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Premise relevance: Informal logic and legal theory compared.

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Premise Relevance:
Informal Logic and Legal Theory Compared

by

Michael Kasurak

A Thesis
Submitted to the Faculty of Graduate Studies and Research
Through the Department of Philosophy
in Partial Fulfillment of the Requirements for
the Degree of Masters of Philosophy at the
University of Windsor

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1993

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Abstract

This thesis is an investigation dealing with premise relevance. Specifically, I am interested in the question: what makes a premise relevant in the context of an argument? My method of approaching this matter is twofold: First, I survey the literature of three informal logicians to see if they agree as to what constitutes relevance. Second, I look to the classical legal literature to determine whether they are agreeable as to how relevance is defined and whether their work is beneficial to the logical enterprise.

The informal logicians are: Douglas Walton, Christopher Tindale and James Freeman. I argue that although each of the writers has a different story to tell, the work of Freeman and Tindale are similar in substantial respects.

The classical legal writers I investigate are John H. Wigmore and James B. Thayer. I have found them to be in agreement as to what constitutes relevance and on the relationship of logic to law.

Overall, I have found that the work on relevance of these classic legal writers is of little benefit to the work of the informal logicians, because the domains differ in their respective approaches to the issue: The legal writers are concerned with arriving at a working
definition of relevance which can be rendered applicable to practical evidentiary matters. The informal logicians attempt to ascertain not only what relevance is with great conceptual clarity, but devise a normative component as well.
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PREFACE

Before I introduce the nature of my project, I will commence with a synoptical account of what brought about its undertaking. Briefly, it was my interest in law which directed me to university as well as guided me to philosophy. Once my studies acquired this focus, my fascination with the law prompted me to learn all I could about argumentation.

As my knowledge about argumentation grew, I began to see the various problems and unanswered questions which confronted the informal logic movement. I could not help wonder whether or not legal argumentation would be of any assistance in their resolution. Out of the many possible topics to which my methodology is applicable, I have chosen relevance as the area in which I wish to concentrate my efforts.

Specifically, I am interested in surveying the current literature on premise-relevance from the perspective of the informal logicians, in order to ascertain whether or not there exists any agreement as to what constitutes the meaning of relevance: What makes a premise relevant to a conclusion? Once this stage is completed, I turn to the jurisprudential literature to determine if there is a fixed conception of relevance in
it, and how it may be applied to what is being said by
the informal logicians: I am interested in whether or not
we can learn anything about premise relevance from the
legal literature.

My findings are that although each of the three
informal logicians that I have examined presents a unique
account of relevance, work of Tindale and Freeman is
compatible in substantial respects. In the legal
literature, I have also found that there is a general
consensus as to what constitutes relevance. Contrary to
my initial expectations, it turned out that the legal
literature does not appear to provide substantial
insights for the informal logicians. This is because the
two groups have quite different concerns. The informal
logicians want to analyze the concept of relevance: The
legal writers want to clarify the conditions for
relevance as it applies to evidence in practical legal
contexts. These findings will be made clearer as the
investigation proceeds.
INTRODUCTION

I want to make some preliminary remarks regarding how I intend to proceed, as well as identify some possible objections which I believe I should address at some point in my investigation.

In terms of the former consideration, I will progress in roughly four stages: First, I will investigate the literature of the informal logicians. Second, I will survey the writings of the legal theorists. I should note that neither of these stages will consist of an exhaustive examination of the literature in their respective domains, for understandably, this would prove to be too extensive an undertaking. Third, I will compare the work of the informal logicians to that of the legal theorists, and fourth, I will arrive at a conclusion.

I should add that throughout the expositions of the various theorists I examine, I refrain from including critical analysis, unless I believe it appropriate for clarification. I will, however, cross-reference for the sake of brevity, or to clarify a point of contention between two writers. I will confine my critical assessment to a section following each exposition with an eye to addressing these three questions: (1) Is there agreement amongst the informal logicians as to what makes
a premise relevant to a conclusion? (2) Is there
greement as to what constitutes relevance in the legal
context? (3) Is the legal literature of benefit to the
work of the informal logicians?

Regarding the matter of possible objections, I
believe that my investigation's methodology can be
confronted with two: First, how is an appeal to legal
literature not a blatant improper appeal to authority?
Second, how is an appeal to the law not an improper
appeal to practice? I merely mention these points for the
present; I will return to them later in the project.
Chapter 1: Douglas Walton: Topical Relevance In Argumentation

1.0: Introduction

Walton, in his book *Topical Relevance In Argumentation*, provides a thorough examination of how the term irrelevance is used in everyday discourse. I have chosen this work as my starting point, for it will function as a sounding board or basis from which I can compare and contrast the various other views of informal logicians that I intend to include in this investigation. Also, I will include much of his theory of argument in order to lay an appropriate foundation from which to view these other conceptions: appropriate in the sense that in order to render my undertaking feasible, I will have to assume some things as given, such as what an argument is.

