

A Basis for Legal Reasoning:

Logic On Appeal

By Mary Massaron Ross

The training of lawyers is a training in logic. The process of analogy, discrimination, and deduction are those in which they are most at home. The language of judicial decision is mainly the language of logic. Oliver Wendell Holmes, *The Path of the Law*, 10 Harv. L. Rev. 457 (1897) at 167 of *The Essential Holmes* (Richard A. Posner ed., 1992).

Logic has been central to legal education and thinking for many years. In the 1800s, when Christopher Columbus Langdell, dean of Harvard Law School, published the first modern casebook, the classical system “was premised on the view that law is complete, formal, and conceptually ordered system that satisfies the legal norms of objectivity and consistency.” Gary Minda, *Postmodern Legal Movements: Law and Jurisprudence at Century’s End 1* (New York Univ Press 1995). The system was believed to be capable of “providing uniquely correct solutions or ‘right answers’ for every case brought for adjudication.” *Id.* at 13. It could “dictat[e] logically correct answers through the application of abstract principles derived from cases.” *Id.*

The Modern Attack on Formalism and Logic

But modernist thinking weakened acceptance for the Langdellian view of the law. Justice Holmes reflected this modern skepticism about the role of logic in his oft-quoted statement that “[t]he life of the law has not been logic: it has been experience.” Oliver Wendell Holmes, Jr., *The Common Law* 1 (1881). Holmes was not alone in rejecting the idea that logic controls the outcome of judicial decisions. With the advent of the legal realism, some believed that “a judge decided which way he wanted a decision to go and then produced an elegant chain of reasoning

to lead to his predetermined conclusion....” J. G. Riddall, *Jurisprudence* 259 (2d ed. 1999).

Lawyers increasingly asserted that “a judge (or an academic) ‘constructs the materials to reach a desired result, and that the result is based on some real interest in winning a certain class of cases, either because they are significant to maintaining economic or political control or because they help solidify a certain ideological story that is helpful to maintaining domination.’” *Id.* quoting Duncan Kennedy, *The Structure of Blackstone’s Commentaries*, 28 *Buff L Rev.* 209 (1979). Judge Jerome Frank, for example, took the position that even when the rules are clear, they do not control the outcome. Jerome Frank, *Law and the Modern Mind* (2d ed. 1963).

Adherents of the legal process school of jurisprudence likewise viewed law as less a matter of logic than of policy. In the legal scholars’ view, decisions should be based not on the reasoned application of substantive theory but “on process values.” Minda, *supra* at 35; See also Henry M. Hart, Jr., & Albert M. Sacks, *The Legal Process: Basic Problems in the Making and Application of Law* (tent. ed. 1958) (Eskridge W. & Frickey P. eds., Foundation Press 1994).

Lawyers increasingly articulated the view that “the conscious process of legal reasoning is not really what accounts for a judge’s decisions.” Daniel A. Farber & Suzanna Sherry, *Beyond All Reason: The Radical Assault on Truth in American Law* 35 (1997). One modern scholar, Derrick Bell, for example, wrote that law is “not a formal mechanism for determining outcomes in a neutral fashion—as traditional legal scholars maintain—but is rather a ramshackle ad hoc affair whose ill-fitting joints are soldered together by suspect rhetorical gestures, leaps of illogic, and special pleading tricked up as general rules, all in a decidedly partisan agenda that wants to wrap itself in the mantle and majesty of the law.” Derrick Bell, *Who’s Afraid of Critical Race Theory?* 1995 *U. Ill. L. Rev.* 893, 899-900. Proponents of this view believe that “the legal system cannot be guided by rational thought; instead, its predictability derives from

the unconscious mindsets of lawyers and judges.” Farber & Sherry, *supra* at 49. This trend to diminish logic as a basis of judicial decision making is justified on the basis of its indeterminate nature. Proponents insist that legal reasoning “does not provide concrete, real answers to particular legal or social problems.” David Kairys, *Law and Politics*, 52 Geo. Wash. L. Rev. 243, 244-247 (1984). Logic, they argue, leaves a range of choices.

