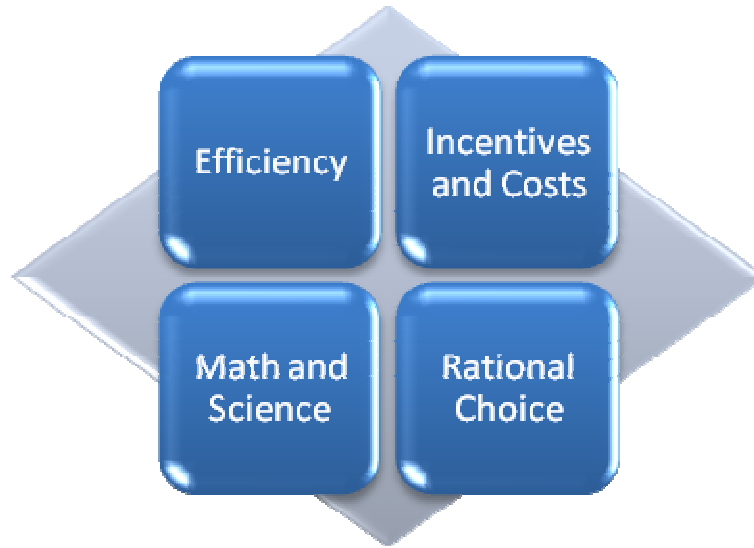
<sup>132</sup> See Eileen A. Scallen, *Classical Rhetoric, Practical Reasoning, and the Law of Evidence*, 44 AM. U. L. REV. 1717, 1728-29 (1995); Frost, *Lost Heritage*, *supra* n.18, at 614, 624, 625, 627.

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.<sup>133</sup>

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 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:

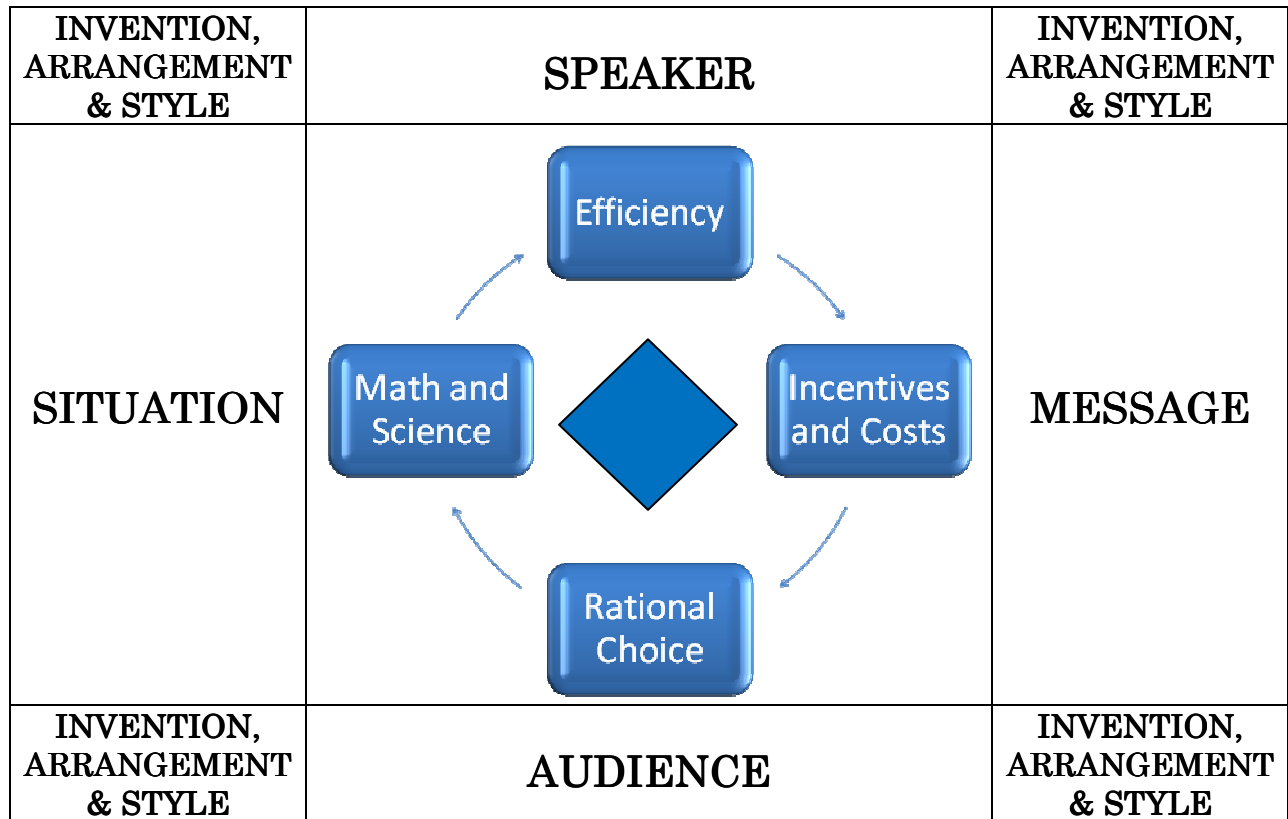
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<sup>133</sup> See generally Frost, Ethos, Pathos & Legal Audience, *supra* n.45; Corbett & Connors, *supra* n.11, at 72-73.



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**



The diagram indicates the rhetorical modes I will discuss in Section 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.<sup>134</sup> Modern argument theory confronts the problem of the indeterminacy of language.<sup>135</sup> 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.<sup>136</sup> 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.<sup>137</sup> The argument is not offered as

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<sup>134</sup> See generally Burke, *Rhetoric of Motives*, *supra* n.19; Bitzer, *supra* n.19, at 6-8, 389-92; Perelman & L. Olbrechts-Tyteca, *supra* n.8; Toulmin, *supra* n.19; Greenhaw, *supra* n.9, at 875-80.

<sup>135</sup> See Smith, *Rhetoric Theory*, *supra* n.8, at 139; Bruner & Amsterdam, *supra* n.8, at chs. 2-3, 6-7; Frans H. Van Eemeren et al., *FUNDAMENTALS OF ARGUMENTATION THEORY: A HANDBOOK OF HISTORICAL BACKGROUNDS AND CONTEMPORARY DEVELOPMENTS* (1996); Stephen Toulmin et al., *AN INTRODUCTION TO REASONING* (2d ed. 1984) [Toulmin, *Introduction to Reasoning*]; Perelman & Olbrechts-Tyteca, *supra* n.8.

<sup>136</sup> See Smith, *Rhetoric Theory*, *supra* n.8, at 139; Toulmin, *Introduction to Reasoning*, *supra* n.140; Perelman & Olbrechts-Tyteca, *supra* n.8.

