Barry Law Review

Volume 14
Issue 1 *Spring 2010*

Article 1

2010

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CONSPICUOUS LOGIC: USING THE LOGICAL FALLACY OF AFFIRMING THE CONSEQUENT AS A LITIGATION TOOL

Stephen M. Rice[*]

I. INTRODUCTION

Litigation is complicated. However, success or failure in litigation typically turns on the simplest questions. Legal analysis is complicated. However, answers to legal questions, also typically turn on answers to simple questions. Below the manifold and dynamic complexities of rules of law, standards of review, and persuasiveness of evidence, lay simple questions that ultimately determine the answer to legal questions with a "yes" or "no." These basic, fundamental structures of legal argument can make up a complex legal theory's form. While these ultimate questions may be simple, sifting through the rhetoric of legal argument may be difficult. However, a convention of philosophy, the formal logical fallacy, can be a useful tool for litigators and jurists interested in ensuring the logical integrity of legal argument. One formal logical fallacy, the Fallacy of Affirming the Consequent, is a practical tool for legal thinkers to use to identify patterns of legal argument that are unsound, to reveal the simple questions in legal argument, and answer those questions conclusively.

The importance of finding the fundamental components in legal argument is best illustrated by example. A lawyer was standing in a courtroom prepared to make an argument in support of my motion for summary judgment. She was prepared for the hearing, but was not prepared for the judge to begin the proceeding by asking, "Counsel, do you agree to *X*? If you do, I'm inclined to grant your motion." Her first instinct was to immediately respond with the word "yes." It seemed to be too simple a response to secure her intended result. Was the question one the judge thought she would never concede? She wondered if the judge was setting her up. Was this a serious question, or was it merely rhetorical? She was before a learned, thoughtful judge. The judge was not one inclined to ask a question out of sarcasm, and was known for his willingness to give litigants a fair chance to make their arguments. Thinking on her feet as litigators often do, she gave as much thought to these issues as she could in the five seconds it took to respond. The response was based on what she might, at first blush, attribute to a gut reaction. "Yes, your honor. My client's position is indeed, *X*. Thank you your honor."

What happened next was contrary to whatever instinct of reason led her to answer the court's question with a "yes." The judge turned to opposing counsel and

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asked him to present his argument. By the time opposing counsel was finished, it was clear that the court had either lost sight of its initial question, or did not mean to ask it. Opposing counsel was able to convince the court of the existence of enough of a genuine issue of material fact that summary judgment was precluded, and therefore the moving party was not entitled to a judgment as a matter of law. Had the court not framed the arguments with its original question to her, the result might not have seemed so unsettling to her. However, after the court asked that question, there seemed to be no need to hear from opposing counsel at all. There certainly was no need to allow him to stir that big pot of clear water that the court had placed upon the stove, and proceed to fill it with bits of carrot, celery and potatoes. Nonetheless, by the time opposing counsel was finished, he had transformed this pot of clear, cold water into thick, hot soup. He had prepared a thick stew, filled with aromatic, irresistible chunks of "genuine issues of material fact."

How often does that happen in the courtroom? How frequently are the tasks of two lawyers more like the tasks of two chefs? One chef sets out to take simple, unadulterated ingredients and stew them into a complex mix. His task is to create an abundance of sights, sounds, and smells, all designed to distract his customers from knowing how simple and easy it is to appreciate the mix's ingredients. As a result, the customers will instead marvel at the pleasing, novel flavor, sophistication and complexity of the cuisine. The other chef has quite another task. His is to take a mixture of liquid ingredients, "reduce" them over the flame by harnessing the power of evaporation to remove the liquid, and leave behind a less complex, simple.

Lawyers frequently overlook or ignore the fact that complex legal arguments can be reduced into their most basic fundamental structures. Moreover, our task as litigators is often to find arguments' most basic, simple structures and draw the court's attention to them. Unfortunately, lawyers are frequently untrained in identifying these simple structures. We have a "sense" for what they are, but cannot always identify them. We are not armed with the language necessary to describe them. We are not always comfortable explaining them, or why they are so compelling to others.

However, there is a simple, time-tested, solution to providing these explanations. These most basic argumentative structures are functions of the ancient rules of philosophical logic. These are rules that philosophy has been refining for centuries. They are simple. They are easy to explain. They are as basic as an argumentative structure can get. Importantly for lawyers, they frequently can be proved to be the basic ingredients of a legal argument. On that day in the courtroom, they were exactly what that lawyer needed to convince the court that, in light of its first question, there was no need to hear opposing counsel's argument, much less be convinced by it. As a matter of logic, if the court's premise was correct, the lawyer had to win her argument. She could not lose. The difference between her victory and defeat that day, was opposing counsel's ability to complicate the otherwise simple argument, and steer the court away from the basic skeleton of logic toward something more complex and difficult to say "no" to.

The rules of logic, developed by philosophers for centuries, [1] made the moving lawyer's position inescapable. Philosophical logic would reduce the argument to its basic structure; a structure that philosophers would call a syllogism. The argument, in its syllogistic form, provides:

> 1. If defendant's counsel's answer to my question is "yes", defendant must win.
>
> 2. Defendant's counsel's answer to my question is "yes".
>
> 3. Therefore, defendant must win.

This simple argumentative form is repeated daily in courtrooms across the United States. However, those repeating, hearing, and reading these arguments do not understand the reasons why the arguments are so compelling. The reasons have been tested and verified by hundreds of years of philosophical scrutiny. They have been proved by rules of logic. Those simple logical rules, once applied to the syllogistic structure, verify that the argument either has a logically sound, reliable structure, or that it does not. Moreover, philosophic logic has used these rules to identify common patterns of argument that violate these fundamental rules, making the argument therefore inherently unsound and necessarily unreliable. These patterns of unreliable argument are called logical fallacies. Understanding and identifying these patterns allow lawyers to spot flawed logic and provide effective explanations for why courts must reject them.

This article, part of a series discussing the application of specific logical fallacies in legal argument,[2] will address one of these fallacies, known as the Fallacy of Affirming the Consequent, discuss the place of formal logic in legal reasoning, describe the Fallacy of Affirming the Consequent, demonstrate how courts have explicitly used the fallacy in deciding cases, and detail how litigators can use the Fallacy to win cases.

II. WHAT LAWYERS NEED TO KNOW ABOUT PHILOSOPHICAL LOGIC AND LOGICAL FALLACY

A. Understanding Deductive Logic and its Place in Legal Reasoning

Identifying legal arguments that have logically fallacious form, requires some understanding of the logical context within which legal reasoning operates. The language of philosophical logic provides a metalanguage for understanding and articulating what is right and what is wrong with a particular legal argument. Legal

1. C.L. HAMBLIN, FALLACIES 196 (1970) "Rules of validity for syllogisms stated in terms of Distribution have been a regular feature of Logic text books since the seventeenth century."

2. Stephen M. Rice, *Indispensable Logic: Using the Logical Fallacy of the Undistributed Middle as a Litigation Tool* 43 AKRON L. REV. 79 (2009); Stephen M. Rice, *Conventional Logic: Using the Logical Fallacy of Denying the Antecedent as a Litigation Tool*, 79 MISS. L.J. __(forthcoming 2010).

arguments take different forms. One form of legal argument is logically deductive argument. Deductive argument is argument that reasons from general principles to a specific conclusion.[3] Deductive argument claims that the argument's conclusion is required by the truth of its premises.[4] That is, a logically deductive argument is one where the premises, if true, ensure that the conclusion must be true. [5] Legal argument does not always take the form of logically deductive logic. Sometimes, for example, legal argument takes the form of logically inductive argument. Arguments based on inductive reasoning do not ensure the truth of their conclusion.[6] Inductive logic reasons from specific to the general.[7] Induction makes the claim that the conclusion is merely probable, not conclusive, in light of the truth of its premises.[8] Lawyers regularly make inductive arguments but claim that their arguments necessarily compel a particular conclusion. It is important to recognize that lawyers frequently make inductive arguments that, either explicitly or impliedly, claim that their conclusion is *required* by the truth of the argument's premises. In fact, logic teaches us that such arguments, while they might be very persuasive, are not so compelling.[9]

Deductive logic focuses on the logical form of the argument. In particular, deductive logic focuses on the propriety of inferences based on the form of the argument.[10] Where the form of a deductive argument is valid,[11] the truth of the premis-

3. RUGGERO J. ALDISERT, LOGIC FOR LAWYERS: A GUIDE TO CLEAR LEGAL THINKING 49 (Nat'l Inst. for Trial Advoc. 1997) ("In the law deductive reasoning moves from the general (universal) to the particular.")