Formalism is typically associated with “the logical, impersonal, objective, constrained character of legal reasoning.” Richard A. Posner, *Judicial Opinion Writing: Judges’ Writing Styles (And Do They Matter?)*, 62 U. Chi. L. Rev. 1421, 1432 (1995). But an approach to legal reasoning that heavily emphasizes formal logic has been subject to attack as overly rigid and too abstract. Pragmatists advocate an approach by which the judge decides “the nonroutine case [by] ... trying to come up with the most reasonable result in the circumstances, with due regard for such systematic constraints on the freewheeling employment of ‘reason’ as the need to maintain continuity with previous decisions and respect the limitations that the language and discernible purposes of constitutional and statutory texts impose on the interpreter.” *Id.* at 1432-1433. As a result, rhetoric rather than logic has become a central tactic of persuasion.

Logic as an Advocacy Tool

Regardless of whether an appellate judge accepts logic as a determinant or adheres to a more pragmatic approach, as long as the rule of law requires like cases to be treated alike and judges to apply statutes and the constitution as written, logic remains an important part of any argument on appeal. And while the academic debates over jurisprudence have shifted from earlier times, advocates still need to employ persuasive tools that include both logic and rhetoric. Aristotle long ago taught that rhetoric was “an offshoot of logic, the science of human reasoning.” Edward P. J. Corbett & Robert J. Connors, *Classical Rhetoric for the Modern*

Student 32 (1999). And his comprehensive approach to persuasion remains a sound strategy for today. An advocate need not resolve the jurisprudential debates of scholars and judges over the grounds of judicial decision making in order to arrive at a persuasive strategy for arguing an appeal. But recognizing these debates has important ramifications.

Lawyers who believe that the unconscious mindset or the conscious evaluation of institutional strengths and policy considerations are determinants of judicial decisions will focus on rhetoric that tries to persuade the court on these terms. The belief that rhetorical tricks can help an advocate with a weak case prevail is not new. Cicero, for example, taught orators that if their cause was “discreditable,” they should use the “subtle” approach to achieve a favorable result “covertly, through dissimulation....” Cicero, *Rhetorica Ad Herennium* 13-21 (Harvard Univ. Press 1999). Aristotle, too, discussed the use of emotion in argument, explaining that “anger, pity, fear, and all other such and their opposites” could alter the judgments of listeners. Aristotle, *The Art of Rhetoric* 141 (Penguin Classics 1991). Aristotle distinguished appeals to emotion (pathos) from the other modes of persuasion including appeals to reason (logos) and appeals to personality or character (ethos). Corbett & Connors, *supra* at 32.

According to Aristotle, “[r]hetoric is the counterpart of dialectics” or logic. Aristotle, *supra* at 66. He explained that “all men engage in them both after a fashion.” *Id.* But he emphasized that “speakers ought not to distract the judge by driving him to anger, envy or compassion....” *Id.* at 67. An opponent who engages in such practices can best be defeated by an approach that precisely reveals the logic (and illogic) of the arguments presented. Naming the rhetorical strategy and explaining why it serves as a distractor reminds the court that the decision should be based upon the application of reasoned, neutral principles to arrive at the correct result.

Despite the modern view that formal logic rarely controls the outcome, it may be, and often is, a critical element in the decision making process. At the appellate level, reasoning remains a primary determinant of judicial decision making. Thus, logic is critical on appeal. As a result, appellate advocates must learn how to best frame their arguments in the classic style of logic. Advocates who seek to prevail must test the logic of their arguments. Advocates must also search out any weakness in the logic of their opponent's argument. The ability to engage in such analytically precise and logical thinking is a hallmark of good advocacy. Like any skill, it requires practice and training. Study of books on rhetoric and logic is helpful. Aristotle, Cicero, and Quintilian all discussed logic and rhetoric in their writings—and what they had to say is surprisingly modern. Many newer books on logic and reasoning exist and also provide analytical tools for advocates when constructing or refuting a logical argument. Analysis of judicial opinions to lay bare the reasoning is also useful. Identifying the logical structure of an opponent's argument and then searching for structural or factual flaws is important. But few law schools directly teach logic. And few appellate briefs directly discuss it.