<sup>137</sup> See Smith, *Rhetoric Theory*, *supra* n.8, at 139; Toulmin, *Introduction to Reasoning*, *supra* n.140; Perelman & Olbrechts-Tyteca, *supra* n.8.

incontrovertible proof, but instead as the most reasonable and probable outcome that can be advocated in the situation.<sup>138</sup>

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.<sup>139</sup> 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).<sup>140</sup> 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<sup>141</sup>—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

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<sup>138</sup> See generally Perelman & L. Olbrechts-Tyteca, *supra* n.8; Toulmin, *supra* n.140. In the legal arena, this theory accepts that 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 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* n.8, at 139 (citing Kurt M. Saunders, *Law as Rhetoric, Rhetoric as Argument*, 44 J. LEG. EDUC. 566, 567 (1994)).

<sup>139</sup> Frost, *Lost Heritage*, at 617; Michael Frost, *Greco-Roman Legal Analysis: The Topics of Invention*, 66 St. John's L. Rev. 107, 110 (1992) [Frost, *Greco-Roman Legal Analysis*].

<sup>140</sup> See Berger, *Law as Rhetoric*, *supra* n.12, at 48; [http://howtosay.org/en\\_el/Heuristic](http://howtosay.org/en_el/Heuristic) (last accessed Jan. 2, 2011). “Heureka,” a/k/a, “eureka” is, “I have found (it),” the first person, singular, perfect active indicative form of *heuriskein*, the Greek verb “to find.” See <http://wordinfo.info/unit/781?letter=E&spage=6> (last accessed Jan. 2, 2011).

<sup>141</sup> See, e.g., Michael R. Smith, *Introduction to Logos, Pathos, and Ethos*, in *Advanced Legal Writing*, *supra* n.12, at 10-25.

contracts, sworn testimony (including expert testimony), interviews, polls, and surveys.<sup>142</sup>

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 required elements of argument.<sup>143</sup> Ideally, using the classical rhetorical canon of invention, the discourse should be crafted to persuade through *logos*,<sup>144</sup> a logical exposition of the argument, as well as by revealing the competence and integrity of the author to handle the exposition itself (*ethos*),<sup>145</sup> and inspire emotions that put the audience in a frame of mind to be persuaded by the argument (*pathos*),<sup>146</sup> 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),<sup>147</sup> *pathos* (persuasion accomplished through the

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<sup>142</sup> See Levine & Saunders, *Thinking Like a Rhetor*, *supra* n.19, at 118-21; Thomas Conley, *RHETORIC IN THE EUROPEAN TRADITION* 15 (1990); Simpson & Selden, *supra* n.98, at 1011.

<sup>143</sup> See Frost, *Lost Heritage*, *supra* n.18, at 617-18; Frost, *Greco-Roman Legal Analysis*, *supra* n.133, at 127.

<sup>144</sup> See Smith, *Aristotle's Logic*, *supra* n.133.

<sup>145</sup> Covino & Joliffe, *supra* n.16, at 52; Corbett & Connors, *supra* n.11, at 71-77; Kennedy, *Classical Rhetoric*, *supra* n.54, at 68, 75.

<sup>146</sup> Covino & Joliffe *supra* n.16, at 17; Corbett & Connors, *supra* n.11, at 77-84; Kennedy, *Classical Rhetoric*, *supra* n.54, at 82, 89.

<sup>147</sup> Aristotle, *The Rhetoric*, *supra* n.18, at Book I, ch. 2 at 1356.

emotional response of the audience to the communication),<sup>148</sup> and *logos* (persuasion accomplished through logical reasoning embodied in the content of the communication).<sup>149</sup> 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<sup>150</sup> (see diagram below):



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.

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<sup>148</sup> *Id.*

<sup>149</sup> *Id.*

<sup>150</sup> Univ. of Iowa Rhetoric Dep't, *The Rhetorical Triangle: Logos, Ethos and Pathos*, MORPHING TEXTBOOK~RHETORIC TOOLS at [http://www.uiowa.edu/~rhetoric/morphing\\_textbook/general/triangle.html](http://www.uiowa.edu/~rhetoric/morphing_textbook/general/triangle.html) (last accessed Dec. 27, 2010); see also Levine & Saunders, *supra* n.19, at 114-15; Kinneavy, *Theory of Discourse*, *supra* n.135, at 19; Phelps, *supra* n.9, at 1091-93.

**Arrangement:** The classical rhetorical canon of arrangement (Latin *dispositio*; Greek *taxis*) pertains to the order and design of the discourse for persuasive effect.<sup>151</sup> 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, desires, or motivation.<sup>152</sup> As a starting point, the classical rhetoricians developed a complex paradigm for arguments that still is applied in court rules<sup>153</sup> for trial and appellate briefs: *Exordium* (introduction or statement of the issues presented), *Narratio* (statement of the case), *Partitio* (summary of the argument), *Confirmatio* (argument), and *Peroratio* (conclusion).<sup>154</sup>

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

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<sup>151</sup> See Corbett & Connors, *supra* n.11, at 20, 256-92; Berger, Law as Rhetoric, *supra* n.12, at 50; Frost, Lost Heritage, *supra* n.18, at 617-19; Frost, Greco-Roman Legal Analysis, *supra* n.133, at 182-89.

<sup>152</sup> See Berger, Law as Rhetoric, *supra* n.12, at 50; Corbett & Connors, *supra* n.11, at 20, 256-92; Michael H. Frost, INTRODUCTION TO CLASSICAL LEGAL RHETORIC 4, 34, 35 (2005) [Frost, Classical Legal Rhetoric].

<sup>153</sup> *E.g.*, U.S. Supreme Ct. Rules 14, 24; see Frost, Classical Legal Rhetoric, *supra* n.157, at 45; Berger, Law as Rhetoric, *supra* n.12, at 50.

<sup>154</sup> See Frost, Classical Legal Rhetoric, *supra* n.157, at 45. The *dispositio* of the argument also may contain *refutatio*, the making and meeting of counter-arguments. In *De Inventione*, Cicero named six parts: *exordium*, *narratio*, *partitio*, *confirmatio*, *reprehensio* (refutation, counter-argumentation), and *conclusio* (conclusion). Cicero, *De Inventione*, *supra* n.18, at 1.19. The *Rhetorica ad Herennium* names six parts of *dispositio*: *exordium*, *narratio*, *divisio* (summary, breakdown of arguments), *confirmatio*, *confutatio* (counter-argumentation), and *conclusio*. RHETORICA AD HERENNIUM § 1.3 (H. Caplan trans., Harv. U. Press 1954). See Russ VerSteeg & Nina Barclay, *Rhetoric and Law in Ovid's Orpheus*, 15 L. & LIT. 395, 409-10 & n.71, 413 (2003).