Given this approach to Walton, I will proceed with my exposition of the various forms of irrelevance he uncovers and his insights about them. In so doing, I will retain his quadrilateral format: Conversational Allegations, Propositional Inferences, Paradoxes, Sophisms and Relatedness, and last, Criticisms of Irrelevance.
1.1: Conversational Allegations

Walton is interested in ascertaining what the term "irrelevance" means in the context of natural language argumentation. His method is to try to fit the diversity of pragmatic argumentation, such as debate, criticism and refutation, with formal mathematical structures. In doing so, he hopes to accomplish two things: first, acquire some idea of what it means to say a claim is irrelevant in a pragmatic setting; second, discover what formal logical system best characterizes it.

Walton acknowledges the opposing position which maintains that formal models are not needed to settle conversational disputes of irrelevancy. He argues that formal models are needed to gain a clear understanding of allegations of irrelevancy in terms of their justifiability. That is, if one makes a charge of irrelevancy, one is operating with not only a concept of 'relevancy' but also one of 'good argument' which the claim is alleged to be in violation of.¹ Thus Walton's point is that when an allegation of irrelevancy is made, there is an underlying concept of relevance which needs to be made explicit.

Walton contends that rules governing relevance in everyday discourse are determined by the participants in the exchange. Thus, in effect, relevancy is a factor of
audience tolerance: but he wants to overlook this relative component of pragmatic discourse for the sake of discovering the general constituents of relevancy. For Walton, this would allow for an understanding of relevance apart from the audience altogether, which is necessary if the charge of irrelevancy is to be made defensible: amenable to some criteria.

Walton’s desire to uncover the general elements of relevance does not mean that he intends to disregard normal discourse altogether: conversational contexts provide the types of allegations which an adequate theory of relevancy must account for. His view, rather, is that looking to everyday argumentation for an account of relevance stands no chance of being beneficial, for such argumentation is rarely governed by rules from which an understanding of relevancy can be derived. Walton also thinks that standards of relevance will not be found by appealing exclusively either to formal logic or to conversational disputations, for "a fruitful pragmatic approach to relevance should combine formal structures with specimens of actual disputation," evaluating one against the other.  

1.2: Disputation Theory

Walton maintains that conversational argumentation has two components: a co-operative one and an
oppositional one. An argument is co-operative in so far as it is to proceed in an orderly and positive manner for those participating. For an argument to proceed in an orderly fashion, it must have some rules governing its exercise. These rules must be agreed upon by the participants of the dispute, to regulate the argument's procedure -- the types of moves which will be allowed and/or required -- and also to outline the objective(s) of the parties involved.

Walton holds that the "core of any argument is a set of propositions - usually described as the premises and conclusion". At the level of natural conversation, this "core element" must exist for there to be an argument. But all the embellishment found in natural conversation which shrouds the argument's actual core structure is of vital importance in gaining an understanding of allegations of irrelevance. Thus the desired model of argument must take into account the propositional component as well as its context.

How can such a requirement be feasible? Grice (1975) answers this question by asserting that classical logic provides the "correct propositional core" and that "conversation theory provides the right background context". For Grice, the "Co-operative Principle" underlies all argumentative exchanges and dictates that any contribution by the participants must contribute to the purpose and direction of the exchange. Walton
objects to this position on the grounds that charges of irrelevance in normal argumentative discourse are rarely co-operative. In Walton’s opinion, what is needed in tandem with conversation theory is a “disputation theory for contexts that are more adversarial in nature than co-operative.” To Walton, disputations are co-operative only to the extent that they are governed by some agreed-upon rules that regulate the acceptability of moves and objectives. Disputations are basically conversational wars, in that one party’s loss is a triumph for the other side.

Walton argues that the “proper vehicle for disputation theory is the game of dialogue or the dialectical game.” The dialectical game is played by two or more participants whose moves are governed by rules. For the most part, these moves consist in asking or answering questions. Atomically, these moves are propositions which each participant introduces in the process defending or refuting a thesis. The winner of the game is determined by the “logical relationships among these sets of propositions”.5

1.3: Types of Irrelevance Allegations

Walton lists a number of different types of criticisms/allegations of irrelevance found in the context of “ordinary” conversation.
He contends that conversational charges of irrelevance are of two main types: (a) those which concern invalid arguments, yet where the premises and conclusion do share a common subject matter; and (b) those which pertain to arguments which are valid.

Regarding irrelevance involving invalidity, Walton gives the example of Fred who is arguing for the position that logic is the study of argument. In response, Wilma replies "What do you know about it? You’ve never struck me as being very logical yourself." Fred’s rejoinder could be something to the effect of "That’s irrelevant, how does that relate to the argument I just presented?" As Walton points out, Fred may concede that Wilma is right, i.e., that he is not the most logically minded person, however the soundness of his argument is left unchallenged by Wilma’s response, even though her response is not entirely off topic, since logic is at issue in both his argument and her response.