Inductive Reasoning Defined

Logicians divide logical reasoning into two categories: inductive and deductive. Inductive reasoning is based on generalizing from our existing knowledge or experience. David Kelley, *The Art of Reasoning* 453 (1998). The premises “of an inductive argument are not offered as *conclusive* evidence for the truth of their conclusions, but as evidence for the *likelihood* or *reasonable probability* of the conclusion's truth.” Douglas Lind, *Logic and Legal Reasoning* 9 (2001). Inductive reasoning generally takes one of two forms, inductive generalization or reasoning by analogy. *Id.*

Inductive generalization involves drawing a general conclusion from a number of particular instances. Lind, *supra* at 15. The process of inductive generalization stems from science; scientists hypothesize certain outcomes and test them by repetition. Ruggero J. Aldisert, *Logic for Lawyers: A Guide to Clear Legal Thinking* 6-2 (1992). If the scientist observes something to be true in every instance in a test, then he can infer that is true in other instances as well. *Id.* Inductive generalization is therefore based on the concept of probability. A “conclusion reached by inductive reasoning is not considered a truth; rather, it is a proposition that is more probably true than not.” *Id.* at 6-6.

Inductive reasoning may also be based on analogy. Reasoning by analogy is based on the argument “that because the two examples are like in many ways they are also alike in one further specific way.” Anthony Weston, *A Rulebook for Arguments* 19 (3d ed. 2000). In other words, the advocate claims “that since some percentage of one or more things (the sample) possesses a property, an inference can be made that some similar thing or things (the target) are likely to have that property as well.” Lind, *supra* at 10. Analogies require a “relevantly similar example.” Weston, *supra* at 21. Analogical reasoning is used to determine whether precedent is controlling. See generally, Edward H. Levi, *An Introduction to Legal Reasoning* (1949). The “steps are these: similarity is seen between cases; next the rule of law inherent in the first case is announced; then the rule of law is made applicable to the second case.” Levi, *supra* at 2. It is also used in numerous other ways in legal reasoning.

Reasoning by enumeration (inductive generalization from enumerated examples) and reasoning by analogy are similar. But in reasoning by enumeration, the argument is based on reviewing numerous instances of the same thing. For example, an inductive generalization might be reached about the color of horses by examining many horses. If one million horses are

examined and none are white, one might conclude that horses are not white. In contrast, reasoning by analogy involves comparing different things that have some similar attribute. One might, for example, analogize a donkey to a horse and conclude that if no donkeys are white, then no horses are white. These examples make clear that the outcome of inductive reasoning is not necessarily true as a matter of logic; much depends on the comparison, the sample, and the breadth of the conclusion.

Testing Inductive Logic

When analyzing an inductive argument, the advocate should first “[i]dentify the two things being compared (A and B) and the property (P) that is being attributed to B in the conclusion.” David Kelley, *The Art of Reasoning* 498 (3d ed. 1998). The advocate should then look for “the property (S) that is supposed to make A and B similar.” To assess the strength of an inductive generalization, consider the size of the sample relative to the size of the target. If the analysis is based on a complete set, then the conclusion will be strong. But if a complete set is not used for the analysis, the conclusion may be weak. The advocate must test the strength of the conclusion by examining the sample’s size and its representativeness. The advocate should also consider the strength and number of any counterexamples. Weston, *supra* at 10-18. In a search for counterexamples, look for prototypical cases, but also “referents close to the borderline of the concept, because many generalizations are true only of prototypical cases, not of atypical” ones. Kelley, *supra* at 458-459.