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 syllogism<sup>155</sup> and the logical inductive structure of the induction.<sup>156</sup> 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.<sup>157</sup>

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<sup>155</sup> Deductive reasoning is the process of formation of a major premise or general proposition and moving to the analysis of a minor premise or specific proposition so as to draw a conclusion. Frost, Greco-Roman Legal Analysis, *supra* n.133, at 118; Robbins, Paradigm Lost, *supra* n.56, at 492-93 (2003); John W. Cooley, *A Classical Approach to Mediation—Part I: Classical Rhetoric and the Art of Persuasion in Mediation*, 19 U. DAYTON L. REV. 83, 88-89 (1993). Aristotle characterized all forms of deductive reasoning as belonging to the topic of syllogisms. See Aristotle, *The Rhetoric*, *supra* n.18, 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* n.56, at 8-9.

<sup>156</sup> 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* n.53, at §§ 5(C), 7.4. Aristotle called a rhetorical induction an “example.” Aristotle, *The Rhetoric*, *supra* n.18, at Book I, ch. 2 at 1356b; Scharffs, *supra* n.53, at 752 & n.58; Schmidt, *supra* n.53, at 372-73.

<sup>157</sup> 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* n.18, at Book I, ch. 1 at 1355a; Cicero, *De Inventione*, *supra* n.18, at 93; Quintilian, *supra* n.18 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* n.18, at Book I, ch. 2 at 1356b. See also George A. Kennedy, *ARISTOTLE ON RHETORIC: A THEORY OF CIVIC DISCOURSE* 40 & n. 49 (1991) (“Kennedy, On Rhetoric”). Aristotle believed the enthymeme to be the superior of the two forms. Aristotle, *The Rhetoric*, *supra* n.18, at Book I, ch. 1 at 1355a, Book I, ch. 2 at 1356b.

The syllogism and enthymeme (deductive forms)<sup>158</sup> and the induction and example (inductive forms)<sup>159</sup> are topoi of arrangement in science, mathematics, and rhetorical demonstration.<sup>160</sup> By borrowing the structure of mathematics and science, legal discourse can engage in open demonstration of the reasoning process

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<sup>158</sup> 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 4 at 38-48. This is referred to by Aristotle as a “complete proof.” Aristotle, *The Rhetoric*, *supra* n.18, 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 4 at 53 (quoting Aristotle, *THE LOGIC: PRIOR ANALYTICS*, Book II, ch. 27); Frost, *Lost Heritage*, *supra* note 4 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) (Frost, *Scalia's Rhetoric*); Steven D. Jamar, *Aristotle Teaches Persuasion: The Psychic Connection*, 8 SCRIBES J. L. 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* n.11, at 53-54. Similarly, the minor premise must be most probably true, not absolutely, necessarily true. Corbett & Connors, *supra* n.11, 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* n.133, at 110.

<sup>159</sup> 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* n.53, 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* n.18, at Book I, ch. 2 at 1356b, Book II, ch. 19 at 1392a-1392b.

<sup>160</sup> 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* n.18, 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.

in a form that is recognized as authoritative and persuasive.<sup>161</sup> The structure of the argument takes the form of logical, scientific deduction and induction to *prove* the proposition.<sup>162</sup> Focusing on the rhetoric-2 and rhetoric-3 uses of 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<sup>163</sup> and explanatory synthesis.<sup>164</sup> The deductive structure of the syllogism

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<sup>161</sup> See Robert L. Heilbroner, Rhetoric and Ideology, *supra* n.25, at 38-39; Cooter & Ulen, *supra* n.27, at 3, 4; Kritzer, *supra* n.31, at 42-43, 59;

<sup>162</sup> George Pólya, INDUCTION AND ANALOGY IN MATHEMATICS: VOLUME I OF MATHEMATICS AND PLAUSIBLE REASONING v-vi (1954); McCloskey, Rhetoric of Law and Economics, *supra* n.4, at 752, 760. The pros and cons of this rhetorical imperative are a lively topic of debate, and one that is growing in the wake of the economic meltdown of 2009-10. *E.g.*, Samuel Gregg, *Smith versus Keynes: Economics and Political Economy in the Post-Crisis Era*, 33 HARV. J.L. & PUB. POL'Y 443, 445, 451-52, 455-56 (2010).

<sup>163</sup> 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.*, Helene S. Shapo, Elizabeth Fajans & Mary R. Falk, WRITING AND ANALYSIS IN THE LAW ch. 2(IV), ch. 5(III) (4th ed. 1999); Deborah A. Schmedemann & Christina L. Kunz, SYNTHESIS: LEGAL READING, REASONING, AND WRITING chs. 4, 6, 9 (3d ed. 2007); Richard K. Neumann, Jr., LEGAL REASONING AND LEGAL WRITING chs. 10-13 (5th ed. 2005); 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* n.56, chs. 2, 5, 6.

<sup>164</sup> 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



and enthymeme provides the framework for each of the organizational paradigms of legal discourse, including IRAC, IREAC, and TREAT.<sup>165</sup> 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.<sup>166</sup> 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

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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, *Legal Writing and Analysis*, chs. 6, 7 (discussing explanatory synthesis); Michael D. Murray, *Rule Synthesis and Explanatory Synthesis: A Socratic Dialogue Between IREAC and TREAT*, 8 *Leg. Com. & Rhet.* \_\_\_ (2011) [Murray, *Rule Synthesis and Explanatory Synthesis*] (forthcoming).

<sup>165</sup> Murray & DeSanctis, *Legal Writing and Analysis*, chs. 2, 6, 7 (discussing IRAC and TREAT); Linda H. Edwards, *LEGAL WRITING: PROCESS, ANALYSIS, AND ORGANIZATION*, chs. 10, 11, 19, 20 (5th ed. 2010) (discussing IREAC and variations for objective and persuasive discourse); Robbins, *Paradigm Lost* 484-87, 492 (discussing IRAC and IREAC); Murray, *Rule Synthesis and Explanatory Synthesis*, *supra* n.169; James M. Boland, *Legal Writing Programs and Professionalism: Legal Writing Professors Can Join the Academic Club*, 18 *ST. THOMAS L. REV.* 711, 719-23 (2006) (discussing IRAC and IREAC).

<sup>166</sup> 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. LEG. EDUC.* 157, 164-77 (1997).