4. *See also* IRVING M. COPI & CARL COHEN, INTRODUCTION TO LOGIC 482 (13th ed., Prentice Hall 2008) ("[A]ny deductive argument, if it is good, brings to light in its conclusion what was already buried in its premises. The relation between premises and conclusion, in deduction, is one of *logical necessity.* In every deductive argument, if it is valid and if its premises are true, its conclusion *must* be true.)

5. *Id.* at 26.

6. *Id.* at 482 ("In *inductive arguments* . . . the relations between premises and conclusion are not those of logical necessity. The claim of certainty is not made. The terms *valid* and *invalid* simply do not apply. This does not mean that inductive arguments are always weak; sometimes they are very strong indeed, and fully deserve our confidence.)

7. ALDISERT, *supra* note 3, at 49 ("In the law of inductive reasoning moves: -- from the particular to the general (universal) (induced generalization by enumeration of instances), or – from the particular to the particular (analogy)").

8. *Id*.

9. *Id.* at 47 ("In legal logic, [inductive logic] is often used to fashion either the major or the minor premise of the deductive syllogism. Often, a statute or specific constitutional provision unquestionably qualifies as the controlling major premise. It is the law of the case, with which the facts (minor premise) will be compared, so as to reach a decision (conclusion)").

10. JENS S. ALLWOOD ET AL., LOGIC IN LINGUISTICS 16 (Cambridge University Press 1977) ("One of the most important aspects of logic is the study of valid inference and sentences that are necessarily true. There are two main types of inference: those that are necessarily valid and those that are valid only with greater or lesser degree of probability. Each type of inference is correlated with a special type of logical study. The study of necessarily valid inferences is pursued within deductive logic, while inferences that are valid with some degree of probability are studied within inductive logic."

11. COPI & COHEN, *supra* note 4, at 26 ("When the claim is made that the premises of an argument (if true) provide incontrovertible grounds for the truth of its conclusion, that claim will be either correct or not correct. If it is correct, that argument is *valid.* If it is not correct (that is, if the premises when true fail to establish the conclusion irrefutably although claiming to do so), that argument is *invalid.* For logicians the term *validity* is applicable only to deductive arguments. To say that a deductive argument is valid is to say that it is not possible for its conclusion to be false if its premise are true. Thus we define **validity** as follows: A deductive argument is *valid* when, if its premises are true, its conclusion must be true. In everyday speech, of course, the term *valid* is used much more loosely.") (emphasis in original).

es necessarily requires the truth of the conclusion. For a lawyer, this means if your logical structure is valid, and your facts are true, then the rules of logic require that you win your argument. Alternatively, where the form of a deductive argument is invalid, the truth of the conclusion is not required by the truth of the premises.[12] For a lawyer, this means if your facts are true, but your logical structure is invalid, then the rules of logic require that you lose your argument. The focus of deductive logic is on identifying the form of an argument, and using simple rules of logic to ascertain whether the form is a recognized, valid form that requires the argument's conclusion to be necessarily true.

Understanding all of the rules of philosophic logic is an enormous task. It is simply not practical for a busy litigator to be expected to dig into the long history of philosophical logic, its debates, and evolution, and expect them to master, much less explain to a client, judge or jury, the nuances of formal deductive logic. Fortunately, such efforts are not necessary. Philosophy has developed a catalog of argument structures that can be easily identified by their argumentative patterns. These patterns are hallmarks of arguments that violate the rules of logic. The patterns are called logical fallacies. They offer a lawyer a shortcut through mastering philosophic logic by identifying the patterns of argument. Recognizing these patterns and describing what is fallacious about them, requires an understanding of the most common argumentative forums, and some of the terminology necessary to describe them. Such an understanding begins with deductive argument's basic form: the syllogism.

B. The Syllogism: The Building Blocks of Deductive Legal Argument

The syllogism has been described as the most rigorous and persuasive[13] argumentative structure. A syllogism is made up of two distinct but related premises and a conclusion.[14] We tend to be naturally inclined to organize arguments in a syllogism.[15] However, the syllogistic form is not always immediately apparent. Sometimes, effort is required to reveal the syllogistic form from ordinary argument.[16] However, once identified, syllogisms take on common patterns, exemplified repeatedly in legal advocacy.

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12. *Id.*

13. Justice Antonin Scalia & Brian Garner, MAKING YOUR CASE: THE ART OF PERSUADING JUDGES 41 (2008). Justice Antonin Scalia and Mark Garder, in their recent book suggest that lawyers "think syllogistically" and observe that "[t]he most rigorous form of logic and hence the most persuasive is the syllogism." *Id.*

14. COPI & COHEN, *supra* note 4, at 224.

15. *Id.* at 41 ("Persuasion is possible only because all human beings are born with a capacity for logical thought. It is something we all have in common. . . . If you have never studied logic, you may be surprised to learn – like the man who was astounded to discover that he had been speaking prose all his life – that you have been using syllogistic reasoning all along.").

16. *Id.* at 267. ("In ordinary discourse the argument we encounter rarely appear as neatly packaged, standard-form categorical syllogisms. So the syllogistic arguments that arise in everyday speech cannot always be readily tested. They can be tested, however, if we put them into standard form – and we can generally do that by reformulating their constituent propositions. The terms syllogistic argument refers to any argument that either *is* a standard-form categorical syllogism or that *can be reformulated as* a standard-form categorical syllogism without any loss or change of meaning.).

One common form of syllogism is the hypothetical syllogism.[17] The hypothetical syllogism contains "one or more compound, hypothetical (or conditional) propositions, affirming that if one of its components (the antecedent) is true then the other of its components (the consequent) is true."[18] Legal arguments frequently take the form of hypothetical syllogisms.[19] The most commonly encountered form of hypothetical syllogism is the mixed hypothetical syllogism: "a syllogism that has one conditional premise and one categorical premise."[20] For example:

> 1. If assent to enter into a contract is made because of an improper threat that leaves the victim no reasonable alternative, then the contract is voidable by the victim.[21]
>
> 2. Assent to the contract was made because of an improper threat.
>
> 3. Therefore, the contract is voidable by the victim.[22]

Within the class of hypothetical syllogisms, we find the Fallacy of Affirming the Consequent. The Fallacy of Affirming the Consequent takes a similar, but logically different, form from that of a well-formed hypothetical syllogism. For example:

17. The examples of hypothetical syllogisms found in this article are actually "mixed hypothetical syllogisms," a subset of hypothetical syllogisms. A mixed hypothetical syllogism is made up of a conditional premise (an "if . . . then" proposition) and a categorical premise (a proposition that puts its subject into a category). In contrast, a "pure hypothetical syllogism" is comprised of two conditional propositions. As legal arguments frequently fall within the category of mixed hypothetical, and for purposes of consistency, this article will refer to mixed hypothetical syllogisms generically as hypothetical syllogisms. Of course there are other types of syllogisms. One common syllogism used in legal argumentation is a categorical syllogism, where the argument is based on the relationship between the concepts in the premises and the concepts' membership in certain categories. Another type of common syllogism is the disjunctive syllogism. The disjunctive syllogism "contains a compound, disjunctive (or alternative) premise asserting the truth of at least one of two alternatives, and a premise that asserts the falsity of one of those alternatives." (emphasis in original) *Id.* at 301.