Evaluation of the strength of an analogy is based on similar considerations. The advocate should consider the size of the sample, the percentage of the sample that has the property, the similarities or positive resemblances, the relevance of the similarities or dissimilarities, the diversity within the sample, and the breadth of the conclusion. Lind, *supra* at 11-12. Analogies

“do not require that the example used as an analogy be *exactly* like the example in the conclusion.” Weston, *supra* at 21. Instead, the analogy requires “*relevant* similarities.” Thus, the advocate should analyze whether the analogy is based on relevant or irrelevant similarities.

Whether an argument is based on the fallacy of a false analogy is often subject to debate. The analogy may be rejected if the comparison is based on irrelevant or inconsequential similarities or ignores dissimilarities. Corbett & Connors, *supra* at 69. *United States v. Leonard*, 494 F.2d 955 (D.C. Cir. 1974) illustrates one such argument. A federal circuit court of appeals analogized paid informers and accomplices who give testimony against their cohorts to witnesses who are granted immunity. The comparison was based on the notion that all had an interest in testifying against another at trial beyond mere truth-telling. *Id. quoted in Lind, supra* at 98. But the Wisconsin Supreme Court later characterized the analogy as “questionable,” concluding that it lacked a “rational basis.” *Linse v. State*, 286 N.W.2d 554 (1980) in *Lind, supra* at 97-98. A Maryland appellate court’s attack on an analogy exemplifies another argument of this kind. In *Conyers v. State*, 691 A.2d 802 (1997), the appellant argued that the same rules should apply to in-court identification procedures as are applied to pre-trial identifications. The court called this a false analogy because the policy concerns raised by overly suggestive pre-trial identifications are absent in court where the identification is inherently suggestive since the defendant is always sitting at the trial table. *Conyers*, in *Lind, supra* at 102-103.

These examples illustrate both the rhetorical strength of analogies and some strategies to refute them. The advocate can explain why the point of comparison is not relevant. Or the advocate can point out that there is no empirical or logical basis for the conclusion that the comparison is based on factors that are the same in the relevant aspect. These strategies allow

the advocate to diminish the analogy's force as an argument by laying bare the logic or lack thereof that forms the underpinnings for the comparison.

The fallacy of faulty generalization may also mar a conclusion based on inductive reasoning. Corbett & Connors, *supra* at 68-69. If a conclusion is based on inadequate evidence, then the generalization is faulty. The advocate should determine whether the evidence that has been used as the basis for the generalization is relevant, whether it is representative, and whether it is numerous enough to permit the conclusion. *Id.* at 68. To the extent that evidence in support of a generalization is based on accepting authority of some kind, the advocate should evaluate whether the authority is biased or prejudiced, incompetent, or outmoded. In addition, the advocate should check to see if the authority has been inaccurately quoted, misinterpreted, or quoted out of context. *Id.* Any of these can be a basis for undercutting the grounds for the generalization. *Id.*

Deductive Logic Defined

Deductive reasoning, as Aristotle long ago taught, is based on the use of a syllogism to prove a conclusion on the basis of two other propositions. Aldisert, *supra* at 4-2. This kind of reasoning is “an act of the mind in which, from the relation of two propositions to each other, we infer, i.e., understand and affirm, a third proposition.” *Id.* The “truth of the conclusion is ‘contained within’ the premises; the conclusion does not involve an assertion that ‘goes beyond’ what is already stated, by implication, in the premises.” Lind, *supra* at 7. Typically, deductive reasoning proceeds from a general proposition to a conclusion that is either a particular proposition or another general proposition. The truth of the conclusion is based upon whether the premises are true and whether the form of the argument is valid. An argument is valid when

it “possesses a formal structure such that the premises, if true, provide conclusive grounds for the truth of the conclusion.” *Id.* at 111.