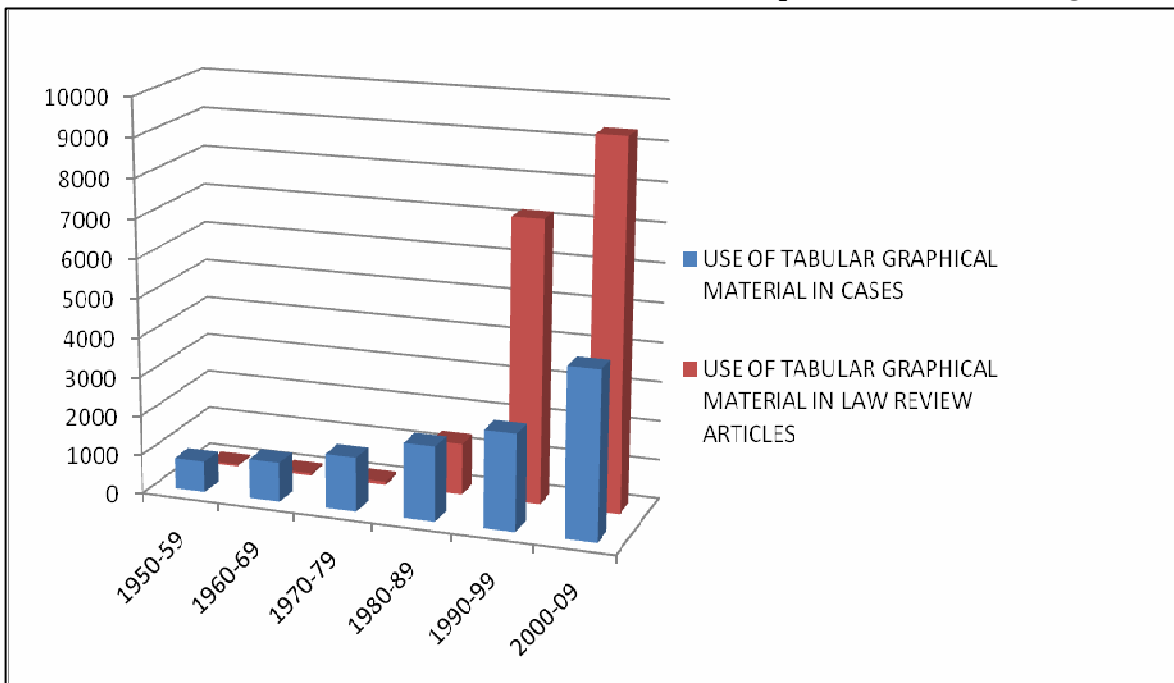
of invention. In many areas of law (specific examples being antitrust, taxation, and securities law, and the calculation of damages in almost every area of contract, tort and property law), mathematical analysis informs or constructs the substantive element of the action—collusive effect, price manipulation, gains 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.<sup>167</sup>

The use of such methods of persuasion has grown over the years<sup>168</sup>:

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<sup>167</sup> See Levine & Saunders, *Thinking Like a Rhetor*, *supra* n.19, at 118-21; Thomas Conley, *RHETORIC IN THE EUROPEAN TRADITION* 15 (1990); Simpson & Selden, *supra* n.98, at 1011.

<sup>168</sup> 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.



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, chart, graph, or table, the uses are going up in cases and law 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.<sup>169</sup> Figures of

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<sup>169</sup> See generally Smith, *supra* n.8, at 133-34 & n.2 (collecting sources on style in classical rhetoric); Corbett and Connors, *supra* n.11, at 20, 378.

speech were divided into schemes (artful deviations from the ordinary arrangements of words), and tropes (creative variations on the meanings of words).<sup>170</sup> 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*) whose purpose is to teach the audience, the middle style (Latin *aequabile* or *mediocre*; Greek *mesos*) whose purpose is to please the audience, and the grand style (Latin *supra* or *magniloquens*; Greek *adros*) whose purpose is to move the audience.<sup>171</sup>

The audience and the situation for the discourse are, of course, very important to the analysis of the best arguments that can be raised,<sup>172</sup> so modern argument theory calls for advocates to pay particular attention to the audience and situation of their argument.<sup>173</sup>

Mathematical forms (charts, diagrams, four-quadrant tables, algebraic formulas) can stimulate thought and imagination, leading to rhetoric-3 appreciation of the persuasiveness of the discourse.

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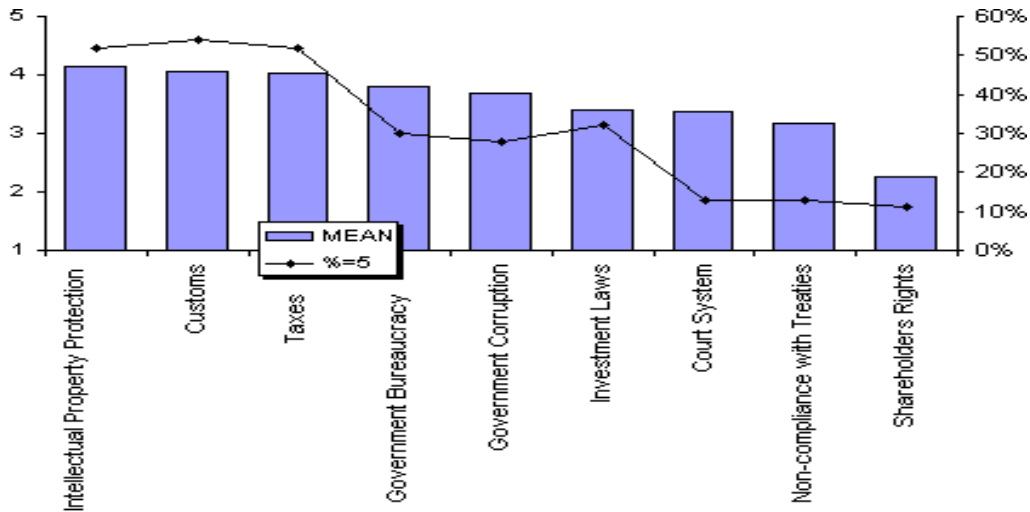
<sup>170</sup> Berger, *Law as Rhetoric*, *supra* n.12, at 51 & n.179.

<sup>171</sup> *See generally* Frost, *Lost Heritage*, *supra* n.18, at 617-18; Frost, *Greco Roman Legal Analysis*, *supra* n.133, at 188-89;

<sup>172</sup> Bitzer, *supra* n.19, at 6-8, 389-92; Greenhaw, *supra* n.9, at 675-80.

<sup>173</sup> Smith, *Rhetoric Theory*, *supra* n.8, at 139.