18. *Id.*

19. *See, e.g.*, Iams v. DiamlerChryslerCorp., 883 N.E.2d 466, 476 (Ohio Ct. App. 2007); Edwards v Riverdale School District, 188 P.3d 317 (Or. Ct. App. 2008); Crouse-Hinds Co. v. Internorth, Inc. 634 F.2d 690, 703 (2d. Cir. 1980); Zinpro Corp. v. Ridenour, NO. 07-96-0008, 1996 Tex.App. LEXIS 3380 (Aug. 1, 1996), *see infra* at 16-24.

20. COPI & COHEN, *supra* note 4, at 299. The mixed hypothetical syllogism is "mixed" because it contains only one hypothetical premise. The other premise is a categorical one. Therefore it is a mixed hypothetical syllogism. This type is contrasted with a pure hypothetical syllogism, which would include two hypothetical premises.

21. *See, e.g.,* RESTATEMENT (SECOND) OF CONTRACTS, §175(1) (1981) ("If a party's manifestation of assent is induced by an improper threat by the other party that leaves the victim no reasonable alternative, the contract is voidable by the victim."); s*ee also, id.* at §175(2) (enumerating what constitute "improper" threats).

22. In this example, the structure of the syllogism is more readily apparent if we reduce its components to symbols. If we assign the term "transfer of an interest in land" the letter "A" and assign "within the statute of frauds" the letter "B" the syllogism takes this form:
If A then B.
A.
Therefore B.

> 1. If assent to enter into a contract is made because of an improper threat that leaves the victim no reasonable alternative, then the contract is voidable by the victim. [23]
>
> 2. The contract is voidable by the victim.
>
> 3. Therefore, the assent to enter into the contract was made because of an improper threat. [24]

Understanding the nature of this logically invalid argument and why it is logically invalid (and legally incorrect) requires an understanding of the rules governing validity of hypothetical syllogisms. A hypothetical syllogism must meet two basic logical rules in order to have a deductively valid form. If the form of the syllogism is invalid, then the syllogism cannot be relied upon to ensure the truth of the conclusion.[25] Where a syllogism violates one of these rules of logical form, the syllogism is invalid, and the argument is said to be fallacious.[26] Accordingly, identifying the fallacious pattern of argument structure is really just a method for identifying what established rule of logic is violated by the argument. The process is similar to many we engage in to solve problems. We look for hallmarks of established problems all the time. For example, if I remove the spark plugs from my vintage motorcycle, and they are heavily "sooted" or covered with black carbon deposits, then I know that the mixture of oxygen and fuel is too rich, and I should adjust the carburetors.[27] I know this because a dark or sooted spark plug is a simple, obvious, hallmark of a more complex problem, i.e., improper mixture of oxygen and fuel in the carburetors of an internal combustion motorcycle engine. More importantly, I am able to identify this without evaluating all of the inner workings of a relatively sophisticated piece of machinery. In a sense, the hallmark of exces-

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23. RESTATEMENT (SECOND) OF CONTRACTS § 175(1) (1981) ("If a party's manifestation of assent is induced by an improper threat by the other party that leaves the victim no reasonable alternative, the contract is voidable by the victim."); *see also id.* § 175(2) (enumerating what constitute "improper" threats).

24. In this example, the structure of the syllogism is more readily apparent if we reduce its components to symbols. If we assign the term "transfer of an interest in land" the letter "A" and assign "within the statute of frauds" the letter "B" the syllogism takes this form:

If A then B.
A.
Therefore B.

25. *See* DOUGLAS WALTON, INFORMAL LOGIC, A PRAGMATIC APPROACH 138 (2d ed., Cambridge Univ. Press 2008) ("In a deductively valid argument, it is logically impossible for the premises to be true and the conclusion false").

26. HAMBLIN, *supra* note 1, at 35-37. *See supra* text accompanying note 20 (discussing the distinction between pure and mixed hypothetical syllogisms).

27. *See, e.g.*, WORKSHOP MANUAL FOR BONNEVILLE 750 AND TIGER 750 UNIT CONSTRUCTION TWINS, H7 (Abbot Litho Press Ltd., 1984). While contemporary combustion engines generally include a fuel injection system that dispenses with the need for a carburetor, older engines used carburetors as a means of mixing oxygen and fuel and regulating the balance of the fuel mixture before it enters the combustion chamber where it fires the engine and powers the vehicle. The carburetor can be adjusted to increase the amount of air (thereby making the mixture more "lean") or decreasing the amount of air (thereby making the mixture more "rich").

sive fuel in the oxygen and fuel mixture required to fire a combustion engine is a sooty or "fouled" spark plug.

Similarly, lawyers should use hallmarks to efficiently identify logically fallacious legal reasoning. The hallmark of a "fouled" legal argument is a fallacious pattern of reasoning. Identifying the pattern will demonstrate that there is a problem with the logical form of the argument, without requiring the evaluator to master the inner workings of philosophical logic or its application to legal reasoning. A litigator's ability to label their opponent's argument as necessarily illogical provides a powerful advocacy tool. A judge's ability to evaluate a litigant's argument as necessarily illogical provides a sound, tested means of explaining away a legal argument. A law student's understanding of logical fallacies helps them to understand legal reasoning as a discipline.

The rules of valid hypothetical syllogisms are simple, but their simplicity is what makes them so easy to violate without notice. A hypothetical syllogism must contain a conditional premise, a categorical premise, and a conclusion.[28] The conditional premise is the part of the syllogism that contains a condition. This is generally an "if, then" statement. For example, the sentence "if a contract is within the statute of frauds,[29] then it must be in writing" is a conditional premise. This conditional premise is made up of two terms: the term that immediately follows the "if" and the term that immediately follows the "then." The term that immediately follows the "if" term is the antecedent term. The term that follows the "then" term is the consequent term. In the example, "if a contract is within the statute of frauds, then it must be in writing," the term "a contract is within the statute of frauds" is the antecedent term. The term "must be in writing" is the consequent term.[30]

The categorical premise is the part of the syllogism that either affirms or denies one of the two terms in the conditional premise. If we add a categorical premise to the previous example of a conditional premise, it might state: "The contract is within the statute of frauds." This would be a categorical premise, which affirms the antecedent term. It affirms the antecedent term because it asserts that the antecedent term is true. Conversely, if the conditional premise stated: "The contract is not within the statute of frauds," then it would have denied the antecedent term, since it asserts that the antecedent term is not true.

Understanding terms used to describe hypothetical syllogisms paves the way to understanding the simple rules that determine whether a hypothetical syllogism takes a valid form or, alternatively, an invalid, fallacious form. In order to be valid, a hypothetical syllogism must take one of two forms. The first form, given the name *modus ponens*, requires that the categorical premise must affirm the truth of the antecedent of the conditional premise and the consequent of the conditional premise must be the conclusion. Therefore, if the categorical premise is "if A, then

28. COPI & COHEN, *supra* note 4, at 301.

29. Where a contract fits the criteria for one of those categories, enumerated in the Statute of Frauds, it generally is required to be in writing to be enforceable. Where a contract meets the criteria of one or more of these categories, it is said to be "within" the Statute of Frauds. RESTATEMENT (SECOND) OF CONTRACTS § 110 cmts. a, b (1981).

30. COPI & COHEN, *supra* note 4, at 299.

B" "A" is the "antecedent" and "B" is the consequent. The syllogism is well-formed if the categorical premise affirms the truth of the antecedent term of the hypothetical "A" and the conclusion affirms the truth of the consequent of the hypothetical "B".[31] Accordingly, the following would be an example of a well-formed hypothetical in the form known as *modus ponens.*

> 1. If assent to enter into a contract is made because of an improper threat that leaves the victim no reasonable alternative, then the contract is voidable by the victim.[32]
>
> 2. Assent to the contract was made because of an improper threat.
>
> *3.* Therefore, the contract is voidable by the victim.

