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THE USE AND LIMITS OF SYLLOGISTIC REASONING IN BRIEFING CASES

Wilson Huhn*

I. INTRODUCTION

The first professional skill that law students learn is how to brief a case, and it is one of the lawyer's principal analytical tools. A case brief reduces a judicial decision to an argument of deductive logic stated in categorical form—a "syllogism." The classic example of a syllogism is:

Question: Is Socrates mortal?

Minor Premise: Socrates is a man.

Major Premise: All men are mortal.

Conclusion: Socrates is mortal.¹

The parts of a case brief correspond precisely to the parts of a syllogism. The question is the issue; the minor premise is the facts section; the major premise is the applicable law; and the holding of the court is the conclusion.² The legal syllogism was recognized by the eighteenth century reformer Cesare Beccaria,³ who expressly advocated that, in the area of crimi-

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¹ Robert Schmidt has observed that this example, though ubiquitous, does not appear in Aristotle's writings. See Robert H. Schmidt, The Influence of the Legal Paradigm on the Development of Logic, 40 S. Tex. L. Rev. 367, 391 n.32 (1999).


nal law, judges should follow syllogistic reasoning: “In every criminal case, a judge should come to a perfect syllogism: the major premise should be the general law; the minor premise, the act which does or does not conform to the law; and the conclusion, acquittal or condemnation.”

An example of a legal syllogism may be taken from the law of parentage. Let us suppose that a married woman, Jenny, has undergone a hysterectomy and is therefore unable to bear a child, but has retained her ovaries and can produce healthy ova. Let us further suppose that she wishes to have a child and that her sister, Sharon, is willing to carry the child to term for her. An embryo is created in vitro with gametes taken from Jenny and her husband, Jack, and the embryo is implanted into Sharon’s uterus. Sharon gestates the child, and upon giving birth she gives the child to Jenny and Jack. These facts, a case of gestational surrogacy, are the minor premise of the legal syllogism.\(^6\)

The people involved in this case may ask us a legal question: “Is Sharon or Jenny the legal mother of the child at the time of its birth?” If Sharon is considered to be the legal mother, and Jack is considered its legal father, then in order to give effect to the wishes of the parties, Sharon will have to legally relinquish her parental rights to the child, and Jenny will have to apply to the probate court for permission to adopt the child to become its legal mother. If, on the other hand, Jenny is the legal mother of the child at the time of its birth, then no adoption will be necessary.

The relevant major premise is a rule of law stating generally the category of persons who are “legal mothers.” If there were a rule of law stating that “a woman who gives birth to a child is its legal mother,” we would conclude that Sharon, the gestational surrogate, is the child’s mother in the eyes of the law, making an adoption necessary to effectuate the intent of the parties.\(^6\) Accordingly, the most concise “brief” of this case would be as follows:

4. CESARE BECCARIA, ON CRIMES AND PUNISHMENTS 11 (David Young trans., Hackett Publ’g Co. 1986) (1764). Beccaria was thereby promoting a rule of lenity, the strict construction of criminal statutes.
5. These are the facts of Belsito v. Clark, 67 Ohio Misc. 2d 54, 56-58 (Ct. Com. Pl. 1994). For a further discussion of this case, see infra note 89 and accompanying text.
6. In the actual case, the court reached the opposite conclusion. See Belsito, 67 Ohio Misc. 2d at 66.
Issue: Who is the legal mother of the child?

Fact: Sharon gave birth to the child.

Law: The woman who gives birth to a child is its legal mother.

Holding: Sharon is the legal mother of the child.

Because a case brief takes the form of a syllogism of deductive logic, beginning law students might assume that legal reasoning is essentially logical, and conclude, as Sir Edward Coke did, that "reason is the life of the law." This viewpoint is consistent with Coke's statement in *Dr. Bonham's Case* that "when an Act of Parliament is against common right or reason . . . the common law will controul it and adjudge such Act to be void." Coke's dictum was interpreted – or misinterpreted – as support for the concept of "natural law.

Oliver Wendell Holmes, in contrast, was a positivist.


8. Dr. Bonham's Case, 77 Eng. Rep. 646, 652 (K.B. 1610). In this case, Coke held that the statute, which authorized the College of Physicians to retain a portion of the fine that it imposed on unlicensed physicians, was invalid because the statute violated the principle that no man should be a judge in his own case. This decision has been described as one of the origins of the practice of judicial review. See Allen Dillard Boyer, "Understanding, Authority, and Will": Sir Edward Coke and the Elizabethan Origins of Judicial Review, 39 B.C. L. REV. 43, 83-85 (1997).


who believed that “[t]he life of the law has not been logic: it has been experience.” He was devoted to the principle that legal and political truth cannot be ascertained a priori, but instead are determined by the people. He rejected natural law as “that naïve state of mind that accepts what has been familiar.” While Coke embraced logic, Holmes rejected logic


11. O.W. Holmes, Jr., The Common Law 1 (1881). Holmes continued, “The felt necessities of the time, the prevalent moral and political theories, intuitions of public policy, avowed or unconscious, . . . have had a good deal more to do than the syllogism in determining the rules by which men should be governed.” Id.

12. “Instead of a system based upon logical deduction from a priori principles, the Holmes concept was one of law fashioned to meet the needs of the community.” Bernard Schwartz, Supreme Court Superstars: The Ten Greatest Justices, 31 Tulsa L.J. 93, 120 (1995).

13. Holmes wrote, “I used to say, when I was young, that truth was the majority vote of that nation that could lick all others,” and that “while one’s experience . . . makes certain preferences dogmatic for oneself, recognition of how they came to be so leaves one able to see that others, poor souls, may be equally dogmatic about something else. And this again means skepticism.” Oliver Wendell Holmes, Natural Law, in Collected Legal Papers 310, 311 (1920). Holmes’s most famous judicial opinions, his dissents in Lochner v. New York, 198 U.S. 45, 74 (1905), and Abrams v. United States, 250 U.S. 616, 624 (1919), are grounded in the interlocking principles of skepticism, toleration, and majority rule. In Lochner he stated,

This case is decided upon an economic theory which a large part of the country does not entertain. If it were a question whether I agreed with that theory, I should desire to study it further and long before making up my mind. But I do not conceive that to be my duty, because I strongly believe that my agreement or disagreement has nothing to do with the right of a majority to embody their opinions in law.

198 U.S. at 75. In Abrams he observed that

when men have realized that time has upset many fighting faiths, they may come to believe even more than they believe the very foundations of their own conduct that the ultimate good desired is better reached by free trade in ideas – that the best test of truth is the power of the thought to get itself accepted in the competition of the market . . . .

250 U.S. at 630. Thus, under Holmes’s brand of positivism we are obligated to defer to the truth as defined by the majority, so long as the majority permits new truths to emerge and to compete for majority acceptance.


If I . . . live with others they tell me that I must do and abstain from doing various things or they will put the screws on to me. I believe that they will, and being of the same mind as to their conduct I not only accept the rules but come in time to accept them with sympathy and emotional affirmation and begin to talk about duties and rights.

Id. at 313.
in favor of experience.

The relation between law and logic has long fascinated legal scholars. For example, some scholars have attempted to reduce legal propositions to a few core concepts, and have sought to illustrate the logical relation among these concepts. The leading authority for this type of reductionism is Wesley Hohfeld, who proposed that legal relationships may be described in terms of four entitlements (rights, powers, privileges, or immunities) and their opposites (no-rights, duties, disabilities and liabilities).

Other scholars have attempted to reduce rules of law to a system of logical notation. Layman Allen and those who have followed him have devised systems of modal or deontic logic that express rules of law as statements of obligation rather than as statements of fact. The chief advantage of such systems is that they clarify the logical connectors within propositions of law, thus resolving ambiguities that may arise, for example, between conjunction and disjunction.


20. Kevin Saunders notes, Much of the ambiguity in statutes, and in other statements of the law, results from the misuse of logical connectives or the failure to recognize that it is unclear how portions of a complex proposition are to be combined. To offer a technically ambiguous, but in practice clear, example,
In contrast to the foregoing approaches, the principal focus of this article is to illustrate the important though limited role that syllogistic reasoning plays in analyzing judicial opinions. I conclude that although judicial reasoning is syllogistic in form, in substance it is evaluative. Like Douglas Lind, I concur with the “middle ground” of H.L.A. Hart, “emphasizing the importance of logic while acknowledging its limitations.”

During the nineteenth century, law was equated with science, and legal reasoning was thought to be a species of deductive logic. Consistent with this notion, judicial opinions have traditionally been summarized in the form of syllogisms, that is, as arguments of deductive logic. More specifically, judicial opinions have been described as chains of syllogisms, reasoning from base premises to ultimate conclusions. The principal thrust of this article is to demonstrate that in hard cases, judicial reasoning proceeds not by way of deduction, but by evaluation and balancing.

Accordingly, Part II of this article compares law with science. Historically, law was considered a science and was thought to have the same underlying structure. Both law and science consist of sets of rules; both are concerned with predicting events; both legal reasoning and scientific reasoning use a framework of deductive logic to reason from general principles to particular results; and both legal principles and scientific principles evolve over time.

Over the last century, however, legal scholars have rejected the identification of law with science. The principal...
difference between law and science is that while science is based upon and must be reconciled with objective observations of nature, law arises from value judgments.

Part III uses the structure of the syllogism to explain the difference between easy cases and hard cases. Easy cases are governed by unambiguous legal rules of unchallenged validity; in such cases, the legal conclusion follows deductively from the applicable rule of law. However, as several scholars have noted, there are two kinds of hard cases: cases where the applicable rule of law is ambiguous in relation to the facts of the case (questions of ambiguity), and cases where it is uncertain what the applicable rule of law is (questions of validity). Ultimately, all hard cases, both questions of ambiguity and questions of validity, are resolved in the same manner, by resort to the fundamental categories of legal argument. This exposes a second fundamental difference between law and science: while science is grounded in a single source (observations of the physical universe), law springs from multiple sources (text, intent, precedent, tradition and policy), which often give rise to legitimate but conflicting interpretations of the law.

Part IV describes the use of the syllogism in analyzing judicial opinions. Case briefs are not mere syllogisms—they are chains of syllogisms ("polysyllogisms"), in which the conclusions of syllogisms earlier in the chain supply the premises of syllogisms that are later in the chain. Questions of ambiguity arise when the minor premise of a legal argument is challenged, while questions of validity represent a challenge to the major premise of a legal argument. At the base of each chain of syllogisms are premises about the law. The base major premises of each chain of legal reasoning consist of the five types of legal argument, while the base minor premises are the specific items of evidence of what the law states. The polysyllogistic approach thus serves as a formal proof of the pluralistic nature of legal reasoning.

Part V illustrates the limits of syllogistic reasoning by demonstrating how judicial reasoning in hard cases proceeds not by deducing conclusions from factual premises, but rather by evaluating the weight of competing arguments. Further-

23. See infra note 90 and accompanying text.
24. See infra text accompanying note 89.
more, rather than a “chain” of syllogisms, a more appropriate
metaphor for legal reasoning is a “cable” of arguments that
acquires persuasive force from the confluence of the different
types of argument. Ultimately, the persuasiveness of a legal
argument depends upon its susceptibility to attack within
each category of legal argument and upon the relative weight
 accorded to the different categories of legal arguments in the
context of the particular case.

II. THE DIFFERENCE BETWEEN LAW AND SCIENCE

We can elucidate the structure of legal reasoning by com-
paring law with science.

A. The Historical Identification of Law with Natural Law
and Science

Americans of the Revolutionary generation shared a pro-
found faith in the concept of Natural Law. They believed
that a person in a pure and uncorrupted state possessed a
natural sense of justice, an innate understanding of right and
wrong. The archetype of the principled man of nature was
Natty Bumppo, the hero of the Leatherstocking Tales by
James Fenimore Cooper. In Cooper’s immensely popular
novels, Bumppo confronted and resisted the march of Ameri-
can law and civilization.

The leading legal scholars of the period reinforced this
common belief with their contention that the laws of society
are but a reflection (albeit imperfect) of the laws of nature.