Example 1<sup>174</sup>:



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.<sup>175</sup> 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 level of concern as customs (54%) and taxes (52%) — which

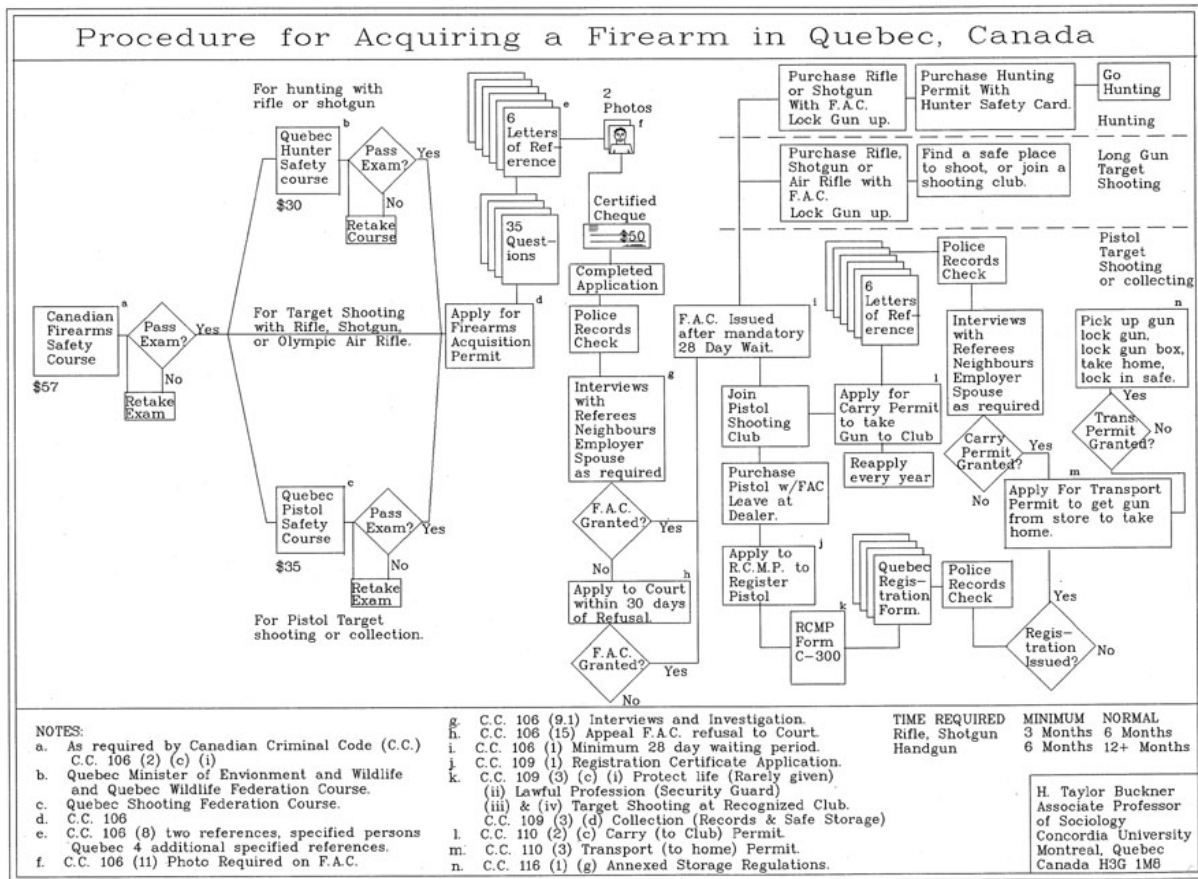
<sup>174</sup> Coalition for Intellectual Property Rights, <<http://www.cipr.org/activities/surveys/top50/index.htm>> (last accessed Jan. 25, 2011).

<sup>175</sup> *Id.*

have historically been perceived as presenting the greatest challenges to business success in Russia.”<sup>176</sup>

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 super-imposed 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.

**Example 2**<sup>177</sup>:

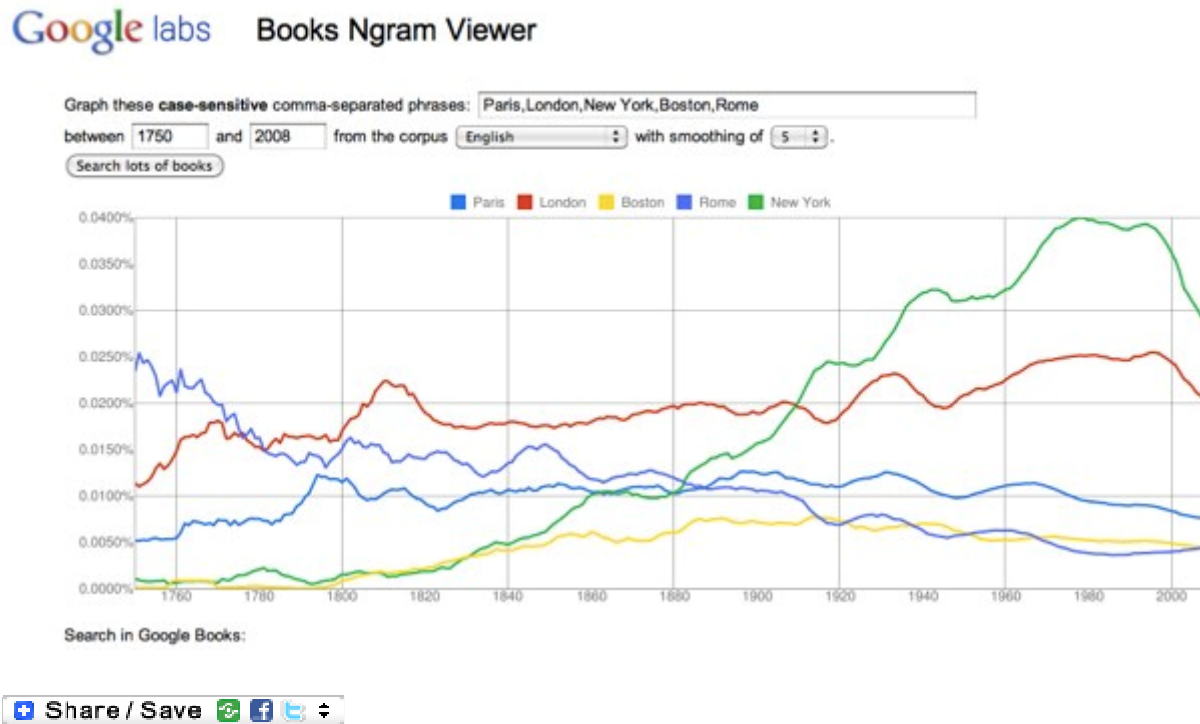


<sup>176</sup> *Id.*

<sup>177</sup> H. Taylor Buckner, Ph.D., *Concordia's "Gun Control" Petition: Ignorance of the Law is the Only Excuse*, <http://www.tbuckner.com/IGNOLAW.HTM> (last accessed Jan. 25, 2011).

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**<sup>178</sup>:



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.<sup>179</sup> The chart purports to tell us something about “the relative

<sup>178</sup> Android6 blog, The Fall and Rise of Twitter in English Literature, < <http://android6.net/the-fall-and-rise-of-twitter-in-english-literature/>> (last accessed Jan. 25, 2011).