Simplifying the syllogism, but reducing the terms to alphabetical symbols, further reveals the logical structure of *modus ponens.*

> 1. If A is true, then B is true.
>
> 2. A is true.
>
> 3. Therefore, B is true.

Similarly, there is a second form of the hypothetical that is also valid. The second from is called *modus tollens.* If the categorical premise affirms the falsity of the consequent of the conditional premise, and the conclusion asserts the falsity of the antecedent of that conditional premise, then that syllogism is well-formed.[33] Accordingly the following would be an example of a well-formed hypothetical in the form of *modus tollens*.[34]

> 1. If assent to enter into a contract is made because of an improper that leaves the victim no reasonable alternative, then the contract is voidable by the victim.[35]
>
> 2. The contract is not voidable by the victim.

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31. HAMBLIN, *supra* note 1, at 35-37; *see also*, DOUGLAS WALTON, FUNDAMENTALS OF CRITICAL ARGUMENTATION 62 (2005).

32. *See, e.g.,* RESTATEMENT (SECOND) OF CONTRACTS § 175(1) (1981) ("If a party's manifestation of assent is induced by an improper threat by the other party that leaves the victim no reasonable alternative, the contract is voidable by the victim."); *see also id.* at § 175(2) (enumerating what constitute "improper" threats).

33. *Id.*

34. COPI & COHEN, *supra* note 4 at 301-302.

35. *See, e.g.,* RESTATEMENT (SECOND) OF CONTRACTS § 175(1) (1981) ("If a party's manifestation of assent is induced by an improper threat by the other party that leaves the victim no reasonable alternative, the contract is voidable by the victim."); *see also id.* at § 175(2) (1981) (enumerating what constitute "improper" threats).

3. Therefore, assent to enter into the contract was not made because of an improper threat that leaves the victim no reasonable alternative.

Again, reducing the syllogism's terms to alphabetical symbols reveals the form of *modus ponens.*

1. If A is true, then B.

2. B is false.

3. Therefore, A is false.

A rule that describes both forms, *modus ponens* and *modus tollens*, has been summarized this way: "A valid hypothetical syllogism either denies the consequent . . . or affirms the antecedent . . . of the major premises; it doesn't deny the antecedent or affirm the consequent."[36]

III. THE FALLACY OF AFFIRMING THE CONSEQUENT

When a hypothetical syllogism fails to follow this rule, and thereby fails to take the form of *modus tollens* or *modus ponens*, it commits a logical fallacy. Where the syllogism, instead of denying the consequent term of the conditional premise, affirms that term, it commits the Fallacy of Affirming the Consequent.[37] The reason why this pattern of argument is fallacious is apparent. While the hypothetical premise "If A, then B" requires us to infer B from A, there is no reason why we should infer A from B. One can infer that if the sun is shining through my window, my office is illuminated. However, it would be improper to infer that, since my office is illuminated, the sun is shining through my office window.[38] When the categorical premise "affirms the consequent" it attempts to make this same improper inference. Some examples clarify why this is impermissible. Take the example syllogism:

1. If assent to enter into a contract is made because of an improper threat that leaves the victim no reasonable alternative, then the contract is voidable by the victim.

2. Assent to the contract was made because of an improper threat.

3. Therefore, the contract is voidable by the victim.

36. NORMAN L. GEISLER & RONALD M. BROOKS, COME LET US REASON: AN INTRODUCTION TO LOGICAL THINKING 65 (1990).

37. Conversely, where the syllogism, instead of affirming the antecedent term, denies it, the syllogism commits the Fallacy of Denying the Antecedent.

38. The light in my office will illuminate it at night.

If the hypothetical premise is true, and it is, since it is an established rule of law, then we can infer the consequent term from the antecedent. We know that improper threats, leaving no reasonable alternatives, make a contract voidable. However, we have no reason to infer the opposite, i.e., that where a contract is voidable it must have been assented to under improper threat. There are lots of reasons why contracts are voidable. For example, mental illness or defect, [39] undue influence, [40] misrepresentation, [41] in addition to duress, are all events that make a contract voidable. While we might agree that all contracts entered into under duress are voidable, we know that not all contracts that are voidable, were entered into under duress.

Thinking through this example makes it clear that the argument is invalid. Its premises cannot ensure the truth of its conclusion. However, what makes this category of fallacious argument so dangerous is that it frequently goes undetected. One classic definition of a fallacious argument is: "A fallacious argument, as almost every account from Aristotle onwards tells you, is one that *seems to be valid* but *is not so*."[42] The second half of this definition is particularly salient for lawyers. The problem for litigators is that these arguments are regularly made, and regularly undetected. Why does this happen? One reason is that, as was discussed above, we are comfortable with syllogistic argument. In fact, the hypothetical syllogism is such a familiar thread in the fabric of legal argument that litigators frequently overlook the structurally subtle differences between, for example, *modus ponens* and the Fallacy of Affirming the Consequent.

While the difference between the logical form of a valid hypothetical syllogism and an invalid logical fallacy might be subtle, the logical consequence of the two is profound. An argument based on a logically fallacious form is necessarily invalid. It cannot support the conclusion, even if its premises are true. If a party can identify and explain the fallacious nature of an argument, its opposition must find a new argument to support the conclusion.[43]

39. RESTATEMENT (SECOND) OF CONTRACTS § 15 (1981) ("A person incurs only voidable contractual duties by entering into a transaction if by reason of mental illness or defect (a) he is unable to understand in a reasonable manner the nature and consequences of the transaction, or (b) he is unable to act in a reasonable manner in relation to the transaction and the other party has reason to know of his condition.")

40. *See id. at* § 177 ("If a party's manifestation of assent is induced by undue influence by the other party, the contract is voidable by the victim.")

41. *See id. at* § 164 ("If a party's manifestation of assent is induced by either a fraudulent or a material misrepresentation by the other party upon which the recipient is justified in relying, the contract is voidable by the recipient.")

42. HAMBLIN, *supra* note 1, at 12; *see also* H. V. Hansen, *The Straw Thing of Fallacy Theory: The Standard Definition of 'Fallacy'*, 16 ARGUMENTATION 133 (2002) (discussing various theories of logical fallacy).

43. While a logically fallacious argument cannot support its conclusion, it does not require that the conclusion be necessarily false. Instead, it requires the party positing the fallacious argument to either find a new, valid argument, or concede defeat.

IV. COURTS HAVE RECOGNIZED ARGUMENTS AFFIRMING THE CONSEQUENT AS LOGICALLY FALLACIOUS, AND REJECTED THEM AS LOGICALLY INVALID AND UNRELIABLE

In *Stewart Foods v. Broecker* (*In re Stewart Foods*), the court used the fallacy of Affirming the Consequent to evaluate a creditor's claim in bankruptcy.[44] The creditor in *In re Stewart Foods*, signed a Salary Continuation Retirement Plan with the debtor, Stewart Foods (the "Agreement"). The Agreement provided that the creditor would "remain employed with Stewart Foods until he reached the age of 65 and, upon retirement, would receive income for the next ten years."[45] The parties modified the Agreement to provide for payment of equal payments of $7,104 per month for 120 months. The debtor made 19 payments to the creditor, filed a petition for bankruptcy protection, and then discontinued making the monthly payments. The creditor filed a Proof of Claim (the "Claim") for the remaining payments owed with the bankruptcy court.[46]

The debtor opposed the Claim, first by characterizing the Claim as an executory[47] contract, which the debtor would have the right to reject. [48] However, it later stipulated that the contract was non-executory. Second, the debtor opposed the Claim by characterizing it as a pre-petition claim against the estate and arguing that it had no continuing obligation to make the payments after the date of filing of the bankruptcy petition. The creditor argued that the contract was not a mere pre-petition claim, but that it was a continuing agreement to pay salary, and that the debtor should continue to make the monthly payments.[49]

The district court ruled that, since the debtor took the position that since the creditor has a pre-petition claim, creditor was rejecting a non-executory contract. The court reasoned from the principle that a creditor who has its executory contract rejected by the debtor has a right to a general pre-petition claim in bankruptcy. It went on to conclude that, since the debtor conceded that the creditor had a claim, the court must conclude that the debtor rejected its executory contract.[50]

The United States Fourth Circuit Court of Appeals rejected this analysis, relying on the Fallacy of Affirming the Consequent. The court recognized that:

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44. 64 F.3d 141, 145 (4th Cir. 1995).