25. For example, Alexander Hamilton said that “the sacred rights of man-
kind are not to be rummaged for among old parchments or musty records. They
are written as with a sunbeam, in the whole volume of human nature, by the
hand of Divinity itself and can never be erased or obscured by mortal power.”
A. Hamilton, The Farmer Refuted (Feb. 23, 1775), in 1 THE PAPERS OF
ALEXANDER HAMILTON 81, 122 (H. Syrett ed. 1961). The reliance of James Otis,
Thomas Jefferson, and other Revolutionary leaders on this Lockean theory of
natural rights is self-evident. See Mark C. Niles, Ninth Amendment Adjudica-
tion: An Alternative to Substantive Due Process Analysis of Personal Autonomy

26. See PERRY MILLER, The Legal Mentality, in THE LIFE OF THE MIND IN
AMERICA 99-100 (1965).

27. The Leatherstocking Tales, in the order of the narrative, include THE
DEERSLAYER (1841), THE LAST OF THE MOHICANS (1826), THE PATHFINDER
(1840), THE PIONEERS (1823), and THE PRAIRIE (1827).

28. See MILLER, supra note 26, at 99.

29. William Blackstone asserted that the law of nature “is binding over all
the globe in all countries, and at all times; no human laws are of any validity, if
They argued that through the exercise of reason, law is derived from fundamental precepts of justice, and they considered the law to be a scientific system of rules deduced from general moral principles. The position expressed by Theodore Dwight at Columbia is typical: "[N]o science known among men is more strictly deductive than the science of a true Jurisprudence." Nathaniel Chipman of Vermont confidently asserted that every law made under the Constitution "is ultimately derived from the laws of nature, and carries with it the force of moral obligation." In a similar vein, Judge Peter Thatcher of Boston described legal analysis as "a patient deduction of truth from actual experiment and mathematical demonstration." Professor Hoeflich credits Francis Bacon and Gottfried Leibniz with the identification of law with science and mathematics, while Dean Pound traced this thought to the "scholastic jurists" of the fourteenth and fifteenth centuries.

The apogee of the identification of law with science occurred in 1870, when Christopher Columbus Langdell, the Dean of Harvard Law School, revolutionized legal education by introducing the "case method." The "case method" contrary to this." Id. at 164. See also Morton J. Horowitz, The Rise of Legal Formalism, 19 AM. J. LEGAL HIST. 251, 255-56 (1975); John H. Langbein, Chancellor Kent and the History of Legal Literature, 93 COLUM. L. REV. 547, 568-69 (1993); M.H. Hoeflich, Law and Geometry: Legal Science From Leibniz to Langdell, 30 AM. J. LEGAL HIST. 95, 118 (1986). But see JEREMY BENTHAM, OF LAWS IN GENERAL 84 (H.L.A. Hart ed., 1970) ("All this talk about nature, natural rights, natural justice and injustice proves two things and two things only, the heat of passions and the darkness of understanding."). Bentham was one of the founders of Positivism. See Miller, supra note 10, at 374.

30. MILLER, supra note 26, at 161.
31. Id. at 165.
32. Id. at 159.
33. See Hoeflich, supra note 29, at 98-100.
34. ROSCOE POUND, AN INTRODUCTION TO THE PHILOSOPHY OF LAW 13, 15-16 (1915). "The geometric ideal pervades the literature of the whole rationalist movement to create exact sciences of ethics, politics, and law that dominated European thought from Grotius to Kant, and that still remains strong in European legal scholarship today." Thomas C. Grey, Langdell's Orthodoxy, 45 U. PITT. L. REV. 1, 16 (1983).
35. "Teaching his first class in Contracts, [Langdell] began, not with the customary introductory lecture, but by asking, 'Mr. Fox, will you state the facts in the case of Payne v. Cave?" Grey, supra note 34, at 1. "[Langdell] changed the method of law teaching from the study of general rules in textbooks or by lecture to the study of actual cases guided by the law professor's Socratic questioning." Thomas A. Woxland, Why Can't Johnny Research? or It All Started with Christopher Columbus Langdell, 81 LAW LIBR. J. 451, 455 (1989).
brought the rigor of the scientific method to legal study.\textsuperscript{36} Prior to Langdell, American legal education was doctrinal in nature. Law books digested rules of law rather than reporting cases, and professors lectured on what the law was rather than discussing with students what it might be.\textsuperscript{37} Langdell invented the casebook\textsuperscript{38} and was the first to engage law students in Socratic dialogue.\textsuperscript{39} Although Langdell introduced these reforms, he clung to the accepted notion that law was a science.\textsuperscript{40} In his casebook on contracts, Langdell maintained that judicial decisions are the raw data of the science of law, and that careful dissection of cases would reveal the underlying rules of law:

Law, considered as a science, consists of certain principles or doctrines. To have such a mastery of these as to be able to apply them with constant facility and certainty to the ever-tangled skein of human affairs, is what constitutes a true lawyer; and hence to acquire that mastery should be the business of every earnest student of law. Each of these doctrines has arrived at its present state by slow degrees; in other words, it is a growth, extending in many cases through centuries. This growth is to be traced in the main through a series of cases, and much the shortest and best, if not the only way of mastering the doctrine effec-

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\textsuperscript{37} See Woxland, \textit{supra} note 35, at 455. "The 'Treatise Tradition' that arose in the 1820s and 1830s is said to have sprung from the belief that law proceeds according to reason, not by will." Speziale, \textit{supra} note 36, at 5. This tradition led to "the domination of treatises and lectures in the classroom of legal education until 1870." \textit{Id.} at 5-6.

\textsuperscript{38} See Woxland, \textit{supra} note 35, at 457.

\textsuperscript{39} See id. at 455. "[Langdell] refused to lecture (thereby implicitly rejecting the notion that a professor could impart knowledge of the law via fixed, true maxims), instead inviting students to journey with him through the sea of cases." Speziale, \textit{supra} note 36, at 3.

\textsuperscript{40} "The heart of the theory was the view that law is a science." Grey, \textit{supra} note 34, at 5. "[Langdell's] belief was that law was a science . . . ." Miller, \textit{supra} note 10, at 375.
tively is by studying the cases in which it is embodied.\textsuperscript{41}

Langdell symbolized what Grant Gilmore called "the age of faith,"\textsuperscript{42} a period during which American jurists and legal scholars emphasized the "scientific" nature of law\textsuperscript{43} and the "deductive" nature of legal reasoning.\textsuperscript{44} This "formalist" or "conceptualist," form of analysis was categorical in nature.\textsuperscript{45} Judges avoided balancing,\textsuperscript{46} and aspired to apply "neutral" principles of law.\textsuperscript{47} The classical legal thought of this period served as a conservative firewall against progressive reforms.\textsuperscript{48} Not only was the law to be neutral,\textsuperscript{49} but the state was to be neutral as well.\textsuperscript{50} The ideal was "a state that could avoid taking sides in conflicts between religions, social classes, or interest groups."\textsuperscript{51} Formalist doctrines such as economic substantive due process\textsuperscript{52} and the "direct-indirect

\begin{itemize}
\item \textsuperscript{41} \textsc{Christopher Langdell}, \textit{A Selection of Cases on the Law of Contracts} vi (1871).
\item \textsuperscript{42} "Christopher Columbus Langdell . . . has long been taken as a symbol of the new age . . . . Langdell seems to have been an essentially stupid man, who, early in his life, hit on one great idea to which, thereafter, he clung with all the tenacity of genius . . . . Langdell's idea was that law is a science." \textsc{Grant Gilmore}, \textit{The Ages of American Law} 42 (1977).
\item \textsuperscript{43} \textsc{Morton J. Horwitz}, \textit{The Transformation of American Law} 1870-1950 9, 10, 13, 15 (1994).
\item \textsuperscript{44} "Deductions from general principles and analogies among cases and doctrines were often undertaken with a self-confidence that later generations, long since out of touch with the premises of the system, could only mistakenly regard as willful and duplicitous." \textit{Id.} at 16.
\item \textsuperscript{45} "Nineteenth-century legal thought was overwhelmingly dominated by categorical thinking – by clear, distinct, bright-line classifications of legal phenomena." \textit{Id.} at 17.
\item \textsuperscript{46} \textit{Id.} at 17-18.
\item \textsuperscript{47} "Classical orthodoxy did claim to discover politically neutral private law principles by rigorous scientific methods, and thus reinforced the view of the common law contract and property system as a 'brooding omnipresence in the sky' rather than as a contingent allocation of power and resources." \textsc{Grey}, \textit{supra} note 34, at 39.
\item \textsuperscript{48} "Progressive and later New Deal lawyers saw classical orthodoxy as a form of conservative ideology." \textit{Id.} \textsc{Grey} ultimately concludes, however, that "[c]lassical legal thought . . . took only a moderately conservative stance in the political struggles of its time." \textit{Id.} at 35.
\item \textsuperscript{49} For example, "the sponsors of the American Law Institute and its Restatement project were . . . promising that sound legal science could quell popular discontent by convincing people that judicial protection of the private law status quo was neutrally scientific rather than political." \textit{Id.} at 33.
\item \textsuperscript{50} \textsc{Horwitz}, \textit{supra} note 43, at 19.
\item \textsuperscript{51} \textit{Id.}
\item \textsuperscript{52} Economic substantive due process was a principle of constitutional law that prohibited "unreasonable" interference with rights of property. Between 1887 and 1937 the Supreme Court repeatedly invoked this doctrine to invali-
"test" under the Commerce Clause\textsuperscript{53} divested state and national government of the power to regulate business or redistribute property.\textsuperscript{54}

B. The Similarities Between Law and Science

The thesis of Langdell that law is a science was plausible because law and science are alike in four fundamental ways. First, both law and science consist of sets of rules. Science consists of the principles followed by the natural world, while law consists of the rules that we are obliged to follow in society. Even our terminology contributes to the confusion; we commonly speak of "laws of nature" and "axioms of law."\textsuperscript{55}

Second, both law and science share a common purpose: they are both concerned with the prediction of events. Scientists seek to predict physical phenomena from the systematic examination of past events. Lawyers seek to predict how courts will interpret the law based upon how it has been interpreted in the past. Most lawyers would agree with Holmes's aphorism, "The prophecies of what the courts will do in fact, and nothing more pretentious, are what I mean by the law."\textsuperscript{56}

The third fundamental similarity between law and science is that legal reasoning and scientific reasoning share an essential formal resemblance. As noted at the beginning of this article, legal reasoning may be framed in the form of a syllogism. Law, like science, appears to derive its conclusions from the application of general rules to particular facts in a manner consistent with the rules of formal logic.

There is a fourth sense in which law and science are alike. Our understanding of law, like our understanding of the natural world, is constantly evolving. Each new case or
physical observation potentially represents a turn of the kaleidoscope upending our assumptions and creating a new pattern. Although the laws of nature are seemingly immutable, our understanding of these laws is tentative and provisional, always subject to being disproven. For example, the theories of Galileo and Newton on the motion of objects replaced those of Aristotle, and were replaced in turn by the theories of Einstein. As with science, our understanding of the law is constantly changing, and it behooves the lawyer who hopes to be effective to exercise a healthy skepticism about the current state of the law.

C. The Reaction Against the Langdellian View

During the first half of the 20th century, the idealist vision of the law, which identified law with science and mathematics, was challenged and eventually overcome by the competing philosophy of legal realism. The legal realists rebelled against the formalism of the 19th century and insisted that the law be analyzed in light of its purposes and likely consequences rather than as an exercise in deductive logic.

Leading the charge on Langdell's vision of law as science was Oliver Wendell Holmes. Holmes, reviewing Langdell's casebook in 1880, launched a spirited attack on the notion of law as science, characterizing Langdell as a "legal theologian." Holmes had previously disputed the proposition that

57. "There are no laws of nature which are given in such a fashion that they can be made dogmas. That is, you cannot say that any law is absolute and fixed." GEORGE H. MEAD, MOVEMENTS OF THOUGHT IN THE NINETEENTH CENTURY 285 (1936).

58. Jeremy Miller compares the parallel development of "relativistic" viewpoints in physics and philosophy to recent changes in American jurisprudence. See Miller, supra note 10, at 396-98.

59. Grant Gilmore summarized Langdell's view of law as science in these words: "The basic idea of the Langdellian revolution seems to have been that there really is such a thing as the one true rule of law, universal and unchanging, always and everywhere the same — a sort of mystical absolute." GRANT GILMORE, THE DEATH OF CONTRACT 97-98 (1974) (footnote omitted). Gilmore added, "To all of us, I dare say, the idea seems absurd." Id.