<sup>179</sup> *Id.*

importance of different power centers in the public imagination.”<sup>180</sup> 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 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.<sup>181</sup> Law and economics also

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<sup>180</sup> *Id.*

<sup>181</sup> See Posner, Foreword, *supra* n.29, at 5; Posner, Economic Analysis of Law, *supra* n.2, at 15-16; Richard A. Posner, *Volume One of The Journal of Legal Studies--An Afterword*, 1 J. LEGAL STUD. 437, 437 (1972). See also Thomas Earl Geu, *Chaos, Complexity, and Coevolution: The Web of Law, Management Theory, and Law Related Services at the Millennium*, 66 TENN. L. REV. 137, 190 n.493 (1998); Gary Minda, *supra* n.52, at 611-12.

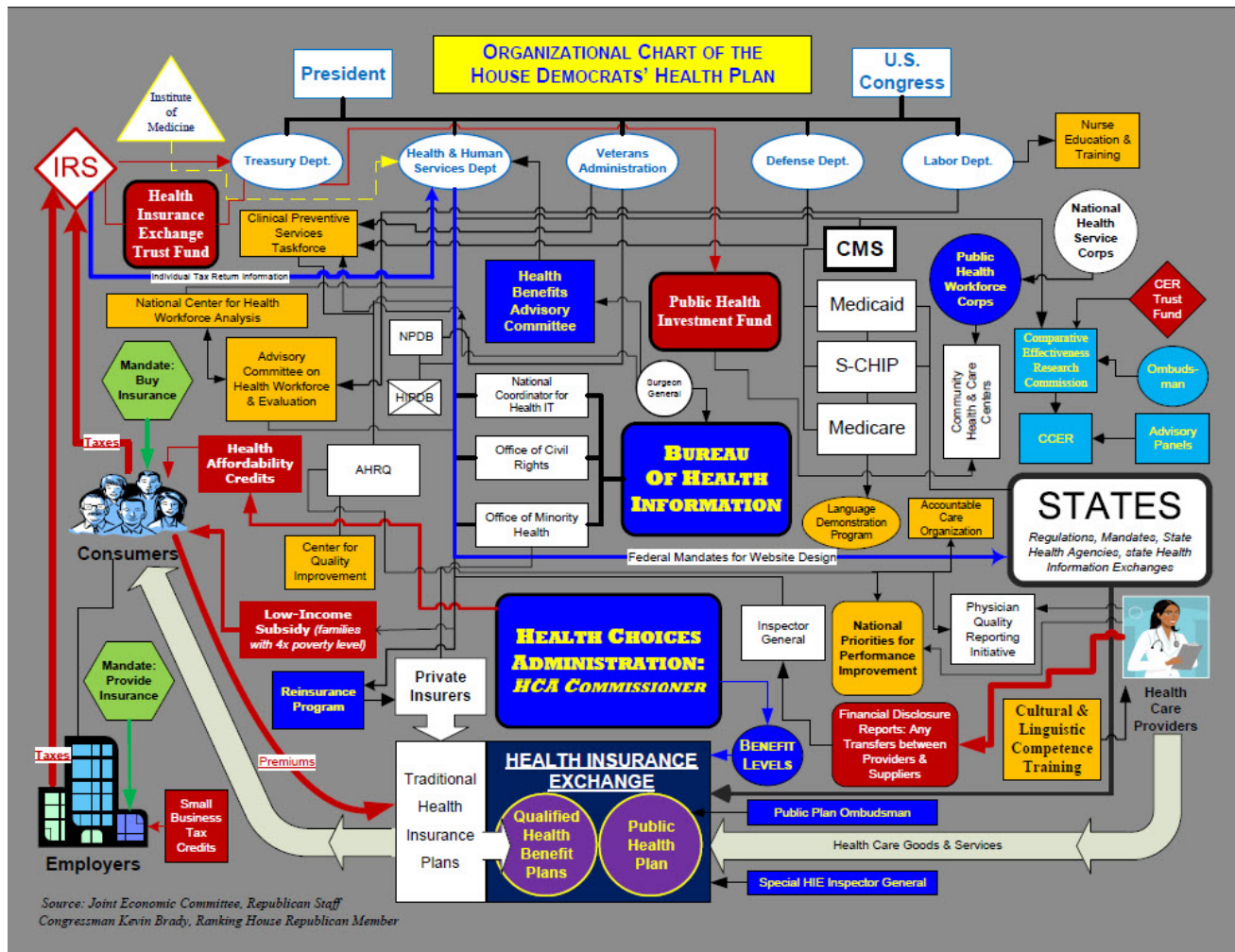


assumes the rhetorical primacy of scientific and mathematical forms in discourse to openly demonstrate the analyses and reveal its theses about human behavior for examination and critique.<sup>182</sup> The rhetorical power of a mathematical proof or a demonstration of a scientific deduction or induction lies in 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 trickery (*mere rhetoric*, not actual rhetoric). Consider the following chart of the Obama Health Care Reform initiative<sup>183</sup>:

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<sup>182</sup> See Bryant G. Garth, *Strategic Research in Law and Society*, 18 FLA. ST. U. L. REV. 57, 59 (1990); Morton J. Horwitz, *Law and Economics: Science or Politics?*, 8 HOFSTRA L. REV. 905, 912 (1980).

<sup>183</sup> Paul Ibrahim, Politics, Economics, and More blog, <<http://www.paulibrahim.com/blog/2009/7/16/get-well-soon-health-care-bureaucracy-chart.html>> (last accessed Jan. 25, 2011).



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 will discuss: (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.”<sup>184</sup> Metaphor is a trope of style in rhetoric, one of the figures of speech described and applied within the canon of style.<sup>185</sup> Metaphor is one of the “master tropes,” the others being metonymy, synecdoche, and irony.<sup>186</sup> Numerous disciplines have studied the power of metaphor in discourse, including linguistics,

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<sup>184</sup> Edward P.J. Corbett, CLASSICAL RHETORIC FOR THE MODERN STUDENT 461 (1971).

<sup>185</sup> Professor Stephanie A. Gore, in “*A Rose By Any Other Name*”: *Judicial Use of Metaphors For New Technologies*, 2003 U. ILL. J.L. TECH. & POL’Y 403, 404-05 (2003), 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).”

<sup>186</sup> Burke, *Grammar of Motives*, *supra* n.19, 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 could substitute representation; For irony we could substitute dialectic. *Id.* (emphasis omitted).

philosophy, rhetoric, cognitive psychology, and literary theory.<sup>187</sup> Recent literary and cognitive studies of metaphor<sup>188</sup> have shown that:

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."<sup>189</sup> 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"<sup>190</sup> that can "scarcely be conveyed"<sup>191</sup> by other means.