45. *Id.* at 143.

46. *Id.*

47. *Id.*; Elizabeth A. Cameron & Salina Maxwell, *Protecting Consumers: The Contractual and Real Estate Issues Involving Timeshares, Quatershares, and Fractional Ownership,* 37 REAL EST. L.J. 278, 289 (2009) ("The exact criteria for defining an executory contract is complex and there is no precise definition, but for the purposes of Section 365 of the Bankruptcy Code, an *executory contract* is an agreement in which any part of the contract remains unperformed."); In re Trans World Airlines, Inc., 261 B.R. 103, 117 (Bankr. D. Del. 2001) ("[T]he ability to reject an executory contract is rooted in the principle of maximizing the return to creditors by permitting a debtor in possession to renounce title to and abandon burdensome property if such action is in the best interests of the estate.").

48. *Stewart Foods,* 64 F.3d at 144 (debtor claimed it would have the right to reject an executor contract under 11 U.S.C. § 365(a)).

49. *Id.*

50. *Id*.

> The district court's reasoning was logically flawed. The district court noted that, under §§ 365 and 502(g), the rejection of an executory contract creates a general unsecured claim. From this premise, the district court erroneously inferred that the existence of a general unsecured claim must imply the rejection of an executory contract.

The court went on to describe the flawed form of the district court's reasoning:

> This type of inference is an example of affirming the consequent, a classic form of invalid reasoning. Consider the following syllogism:
>
> (1) If A is true, then B is true.
>
> (2) B is true.
>
> (3) Therefore, A is also true.

The conclusion that A is true does not logically follow from the premises. The district court's reasoning roughly reduces to the following syllogism:

> (1) If a debtor rejects a contract, then a general unsecured claim exists.
>
> (2) A general unsecured claim exists.
>
> (3) Therefore, the debtor must have rejected a contract.[51]

As the court recognized, the district court's reasoning is necessarily invalid, since it fits into this fallacious pattern of reasoning. Importantly, the use of the Fallacy of Affirming the Consequent provided the court of appeals with a mechanism to explain what is wrong with the district court's logic and why it is wrong. Frequently, legal arguments become convoluted. Parties can use inconsistent terms and structure in drafting their arguments. Formal logic provides a consistent framework for organizing legal argument in consistent terms, and a consistent syllogistic structure. This structure allows legal thinkers to comparatively analyze legal argument, by comparing and contrasting it to necessarily valid or invalid logical structures, and reach conclusive logical decisions about the validity or invalidity of the form of the argument.[52] The court used the Fallacy of Affirming the Consequent for just such a purpose in *Stewart Foods*.

51. *Id.* at 145, n.3.

52. One writer has described the language of logic as a metalanguage for evaluating arguments as "it's necessary to distinguish between the logician's language with its concepts, and the reasoner's language with its

Next, in *City of Green Ridge v. Kreisel,*[53] the court also used the fallacy of Affirming the Consequent to analyze the plaintiff's argument. Defendant Kreisel was operating a junkyard that the City of Green Ridge sought to regulate by establishing an ordinance ("Ordinance 477")[54] that provided a set of requirements for junkyards, and the ramifications of a junkyard's failure to meet the requirements.[55] Kreisel argued that the ordinance constituted a zoning ordinance, and that it was invalid since it failed to meet the procedural requirements for a zoning ordinance.[56] The City of Green Ridge counter argued that the ordinance was not a zoning ordin-

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concepts. For convenience let's call the logician's language the *metalanguage* and the reasoner's language the *object language*." (emphasis in original). JACQUETTE, ET AL., PHILOSOPHY OF LOGIC 43 (2006).

53. 25 S.W.3d 559, 563-64 (Mo. Ct. App. 2000).

54. The ordinance provided:

> Section 2. General operating requirements. The following general operating requirements shall apply to all junkyard operators and junkyard owners operating within the City of Green Ridge, Missouri:
> a. The junkyard, together with things kept therein, shall at all times be maintained in a sanitary condition.
> b. No water shall be allowed to stand in any place on the premises in such matter as to afford a breeding place for mosquitoes.
> c. Weeds and vegetation on the premises, other than trees, shall be kept at a height of not more than four inches.
> d. No garbage or other waste liable to give off a foul order or attract vermin shall be kept on the premises; nor shall any refuse of any kind be kept on the premises.
> e. No junk shall be allowed to rest upon or protrude over any public property, street, alley, walkway, or curb or become scattered, washed off or blown off the business premises.
> f. Junk shall be stored in piles not exceeding ten feet in height and shall be arranged so as to permit easy access to all such junk for fire fighting purposes.
> g. No combustible material of any kind not necessary or beneficial to the business shall be kept on the premises; nor shall the premises be allowed to become a fire hazard.
> h. Gasoline and oil shall be removed from any scrapped engines or vehicles on the premises.
> i. No junk or other material shall be burned on the premises in any matter [sic] not meeting the approval of the chief of the fire department, which approval shall not be unreasonably denied.
> j. No noisy processing of junk or other noisy activity shall be carried [**8] on in connection with the business on Sunday, Christmas, Thanksgiving, or at any time between the hours of 6:00 p.m. and 7:00 a.m.
> k. The area on the premises where junk is kept (other than indoors) shall be enclosed, except for entrances and exits, with a solid vertical wall or fence of a minimum height of eight (8) feet measured from ground level. Entrances and exits shall not be wider or more numerous than reasonably necessary for the conduct of the licensed business. Said wall or fence and its posts (which shall be placed on the inside of said wall or fence) shall be constructed of wood which is treated so as not to rot or be susceptible to termites or other similar pests, and shall be constructed, maintained and anchored so as not to sag, become unsightly, or fall over in high winds.

Id. at 562 (quoting Section 1 of City of Green Ridge, Ordinance 477) (Emphasis in original).

55. *City of Green Ridge,* 25 S.W.3d at 562-63.

56. *Id*. at 561 (quoting MO. ANN. STAT. § 89.09 (West 2009): "The legislative body of such municipality shall provide for the manner in which such [zoning] regulations and restrictions and the boundaries of such districts shall be determined, established, and enforced, and from time to time amended, supplemented, or changed. ***However, no such regulation, restriction, or boundary shall become effective until after a public hearing in relation thereto, at which parties in interest and citizens shall have an opportunity to be heard. At least fifteen days' notice*** of the time and place of such hearing shall be published in an official paper or a paper of general circulation in such municipality.") (emphasis in original).

ance and did not have to be promulgated pursuant to the requirements for zoning ordinances.[57]

Kreisel made an argument that relied on the fact that the zoning ordinance statute provided that zoning ordinances could be used to promote public health and safety.[58] The court described Kriesel's argument this way: "He argues, therefore, that since zoning ordinances regulate health and safety through regulating the use of buildings, and since this ordinance addresses health and safety in his operation of his junkyard, therefore this ordinance is a zoning ordinance."[59] The court went on to describe the fallacious logical structure of the argument:

Mr. Kreisel's argument commits the logical fallacy of "affirming the consequent." He fails to recognize that, while zoning ordinances may address health and safety issues, other types of ordinances may also address health and safety issues without becoming zoning ordinances. In other words, the mere fact that a purpose of zoning ordinances is to regulate public safety does not mean that all ordinances which regulate health and safety are zoning ordinances. To the contrary, there are many other kinds of ordinances which also regulate public health and safety.[60]

Unlike the court in *In re Stewart Foods*, the court in *Kreisel* did not break down the argument symbolically. However, doing so better illustrates how both *In re Stewart Foods* and *Kreisel*, while they deal with significantly different subject matter, were decided based on identical logical grounds.