60. Oliver Wendell Holmes, Book Notices, 14 AM. U. L. REV. 233, 234 (1880). In a similar spirit, Grant Gilmore called Langdell a "conceptualist," and Richard Posner calls Langdell's approach "Platonism." GILMORE, supra note 42, at 62; Richard Posner, The Decline of Law as an Autonomous Discipline, 100 HARV. L. REV. 761, 762 (1987). In contrast, Marcia Speziale persuasively argues that Langdell was not a formalist, but rather that by reforming the teaching of law from the preaching of doctrine to the study of cases, he laid the groundwork for
rules of law could be derived by deduction. He explained,

In form [the] growth [of the law] is logical. The official theory is that each new decision follows syllogistically from existing precedents . . . . On the other hand, in substance the growth of the law is legislative . . . . Every important principle which is developed by litigation is in fact and at bottom the result of more or less definitely understood views of public policy . . . .

Over the course of his career Holmes repeatedly returned to this theme. In his 1897 address at Boston University, Holmes debunked the notion that a system of law "can be worked out like mathematics from some general axioms of conduct." In 1905, in his Lochner dissent, Holmes wrote, "[g]eneral propositions do not decide concrete cases," and in 1921 he noted, "a page of history is worth a volume of logic." Joining Holmes in the realist revolution against legal formalism were the greatest American jurists of the early 20th century: Learned Hand, Louis Brandeis, and Benjamin Car-
Like Holmes and Brandeis, Cardozo did not reject deductive logic and traditional methods of legal reasoning, but he did find them to be incomplete:

The final cause of law is the welfare of society. The rule that misses its aim cannot permanently justify its existence. . . . Logic and history and custom have their place. We will shape the law to conform to them when we may; but only within bounds. The end which the law serves will dominate them all. 68

Legal realism replaced formalism and became the dominant force in American law because it is a more complete and more satisfying approach to solving hard legal problems. As H.L.A. Hart explained, legal realism stands for the principle "that judges should not seek to bootleg silently into the law their own conceptions of the law's aims or justice or social policy or other extra-legal elements required for decision, but should openly identify and discuss them." 69

The most cogent explanation for the realists' rejection of law as science was offered by John Dickinson of Princeton in 1929:

[J]ural laws are not, like scientific "laws," descriptive statements of verifiable relations between persons or things—relations which exist and will continue to exist irrespective of whether human choice and agency enter into the situation. . . . They are consequently the result of value-judgments, rather than of judgments of fact—judgments, i.e., that one arrangement of relations is better, as for some reason more just or more convenient, than another arrangement which is admitted to be physically possible.70

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67. Cardozo served on the New York Court of Appeals from 1914 to 1932, when he was appointed to fill Holmes's vacancy on the United States Supreme Court, where he served for six years. A number of judicial opinions that Cardozo authored during his long tenure on the New York Court of Appeals are typically included in standard casebooks. See Lawrence A. Cunningham, Cardozo and Posner: A Study in Contracts, 36 WM. & MARY L. REV. 1379 (1995).


Philip Bobbitt has persuasively made this same point. Bobbitt contends that many people make the "fundamental epistemological mistake" of assuming "that law-statements are statements about the world (like the statements of science) and thus must be verified by a correspondence with facts about the world." 71 Dennis Patterson agrees with Bobbitt, and extends this viewpoint to all law: "This confusion of legal and scientific modalities lies at the heart of contemporary constitutional jurisprudence. . . . [T]he same argument can be made about contemporary jurisprudence generally." 72

If law is not a science, then what is it? The practice of law is not the discovery of truth; it is the art of persuasion. Donald Hermann has observed, "[L]egal reasoning entails a practice of argumentation. The reasons given for the conclusions reached are to be measured by their persuasiveness, not by reference to some established true state of affairs." 73

Law differs from science in that science describes the physical world, while law reflects our values. Science is descriptive, while law is prescriptive. 74 Scientific reasoning is intended to convey statements of fact, while legal reasoning seeks to persuade that one complex of values is more compelling than another.

The view of Holmes, Brandeis, Cardozo, Gilmore, Dickinson, and the other legal realists eventually prevailed in American jurisprudence. It is now accepted that although

71. PHILIP BOBBITT, CONSTITUTIONAL INTERPRETATION xii (1991). Bobbitt suggests that law is not a science, but "something we do." Id. at 24.
72. Patterson, supra note 36, at 276.
74. H.L.A. Hart attributes this insight to John Stuart Mill:
This, Mill thought, revealed the perennial confusion between laws which formulate the course or regularities of nature, and laws which require men to behave in certain ways. The former, which can be discovered by observation and reasoning, may be called "descriptive," and is for the scientist thus to discover them; the latter cannot be so established, for they are not statements or descriptions of facts, but are "prescriptions" or demands that men shall act in certain ways.
HART, supra note 9, at 186-87. The importance of this distinction is underscored by the fact that "prescriptive laws may be broken and yet remain laws," while "it is meaningless to say of the laws of nature, discovered by science, either that they can or cannot be broken." Id. at 187.
law is logical in form, deductive logic is incapable of solving hard legal problems.\footnote{75. "Lawyers think axiomatically, yet the law cannot be put into the form of a deductive system." J.C. Smith, Machine Intelligence and Legal Reasoning, 73 CHI.-KENT L. REV. 277, 313 (1998). Smith concludes that we cannot design computers that can solve hard cases: "The idea of intelligent and thinking machines that can perform the range of tasks of which the human is capable is, in itself, a form of Oedipal blindness, and a reflection of our own denial of our animality." Id. at 346.} In fact, as the following portion of this article illustrates, the very definition of a hard case is that it is one that cannot be resolved deductively. Furthermore, in the resolution of hard cases another fundamental difference between law and science becomes evident.

III. THE DIFFERENCE BETWEEN EASY CASES AND HARD CASES

A. Problems of Ambiguity and Problems of Validity

To elucidate the difference between hard cases and easy cases, and the concomitant limitations of syllogistic reasoning in legal analysis, it is appropriate at this point to utilize the hypothetical rather than the categorical form of logical proposition.\footnote{76. Sinclair uses the categorical form to describe rules of law: [T]he variable “c” ranges over cases, or, more precisely, the facts of cases as determined by courts; “c[i]” thus picks out some particular set of facts of a case. The notation “L” is used for the set of legal predicates, “L[i]” for a particular one of them. Schematically then the intrinsically legal question facing the judge is of the form “Is c[i] an L[i]?" where c[i] is the set of facts comprising the case to be decided and L[i] is the legal predicate. Sinclair, supra note 19, at 357. Eveline Feteris, in contrast, notes that the “if... then” format of prepositional logic is a more efficient method for describing rules of law. See FETERIS, supra note 2, at 29.}

All rules of law may be stated in the following hypothetical form: \textit{if} certain facts are true, \textit{then} a certain legal conclusion follows. For example, \textit{if} a person purposefully and without justification or excuse causes the death of another, \textit{then} the person is guilty of homicide.\footnote{77. The perpetrator’s mental state may aggravate or mitigate the crime. If the murder was committed “with prior calculation and design,” the crime is aggravated murder, while if it was knowingly committed “while under the influence of sudden passion or in a sudden fit of rage,” the crime is mitigated to voluntary manslaughter. See, e.g., OHIO REV. CODE ANN. §§ 2903.01-.03 (Anderson 1999).} An intruder who deliberately shoots and kills a sleeping homeowner in the course of a burglary is clearly guilty of murder; this is an easy case. But
consider the case of a woman who has suffered years of seri-
ous physical abuse at the hands of her husband, a man who
has repeatedly threatened her life. Is this woman guilty of
homicide if she shoots and kills him as he lies sleeping? Was
her act justified? The law of self-defense generally requires
that the defendant reasonably believed that her actions were
necessary to defend herself against the aggressor's imminent
use of unlawful force. This is a hard case because of the am-
biguity inherent in the word "imminent." In one case, the
North Carolina Court of Appeals ruled that the defendant-
wife was in imminent danger because the decedent-husband's
nap was "but a momentary hiatus in a continuous reign of
terror," while the North Carolina Supreme Court overruled
and held that the wife was not in "imminent" danger.

Exacerbating this interpretative problem is the question
whether the imminence of the danger is to be determined by
what the reasonable person would believe, or by reference to
the reasonable belief of a person in the defendant's mental
state? The meaning of the term "imminent" is ambiguous as
applied to the facts of this case because the imminence of the
danger may be measured by an objective or a subjective stan-
dard. Furthermore, it may be difficult to control whether a

78. See generally 1 JANE CAMPBELL MORIARTY, PSYCHOLOGICAL AND
SCIENTIFIC EVIDENCE IN CRIMINAL TRIALS ch. 7 (1996 & Supp. 2000).
79. Compare State v. Norman, 378 S.E.2d 8 (N.C. 1989) (holding that a de-
fendant convicted of voluntary manslaughter was not entitled to instruction on
self-defense) with State v. Allery, 682 P.2d 312 (Wash. 1984) (holding that a de-
fendant convicted of second degree murder was entitled to self-defense instruc-
tion). Jane Moriarty discusses these "non-confrontational" or "sleeping man"
homicide cases in MORIARTY, supra note 78, at 7-20 to 7-25.
80. For example, the law of Maine provides, in relevant part:
A person is justified in using a reasonable degree of nondeadly force
upon another person in order to defend himself or a 3rd person from
what he reasonably believes to be the imminent use of unlawful, non-
deadly force by such other person, and he may use a degree of such
force which he reasonably believes to be necessary for such purpose.
81. "Primarily, the issue of when the threat becomes imminent or immedi-
ate is the focal point for most of the courts – that is, if the defendant was not in
'imminent' danger of serious bodily harm, self-defense is not an issue in the
case . . . ." MORIARTY, supra note 78, at 7-21.
84. See David L. Faigman & Amy J. Wright, The Battered Woman Syn-
drome in the Age of Science, 39 ARIZ. L. REV. 67, 85-88 (1997) (describing the
objective and subjective standards for measuring imminence).
jury should use an objective or a subjective standard to de-
terminate the "imminence" of the danger:

The distinction between the objective and subjective tests
can be elusive. A court nominally applying the objective
test may allow the jury to consider so many of the defend-
ant's unique circumstances that the hypothetical "rea-
sonable person" assumes most of the fears and weaknesses
of the defendant. The jury may thus come close to evalu-
ating the necessity of self-defensive action as the defen-
dant saw it.85

Some will argue that the defendant is guilty86 and some
will argue that she is not,87 because the meaning of the word
"imminent" in the rule defining self-defense is unclear in the
context of a "sleeping husband / battered wife" murder case.
This problem of ambiguity creates a hard case because it al-

dows for two different interpretations of the rule.88

To illustrate another type of hard case we return to our
earlier example of gestational surrogacy. The relevant rule of
law may be stated in hypothetical form as follows: if a woman
gives birth to a child, then she is its lawful mother. This rule
is not ambiguous in the context of gestational surrogacy; all
the words of the fact portion of the rule have but one meaning
as applied to this case. But we know intuitively that this is
not an easy case, even though the rule of law is unambiguous.
The difficulty arises because in this context the rule itself
seems to be an incorrect or unfair statement of the law.89 This
type of case is hard because the validity of the rule is in ques-

85. Id. at 85-86.
86. See ALAN M. DERSHOWITZ, THE ABUSE EXCUSE AND OTHER COP-OUTS,
87. See Arthur Ripstein, Self-Defense and Equal Protection, 57 U. Pitt. L.
88. Hart observed that rules of law, "however smoothly they work over the
great mass of ordinary cases, will, at some point where their application is in
question, prove indeterminate; they will have what has been termed an open
texture." HART, supra note 9, at 128. Hart traces the ambiguity of legal rules to
two human shortcomings: "our relative ignorance of fact" and "our relative inde-
terminacy of aim." Id. When the law presents "a fresh choice between open al-
ternatives," "the necessity for such choice is thrust upon us because we are men,
not gods." Id.
89. The three courts that have considered the issue decided not to apply the
common law rule recognizing the birthmother as the legal mother; each recog-
nized the intended mother as the lawful mother of the child. Johnson v. Cal-
vert, 851 P.2d 776 (Cal. 1993); Belsito v. Clark, 67 Ohio Misc. 2d 54 (Ct. Com.
tion, even though its meaning is clear.  

B. The Contrasting Sources of Law and Science

The foregoing examples illustrate that a case may be difficult because the applicable rule of law is ambiguous, or because the validity of the rule has been challenged. But how is a court to resolve a case where the meaning or the validity of the existing rule is challenged? It is here, in the resolution of hard cases, that the critical difference between law and science becomes evident. To resolve questions of ambiguity or validity lawyers and judges create legal arguments.