Testing Deductive Logic

A “valid syllogism has no internal gap whatever; if the premises are true, the conclusion must be true; you cannot accept the premises and deny the conclusion without contradicting yourself.” Kelley, *supra* at 239. The advocate can therefore challenge a conclusion by attacking the truth of the premises or by attacking the form of the syllogism. False premises don’t prove anything. And premises that are not logically related to the conclusion are not grounds of proof.

Testing an argument based on deductive reasoning requires the advocate to analyze the form of the argument. Syllogisms can take a number of forms, including a categorical one that is based on assertions about the relationship between classes. For example, the statement “all sparrows are birds” is a categorical proposition setting forth an assertion about the relation of the class of sparrows to that of birds. The categorical proposition can be affirmative or negative and includes a qualifier, such as all, none, some, or few. One logician explained that a valid syllogism might take the following form:

If p then q.

p.

Therefore q.

Weston, *supra* at 41. Alternatively, it can be stated in the negative:

If p then q.

not q.

Therefore, not p.

Id. at 43. Both of these are valid forms and the conclusions logically can be deduced if the premises are true. Syllogisms can also be hypothetical.

If p then q.

If q then r.

Therefore, if p then r.

Id. at 44. This chain is especially useful for analyzing cause and effect relationships. Syllogisms may also be disjunctive.

p or q.

Not p.

Therefore, q.

Id. at 46. Another form of syllogism is the dilemma. The form of that is:

p or q.

If p then r.

If q then s.

Therefore, r or s.

Id. at 47. Other forms of syllogisms also exist. The advocate can and should study these forms to learn how to recognize them. The advocate must learn to identify the premises and the conclusion. This may be easy when the syllogism is drawn out; but sometimes it is more difficult. Often premises may be implicit. The philosopher Ludwig Wittgenstein used the everyday example of someone drawing an inference, “The stove is smoking, so the chimney is out of order again.” Ludwig Wittgenstein, *Remarks on the Foundations of Mathematics*, quoted in Lind, *supra* at 136. Wittgenstein pointed out that this statement is based on the following logical structure: the stove is smoking; whenever the stove is smoking the chimney is out of order; therefore, the chimney is out of order. *Id.* An “omitted premise is called an enthymeme.” Aldisert, *supra* at 5-2. An argument may also rest on a chain of syllogistic reasoning, which can take some time to identify. The “first syllogism in such a series is called a prosyllogism; the

syllogism that contains the conclusion, using the first syllogism as its premise, is called the episyllogism.” *Id.*

Once the syllogism has been identified, the advocate can convert the argument into symbolic language. The advocate is then ready to test the syllogism’s validity by employing well-recognized rules of logic. Logicians teach that “[e]very categorical syllogism in standard-form ... can be tested for validity by determining whether it violates any rule from a set of standard rules of validity.” Lind, *supra* at 130. Fallacies based on the failure to follow logical form are considered formal. Formal fallacies can be readily detected by careful scrutiny of the syllogism in light of the rules. The process may seem abstract and difficult, particularly to those lawyers who are not mathematically-minded. But it becomes easier with practice. And an argument that flows from such precise analysis can be extremely persuasive.

The first rule is that “[e]very valid categorical syllogism contains precisely three terms, each of which is used in the same sense throughout the argument.” Lind, *supra* at 130. A violation of this rule is known as the fallacy of four terms or the fallacy of equivocation. *Id.*; Aldisert, *supra* at 4-4, 10-1-10-8. The problem with such a syllogism is that it “lacks any basis of comparison for its minor and major terms, so that it is impossible to draw a legitimate conclusion.” *Id.* at 10-2.

The second rule is that “[i]n every valid categorical syllogism, the middle term is distributed in at least one premise.” Lind, *supra* at 130. The failure to follow this rule is known as the fallacy of the undistributed middle. *Id.* Logicians explain that the connection between the two terms occurs by means of the middle term. As a result, at least one of the two terms “must be related to the whole of the class designated by the third or middle term. Otherwise each may

be connected with a different part of the class and not necessarily connected with each other at all.” Aldisert, *supra* at 10-3. This example illustrates the problem:

All dogs are mammals.