Kreisel's argument, examined syllogistically, appears this way:

1. If an ordinance is a zoning ordinance, then it regulates health and safety through regulating the use of buildings.

2. This ordinance regulates health and safety.

3. Therefore this ordinance is a zoning ordinance.

Simplifying the syllogism using symbols yields this result:

1. If A, then B.

2. B.

3. Therefore, A.

Accordingly, the court in *Kreisel* was able to use the Fallacy of Affirming the Consequent to analyze and explain what was wrong with Kreisel's argument.

Like *Kreisel,* which used a logical fallacy to solve a problem with a statutory definition, the court in *Paulson v. State* [61] also made use of the Fallacy of Affirm-

57. *Id.* at 563.
58. *Id.*
59. *Id.*
60. *Id.* at 563-64.
61. 28 S.W.3d 570, 572 (Tex. Crim. App. 2000).

ing the Consequent in solving a different definitional problem. In *Paulson*, the court considered the propriety of a jury instruction mandated by a previous court decision. The jury instruction dealt with the definition of "reasonable doubt." The court reviewed the previous definition of "reasonable doubt," which had provided:

It is the kind of doubt that would make a reasonable person hesitate to act in the most important of his own affairs. Proof beyond a reasonable doubt therefore must be proof of such a convincing character that you would be willing to rely and act upon it without hesitation in the most important of your own affairs.[62]

The court focused on the definition "proof beyond a reasonable doubt therefore must be proof of such a convincing character that you would be willing to rely and act upon it without hesitation in the most important of your own affairs."[63] The court rejected this definition because it violated the rules of logic. The court described it as a logically fallacious application of the previous definition "the kind of doubt that would make a reasonable person hesitate to act in the most important of his own affairs." The court explained its conclusion this way: "The court says that reasonable doubt makes you hesitate to act; therefore, if you hesitate to act, you have a reasonable doubt. That is like saying, "Pneumonia makes you cough; therefore, if you cough, you have pneumonia." This is the logical fallacy called "affirming the consequent."[64] The logical fallacy here is not immediately apparent from the court's explanation. However, it suggests that it arranged its syllogistic components this way:

1. If the evidence makes the jury hesitate, then the jury has reasonable doubt.

2. The evidence makes the jury hesitate.[65]

62. The court was reviewing the approved instruction defining "reasonable doubt" in *Geesa v. State*, 820 S.W.2d 154 (Tex. Crim. App. 1991). The court in *Paulson* was actually addressing a three part definition provided by the *Geesa* court. However, for purposes of logical fallacy analysis, the *Paulson* court only considered two of the *Geesa* court's three definitions. The three definitions, as described by the *Paulson* court were: "A reasonable doubt is a doubt based on reason and common sense after a careful and impartial consideration of all the evidence in the case;" "It is the kind of doubt that would make a reasonable person hesitate to act in the most important of his own affairs;" and "Proof beyond a reasonable doubt therefore must be proof of such a convincing character that you would be willing to rely and act upon it without hesitation in the most important of your own affairs."

63. *Id.*

64. *Id.*

65. This formulation of the court's recitation of the argument here is merely a summary, in positive terms, of the second "definition" of reasonable doubt. The definition was originally stated in the negative, in order to couch the definition in the familiar parlance of "beyond a reasonable doubt": "Proof beyond a reasonable doubt therefore must be proof of such a convincing character that you would be willing to rely and act upon it without hesitation in the most important of your own affairs." Stated in the affirmative, this could be summarized to merely say that "if a jury hesitates, then it has reasonable doubt." Simplifying this language reveals an ambiguity in the definition itself. Is the definition connoting that "hesitation" and "reasonable doubt" are the same? Alternatively, is the definition telling the jury that if it hesitates, then it has "reasonable doubt?" It would seem that the later is the intended meaning of this language. It appears that the court interpreted this "third" definition as something distinct from the "second" definition. It might have reasonably decided that the "third" definition was not a distinct definition at all or, for that matter, that it was never intended as a premise of an argument. Had it con-

3. Therefore, the jury has reasonable doubt. [66]

First, it is apparent that the court's summary of the syllogistic form of the jury instruction's logic, that this is not the structure of Affirming the Consequent. Apparently the Court in *Paulson*, in concluding that the form of the instruction was logically fallacious, did not interpret the language that way. Instead, it appears to have interpreted the language this way:

1. If the evidence makes the jury hesitate, then the jury has reasonable doubt.

2. The jury has reasonable doubt.

3. Therefore, the jury hesitated.

Simply put, the court's objection to the instruction is this: while reasonable doubt may be properly inferred from a jury's hesitation, there is no reason to infer hesitation from reasonable doubt. For example, if a jury is entirely convinced that a defendant has met its standard of proof, it may well reach the conclusion of reasonable doubt without the need to hesitate in any way.

Similarly, in *Gilliam v Nev. Power*[67] the court used the Fallacy of Affirming the Consequent to solve a legal problem. The court in *Gilliam* was faced with the issue of determining whether certain severance payment received by the plaintiff constituted "earnings" under her retirement plan ("Plan"). [68] The plaintiff received a severance payment of $512,000.[69] The Plan defined "earnings" as "total wages and salary as reported by the Company for federal income tax purposes for the calendar year." Accordingly, the litigants focused their arguments on whether the severance payment constituted "wages and salary."

Gilliam argued that since her employer reported the severance payment in Box 1 of her federal W-2 form, the place designated for an employer to report "wages and salary," her severance payment must be "wages and salary" under the Plan. The court used the Fallacy of Affirming the Consequent to dispose of this argument:

> This argument rests on the logical fallacy of affirming the consequent. While Nevada Power Company must report "wages and salary" on Box 1 of the federal Form W-2, not all amounts reported in Box 1 of the federal Form W-2 must be "wages and salary." For example, the 1999 Instructions for Forms W-2 and W-3

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cluded either or those things, then the argument would not be an appropriate candidate for analysis as a Fallacy of Affirming the Consequent.

66. 28 S.W.3d at 572.
67. 488 F.3d 1189, 1197 (9th Cir. 2007).
68. *Id.* at 1196.
69. *Id.*

> explain that Box 1 includes many employee income items other than "wages and salary."[70]

Accordingly, the Court in *Gilliam* interpreted Gilliam's argument this way:

> 1. If the employer pays "wages and salary" then it must be reported in Box 1.
>
> 2. The employer reported payments in Box 1.
>
> 3. Therefore, the payment must be "wages and salary."

As the court aptly stated, the fact that wages and salary must be reported in Box 1, does not require the inference that everything reported in Box 1 is wages and salary. Of course, this is the essence of what is "wrong" with an argument that fits the pattern of the Fallacy of Affirming the Consequent.

Another case, *United Tel. Co. v. Federal Communications Com.*,[71] considered a similar argument regarding the petitioner's challenge to a formula for the division of revenues.[72] The lower court affirmed the FCC's decision to dismiss the petitioners' petitions without hearing based on the fact that neither petitioner had sufficiently challenged the reasonableness of the settlement formula for dividing revenues, which was the heart of the dispute.[73] Instead the petitioners relied "on the implication that a settlement formula which does not provide a higher rate of return to a company whose overall operations make it a riskier economic enterprise than its co-participant is *ipso facto* unjust and unreasonable." Petitioners provided no evidence that the result of the settlement formula was unjust. Instead, they argued that the result must be unjust since the formula was unjust.[74]

The court framed the problem with this argument in terms of the Fallacy of Affirming the Consequent:

> The Commission properly characterized United's and Carolina's arguments as an attempt to attack the formula for dividing charges without alleging that the result of that formula is in fact unjust and unreasonable. United and Carolina insist that if the method of dividing charges is unjust and unreasonable, its result must also be unjust and unreasonable. Reply Brief for Petitioners at 10. This exercise in sophistry miscasts the issue by reversing the logic of the

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70. *Id.* at 1197 n.7.