Legal arguments may be based upon text, intent, precedent, tradition, or policy analysis. These five types of legal

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90. Ronald Dworkin noted that questions of validity create "hard cases," just as questions of ambiguity do: "Judges often disagree not simply about how some rule or principle should be interpreted, but whether the rule or principle one judge cites should be acknowledged to be a rule or principle at all." Ronald Dworkin, Hard Cases, 88 HARV. L. REV. 1057, 1089 (1975). Dworkin characterizes Hart as arguing that "hard cases arise only because legal rules have what he calls 'open texture.'" Id. Hart, however, had identified the same two difficulties in determining the correct statement of the law.

The distinction between the uncertainty of a particular rule, and the uncertainty of the criterion used in identifying it as a rule of the system, is not itself, in all cases, a clear one. But it is clearest where rules are statutory enactments with an authoritative text. The words of a statute and what it requires in a particular case may be perfectly plain; yet there may be doubts as to whether the legislature has power to legislate in this way.

HART, supra note 9, at 148.

91. David Lyons adds a third category of hard case: cases that are governed by conflicting rules. David Lyons, Justification and Judicial Responsibility, 72 CAL. L. REV. 178 (1984). I would classify a case with conflicting rules as one where the validity of the applicable rule is in question.

92. How indeed? James Gordley notes that "it would be a mistake to think that if one stares hard at [an ambiguous term] ... one will achieve greater clarity." James Gordley, Legal Reasoning: An Introduction, 72 CAL. L. REV. 138, 155 (1984). Not that we haven't tried!

93. This system of classifying legal arguments is described in Wilson Huhn, Teaching Legal Analysis Using a Pluralistic Model of Law, 36 GONZ. L. REV. 433 (2000). It is principally based upon Philip Bobbitt's theories of "modalities" in constitutional interpretation and the work of William Eskridge, Jr., and Philip Frickey in describing the modes of statutory interpretation. See BOBBITT, supra note 71; William N. Eskridge, Jr. & Philip P. Frickey, Statutory Interpretation as Practical Reasoning, 42 STAN. L. REV. 321 (1990). It also draws upon theories of interpretation proposed by Akhil Amar, Richard Fallon, Dennis Patterson, and Kent Greenawalt. See Akhil Amar, Intratextualism, 112 HARV. L. REV. 747 (1999); Richard H. Fallon, Jr., A Constructivist Coherence Theory of Constitutional Interpretation, 100 HARV. L. REV. 1189 (1987); Patterson, supra note 73; KENT GREENAWALT, STATUTORY INTERPRETATION:
argument represent different conceptions of the law. Law may be considered to be legal text itself, or it may be considered to be what the text meant to the persons who enacted it into law. Law may be considered to be the holdings or opinions of courts saying what the law is, and may also be thought of as the traditional ways in which members of the community have conducted themselves. Finally, law may be conceived as the expression of the underlying values and interests that the law is meant to serve. The five types of legal argument arise from these different sources of law.

In addition, each type of legal argument represents a different ordering in the values that are served by a system of laws. Textual interpretation promotes objectivity. Intent reflects the popular will. Precedent promotes stability. Tradition promotes societal coherence. And policy arguments—consequentialist arguments—enable the law to achieve its purposes. It is common for these values to conflict in particular cases. That there are multiple legitimate types of legal argument is a principal reason that hard cases exist, and why informed people may in good faith legitimately differ as to the meaning of the law.

The forms of legal argument may thus be characterized as arising from different sources of law, or as the separate embodiment of the various values served by our system of laws. Nevertheless, all five methods of legal analysis share one fundamental point in common. The fundamental nature of law is that it is intentional. Regardless of how a rule of law was created, it is always the case that it arose because someone, at some point in time, made a value choice. A person, or group of persons, chose to elevate one interest over another, and this choice is recognized as our law by a court that selects a method of analysis accepting a particular value choice as binding.

This is not how our understanding of the laws of nature evolves. Scientists do not reformulate natural laws by making intentional value choices. Instead, our understanding of

20 QUESTIONS (1999).

94. Huhn, supra note 93, at 476.

95. Lysenko attempted to reformulate the law of genetics to conform to communist doctrine—and this was not science, but ideology. See ALEXANDER KOHN, FALSE PROPHETS 63 (1986). Creationists attempt to reformulate the theory of evolution to conform to scripture—and this is not science, but religion.
the laws of nature changes when our current theories are inadequate to explain observed phenomena.

The formalistic view of the law as a determinate set of rules is fundamentally inconsistent with how law is made and interpreted. Law is not a science. The assumptions of law and science are at odds with each other. Even though law, like science, consists of a set of rules; even though the purpose of legal study, like science, is to make predictive statements; even though both legal and scientific reasoning use formal deductive logic to derive conclusions by applying general rules to specific facts; and even though the law, like science, is constantly evolving, there are basic differences between law and science.

Unlike science, the law has multiple sources. In hard cases, the law is fundamentally indeterminate. And unlike science, the law is volitional, not phenomenological. The root premises of law are value judgments. Though law is logical and rational in form, in substance it is evaluative, the result of intentional value choices.

The case of the battered spouse who was charged with murder is a hard case because it presents a problem of ambiguity: was she in "imminent danger"? The gestational surrogacy case is a hard case because the validity of the rule that "the woman who gives birth to the child is its lawful mother" seems questionable in that context.

Part IV of this article describes the logical structure of judicial reasoning in hard cases. Part V describes a model for the non-logical resolution of hard cases.

IV. THE USE OF THE SYLLOGISM IN JUDICIAL REASONING

Ruggero J. Aldisert, Judge for the United States Court of Appeals for the Third Circuit, and Brian Winters, a Minneapolis attorney, have both made significant contributions to explaining the appropriate use of logic in judicial reasoning.98
Aldisert discusses the syllogistic structure of a number of judicial opinions. The syllogistic model of legal analysis is the subject of Part A below. Winters makes several acute observations about the logical structure and premises of legal argument, which are described in Parts B and C.

A. The Case Brief as a Chain of Syllogisms

As noted at the beginning of this article, a case brief is in the form of a syllogism, an argument of deductive logic. But to characterize a brief as a single argument of deductive logic, a single syllogism, is misleading. In law school, law professors typically ask students to identify “the issue” or “the holding” of a case, implying that for every case there is only one issue and one holding. But on closer inspection it becomes apparent that this is not at all true; the reasoning of the court in any particular case is not a single argument of logic as the form of a brief would suggest, but many arguments or syllogisms. A case brief is in fact a chain of logical arguments, proceeding from the root premises of the court to its final decision. As Judge Aldisert observed, “[o]ften a series of syllogisms are linked with conclusions of previous ones forming both promote the role of logical analysis in legal reasoning. “Logical reasoning lies at the heart of the common law method.” ALDISERT, supra at 9. “I propose . . . that we consciously conceptualize constitutional ‘interpretation’ as a logical enterprise – contra Posner, and much contemporary scholarship – and mount our assessments of Supreme Court opinions in explicitly logical terms. I believe that such an approach would do much to advance the cause of intelligibility – and of legitimacy.” Winters, supra at 307. See also Patricia Sayre, “Socrates Is Morta”: Formal Logic and the Pre-Law Undergraduate, 73 NOTRE DAME L. REV. 689, 689-90 (1998) (advising that pre-law students should study formal logic as well as the history and philosophy of logic).

99. In light of the fact that a judicial opinion may encompass dozens of issues and holdings, which is the issue or the holding of the case? As a practical matter, when a professor asks a student to identify “the issue” in a case, the professor is asking the student to identify the issue in the case that best serves the professor’s pedagogical purpose. The professor probably assigned the case because one of the issues in the case concerns the next topic to be covered in the syllabus of the course. The professor or casebook editor may have selected a particular case because it was the first time that the issue to be studied was decided by a court, or because the opinion of the court is particularly thorough or well-written, or because the court’s discussion of the issue presents an informative contrast to a complementary discussion in another case.

100. “A legal argument, therefore, is almost always a chain of syllogisms . . . .” Winters, supra note 98, at 285. “In hard cases, in which the facts or the rule are disputed, a further justification by means of a chain of subordinate arguments is required.” FETERIS, supra note 2, at 193.
the premises of those which follow."\textsuperscript{101} By using a "polysyllabic" approach, one may trace the court's reasoning from its underlying assumptions about the law to its ruling in the case before it.

An ideal case to illustrate this point is \textit{Marbury v. Madison}.\textsuperscript{102} There are two reasons to turn to \textit{Marbury} as a prime example of the use of syllogistic reasoning. First, \textit{Marbury} is the foundational case in constitutional law. In \textit{Marbury}, the United States Supreme Court, speaking through Chief Justice John Marshall, articulated the principle of judicial review; i.e., the authority of the courts to interpret the Constitution and to declare statutes unconstitutional. Because this case established the foundation of the power of the courts to "say what the law is,"\textsuperscript{103} it is appropriate to examine the opinion of the Court in determining the foundation of judicial reasoning.

The second reason that \textit{Marbury} is an ideal case to analyze syllogistically is because of Marshall's spare, logical style. The legal historian Bernard Schwartz has celebrated Justice Marshall's "rigorous pursuit of logical consequences" and "[t]he magisterial character of his opinions marching with measured cadence to their inevitable logical conclusion ..."\textsuperscript{104} Marshall achieves this effect by phrasing the issues of a case in terms of black and white, rather than shades of gray.\textsuperscript{105} Every hard choice is presented as an "either/or" proposition, not as a matter of degree. For example, in \textit{Marbury}, Marshall argues that

\textquote{It is a proposition too plain to be contested, that the constitution controls any legislative act repugnant to it; or that the legislature may alter the constitution by an ordinary act.}

\textsuperscript{101} ALDISERT, supra note 98, at 60.
\textsuperscript{102} Marbury v. Madison, 5 U.S. (1 Cranch) 137 (1803).
\textsuperscript{103} "It is emphatically the province and duty of the judicial department to say what the law is." \textit{Id.} at 177.
\textsuperscript{104} BERNARD SCHWARTZ, A HISTORY OF THE SUPREME COURT 36-37 (1993).
\textsuperscript{105} "Symbolic logic assumes that every statement in a defined universe is either true or false ..." Phillip M. Kannan, \textit{Symbolic Logic in Judicial Interpretation}, 27 U. MEM. L. REV. 85, 87 (1996). "The syllogism requires that something either be in the classification or out of it. Binary thinking rules formal logic – true or false, in or out, on or off, one or zero." Jamar, supra note 21, at 568-69. For the same reason, balancing tests, like strict scrutiny, cannot be resolved by resort to deductive logic. \textit{See id.} at 569-73.
Between these alternatives there is no middle ground. The constitution is either a superior paramount law, unchangeable by ordinary means, or it is on a level with ordinary legislative acts, and, like other acts, is alterable when the legislature shall please to alter it.

If the former part of the alternative be true, then a legislative act, contrary to the constitution, is not law: if the latter part be true, then written constitutions are absurd attempts, on the part of the people, to limit a power, in its own nature, illimitable.

Marshall presents the question of the duty of the courts to review legislation in similar dichotomous fashion:

So, if a law be in opposition to the constitution; if both the law and the constitution apply to a particular case, so that the court must either decide that case, conformable to the law, disregarding the constitution; or conformable to the constitution, disregarding the law; the court must determine which of these conflicting rules governs the case...

By framing the issues as alternatives with "no middle ground," Marshall makes it possible to arrive at a single right answer by means of deductive reasoning. Although Marshall makes policy arguments, he does not balance one principle or outcome against another. Marshall's consequentialist analysis buttresses the conclusions he reaches syllogistically.