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<sup>187</sup> Michael R. Smith, *Levels of Metaphor in Persuasive Legal Writing*, 58 MERCER L. REV. 919, 919-20 (2007) (citing Linguistics sources: George Lakoff, METAPHORS WE LIVE BY (1980) (with Mark Johnson); George Lakoff, WOMEN, FIRE, AND DANGEROUS THINGS: WHAT CATEGORIES REVEAL ABOUT THE MIND (1987); George Lakoff, MORE THAN COOL REASON: A FIELD GUIDE TO POETIC METAPHOR (1989) (with Mark Turner); George Lakoff, MORAL POLITICS: HOW LIBERALS AND CONSERVATIVES THINK (1996); George Lakoff, PHILOSOPHY IN THE FLESH: THE EMBODIED MIND AND ITS CHALLENGE TO WESTERN THOUGHT (1999) (with Mark Johnson); George Lakoff, "DON'T THINK OF AN ELEPHANT: KNOW YOUR VALUES AND FRAME THE DEBATE" THE ESSENTIAL GUIDE FOR PROGRESSIVES (2004); George Lakoff, THINKING POINTS: COMMUNICATING OUR AMERICAN VALUES AND VISION (2006); Philosophy sources: Mark Johnson, METAPHORS WE LIVE BY (1980) (with George Lakoff); Mark Johnson, PHILOSOPHICAL PERSPECTIVES ON METAPHOR (Mark Johnson ed., 1981); Mark Johnson, THE BODY IN THE MIND: THE BODILY BASIS OF MEANING, IMAGINATION, AND REASON (1987); Mark Johnson, MORAL IMAGINATION: IMPLICATIONS OF COGNITIVE SCIENCE FOR ETHICS (1993); Mark Johnson, PHILOSOPHY IN THE FLESH: THE EMBODIED MIND AND ITS CHALLENGE TO WESTERN THOUGHT (1999) (with George Lakoff); Rhetoric sources: Michael H. Frost, *Greco-Roman Analysis of Metaphoric Reasoning*, in INTRODUCTION TO CLASSICAL LEGAL RHETORIC: A LOST HERITAGE 85 (2005); Michael R. Smith, *The Power of Metaphor and Simile in Persuasive Writing*, in ADVANCED LEGAL WRITING: THEORIES AND STRATEGIES IN PERSUASIVE WRITING 179, 179 (1st ed. 2002); Cognitive psychology sources: Steven L. Winter, A CLEARING IN THE FOREST: LAW, LIFE, AND MIND (2001); Steven L. Winter, *The Metaphor of Standing and the Problem of Self-Governance*, 40 STAN. L. REV. 1371 (1988); Steven L. Winter, *The Cognitive Dimension of the Agon Between Legal Power and Narrative Meaning*, 87 MICH. L. REV. 2225 (1989); Steven L. Winter, *Transcendental Nonsense, Metaphoric Reasoning, and the Cognitive Stakes for Law*, 137 U. PA. L. REV. 1105 (1989); and Literary Theory sources: Michael R. Smith, *The Functions of Literary References in Persuasive Writing: A Multidisciplinary Analysis*, in *Advanced Legal Writing*, *supra* n.12, at 9, 15-30 (discussing "Literary References for Nonthematic Metaphoric Comparison").

<sup>188</sup> *E.g.*, Michael Frost, *Greco-Roman Analysis of Metaphoric Reasoning*, 2 L. WRITING 113, 135-38 (1996) [Frost, Greco-Roman Metaphor].

<sup>189</sup> *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)).

<sup>190</sup> *Id.* (citing Aristotle, *The Rhetoric*, *supra* n.18, at 206).

Under this view, metaphors become important intellectual components of legal analysis rather than mere mnemonic or focusing devices.<sup>192</sup>

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."<sup>193</sup>

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.<sup>194</sup> 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 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

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<sup>191</sup> *Id.* (citing Cicero, *De Oratore*, *supra* n.18, at 123).

<sup>192</sup> *Id.* at 135-37.

<sup>193</sup> *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.

<sup>194</sup> Note the metaphor I am using here. Metaphors are unavoidable in legal discourse.

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.<sup>195</sup> 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.

## **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

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<sup>195</sup> 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.*, Levine & Saunders, *Thinking Like a Rhetor*, *supra* n.19, at 118-21; Thomas Conley, *RHETORIC IN THE EUROPEAN TRADITION* 15 (1990); Simpson & Selden, *supra* n.98, at 1011.

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.<sup>196</sup> 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).<sup>197</sup> 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.<sup>198</sup>

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<sup>196</sup> Murray & DeSanctis, *Legal Writing and Analysis*, *supra* n.56, at ch. 6.

<sup>197</sup> *Id.*

<sup>198</sup> *See* Murray, *Rule Synthesis and Explanatory Synthesis*, *supra* n.169.

### **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 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,<sup>199</sup> and the experiments indicating that the endowment effect or status quo bias plays a strong role in contract negotiation<sup>200</sup>—creates a rhetorical prescription for advocates: advocates should work to carefully and advantageously define the starting point terms of a negotiation (which will, as

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<sup>199</sup> Cass R. Sunstein, BEHAVIORAL LAW AND ECONOMICS 3, 4, 5 (2000) [Sunstein, Behavioral Law & Economics]; Mark Kelman, Yuval Rottenstreich, & Amos Tversky, *Context-Dependence in Legal Decision Making*, in Sunstein, Behavioral Law and Economics, *supra* at 61-62, 73-74, 76.

<sup>200</sup> Russell Korobkin, *Behavioral Economics and Contract Law*, in Sunstein, Behavioral Law and Economics, *supra* n.204, at 116-119, 120-121, 136-138.

indicated by the experiments, be perceived and responded to as the status quo)<sup>201</sup> 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),<sup>202</sup> 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.<sup>203</sup>

**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 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

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<sup>201</sup> See Korobkin, *supra* n.205, at 136.

<sup>202</sup> *Id.* at 137.

<sup>203</sup> Kelman, Rottenstreich, & Tversky, *supra* n.205, at 74-76.

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.<sup>204</sup>

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.<sup>205</sup> 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,<sup>206</sup> and a rhetorical examination of values leads to the

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<sup>204</sup> See Hanson & Yosifon, *The Situation*, *supra* n.6; Hanson & Yosifon, *The Situational Character*, *supra* n.6; 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).

<sup>205</sup> See, e.g., Bitzer, *The Rhetorical Situation*, *supra* n.19, at 6-8, 389-92; White, *Law as Rhetoric*, *supra* n.14, at 695; Wetlaufer, *Rhetoric and Its Denial*, *supra* n.17, at 1546; Robbins-Tiscione, *Rhetoric For Legal Writers*, *supra* n.17, at 9; Makay, *Speaking with an Audience*, *supra* n.17, at 9.