71. 559 F.2d 720 (D.C. Cir. 1977). *See* Internal Revenue Service, 1999 Instructions for Forms W-2 and W-3, at 7 (1999), *available at* http://www.irs.gov/pub/irs--prior/iw2-1999.pdf; *see also* Cent. Ill. Pub. Serv. Co. v. United States, 435 U.S. 21, 25 (1978) ("Wages usually are income, but many items qualify as income and yet clearly are not wages.")

72. *Id.* at 725-26 (citing IRVING COPI, INTRODUCTION TO LOGIC 202 (3d ed. 1968) and describing the principle utilized as "fallacy of affirming the consequent.")

73. *Id.* at 724-25.

74. *Id.* at 725.

> inquiry. A method of determining rates, or divisions thereof, is unjust and unreasonable if the result reached does not afford a compensatory return. One cannot, as United and Carolina try to do, reverse the order of this proposition and preserve its logical validity. [75]

Considered syllogistically, the petitioner's argument looked like this:

> 1. If the application of the settlement formula yields an unjust result, then the settlement formula is unjust.
>
> 2. The settlement formula is unjust.
>
> 3. Therefore, the application of the settlement formula yields an unjust result.

Just as the preceding courts, the court in *United Tel. Co.* identified a pattern of argument that is Denying the Antecedent, realized its logical unreliability, and rejected the argument on grounds of philosophical logic.

V. HOW TO RECOGNIZE THE FALLACY AND USE IT TO DEFEAT FALLACIOUS REASONING

These case examples make plain this fallacious pattern and help to identify this logically fallacious pattern and explain why it is unreliable. Compare the arguments made in *In re Stewart Foods, Kreisel, Gilliam,* and *United Tel. Co.,* respectively:

> 1. If a debtor rejects a contract, then a general unsecured claim exists.
>
> 2. A general unsecured claim exists.
>
> 3. Therefore, the debtor must have rejected a contract. [76]
>
> 1. If an ordinance is a zoning ordinance, then it regulates health and safety through regulating the use of buildings.
>
> 2. This ordinance regulates health and safety.
>
> 3. Therefore this ordinance is a zoning ordinance. [77]

75. *Id.* at 725-26 (citing IRVING COPI, INTRODUCTION TO LOGIC 202 (3d ed. 1968)).
76. *In re Stewart Foods,* 64 F.3d at 145.
77. *City of Green Ridge* 25 S.W. 3d at, 563-64.

1. If the employer pays "wages and salary" then it must be reported in Box 1.

2. The employer reported payments in Box 1.

3. Therefore, the payment must be "wages and salary." [78]

1. If the application of the settlement formula yields an unjust result, then the settlement formula is unjust.

2. The settlement formula is unjust.

3. Therefore, the application of the settlement formula yields an unjust result. [79]

Each of these arguments takes the same invalid syllogistic form, illustrated symbolically as:

If A, then B.

B.

Therefore, A.

Each argument suffers from the same invalid pattern of logical form. Each invalid pattern of logical form is infected with the false suggestion that there exists a reciprocal causative relationship between two terms. Where one term requires the other, while it is possible that the other reciprocally requires the first, it is not necessarily the case. In fact, frequently there is no reason whatsoever to believe that such a bilateral causative relationship exists. Such is the case with debtors who reject contracts,[80] ordinances that control zoning,[81] employers that pay "wages and salaries,"[82] and settlement formulas that yield unjust results[83] in the cases discussed *supra*.[84]

In each case, this pattern is a hallmark of an argument that must fail. By identifying this hallmark pattern, a lawyer can immediately diffuse the argument's superficial appeal. The rule of a well-formed hypothetical provides that the syllogism is well-formed if the categorical premise affirms the truth of the antecedent term of the hypothetical and the conclusion affirms the truth of the consequent of

78. *Gilliam,* 488 F.3d at 1197.
79. *United Tel. Co.*, 559 F.2d at 725.
80. *In re Stewart Foods,* 64 F.3d at 145.
81. *City of Green Ridge,* 25 S.W.3d 563-564.
82. *Gilliam,*488 F.3d at 1197 (9th Cir. 2007).
83. *United Tel. Co.*, 559 F.2d at 725.
85. *Stewart Foods,* 64 F.3d at 145; *City of Green Ridge,* 25 S.W. 3d at 563-64; *Gilliam,* 488 F.3d at 1197; *United Tel. Co.*, 559 F.2d at 725.

the hypothetical.[85] Where the argument violates this rule by affirming the consequent, instead of the antecedent term of the hypothetical premise, it commits the Fallacy of Affirming the Consequent, and must fail.

One would be prudent to anticipate that some judges will be unfamiliar with rules of philosophical logic or their precedential value as legal authority. Accordingly, citation to the cases above will provide legal authority for the use of logical fallacy in legal argument. There are scores of cases that have used the rules of philosophical logic and specific fallacies as the basis for evaluating legal arguments. For example, courts have employed the Fallacies of the Undistributed Middle Term,[86] the Fallacy of Denying the Antecedent,[87] and Illicit Process of the Major or Minor Term.[88] Many of those cases specifically address the Fallacy of Af-

85. *See* GEISLER & BROOKS, *supra* note 36 at 63 (1990).

86. *See*, *e.g.*, Spencer v. Texas, 385 U.S. 554, 578-79 (1967); Funk Bros. Seed Co. v. Kalo Inoculant Co., 333 U.S. 127, 134 (1948); Allied Erecting & Dismantling Co. v. USX Corp., 249 F.3d 191, 202 (3d Cir. 2001); Aylett v. Sec'y of Hous. & Urban Dev. ex rel. Burris, 54 F.3d 1560, 1569 (10th Cir. 1995); Hernandez v. Denton, 861 F.2d 1421, 1438-39 (9th Cir. 1988) (*vacated and remanded on other grounds*, Denton v. Hernandez, 493 U.S. 801 (1989)); Regalado v. City of Chicago, 1999 U.S. Dist. LEXIS 14902 *4 (N.D. Ill. Aug. 31, 1999); British Steel PLC v. United States, 929 F. Supp. 426, 436 (Ct. Int'l Trade 1996); Lucas Aerospace v. Unison Indus., L.P., 899 F. Supp. 1268, 1287 (D. Del. 1995); Foster v. McGrail, 844 F. Supp. 16, 20 (D. Mass. 1994); Pearson v. Bowen, 648 F. Supp. 782, 792 (D. Ill. 1986); United States v. Gambale, 610 F. Supp. 1515, 1525 (D. Mass. 1985); Amusement Equip., Inc. v. Mordelt, 595 F. Supp. 125, 130-31 (E.D. La. 1984) (*aff'd in part and rev'd in part,* Amusement Equip., Inc. v. Mordelt, 779 F.2d 264, 268 (5th Cir. 1985)); Menora v. Ill. High Sch. Ass'n, 527 F. Supp. 632, 636 (N.D. Ill. 1981); Lakeland Constr. Co. v. Operative Plasterers & Cement Masons Local No. 362, 1981 U.S. Dist. LEXIS 11584, *4 & n.2 (N.D. Ill. Mar. 24, 1981); Glenn v. Mason, 1980 U.S. Dist. LEXIS 13233, *7 (S.D.N.Y. Aug. 18, 1980); Desilu Prod., Inc. v. Comm'r, T.C. Memo 1965-307, *34 (T.C. 1965); Batty v. Ariz. State Dental Bd., 112 P.2d 870, 873 (Ariz. 1941); Nickolas v. Super. Ct. of San Diego County, 50 Cal. Rptr. 3d 208, 222, (Cal. Ct. 2006); People v. Martinez, 74 P.3d 316, 321-22 (Colo. 2003); Royer v. State, 389 So. 2d 1007, 1016 (Fla. Dist. Ct. App. 1979); Barham v. Richard, 692 So. 2d 1357, 1359 (La. Ct. App. 1997); State v. Star Enter., 691 So. 2d 1221, 1230 (La. Ct. App. 1996); Wein v. Carey, 362 N.E.2d 587, 590-91 (N.Y. 1977); Hicks v. State, 241 S.W.3d 543, 546 (Tex. Crim. App. 2007); State v. Zespy, 723 P.2d 564, 570 (Wyo. 1986).