As noted above, one of Langdell's greatest contributions to legal education was the practice of "briefing cases." As the first step in briefing a case is to state the facts, I will begin with the facts of Marbury, which are familiar to every American lawyer. On the eve of leaving office, President John Adams attempted to appoint William Marbury as Justice of the Peace for the District of Columbia. The President signed the commission appointing Marbury, but the commission was not delivered to Marbury before Adams left office. The incoming President, Thomas Jefferson, instructed his Secretary of State, James Madison, not to deliver the commission to Marbury. Congress, in the Judiciary Act of 1789, had given the Supreme Court the power to issue writs of

106. Marbury, 5 U.S. (1 Cranch) at 177.
107. Id. at 178.
108. See infra note 174 and accompanying text.
109. See supra note 35 and accompanying text.
mandamus to any public official of the United States. Accordingly, Marbury sued Madison in the Supreme Court, asking the Court to issue a writ of mandamus ordering Madison to deliver the commission.\textsuperscript{110}

The second step in briefing a case is to state the issue, which is the question of law that the court answers. But even a cursory examination of the Court's opinion in \textit{Marbury} reveals a large number of questions that the Court answered in addition to the issue of judicial review. A sampling of these other issues includes the following:

1. Does the Supreme Court have jurisdiction over this case?\textsuperscript{111}

2. Does the Supreme Court have original jurisdiction to issue a writ of mandamus to the Secretary of State?\textsuperscript{112}

3. Is Section 13 of the Judiciary Act a valid statute?\textsuperscript{113}

4. Is Section 13 of the Judiciary Act in conflict with the Constitution?\textsuperscript{114}

5. Does Article III, Section 2, Clause 2, of the Constitution authorize Congress to grant the Supreme Court original jurisdiction to issue writs of mandamus against public officers of the United States?\textsuperscript{115}

\begin{enumerate}
\item See \textit{Schwartz}, supra note 104, at 40.
\item "It remains to be inquired whether he [Marbury] is entitled to the remedy for which he applies? This depends on . . . [t]he power of this court." \textit{Marbury}, 5 U.S. (1 Cranch) at 168.
\item "Whether it [the writ of mandamus] can issue from this court." \textit{Id.} at 173.
\item The Court stated,

\[\text{[I]f this court is not authorized to issue a writ of mandamus to such an officer [the Secretary of State], it must be because the law [Section 13 of the Judiciary Act] is unconstitutional, and therefore, absolutely incapable of conferring the authority, and assigning the duties which its words purport to confer and assign.}\]

\textit{Id.}

\item "If two laws conflict with each other, the courts must decide on the operation of each." \textit{Id.} at 177.
\item Marshall stated,

\[\text{It has been insisted, at the bar, that as the original grant of jurisdiction to the supreme and inferior courts, is general, and the clause, assigning original jurisdiction to the supreme court, contains no negative or restrictive words, the power remains to the legislature, to assign original jurisdiction to that court, in other cases than those specified in the article which has been recited; provided those cases belong to the judicial power of the United States.}\]

\textit{Id.} at 174.
6. Are statutes that are in conflict with the Constitution valid?116

It is obvious that the foregoing issues are listed in inverse order of logical progression; for example, question 2 must be answered before question 1. A narrowed and simplified description of Marshall's reasoning is diagrammed below. In this redacted version of his opinion, the logical relation among the various issues in the case becomes more apparent.

Syllogism 1

Issue: Does the Supreme Court have jurisdiction over this case?

Fact: This is a case involving the Supreme Court's exercise of original jurisdiction to issue a writ of mandamus to the Secretary of State.117

Law: The Supreme Court lacks original jurisdiction to issue a writ of mandamus to the Secretary of State.118

Holding: The Supreme Court lacks jurisdiction over this case.

Syllogism 2

Issue: Does the Supreme Court have original jurisdiction to issue a writ of mandamus to the Secretary of State?

Fact: Section 13 of the Judiciary Act is not valid.119

Law: The Supreme Court may exercise jurisdiction over to issue a writ of mandamus to the Secretary of State only if Section 13 of the Judiciary Act is valid.120

116. "The question, whether an act, repugnant to the constitution, can become the law of the land, is a question deeply interesting to the United States...." Id. at 176.

117. Marshall stated as follows:

The secretary of state, being a person holding an office under the authority of the United States, is precisely within the letter of [Section 13 of the Judiciary Act]; and if this court is not authorized to issue a writ of mandamus to such an officer, it must be because the law is unconstitutional....

Id. at 173.

118. Holding of Syllogism 2, infra note 121 and accompanying text.

119. Holding of Syllogism 3, infra note 124 and accompanying text.

120. See quote supra note 113. Syllogism 2 simplifies Marshall's reasoning. What Marshall actually says, of course, is not that the Court lacks jurisdiction if the law is unconstitutional, but that if the Court lacks jurisdiction then the statute must be unconstitutional and therefore void. Marshall simply assumes that Section 13 of the Judiciary Act is the only possible source of jurisdiction.
Holding: The Supreme Court lacks original jurisdiction to issue a writ of mandamus to the Secretary of State.\footnote{121}

Syllogism 3

Issue: Is Section 13 of the Judiciary Act valid?

Fact: Section 13 of the Judiciary Act is in conflict with the Constitution.\footnote{122}

Law: Statutes that are in conflict with the Constitution are not valid.\footnote{123}

Holding: Section 13 of the Judiciary Act is not valid.\footnote{124}

Syllogism 4

Issue: Is Section 13 of the Judiciary Act in conflict with the Constitution?

Fact: Section 13 of the Judiciary Act provides that the Supreme Court has original jurisdiction to issue writs of mandamus to officers of the United States,\footnote{125} while Article III, Section 2 of the Constitution does not authorize Congress to grant the Supreme Court original jurisdiction to

No other statute is mentioned, and Marshall's interpretation of Article III, Section 2 necessarily implies that the Constitution does not confer jurisdiction over the case on the Court. \textit{See Marbury, 5 U.S. (1 Cranch) at 173.}

121. The closest that the Court comes to flatly stating that it lacks subject matter jurisdiction is the statement "To enable this court, then, to issue a mandamus, it must be shown to be an exercise of appellate jurisdiction, or to be necessary to enable them to exercise appellate jurisdiction." \textit{Marbury, 5 U.S. (1 Cranch) at 175.} The Court then concluded that this was an original action, not appellate. \textit{Id.} at 175-76.

122. Holding of Syllogism 4, \textit{infra} note 128 and accompanying text.

123. Holding of Syllogism 6, \textit{infra} note 134 and accompanying text.

124. Marshall argues, If an act of the legislature, repugnant to the constitution, is void, does it, notwithstanding its invalidity, bind the courts, and oblige them to give it effect? Or, in other words, though it be not law, does it constitute a rule as operative as if it was a law? This would be to overthrow, in fact, what was established in theory; and would seem, at first view, an absurdity too gross to be insisted on. It shall, however, receive a more attentive consideration. \textit{Marbury, 5 U.S. (1 Cranch) at 177.} At this point Marshall develops his justification for the doctrine of judicial review, concluding that since "[i]t is, emphatically, the province and duty of the judicial department, to say what the law is," that "[i]f two laws conflict with each other, the courts must decide on the operation of each" and determine the constitutionality of statutes. \textit{Id.}

125. "The act to establish the judicial courts of the United States authorizes the supreme court, 'to issue writs of mandamus, in cases warranted by the principles and usages of law, to any courts appointed or persons holding office, under the authority of the United States.'" \textit{Id.} at 173.
issue writs of mandamus to officers of the United States.\textsuperscript{126}

\textit{Law}: If one law permits what another law forbids, the laws are in conflict.\textsuperscript{127}

\textit{Holding}: Section 13 of the Judiciary Act of the Constitution is in conflict with the Constitution.\textsuperscript{128}

\begin{flushleft}
\textbf{Syllogism 5}
\end{flushleft}

\textit{Issue}: Does Article III, Section 2, Clause 2 of the Constitution authorize Congress to grant the Supreme Court original jurisdiction to issue writs of mandamus to officers of the United States?

\textit{Fact}: If Article III, Section 2, Clause 1 of the Constitution is interpreted as allowing Congress to grant the Supreme Court original jurisdiction to issue writs of mandamus to officers of the United States, then Clause 2 would be rendered meaningless.\textsuperscript{129}

\textit{Law}: The Constitution may not be interpreted in such a way as to render any portion of it meaningless.\textsuperscript{130}

\textit{Holding}: Article III, Section 2, Clause 2 of the Constitution does not authorize Congress to grant the Supreme Court original jurisdiction to issue writs of mandamus to

\begin{flushleft}
\textsuperscript{126} Holding of Syllogism 5, infra note 131 and accompanying text.  \\
\textsuperscript{127} Marshall stressed that, \textit{This doctrine would subvert the very foundation of all written constitutions. It would declare that an act which, according to the principles and theory of our government, is entirely void, is yet, in practice, completely obligatory. It would declare, that if the legislature shall do what is expressly forbidden, such act, notwithstanding the express prohibition, is in reality effectual. It would be giving to the legislature a practical and real omnipotence, with the same breath which professes to restrict their powers within narrow limits. It is prescribing limits, and declaring that those limits may be passed at pleasure.} \\
\textit{Marbury}, 5 U.S. (1 Cranch) at 178.  \\
\textsuperscript{128} "The authority, therefore, given to the supreme court by the act establishing the judicial courts of the United States, to issue writs of \textit{mandamus} to public officers, appears not to be warranted by the constitution . . . ." \textit{Id.} at 176.  \\
\textsuperscript{129} The Court asserted, \textit{The subsequent part of the section is mere surplusage—is entirely without meaning, if such is to be the construction. If congress remains at liberty to give this court . . . original jurisdiction where the constitution has declared it shall be appellate; the distribution of jurisdiction, made in the constitution, is form without substance.} \textit{Id.} at 174.  \\
\textsuperscript{130} "It cannot be presumed, that any clause in the constitution is intended to be without effect; and therefore, such a construction is inadmissible, unless the words require it . . . ." \textit{Id.}
\end{flushleft}
officers of the United States.\textsuperscript{131}

**Syllogism 6**

**Issue:** Are statutes that are in conflict with the Constitution valid?

**Fact:** The Framers intended for any statute in conflict with the Constitution to be invalid.\textsuperscript{132}

**Law:** The Constitution is to be interpreted according to the intent of the Framers.\textsuperscript{133}

**Holding:** Statutes that are in conflict with the Constitution are not valid.\textsuperscript{134}

The individual syllogisms that make up the reasoning of a judicial opinion are connected in that the “holding” of the court in one syllogism supplies a “fact” (minor premise) or a “law” (major premise) for other syllogisms in the chain of reasoning. In the example above, the holding of syllogism 4 is the minor premise of syllogism 3, and the holding of syllogism 6 is the major premise of syllogism 3.

The Court’s reasoning proceeds from its root premises to the ultimate result, which is dictated by the last syllogism in the Court’s chain of reasoning. In this case, the Court’s hold-

\textsuperscript{131} Marshall concludes, [T]he plain import of the words [of Article III, Section 2] seems to be, that in one class of cases its jurisdiction is original, and not appellate; in the other it is appellate, and not original. If any other construction would render the clause inoperative, that is an additional reason for rejecting such other construction, and for adhering to their obvious meaning. Id. at 175.

\textsuperscript{132} “Certainly all those who have framed written constitutions contemplate them as forming the fundamental and paramount law of the nation . . . .” Id. at 176.

\textsuperscript{133} Marshall implicitly asserts this by repeatedly invoking the intent of the Framers. “It cannot be presumed that any clause in the constitution is intended to be without effect.” Id. at 174. “To what purpose are powers limited, and to what purpose is that limitation committed to writing, if these limits may, at any time, be passed by those intended to be restrained?” Id. at 176. “Could it be the intention of those who gave this power, to say that in using it the constitution should not be looked into?” Id. at 179. “From these, and many other selections which might be made, it is apparent, that the framers of the constitution contemplated that instrument as a rule for the government of courts, as of the legislature.” Id. at 179-80.

\textsuperscript{134} “If, then, the courts are to regard the constitution, and the constitution is superior to any ordinary act of the legislature, the constitution, and not such ordinary act, must govern the case to which they both apply.” Id. at 177. “[A] law repugnant to the constitution is void . . . .” Id. at 180.
ing in syllogism 1 that the Supreme Court lacked jurisdiction required it to dismiss Marbury’s petition for writ of mandamus.  

The foregoing analysis depicts Marshall’s reasoning in Marbury as a simple chain of syllogisms, building a conclusion deductively from its premises. This redacted model does not do justice to Marshall’s opinion. Part V of this article presents a more complete description of Marshall’s reasoning. This will demonstrate how the persuasiveness of Marbury ultimately depends not only on the logical structure of the opinion, but also upon the variety of arguments Marshall makes and the underlying values he invokes.

B. Challenges to the Minor and Major Premises of a Legal Argument

One of Winters’ important insights is that careful dissection of the steps of logical analysis of a judicial opinion reveals how the court attacks the “hard questions” of law. Specifically, this method reveals how a court raises questions of ambiguity and questions of validity. To illustrate this point I will continue to refer to the polysyllogistic analysis of Marbury v. Madison.

The major premise of syllogism 3 above is “Statutes that are in conflict with the Constitution are not valid.” One may fairly ask, “Is it true that statutes that are in conflict with the Constitution are not valid?” This is a challenge to the validity of the rule, and it is the issue of syllogism 6.