Walton maintains that Fred’s response amounts to saying that although the argument Wilma presented is relevant in so far as it is not off the topic, but that "in some sense" it is not valid. Walton is unsure as to what sense Wilma’s argument is invalid and suggests that it may be by the rules of classical logic.

In the second type of conversational irrelevance allegation, Walton is referring to cases where the argument presented is valid, at least in so far as it is
uncontested, yet where the conclusion proved has no
boaring on the purpose of the overall argument. For
example, he presents the case of a prosecuting lawyer
involved in a murder trial who argues for the conclusion
that murder is a horrible crime, in order to persuade the
jury to find the defendant guilty. Clearly, the argument
presented can be valid in terms of classical logic, yet
the conclusion argued for is not relevant as an attempt
to meet the burden of proof requirement set out by the
court.

This fallacy, Walton notes, has been labeled by
DeMorgan ignoratio conclusionis, which is the same
fallacy Aristotle refers to as ignoratio enlenchi in the
De Sophisticis Elenchis. An argument committing such a
fallacy fails because, although it is valid, its
conclusion is not the one the arguer is ultimately out to
prove. Walton goes on to suggest that these two forms of
irrelevance may be reduced to the same fallacy, for in
the case of the wrong conclusion, it may be hard not to
include all other fallacies, especially those which
pertain to acts of diversion.

In support of this contention, Walton notes that
when Aristotle defines ignoratio enlenchi he classifies
it as the "failure of a refutation to contradict a given
conclusion" and in doing so he covers many of the
traditional fallacies. Walton hypothesizes that
Aristotle's point may be that there are as many ways to
argue incorrectly as there are fallacies. Walton agrees with Hamblin that a "misconception of reutation" can be made to cover almost all fallacies, including appeals to authority and to popularity, as well as those already mentioned. The problem with the apparent blanket treatment of fallacies of relevance is that there is a lack of precision given to their identification.

1.4: Emotional Appeals

Walton introduces what are commonly referred to as fallacies of emotional distraction, regarded as fallacies in logic texts because such appeals are considered irrelevant. Examples include: *ad baculum* (appeal to force), *ad populum* (appeal to popular pieties, and *ad misericordiam* (appeal to pity). In Walton's view, the treatment of these fallacies by many textbooks is problematic.

For Walton, one problem with regarding emotional appeals as fallacies is that they can't be formulated into propositions. This being the case, the problem arises of locating the argument. Take, for example, one who says "Accept my argument or I'll sue you." Clearly there is a threat being brought forth, but is there an argument or simply a conditional statement being offered: "If you don't accept my argument, I'll sue you."

According to Walton, another problem with treating
emotional appeals as fallacies is that these appeals don’t always seem irrelevant. Take, for example, an appeal to force. Consider the penalties for being convicted of impaired driving: a monetary fine, an automatic loss of one’s driving privileges, a criminal record, and possibly incarceration. Given the potential threat that drunk drivers pose to society, it doesn’t seem unreasonable to legislate such penalties against them, regardless of the blatant appeal to force. So where is the line to be drawn separating a fallacious appeal from a legitimate one? 8 Also, if appeals of emotional distraction are ‘irrelevant’, which is the common accusation, in what sense are they actually irrelevant?

To illustrate that appeals to pity are problematic, Walton puts forth a few examples. For the sake of brevity, I will limit myself to only one.

The example is an appeal to pity which Walton regards as common in legal argumentation. The scenario would run as follows. Mr. X steals money to buy food for his family. He regrets doing it but he also believes he had no alternative. Mr. X also is willing to make amends, provided he can acquire a job. If given a jail sentence, he would not be able to take care of his family, so he asks the court for a suspended sentence.

This example can be viewed from two perspectives: compassionately or callously. One maintaining the callous
position would hold that the fact that Mr. X stole the money to feed his family should have no effect on the trial; that is, the context of the crime is irrelevant to both the trial and the sentence. The compassionate observer of the situation would argue that the circumstances surrounding the crime should be taken into consideration by the courts. In other words, the circumstances of the crime are relevant to the outcome of the trial.