87. Carver v. Lehman, 528 F.3d 659, 671 (9th Cir.), *opinion withdrawn*, 540 F.3d 1011 (9th Cir. 2008); Agri Processor Co. v. Nat'l Labor Relations Brd., 514 F.3d 1, 6 (D.C. Cir. 2008); E. Armata, Inc. v. Korea Commer. Bank of N.Y., 367 F.3d 123, 129 n.7, 132 n.10 (2d Cir. 2004); Torpharm Inc. v. Ranbaxy Pharm., Inc., 336 F.3d 1322, 1329 & n.7 (Fed. Cir. 2003); Crouse-Hinds Co. v. Internorth, Inc., 634 F.2d 690, 703 & n.20 (2d Cir. 1980); Nw. Steel Erection Co. v. Zurich Am. Ins. Co., 2008 U.S. Dist. LEXIS 4082, *4 & n.5 (D. Neb. Jan. 18, 2008); Bell Atl. Corp. v. MFS Commc'ns Co., 901 F. Supp. 835, 849 (D. Del. 1995); Villines v. Harris, 11 S.W.3d 516, 520 & n.2 (Ark. 2000); Thomson v. Beuchel, 2007 Cal. App. Unpub. LEXIS 6242, n.6 (Cal. Ct. App. July 31 2007); Thompson v. Clarkson Power Flow, Inc., 254 S.E.2d 401, 402 & n.1 (Ga. Ct. App. 1979); French v. State, 362 N.E.2d 834, 842-43 & n.1 (Ind. 1977); Mark v. Comm'r of Pub. Safety, 2005 Minn. App. LEXIS 500, *4-5 & n.3 (Minn. Ct. App. May 10, 2005); Health Pers. v. Peterson, 629 N.W.2d 132, 134-35 & n.3 (Minn. Ct. App. 2001); State v. Clifford, 121 P.3d 489, 501 (Mont. 2005); State v. Wetzel, 114 P.3d 269, 275-76(Mont. 2005); Dep't 56, Inc. v. Bloom, 720 N.Y.S.2d 920, 922-23 (N.Y. Sup. Ct. 2001); Iams v. Daimlerchrysler, Corp., 883 N.E.2d 466, 478-79 (Ohio Ct. App. 2007); Edwards v. Riverdale Sch. Dist., 188 P.3d 317, 320 (Or. Ct. App. 2008); Hale v. Water Res. Dep't., 55 P.3d 497, 502(Or. Ct. App. 2002); In re Luna, 175 S.W.3d 315, 320 & n.4 (2004), *opinion withdrawn*, In re Luna, 275 S.W.3d 537 (Tex. App. 2008); Thompson v. State, 108 S.W.3d 269, 278-79 (Tex. Crim. App. 2003); Zinpro Corp. v. Ridenour, 1996 Tex. App. LEXIS 3380, at *10 n.4 (Tex. App. Aug. 1, 1996).

88. Baker v. Amoco Oil Co., 761 F. Supp. 1386, 1392 (E.D. Wis. 1991); State v. Zespy, 723 P.2d 564, 570, n.1 (Wyo. 1986); Hernandez v. Denton, 861 F.2d 1421, 1439 (9th Cir. 1988); Caterpillar Inc. v. United States, 20 C.I.T. 1169 (Ct. Int'l Trade 1996); Idaho Press Club, Inc. v. State Legislature, 142 Idaho 640, 650 (2006); Central Dauphin Sch. Dist. v. Pennsylvania Mfrs. Ass'n Ins. Co., 16 Pa. D. & C. 4th 289, 296 (1992); State v. Euman, 558 S.E. 2d 319, 324 (W. Va. 2001) (*quoting* Max Radin, *Statutory Interpretation*, 43 HARV. L. REV. 863, 873-74 (1930)).

firming the Consequent.[89] Accordingly, the legal authority for using the convention of logical fallacy to evaluate a legal argument is substantial.

However, the impact of the logical fallacy has its limits. While the fallacy is a powerful tool for exposing and diffusing the influence of an illogical argument, it does not necessarily invalidate the conclusion. Instead, it only invalidates the form of the argument purporting to support the conclusion. If an argument's structure is logically invalid, the result is that the argument cannot be used to support the truth of the conclusion. Another, logically sound, argument might still be crafted to support the conclusion. However, identifying and explaining the illogical nature of the argument, will take the opponent to task, requiring that they either devise a logically valid argument to support their conclusion or concede defeat.

VI. MAKING LOGIC CONSPICUOUS AGAIN

Formal logic can be a powerful advocacy tool for litigators. It can provide a mechanism and a language for them to analyze and discuss the shortcomings in their opponents' legal arguments. Formal logic is important to judges, whose decision making processes, and whose opinions articulate those processes, need to be grounded in traditional, consistent logic. Formal logic can be invaluable to the student of law engaged in mastering the discipline of legal reasoning. It provides a structure for legal reasoning. It shows the student what regal reasoning, a frequently elusive concept to legal neophytes, "looks like."

In fact, even for the experienced litigator, revealing what legal argument "looks like" is half the battle to successfully defeating a legal argument, based on rules of logic, instead of rules of law. Legal argument often requires that the litigator reduce the argument to its most basic concepts, revealing simple, ingredients, and a basic, logical framework that can then be tested against the rules of philosophical logic. Often complex legal analysis turns on these most simple logical questions; questions that have certain answers. They are questions answered not by the application of rules of law, but instead on the application of rules of logic. Lawyers, who arm themselves with knowledge of these rules of logic, have an important tool in crafting sound arguments, analyzing the structure of argument, and explaining just what is wrong with fallacious legal arguments, such as those suffering from the Fallacy of Affirming the Consequent.

Understanding and employing this and other logical fallacies does not require a litigator to devote long hours to reading philosophy. Instead, by mastering certain rules of logic and looking for certain patterns of argument, a lawyer can identify a logically invalid argument form. Recognizing even one of these hallmarks of

89. *Gilliam*, 488 F.3d at 1197 n.7; *Stewart Foods*, 64 F.3d 141 at 145 n.3, *United Tel. Co*, 559 F.2d 720 at 725-26; Topliff v. Wal-Mart Stores E. LP, 2007 U.S. Dist. LEXIS 20533 (N.D.N.Y 2007); Adams v. La.-Pacific Corp., 284 F. Supp. 2d 331, 338 n.7 (W.D.N.C. 2003), *rev'd in part, vacated in part, remanded*, 177 Fed. App'x. 335, (4th Cir. 2006); United States v. Balcarczyk, 52 M.J. 809, 812 n. 4 (NM.Ct. Crim. App. 2000); In re Jeffery, 2008 Cal. App. Unpub. LEXIS 7976, n.8 (Cal. Ct. App. 2008); Pirtle v. Cook, 956 S.W.2d 235, 248 (Mo. 1997), *City of Green Ridge,* 25 S.W. 3d at 563 and 564 n.2; *Paulson*, 28 S.W. 3d at 572, Culton v. State, 95 S.W. 3d 401, 405 (Tex. App. 2002).

invalid argument will allow a lawyer to identify patterns of argument that might seem logically sound, but are in fact, logically unreliable. Once identified, a lawyer can use legal precedent, which has rejected logically fallacious arguments like the Fallacy of Affirming the Consequent, to rebut their opposition's argument and educate the court regarding the place of formal logic in jurisprudence. A little understanding of formal logic is all that is required to make one's opponent's logic (or lack thereof) conspicuous again. Once an argument can be revealed as logically fallacious, its opponent is armed with a powerful advocacy tool.