The minor premise of syllogism 3 is “Section 13 of the Judiciary Act is in conflict with the Constitution.” Again one may ask, “Is it true that Section 13 of the Judiciary Act is in conflict with the Constitution?” This question challenges the

135. Note that the last step in the opinion—from determining that the case ought to be dismissed, to actually ordering the dismissal of the case—is not a step of logic. There is a difference between knowing the right thing to do and doing it. Just as there is no necessary connection between an “is” and an “ought,” so it is that there is no necessary connection between an “ought” and an “is.”


137. Winters refers to challenges to the major premise of a legal syllogism as “problems of interpretation.” Id. This term is somewhat misleading because challenges to the minor premise of a legal syllogism also require interpretation of the law. Accordingly, it is more accurate to refer to challenges to the major premise as presenting “questions of validity.”
applicability of the major premise to the facts of the case; in other words, it charges the rule with being ambiguous as applied to the facts of the case. This becomes the issue of syllogism 4.\textsuperscript{138}

Part III of this article proposed that hard cases involve either questions of ambiguity or questions of validity.\textsuperscript{139} We now see why this is so. The soundness of any syllogism may be challenged by attacking either the minor premise or the major premise. An attack on the minor premise of a legal syllogism tests whether the rule is applicable to the facts, while an attack on the major premise tests its validity.

This pattern suggests a strategy for attacking legal arguments generally. For example, when the defendant in a tort case raises "economic efficiency" as a defense, one may challenge the applicability of the rule to the facts by asking, "Would it be economically efficient to hold the defendant liable in this case?" In addition, or in the alternative, one may challenge the validity of the rule by asking, "Is it true that economic efficiency is a goal of the law of tort?"\textsuperscript{140}

Posing challenges to the major and minor premises of the legal syllogism eventually takes us back to the root premises

\textsuperscript{138} Winters identifies challenges to the minor premise of the legal syllogism with Steven Burton's "problem of importance." \textit{Id.} (citing BURTON, supra note 2, at 31-39.) Burton describes "the problem of importance" as arising in the context of both deductive and analogical reasoning:

[The problem of importance] arises in the analogical form of legal reasoning when lawyers and judges must decide whether the factual similarities or differences between two cases will or should matter in reaching a legal decision. It also arises in the deductive form when lawyers and judges must decide which facts justify placing a problem case in a class of cases designated by a legal rule. \textit{Id.} at 83.

The problem of importance concerns whether similarities and dissimilarities of the facts of the case at bar are important in determining whether to apply an existing rule to the case. "Importance" is measured by reference to the values and purposes that the existing rule is intended to serve. Thus, "problems of importance" are resolved realistically, by balancing the relevant values and interests. Because challenges to the minor premise of a legal syllogism may be resolved not only realistically, but also by textual arguments, reference to the drafters' intent of the law, citation to precedent, or reliance on tradition, it is more accurate to refer to these challenges as presenting "questions of ambiguity." \textit{Id.}

\textsuperscript{139} See \textit{supra} notes 76-90 and accompanying text.

\textsuperscript{140} This example is inspired by Winters' observation that "[t]he authoritativeness of . . . the constitutional text itself . . . is far less problematic than any proposed ultimate premise (economic efficiency) which might ground the common law." Winters, \textit{supra} note 98, at 291.
of the legal arguments. It is these premises that are examined in the following section of this article.

C. The Root Minor Premises and the Root Major Premises of Legal Argument

Winters' most ambitious contribution to the rational dissection of legal arguments is his attempt to reconcile the theories of two prominent figures: the logician Stephen Toulmin, and constitutional scholar Philip Bobbitt. Toulmin created a general theory intended to demonstrate the legitimacy of arguments in different fields, while Bobbitt's theory of constitutional modalities sought to delineate the universe of legitimate arguments in the field of constitutional law.

Winters summarizes Toulmin's theory as follows: "[I]n our logical practice we recognize fields of argument," and "[o]ur warrants and the backing we offer for them, what we consider to be grounds, and our sense of logical cogency all vary as a function of the field of problems within which we are reasoning at any given time." In other words, in different fields we reason from different premises.

The beginning premises in law are the different types of legal arguments. Bobbitt contends that there are six kinds of legal argument that lawyers and judges use to interpret the Constitution. He identifies these interpretative tools—the "modalities" of constitutional argument—as the "historical," "textual," "structural," "doctrinal," "ethical," and "prudential" kinds of arguments. Bobbitt contends that these are the only legitimate means of interpreting the Constitution: "There is no constitutional legal argument outside these modalities."

Winters concludes that Bobbitt's modalities are the

141. STEPHEN TOULMIN, THE USES OF ARGUMENT (1958). For a description of Toulmin's theory as it relates to legal reasoning, see FETERIS, supra note 2, at 40-47. Feteris characterizes Toulmin's approach as "rhetorical" in that "the acceptability of argumentation is dependent on the effectiveness of the argumentation for the audience to which it is addressed." Id. at 16. Feteris concludes that Toulmin's model of argumentation "cannot be used in hard cases where the legal rule has to be interpreted, or where the facts have to be qualified." Id. at 47.
142. See notes 145-46 infra and accompanying text.
143. Winters, supra note 98, at 300.
144. Id. at 300-01.
146. Id. at 22.
“categories of backing” for interpretations of the Constitution. 147 Winters’ characterization of the modalities as categories of backing is consistent with Bobbitt’s conception of the modalities as the universe of “legitimate” constitutional arguments.

Winters also states that the grounds of constitutional argument “might consist of such ‘facts’ as the constitutional text itself, reports of ratification debates, reports of decided cases, etc.”148 He notes, “The materials I use as backing for any constitutional inference-warrant depend then on the type of argument I mount, the modality I employ.”149 This is consistent with the idea that each kind of legal argument may be considered to be a category of evidence that is admissible to prove the meaning of the law.

The categories of legal argument that are employed in teaching legal analysis—text, intent, precedent, tradition, and policy—are derived from Bobbitt’s modalities as well as from the tools of statutory construction identified by Eskridge and Frickey.150 These forms of argument may be utilized in any area of law that involves the interpretation of text, and Winters’ observations about the logical premises of legal argument are equally applicable to them. To illustrate this point we again turn to the polysyllogism in *Marbury v. Madison*.

The syllogisms from *Marbury* set forth the links in the Court’s chain of reasoning. As we trace the reasoning of the Court back through earlier syllogisms in the chain, we eventually reach premises that are not proven or explained. These are the base premises, the often unspoken assumptions of the Court’s opinion.

Among the root minor premises of any judicial opinion are the items of evidence of what the law is: the text of statutes and constitutional provisions, and specific evidence of intent, tradition, precedent and policies. For example, the minor premise of syllogism 4 contains the text of Section 13 of the Judiciary Act, and the minor premise of syllogism 6 is the court’s finding concerning the intent of the Framers.

Among the root major premises of any judicial opinion

147. Winters, supra note 98, at 304.
148. Id. at 303.
149. Id. at 304.
150. See Eskridge & Frickey, supra note 93.
are the types of legal argument that the court utilizes. Syllogism 6 asserted that “the Constitution is to be interpreted according to the intent of the Framers”; similarly, syllogism 5 assumes the validity of the canon of construction that “the Constitution may not be interpreted in such as way as to render any portion of it meaningless.” These major premises assert the validity of interpreting the Constitution according to the intent of the framers and in accordance with a textual canon of construction.

Whenever a person makes a legal argument, he implicitly asserts that the argument is a legitimate form of legal analysis. The explicit or implicit major premises of every judicial opinion assume the validity of the accepted forms of legal argument: text, intent, precedent, tradition, and policy. The court takes for granted that the legal argument it utilizes is derived from a valid source of law. Sometimes, however, courts take the additional step of expressly justifying the legitimacy of an argument by identifying its source of authority.

In *Marbury*, Justice Marshall repeatedly invoked “the intent of the framers” in support of his interpretation of the Constitution. Marshall then proceeded to explain why he relied upon “the intent of the framers” to interpret the Constitution: “That the people have an original right to establish, for their future government, such principles as, in their opinion, shall most conduce to their own happiness is the basis on which the whole American fabric has been erected.”

This right, the exercise of which Marshall referred to as the “original and supreme will,” is recognized the Declara-

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152. “If it had been intended to leave it in the discretion of the legislature to apportion the judicial power between the supreme and inferior courts according to the will of that body, it would certainly have been useless to have proceeded further . . . .” *Id.* at 174. “It cannot be presumed that any clause in the Constitution is intended to be without effect . . . .” *Id.* “Certainly all those who have framed written constitutions contemplate them as forming the fundamental and paramount law of the nation . . . .” *Id.* at 176. “Could it be the intention of those who gave this power, to say that in using it the constitution should not be looked into?” *Id.* at 179. “[It is apparent that the framers of the constitution contemplated that instrument as a rule for the government of courts, as well as of the legislature.” *Id.* at 179-80.
153. *Id.* at 176.
154. “The original and supreme will organizes the government, and assigns to different departments their respective powers.” *Id.*
tion of Independence, which states that governments "deriv[e] their just powers from the consent of the governed." The interpretive method of the "intent" form of legal argument arises from the fundamental principle of popular sovereignty.

We can illustrate this portion of the Court's reasoning by means of a final syllogism:

Syllogism 7

Issue: Is the Constitution to be interpreted according to the intent of the Framers?

Fact: The intent of the Framers in drafting the Constitution reflects the original will of the people.

Law: The original will of the people is supreme.

Holding: The Constitution is to be interpreted according to the intent of the Framers.

This syllogism shows the relation between a method of legal argument and a source of law. In constitutional cases, the source of authority for the legal argument of "original intent" is the right of the people to establish a limited government. The principle of popular sovereignty is the source of authority that forms the fundamental major premise of Marshall's reasoning in *Marbury v. Madison*.

In easy cases, the derived rule of law unambiguously applies to the facts, and the validity of the rule is not questioned. In hard cases, however, two or more legal arguments lead to contradictory conclusions about the meaning or the validity of the rule. It is in those cases that we reach the limits of deductive logic; we transcend those limits by means of a complex balancing of myriad values which are described in the final portion of this article.

V. THE LIMITS OF SYLLOGISTIC REASONING IN JUDICIAL OPINIONS

James Wilson argues persuasively that judicial opinions are not syllogisms, but rather "enthymemes." "Legal opinions are enthymemes, not logical syllogisms. One should not expect complete coherence, because all legal enthymemes are premised upon prevailing public norms, which are not and

155. THE DECLARATION OF INDEPENDENCE para. 2 (U.S. 1776).
need not be completely internally consistent.”

I concur with Wilson’s analysis, and suggest that there are two reasons why judicial opinions cannot be accurately described as syllogisms. First, a persuasive judicial opinion is not organized as a “chain” of syllogisms, but rather as a “cable” of interlocking arguments. When different types of legal arguments are marshaled to support a single interpretation of the law, it greatly enhances the persuasive force of the opinion. A judicial opinion that invokes a variety of legal arguments is more than the sum of its parts. Second, in hard cases the courts must either implicitly or explicitly balance a number of competing factors to arrive at an interpretation of the law. This balancing is made necessary by the fact that there are a number of different ways to attack each type of legal argument. Additionally, each type of argument instantiates a different fundamental value of our system of laws. This evaluative process cannot be conducted by means of a syllogism; it is instead a matter of interpretive choice.

A. Persuasive Legal Arguments Resemble Cables Rather Than Chains

Part IV of this article applied Judge Aldisert’s polysyllogistic model of legal reasoning to illustrate the steps and to expose the base premises of legal reasoning. Traditionally, the brief of a judicial opinion has been characterized as a “chain” of syllogisms, and that is how this article represented the reasoning in Marbury v. Madison. There is, however, a more nuanced and satisfying metaphor to describe legal reasoning. In place of the “chain” of syllogisms, William Eskridge and Philip Frickey proposed that persuasive legal argumentation is more accurately described as a “cable.”

A chain is no stronger than its weakest link, because if any of the singly connected links should break, so too will the chain. In contrast, a cable’s strength relies not on that

156. James G. Wilson, Surveying the Forms of Doctrine on the Bright Line – Balancing Test Continuum, 27 ARIZ. ST. L.J. 773, 839 (1995). Wilson explains that when using an enthymeme, “[t]he advocate derives premises from prevailing public opinions, not from rigid linguistic conventions or geometrical assumptions. The advocate then attempts to predict the consequences of different proposed solutions.” Id. at 814.

of individual threads, but upon their cumulative strength as they are woven together. Legal arguments are often constructed as chains, but they tend to be more successful when they are cable-like.158

What makes a legal argument resemble a cable rather than a chain? A legal argument that is a cable is one that weaves together the different kinds of legal argument. A brief or judicial opinion that cites text, intent, precedent, tradition, and policy, all tending toward a single interpretation of the law, is far more persuasive than one that utilizes a single modality.159 When every method of argument points to the same result, it creates an impression of inevitability.