<sup>206</sup> Mitchell, *supra* n.209, at 101-10, 160-64; 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,

analysis of *pathos*<sup>207</sup>—the emotional response to persuasive discourse<sup>208</sup>—because values appear in contemporary brain science to be the most important trigger of emotional conviction.<sup>209</sup> Contemporary rhetoric encompasses examination and

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VALUES, AND FRAMES 171 (Daniel Kahneman & Amos Tversky eds., 2000). See also Amos Tversky & Itamar Simonson, *Context-dependent Preferences*, 39 MGMT. SCI. 1179, 1179 (1993); Itamar Simonson & Amos Tversky, *Choice in Context: Tradeoff Contrast and Extremeness Aversion*, 29 J. MARKETING RES. 281, 281 (1992).

<sup>207</sup> 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 A. Posner's First Decade of Dissenting Opinions*, 69 MO. L. REV. 73, 158 (2004). Quintilian put great stock in emotional appeals, Frost, Ethos, Pathos & Legal Audience, *supra* n.45, at 91, claiming that, “this emotional power . . . dominates the court [:] it is this form of eloquence that is queen of all.” 2 Quintilian, *Institutio Oratoria*, *supra* n.18, 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.” *Id.* at 139; see Frost, Ethos, Pathos & Legal Audience, *supra* n.45, 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. Corbett & Connors, *supra* n.11, at 78. See also Kenneth D. Chestek, *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. Corbett & Connors, *supra* n.11, 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. 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. 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. See *id.*; Frost, Ethos, Pathos & Legal Audience, *supra* n.45, at 94; Chestek, *supra*, at 2, 3, 5, 29-32.

<sup>208</sup> See, e.g., D. Don Welch, *Ruling with the Heart: Emotion-Based Public Policy*, 6 S. CAL. INTERDISC. L.J. 55, 57, 59 (1997); John W. Cooley, *A Classical Approach to Mediation - Part I: Classical Rhetoric and the Art of Persuasion in Mediation*, 19 U. DAYTON L. REV. 83, 92 (1993). See also EMOTIONS, COGNITION AND BEHAVIOR 112 (Carroll E. Izard et al. eds., 1984); Arlie Russell Hochschild, *THE MANAGED HEART: COMMERCIALIZATION OF HUMAN FEELING* (1983); Carroll E. Izard, *HUMAN EMOTIONS* (1977).

<sup>209</sup> See Antonio R. Damasio, *DESCARTES' ERROR: EMOTION, REASON, AND THE HUMAN BRAIN* 96-97, 170-75, 250 (1994) [Damasio, *Descartes' Error*]; Antonio R. Damasio, *LOOKING FOR SPINOZA: JOY, SORROW, AND THE FEELING BRAIN* 54 (2003). See also Robert F. Blomquist, *The Pragmatically Virtuous Lawyer?*, 15 WIDENER L. REV. 93, 114, 133 (2009); Kathryn M. Stanchi, *Playing with Fire: The Science of Confronting Adverse Material in Legal Advocacy*, 60 RUTGERS L. REV. 381 (2008); Stanchi, *Science of Persuasion*, at 411; Berger, *Law as Rhetoric*, *supra* n.12, at 28; Raymond Ross, *UNDERSTANDING PERSUASION* 7 (3rd ed. 1990).

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).<sup>210</sup> Contemporary law and economics describes the same 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.<sup>211</sup> Contemporary rhetoric applies cognitive

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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).

<sup>210</sup> *See, e.g.*, Linda H. Edwards, *Once Upon a Time in the Law: Myth, Metaphor and Authority*, 77 TENN. L. REV. 883 (2010); Smith, *Advanced Legal Writing*, *supra* n.12, at ch. 3; J. Christopher Rideout, *Storytelling, Narrative Rationality, and Legal Persuasion*, 14 LEG. WRITING 53 (2008); Kenneth D. Chestek, *The Plot Thickens: Appellate Brief as Story*, 14 LEG. WRITING 127 (2008); Ruth Anne Robbins, *Harry Potter, Ruby Slippers, and Merlin: Telling the Client's Story Using the Characters and Paradigm of the Archetypal Hero's Journey*, 29 SEATTLE U. L. REV. 767 (2006); Philip N. Meyer, *Vignettes from a Narrative Primer*, 12 LEG. WRITING 229 (2006); Brian J. Foley & Ruth Anne Robbins, *Fiction 101: A Primer for Lawyers on How to Use Fiction Writing Techniques to Write Persuasive Facts Sections*, 32 RUTGERS L.J. 459 (2001); Delia B. Conti, *Narrative Theory and the Law: A Rhetorician's Invitation To The Legal Academy*, 39 DUQ. L. REV. 457 (2001); Linda H. Edwards, *The Convergence of Analogical and Dialectic Imaginations in Legal Discourse*, 20 LEG. STUD. FORUM 7 (1996).

<sup>211</sup> Korobkin & Ulen, *supra* n.5, at 1076-78; Jolls, Sunstein, & Thaler, *supra* n.5, at 1471-550; Russell Korobkin, *Behavioral Economics, Contract Formation, and Contract Law*, in Sunstein, *Behavioral Law and Economics*, *supra* n.204, at 116-43; Donald C. Langevoort, *Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review*, 51 VAND. L. REV. 1499-540 (1998);

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,<sup>212</sup> 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.<sup>213</sup>

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 at 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

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Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCIENCE 1124, 1128-1130 (1974).

<sup>212</sup> 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.*, Frost, Greco-Roman Metaphor, *supra* n.193, at 135-38; Haig Bosmajian, Metaphor and Reason in Judicial Opinions 152, 441 (1992); 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)); Burr Henly, "Penumbra": *The Roots of a Legal Metaphor*, 15 HASTINGS CONST. L. QRTY. 82 (1987); 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); 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); James B. White, THE LEGAL IMAGINATION: STUDIES IN THE NATURE OF LEGAL THOUGHT AND EXPRESSION 695, 707 (1973); Owen Barfield, POETIC DICTION: A STUDY IN MEANING 63-64 (1964).

<sup>213</sup> 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 Chorvat, Kevin McCabe, & Vernon Smith, *Law and Neuroeconomics*, 13 SUP. CT. ECON. REV. 35 (2005); Anne C. Dailey, *The Hidden Economy of the Unconscious*, 74 CHI.-KENT L. REV. 1599 (2000).



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.

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 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 start with the assertion that mathematical and scientific methods of daunting complexity are used 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 whose true meaning 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 communication.<sup>214</sup> 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.

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<sup>214</sup> My colleague, David Herzig, summarized this lesson by repeating the apt comment, “Statistics never lie—but liars use statistics.”