All cats are mammals.

Therefore, all cats are dogs.

Amusement Equipment, Inc. v. Mordelt, 595 F. Supp. 125, 130-131 (E.D. La. 1984) quoted in Aldisert, *supra* at 10-5. The syllogism is invalid because the middle term does not connect the other two terms; that both cats and dogs are related to mammals does not mean that they are related in some way to each other.

The third rule is that “[i]n every categorical syllogism, any term distributed in the conclusion is also distributed in the premise where it appears.” Lind, *supra* at 131. A violation of this rule is known as the fallacy of the illicit major term or the illicit minor term. *Id.* An argument that attempts an illicit process bases a conclusion about a whole class when “the class was not referred to in its entirety in the major premise.” *Id.* Judge Aldisert provides an illustration:

Courts may punish for contempt.

Legislatures are not courts.

Therefore, legislatures may not punish for contempt.

Aldisert, *supra* at 10-10. The conclusion suggests that the entire class of legislatures may not punish for contempt although the premise does not demonstrate that only courts may punish for contempt. Thus, the conclusion goes beyond what the premises provide.

The fourth rule is that “[n]o valid categorical syllogism has two negative premises.” Lind, *supra* at 131. Violation of this rule is known as the fallacy of exclusive premises. This rule is “founded in the principle that inference can proceed only where there is *agreement*.”

Aldisert, *supra* at 10-12. Judge Aldisert illustrates this principle by pointing out that “[f]rom the premises, James is not a lawyer; lawyers are not steelworkers, we cannot conclude that James is or is not a steelworker.” *Id.* The fifth rule is that “[e]very categorical syllogism with one negative premise has a negative conclusion.” Lind, *supra* at 132. And the sixth rule is that “[n]o valid categorical syllogism has two universal premises and a particular conclusion.” *Id.*

If an advocate diagrams the logical structure of an argument, it is easier to identify whether it satisfies the rules for a valid deductive argument. If it does not, the advocate can readily provide the court with this analysis and label the fallacy created by the flawed form of the syllogism. An “argument with more than one step can be no stronger than its *weakest* step.” Kelley, *supra* at 107. And “when there are independent premises within a single step... the argument is at least as strong as the *strongest* component.” *Id.*

The advocate can also test a syllogism by examining whether the premises are true or false. Justice Breyer employed this kind of reasoning in a dissenting opinion in *Clinton v. City of New York*, 524 U.S. 417 (1998). He argued that the majority’s reasoning was wrong because it was predicated on a premise that should not be accepted. Justice Breyer criticized the majority’s reasoning because it was based on a syllogism with a faulty minor premise, that is, one that was untrue. According to Breyer, this syllogism captured the majority’s basic reasoning:

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| Major premise: | The Constitution sets forth the exclusive method for enacting, repealing, or amending laws. |
| Minor premise: | The Act authorizes the President to ‘repea[l] or amen[d]’ laws in a different way, namely by announcing a cancellation of a portion of a previously enacted law. |
| Conclusion: | The Act is inconsistent with the Constitution. |

Rejecting the Court’s reasoning because “its Minor Premise is faulty,” Breyer explained that, in his view, the president did not repeal or amend any law when he “cancelled” two appropriation

measures. According to Breyer, the president “simply *followed* the law, leaving the statutes, as they are literally written, intact.” Breyer read the statute to delegate a contingent power to the president to take action to render statutory provisions without force or effect, and not to provide for presidential amendment or repeal.

Some Fallacies To Look Out For

Fallacy is “the term normally restricted to certain patterns of errors that occur with some frequency, usually because the reasoning involved has a certain plausibility.” Kelley, *supra* 126.

Books on logic identify and discuss numerous fallacies; the advocate should study them.