Marshall achieves this impression by weaving a cable of arguments in *Marbury*. The syllogisms set forth in Part IV of this article present a single chain of Marshall's reasoning. But the force of Marshall's argument arises from the variety of arguments he employs. For example, in interpreting the appellate and original jurisdiction clause of Article III, Section 2, this article presented Marshall's use of a single canon of construction, that "it cannot be presumed that any clause of the constitution is intended to be without effect."160 But Marshall does not rest his interpretation of this provision on that canon alone. He also relied upon another canon of construction, "Affirmative words are often, in their operation, negative of other objects than those affirmed."161 Furthermore, he invoked the plain meaning of the constitutional text.162

In a similar fashion, Marshall employed a number of intratextual arguments163 in support of his conclusion that the

158. Eskridge & Frickey, supra note 93, at 351.
159. See Huhn, supra note 93, at 482.
160. Marbury v. Madison, 5 U.S. (1 Cranch) 137, 174 (1803). This canon formed the major premise of syllogism 5. See supra text accompanying note 129.
162. See id. at 175 ("[T]he plain import of the words seems to be, that in one class of cases its jurisdiction is original, and not appellate; in the other it is appellate, and not original.").
163. Intratextual arguments and structural arguments are similar in that both refer to other terms of the text, or to its structure, to interpret a provision of legal text. Intratextual arguments differ from structural arguments in that intratextual arguments seek to ascertain the definition of a term by comparing it to other portions of the text, while structural arguments seek to ascertain the policy that is served by the relevant provision of legal text. See generally Akhil Amar, Intratextualism, 112 HARv. L. REV. 747 (1999).
courts are bound to obey the Constitution, and are obligated to strike down laws that conflict with it. From the general jurisdiction clause of Article III extending the power of the federal courts to all cases arising under the Constitution, Marshall concluded that the federal courts must give effect to the Constitution. From specific provisions prohibiting state taxes on exports, ex post facto laws, and convictions for treason based on the testimony of a single witness, Marshall inferred that "the framers of the constitution contemplated that instrument as a rule for the government of courts, as well as of the legislature." After observing that the Constitution requires judges to take an oath to support the constitution, he concluded that it would be immoral if the Constitution did not permit judges to enforce it. And he inferred the superiority of the Constitution to mere statutes from the phrasing of the Supremacy Clause.

In addition to these textual arguments, Marshall proffered powerful policy and tradition arguments in support of the principle of judicial review. He observed that if statutes

164. See U.S. CONST. art. III, § 2, cl. 1 ("The judicial power of the United States is extended to all Cases . . . arising under this Constitution.").

165. See Marbury, 5 U.S. (1 Cranch) at 179 ("Could it be the intention of those who gave this power, to say that, in using it, the constitution should not be looked into?").

166. See U.S. CONST. art. I, § 9, cl. 5.

167. See id. cl. 3.

168. See id. art. III, § 3, cl. 1.

169. Marbury, 5 U.S. (1 Cranch) at 179-80 (emphasis added).

170. See U.S. CONST. art. VI, cl. 3 ("The Senators and Representatives before mentioned, and the Members of the several State Legislatures, and all executive and judicial Officers, both of the United States and of the several States, shall be bound by Oath or Affirmation, to support this Constitution . . . .").

171. Marshall declared,

Why otherwise does it direct the judges to take an oath to support it? This oath certainly applies, in an especial manner, to their conduct in their official character. How immoral to impose it on them, if they were to be used as the instruments, and the knowing instruments, for violating what they swear to support!

Marbury, 5 U.S. (1 Cranch) at 180.

172. See id. ("It is also not entirely unworthy of observation, that in declaring what shall be supreme law of the land, the constitution is first mentioned; and not the laws of the United States generally, but those only which shall be made in pursuance of the constitution, have that rank."). The Supremacy Clause states, "The Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land." U.S. CONST. art. VI, cl. 2.
that are contrary to the Constitution are binding law, "then written constitutions are absurd attempts, on the part of the people, to limit a power in its own nature illimitable." He added,

This doctrine would subvert the very foundation of all written constitutions. ... That it thus reduces to nothing what we have deemed the greatest improvement on political institutions—a written constitution—would of itself be sufficient, in America, where written constitutions have been viewed with so much reverence, for rejecting the construction.¹⁷⁴

By interweaving textual, intent, tradition, and policy arguments, all pointing to the same conclusion, Marshall makes the Court's decision in *Marbury* seem inevitable. By drawing together these separate strands, Marshall created a powerful legal argument in support of the principle of judicial review. Marshall thereby makes *Marbury* seem like an easy case.

Hard cases, in contrast, are cases where plausible legal arguments may be created for two contradictory results. Deductive logic is powerless to resolve conflicts between competing legal arguments. Instead, hard cases are resolved by balancing. This balancing proceeds on two levels: courts evaluate the strength of a legal argument standing alone and evaluate its strength as compared to other types of arguments.

B. Resolving Conflicts Among Competing Legal Arguments

There are two types of conflicts among legal arguments: "intramodal"¹⁷⁶ and "intermodal"¹⁷⁷ conflicts. Intramodal challenges attack legal arguments on their own terms, while in-

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¹⁷⁴. *Id.* at 178.
¹⁷⁵. In describing Marshall's opinion in *Marbury*, Akhil Amar notes, Missing from this mosaic, interestingly, is precedent. Although Marshall could have invoked various judicial decisions in support of his analysis of judicial review—prior state court invocations of state constitutions against state legislatures, a famous circuit court ruling striking down a federal statute, an earlier Supreme Court case invalidating a state statute on Supremacy Clause grounds—he does not. Akhil Amar, Foreward: The Document and the Doctrine, 114 HARV. L. REV. 26, 32 (2000).
¹⁷⁶. The term "intramodal" was coined in J.M. Balkin & Sanford Levinson, *Constitutional Grammar*, 72 TEX. L. REV. 1771, 1796 (1994).
¹⁷⁷. Balkin and Levinson call these "cross-modal" attacks. *Id.*
termodal challenges attack the category of argument asserted.\textsuperscript{178}

The intramodal challenges to legal arguments are self-evident. Each type of legal argument—text, intent, precedent, tradition, and policy—has characteristic strengths and weaknesses, and is subject to intramodal attack against one or more of its constituent elements. For example, one might challenge the applicability of a textual canon of construction, the strength of the evidence of the Framers' intent, the level of the court that issued an opinion cited as precedent, the

\textsuperscript{178} The twenty-five types of intramodal attacks are as follows:

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<td>B. ATTACKS ON ARGUMENTS THAT ARE BASED UPON CANONS OF CONSTRUCTION</td>
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<td>C. ATTACKS ON INTRATEXTUAL ARGUMENTS</td>
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<td>7. The Evidence of Intent Is Not Sufficient</td>
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<td>9. The Person Whose Intent Was Proven Did Not Count</td>
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<th>III. ATTACKS ON ARGUMENTS BASED UPON PRECEDENT</th>
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<td>10. The Case Does Not Stand for the Cited Proposition</td>
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<td>12. The Opinion Was Not Issued By a Controlling Authority</td>
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<td>17. The Case Has Been Overruled</td>
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<th>IV. ATTACKS ON ARGUMENTS BASED UPON TRADITION</th>
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<td>19. No Such Tradition Exists</td>
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<td>20. There Is a Conflicting Tradition</td>
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<th>V. ATTACKS ON ARGUMENTS BASED UPON POLICY</th>
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<td>21. The Predictive Judgment Is Not Factually Accurate</td>
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<td>24. The Policy Is Not Served In This Case</td>
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<td>25. The Policy Is Outweighed by a Competing Policy</td>
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Huhn, supra note 93, at 458-66.
continued viability of a tradition, or the likelihood that a policy will be achieved. The strength of a legal argument depends in part upon an evaluation of effectiveness of these intramodal attacks.

The strength of legal arguments is also measured intermodally. Intermodal attacks on legal arguments are not as familiar, but are easily described. Intermodal attacks involve a comparison between two or more different types of arguments, such as text versus intent, or precedent versus policy. Intermodal arguments implicitly or explicitly contend that one type of argument has more persuasive force than another.

The difference between intramodal and intermodal conflict may be clarified by the following example. Suppose that an attorney has asserted a legal argument based upon precedent. Opposing counsel could attack this argument intramodally by challenging the authoritativeness or applicability of the cited case. Opposing counsel could also mount an intermodal attack by asserting that the weight of the precedent is subordinated by a competing policy. The remainder of this article describes how Justice Cardozo expressly weighed one type of argument against another to resolve an intermodal conflict in the case of Jacob & Youngs, Inc. v. Kent. 179

C. Jacob & Youngs, Inc. v. Kent

Justice Cardozo's opinion in Jacob & Youngs, Inc. v. Kent, is an old chestnut of the law of contracts. 180 It features intermodal conflicts both of precedent versus policy and of text versus intent.

Jacob and Youngs, a building contractor, built a house for Kent, and sued to recover the balance owed on the contract. 181 The owner, Kent, refused to pay the full contract price because the contractor had failed to install the type of pipe specified in the contract (Reading pipe), instead substituting pipe manufactured by other companies. 182 The contractor offered sufficient evidence tending to prove that the error was unintentional. 183 The contractor also offered evidence, appar-

180. This case is reprinted in eleven out of thirteen leading contracts casebooks. Cunningham, supra note 67, at 1459.
181. Jacob & Youngs, 129 N.E. at 890.
182. See id.
183. See id. at 890. ("The evidence sustains a finding that the omission of the
ently stipulated to by the owner, that the pipe used was the same in quality, appearance, market value, and cost as Reading pipe. The trial court, however, excluded this evidence and entered a directed verdict for the owner.

The first issue in *Jacob and Youngs* concerned liability. Was the evidence proffered by the contractor admissible and sufficient to prove that the contractor had "substantially performed" the contract? Under the law of New York, if a contractor had substantially performed its obligations, the owner owed the contractor the contract price less an allowance for any damages sustained by the owner due to the contractor's failure to fully perform. If the contractor did not substantially perform its obligations, however, then the contractor could have no recovery under the contract.

The second issue in *Jacob & Youngs* went to damages. If the contractor "substantially performed" the contract, how much of an allowance or deduction from the contract price was the owner entitled to on account of the contractor's failure to install the correct brand of pipe? Since most of the pipe had already been encased in the walls, it would have been prohibitively expensive to replace it with Reading pipe. Thus, if the owner's allowance was the cost of replac-

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prescribed brand of pipe was neither fraudulent nor willful. It was the result of oversight and inattention of the plaintiff's subcontractor.

184. See *id.* at 890. The court refers to the "stipulation" at the close of its opinion. *See id.* at 891.

185. *See id.* at 890.

186. *Id.* at 890-91.


188. See *Smith v. Brady*, 17 N.Y. 173 (App. Div. 1858). In *Jacob & Youngs*, Cardozo held that a reasonable jury could have found the contractor's substitution of pipe was "neither fraudulent nor willful." *Jacob & Youngs*, 129 N.E. at 890. Instead, the substitution was found to be "the result of the oversight and inattention of the plaintiff's subcontractor." *Id.* He also found that the proffered evidence "would have supplied some basis for the inference that the defect was insignificant in its relation to the project." *Id.* Accordingly, Cardozo held that the trial court erred by excluding the contractor's evidence and in directing a verdict for the owner. *Id.* Because the owner had stipulated to the accuracy of the contractor's contention that the pipe that was used was equal in cost and quality to Reading pipe, Cardozo entered a directed verdict for the contractor. *Id.* at 892.


190. *See id.* at 890 ("The plumbing was then encased within the walls except in a few places where it had to be exposed. Obedience to the order meant more than the substitution of other pipe. It meant the demolition at great expense of substantial parts of the completed structure.").
ing the non-conforming pipe, the contractor would have no recovery. On the other hand, if the owner's allowance was the difference between the value of the house with the pipe that was used and the value that the house would have had if Reading pipe had been installed—an amount that the court stated was "either nominal or nothing"—then the contractor would be entitled to all or virtually all of the remainder of the unpaid contract price.

Cardozo and the majority of the court ruled in favor of the contractor on both liability and damages. In his opinion Cardozo introduced two innovations into the law of contracts. First, on the issue of liability, Cardozo developed a multi-factor balancing test to determine the meaning of the term "substantial performance." Second, regarding the measurement of damages, Cardozo held that when a contract has been substantially performed and the cost of completing the contract strictly according to its terms is substantially disproportionate to "the good to be attained," the proper measure of damages is not "cost of completion" but "difference in value." What makes Cardozo's opinion on the issue of damages intriguing is that he expressly acknowledges two intermodal conflicts.

The liability issue presented Cardozo with a "question of ambiguity." Precisely what is the legal definition of "substantial performance?" How is a jury to decide whether or not a contractor has substantially performed a contract? Cardozo first noted that whether a contractor's performance is substantial "cannot be settled by a formula." Instead, he developed a multi-factor balancing test based upon what he perceived to be the underlying policies served by the substantial performance test. Cardozo identified four such factors: "the purpose to be served, the desire to be gratified, the excuse for deviation from the letter, the cruelty of enforced adherence.

191. See id. at 891.
192. Id.
193. See infra note 197 and accompanying text.
194. Jacob & Youngs, 129 N.E. at 891.
195. Id.; see also infra note 200 and accompanying text.
196. Jacob & Youngs, 129 N.E. at 891.
197. Id. The Restatement, Second, of Contracts quickly adopted Cardozo's factors for determining whether the contractor had substantially performed the contract. "This doctrine of substantial performance is one of Cardozo's most important contributions to the law of contracts, having been showcased in a Re-
Cardozo acknowledged that this multi-factor standard, compared to the bright-line rule of forfeiture, was relatively indeterminate, but he vigorously defended the standard against the rule:

Those who think more of symmetry and logic in the development of legal rules than of practical adaptation to the attainment of a just result will be troubled by a classification where the lines of division are so wavering and blurred. Something, doubtless, may be said on the score of consistency and certainty in favor of a stricter standard. The courts have balanced such considerations against those of equity and fairness, and found the latter to be the weightier. Accordingly, in determining the definition of "substantial performance," Cardozo opted for a flexible standard on policy grounds.

Cardozo then turned to the issue of damages, which presented a question of validity. Should the contractor be permitted to recover the unpaid portion of the contract price, or should its recovery be offset by the cost of replacing the pipe that had been installed in the house? Here, Cardozo was apparently constrained by both precedent and the express terms of the contract.

In *Spence v. Ham*, the New York Court of Appeals had previously specified the measure of damages, holding that in cases of substantial performance, the contractor was entitled to recover the contract price less the cost of completing the contract according to its terms. In *Jacob & Youngs*, Cardozo created an exception to *Spence*, and held that the owner's allowance in cases of substantial performance was to be measured by the difference in value between the promised

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199. *See Spence v. Ham*, 57 N.E. 412, 413 (N.Y. 1900) ("Unsubstantial defects may be cured, but at the expense of the contractor, not of the owner.").
performance and the actual performance, rather than by the cost of completing the contract strictly according to its terms. In so ruling, Cardozo explained that the same policy considerations supporting the substantial performance doctrine also supported this liberal measure of recovery for the contractor: "The rule that gives a remedy in cases of substantial performance with compensation for defects of trivial or inappreciable importance has been developed by the courts as an instrument of justice. The measure of the allowance must be shaped to the same end."

Cardozo thus subordinated precedent to policy in ascertaining the measure of damages. But Cardozo did not rely solely on this policy argument. He also invoked "the intent of the parties" to determine the proper measure of damages.

It was necessary for Cardozo to invoke the intent of the parties because the language of the contract practically dictated a result in favor of the owner. The contract stated that "the work included in this contract is to be done under the direction of the [owner's] Architect, and that his decision as to the true construction and meaning of the drawings and specifications shall be final."

The contract also expressly provided that if the contractor failed to perform any part of the

200. Cardozo stated,

It is true that in most cases the cost of replacement is the measure.
The owner is entitled to the money which will permit him to complete, unless the cost of completion is grossly and unfairly out of proportion to the good to be attained. When that is true, the measure is the difference in value.

*Jacob & Youngs*, 129 N.E. at 891 (citation omitted).

201. *Id.* at 892.

202. Cardozo explained that in interpreting a contract, the courts "will be slow to impute [to the parties] the purpose" of imposing a forfeiture upon the contractor:

This is not to say that the parties are not free by apt and certain words to effectuate a purpose that performance of every term shall be a condition of recovery. That question is not here. This is merely to say that the law will be slow to impute the purpose, in the silence of the parties, where the significance of the default is grievously out of proportion to the oppression of the forfeiture.

*Jacob & Youngs*, 129 N.E. at 891. Legal arguments based upon "intent" view the law not as the legal text itself, but what was meant by the drafters of the text. "Intent" may refer to the intent of the framers, the intent of the legislature, administrative intent, the intent of the parties, or the intent of the testator. *See* Huhn, *supra* note 93, at 443-44.

contract, the owner was entitled to provide the materials and
deduct the cost from any amounts due under the contract.\textsuperscript{204}

The dissenting opinion in \textit{Jacob \& Youngs} emphasized
the textual obligations of the contractor: “Defendant con-
tracted for pipe made by the Reading Manufacturing Com-
pany. What his reason was for requiring this kind of pipe is
of no importance. He wanted that and was entitled to it.”\textsuperscript{205}

Cardozo admitted that the parties were free to contract
for exact performance. He indicated, however, that there is a
presumption against such a construction of the contract
“where the significance of the default is grievously out of pro-
portion to the oppression of the forfeiture.”\textsuperscript{206}

Just as Cardozo chose policy over precedent to interpret
the law of “substantial performance,” he also chose “the intent
of the parties” over “text” to interpret the contract.\textsuperscript{207} As

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{204} \textit{Id.} at 110. Cardozo has been criticized for failing to mention these con-
tractual provisions in his opinion. \textit{See} Cunningham, \textit{supra} note 67, at 1440. On
motion for reargument, the Court unanimously stated that “the court did not
overlook the specification which provides that defective work shall be replaced,”
and explained that the court had treated the specification not as a dependent
condition to payment, but as an independent promise, for which the remedy is
not forfeiture but damages. \textit{Jacob \& Youngs}, Inc. v. Kent, 130 N.E. 933, 933
(N.Y. 1921). But how does one tell the difference between a dependent condition
and an independent promise? Cardozo stated, “Considerations partly of justice
and partly of presumable intention are to tell us whether this or that promise
shall be placed in one class or another.” \textit{Jacob \& Youngs}, 129 N.E. at 890. He
further explained,
\begin{quote}
From the conclusion that promises may not be treated as dependent to
the extent of their uttermost minutiae without a sacrifice of justice, the
progress is a short one to the conclusion that they may not be so
treated without a perversion of intention. Intention not otherwise re-
vealed may be presumed to hold in contemplation the reasonable and
probable. If something else is in view, it must not be left to implication.
There will be no assumption of a purpose to visit venial faults with op-
pressive retribution.
\end{quote}
\textit{Id.} at 891.

\item \textsuperscript{205} \textit{Jacob \& Youngs}, 129 N.E. at 892 (McLaughlin, J., dissenting).

\item \textsuperscript{206} \textit{Id.} at 891.

\item \textsuperscript{207} \textit{See supra} note 202 and accompanying text. Cunningham observes that
Cardozo's opinion in \textit{Wood v. Lucy, Lady Duff-Gordon} “protects the reasonable
expectations of contracting parties even while it necessarily locates those expec-
tations outside the four corners of the written agreement.” Cunningham, \textit{supra}
note 67, at 1398. Another scholar notes,
\begin{quote}
When parties enter into a contract, they rarely foresee every circum-
stance that might arise during the course of performance. How should
a court deal with problems not expressly dealt with in the contract? In
two of the most significant contract cases – \textit{Wood v. Lucy, Lady Duff-
Gordon}, and \textit{Jacob \& Youngs v. Kent} – the Court of Appeals looked be-
yond the language of the contract to reach results that appeared more
\end{quote}
\end{itemize}
\end{footnotesize}
noted above, each type of legal argument—text, intent, precedent, tradition, and policy—reflects a different ordering in the values that are served by our system of laws.

Intermodal arguments, in effect, represent conflicts among these underlying values. In Jacob & Youngs, the crux of the case for Cardozo was the balance between "consistency and certainty" on the one hand, and "equity and fairness" on the other. Cardozo elevated equity over consistency, and as a result he chose policy over precedent and intent over text. He observes, "Those who think more of symmetry and logic in the development of legal rules" would be troubled by his reasoning; but the fact is that no syllogism or system of logic can perform the evaluative and balancing function demanded of legal reasoning in hard cases.

Furthermore, like Marshall's opinion in Marbury, Cardozo's opinion in Jacob & Youngs exemplifies the recommendation of Eskridge and Frickey that legal arguments should resemble a cable rather than a chain. The power of Cardozo's reasoning arises in part from the fact that he weaves precedent, intent, and policy together in defining and applying the substantial performance rule.

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in line with the party's intentions.


208. See Jacob & Youngs, 129 N.E. at 891; see also *supra* note 198 and accompanying text.

209. See Jacob & Youngs, 129 N.E. at 891.

210. According to Cunningham, the signature of Cardozo's approach to legal reasoning is that he "recognized and attempted to harmonize the many competing values at stake in the law of contracts." Cunningham, *supra* note 67, at 1406. Eveline Feteris concurs that while logic provides the form of legal reasoning, it does not provide its substance: "[A] logical approach is important for the formal analysis and evaluation of legal argumentation.... Logic does not offer norms by which to evaluate the material and procedural aspects of legal argumentation." FETERIS, *supra* note 2, at 39.

Feteris cites the Belgian legal philosopher Chaim Perelman for the proposition that in hard cases, questions of law are determined not through logic, but through a "weighing of values."

According to Perelman, the justification of a decision in law is not formal proof.... If the meaning of a rule in a concrete case is unclear, the judge must interpret the rule. The choice of a particular interpretation is never compelling, but is always based on a weighing of values, a weighing of what is the most fair and legally correct decision.

*Id.* at 52.

211. See *supra* note 158 and accompanying text.
Syllogistic reasoning is suited to formalist analysis and categorical doctrine. But hard cases by definition are cases where either the definition of the terms of rule ("What is 'substantial performance'?") or its validity ("Is 'cost of completion' or 'difference in value' the measure of damages in cases of substantial performance?") is challenged. Such cases are resolved by value judgments that are framed by intramodal and intermodal legal arguments.\footnote{See supra notes 176-79.}

The susceptibility of a legal argument to an intramodal attack determines the strength of the argument within its category. In addition, the comparative strength of the category of the argument must be measured against that of other categories in the context of a particular case. The ultimate persuasiveness of an argument is a function of both its intramodal and intermodal strength. These determinations are evaluative, not definitional. Careful examination of the legal reasoning in hard cases such as \textit{Jacob & Youngs} reveals the limits of syllogistic logic.

VI. CONCLUSION

At one time law was considered to be a science; this belief was associated with the concept of "natural law." And just as law was considered a science, legal reasoning was considered to be a species of deductive logic, and judicial opinions were summarized or "briefed" as if they were syllogisms, arguments of deductive logic.

A case brief is not a single syllogism of deductive logic; rather, it consists of strands or chains of syllogisms—"polysyllogisms." The polysyllogistic approach is a useful means for describing the underlying structure of a judicial opinion. This approach reveals that the base minor premises of legal arguments consist of items of evidence of what the law is, while the base major premises are the categories of legal arguments that may be legitimately made. Furthermore, the syllogistic approach to briefing cases reveals that there are two types of hard cases: cases where a rule of law is ambiguous, and cases where the validity of a rule is in question. Questions of ambiguity arise when the minor premise of a proposition of law is challenged, while questions of validity arise when the major premise of a proposition of law is chal-
Hard cases are cases where two or more valid legal arguments lead to contradictory conclusions.

It is now recognized, however, that the purpose of legal reasoning is not to prove to others the truth of a statement of fact, but is rather to persuade others about how the law ought to be interpreted and applied. Persuasive legal argumentation resembles not a chain of syllogisms, but a cable of mutually supportive arguments. Although legal reasoning may logical in form, in substance it is evaluative.

Accordingly, although syllogistic reasoning plays a central role in briefing judicial opinions, logic alone cannot describe hard cases. When we attempt to reduce a judicial opinion to an argument of deductive logic, the aspects of legal reasoning that are not deductive are exposed. A system of pure logic works only in easy cases, i.e. cases where the validity of the rule of law is unchallenged and the terms of rule are unambiguous. Hard cases are resolved by a complex balancing of intramodal and intermodal arguments, in which the court evaluates not only the strength of individual arguments, but also the relative weight of the values that support our legal system, as implicated in the particular case.