Knowing these flaws in logic should help the advocate shape the argument on appeal.

Familiarity with the different fallacies can also help the advocate more precisely name and refute flawed arguments of an opponent.

Formal fallacies are based on a mistake in the form or logic of the argument. Aldisert, *supra* at 9-5. Material or factual fallacies are based on the argument’s “material,” rather than on its logical form or structure. Lind, *supra* at 269. These two basic types of fallacy can be further subdivided into additional categories. Fallacies of context include those based on arguments in which the conclusion is based on a logical gap due to insufficient information. Kelley, *supra* at 145. Linguistic fallacies occur when syllogisms use different senses of the same terms. Aldisert, *supra* at 11-38. Fallacies of distraction include those that “shift attention from reasoned argument to other things that are always irrelevant, always irrational, and often emotional.” *Id.* at 11-7.

The fallacy of composition, for example, occurs when we infer “that what is true of a part must be true of the whole.” Kelley, *supra* at 145. An analogy that is based on this inference without anything more can be attacked on this ground. Similarly, the “fallacy of division is the

mirror image of composition: it is the inference that what is true of the whole must be true of the parts.” *Id.* A bald assumption that this is true should be rejected. Another “jump to conclusion” fallacy is the fallacy of false alternatives, which occurs when the argument is based on considering only two extremes on a scale, or when the argument provides only for polarized positions. Another contextual fallacy, the post hoc fallacy, is based on the notion that because one event preceded another, the first event caused the second. *Id.* at 142-143.

Appeals to emotion can include, for example, appeals to pity or to force. An appeal to pity (*argumentum ad misericordium*) involves an emotional appeal meant to arouse sympathy in the listener. An appeal to force involves trying to persuade the listener on the basis of a threat. Kelley, *supra* at 156. An *ad hominem* “argument rejects or dismisses another person’s statement by attacking the person rather than the statement itself.” *Id.* at 137. One form of *ad hominem* argument attacks the speaker in an effort to show that his statement is false or his argument is weak. Lind, *supra* at 272. A second type of *ad hominem* argument focuses on the “logically irrelevant connection between the truth of the proposition and the circumstances of a person’s life, such as his or her race, ethnic background, nationality, gender, employment status, religion, etc.” *Id.* at 273. Begging the question is a circular argument that uses “a proposition as a premise in an argument intended to support that same proposition.” Kelley, *supra* at 147-148. An appeal to ignorance (*argumentum ad ignorantiam*) involves “using the absence of proof for a proposition as evidence for the truth of the opposing proposition.” *Id.* at 157.

Logic and Lawyering

Francis Bacon spoke about the lawyer’s life explaining “I found that I was fitted for nothing so well as the study of Truth; as having a mind nimble and versatile enough to catch the resemblances of things (which is the chief point), and at the same time steady enough to fix and

distinguish their subtler differences; as being gifted by nature with desire to seek, patience to doubt, fondness to meditate, slowness to assert, readiness to reconsider, carefulness to dispose and set in order; and as being a man that neither affects what is new nor admires what is old, and that hates every kind of imposture. So I thought my nature had a kind of familiarity and relationship with Truth.” Francis Bacon quoted in Catherine Drinker Bowan, *Francis Bacon: The Temper of a Man* 104-105 (1993). More recently, Justice Frankfurter characterized logical reasoning as an essential part of lawyering and cautioned that “there are people who by temperament do not like the disputatious process of the law, the fine distinctions, the nice discriminations, who don’t care what they call a thing.” Felix Frankfurter, *Of Law and Life & Other Things that Matter* 159 (Philip B. Kurland ed., 1969). But in Frankfurter’s view, these were critical aspects of lawyering.

Bacon, Frankfurter, and the great advocates of history remind us of the need to think deeply and precisely about the arguments that we present on appeal and those we refute. It is reason that the advocate uses to best persuade on appeal. For the appellate advocate, logic is essential.

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