So the question is this: Is the appeal to the emotions relevant or not? Walton suggests that the right way to arrive at an answer may be to separate the argument's two conclusions which the court must decide upon: first, whether or not Mr. X is guilty of the alleged crime; second, what an appropriate sentence would be. One could further argue that the emotional appeal is not relevant to (1) whether the act was committed or not, but is relevant to (2) the sentence. As Walton points out, there is a "subject-matter overlap between the emotional appeal to Mr. X's circumstances and both (1) and (2) respectively." Walton concludes that whatever relevance does mean, it does not mean "subject-matter relatedness of propositions". Walton goes on to say that regardless, until the meaning of what is relevant can be determined, the question of whether appeals to pity are fallacious or not will remain unanswered.9
Walton summarizes his thoughts on the nature of appeals to pity in the following manner: the essence of the irrelevance allegation amounts to the argue: inadequately proving the conclusion that the argument sees to establish. Thus the appeal to pity acts as a "smokescreen for the failure of the arguer to present premises that would have genuine logical force in justifying" the intended conclusion. The charge of irrelevancy is justified only in the sense that the appeal is used as a premise which does not establish the conclusion which the argument aimed at proving. Other times, the appeal to pity functions as a diversion to hide the insufficiency of evidence offered to support either a premise or the conclusion.

1.5. Personal Attacks

Another form of common allegation of fallacious reasoning/irrelevancy found in conversational disputes is the ad hominem fallacy. Walton explains that the fallacy is committed when:

one's adversary is accused of a circumstantial inconsistency between his actions and certain propositions he has advocated, e.g. in his moral exhortations or professional ethical standards or codes he is committed to.

In essence, the accuser is attacking his opponent's
person/personality instead of the issue under dispute. However, this line can become quite blurred, since one’s personality can be closely intertwined with the issue at hand. This being the case, the fallaciousness is questionable, for the introduction of such material may be completely justified and not merely an unscrupulous diversionary tactic.

The example used by Walton regards Gerald Bouey, a past Governor of the Bank of Canada, who was criticized for telling the public to resist inflationary wage demands while at the same time accepting an increase of his salary to one hundred and fifty thousand dollars. This criticism could be rendered fallacious if “it is taken to be a rejection of the proposition that high wage increases are inflationary.” But, if it points to an inconsistency between Mr. Bouey’s espoused theory and his personal actions, then no fallacy is committed by the criticism.13

1.6: Questions and Answers

Another type of conversational accusation of irrelevancy covered by Walton involves questions and answers. Walton states that it is commonly believed, that if a question is not answered directly in the context of an argument, then a fallacy has been committed. As Walton
points out, such a position is far too rigid, for it rules as fallacious the failure to answer loaded questions such as "Are you still beating your wife?". Clearly, a direct 'yes' or 'no' still entraps the respondent into admitting guilt to the presupposition; namely, that at some point in time he beat his wife. Ultimately, the respondent should be given the opportunity to address the presupposition of such a question.

Walton points out that many questions are loaded and/or unfair because they contain presuppositions which the respondent is not committed to, so she must be careful not to consent to them by answering the question directly. Walton's point is that answering a question directly is not always the fairest way in which to address it. Consequently, separating where an answer to a question is relevant from where it is irrelevant becomes a difficult undertaking, since in some cases the best reply is another question.14

Having uncovered various types of charges of irrelevancy in natural argumentation, Walton is in a position to investigate which formal model is best in ascertaining their failure of logic. 15
Propositional Inferences In Disputation

1.7: Types of Promise Relationships

Walton maintains that if an argument is to be regarded as an "organized two-person disputation", then three types of relevance relationships can surface as points of contention during the course of the exchange. The first is the relationship between a question and its answer. If an answer qualifies as a direct answer, according to the rules of the game, then its relevancy would go unchallenged. If, on the other hand, the response fails to meet the direct answer requirement, it would, to some degree, be susceptible to a charge of irrelevancy. The relevance relationship would exist between the question itself and the proposition advanced for its response. Walton terms this a "local" relationship because it involves only "two points in the set of moves" made by the collaborators of the argument.

The second form of relevance relationship can exist between a proposition put forward and the issue under scrutiny. Here, Walton refers to the issue as a set of propositions agreed upon by the participants of the argument from the outset. The conclusion(s) are the proposition which each side or participant is seeking to establish in order to win the game. Thus, at any point throughout the exchange, one arguer, in the opinion of
the other, may stray from the initial topic and be
criticized for making an irrelevant move. This
relationship, Walton refers to as being "more global"
than the first because it regards a particular move in
the game as it stands to the game itself.

The third type of relevance relationship Walton
identifies regards one or more of the propositions an
arguer puts forward and the argument itself. Hence, if
one argues that if P then Q, and the adversary doesn’t
admit that P is related to Q, a charge of irrelevancy may
ensue. Walton acknowledges that this relationship too is
"local", as it pertains only to a certain move of the
argument. It also can coincide with the first. If the
question "Why Q?" and the response is "If P, then Q", the
point of contention may be the relevance of P to Q, which
the subsequent answer should address.

After identifying the three propositional
relationships which allegations of irrelevancy arise
from, Walton goes on to discuss how formal logic ties in
to disputation. He maintains that the role of
propositional logic for disputation is to set out the
rules defining what constitutes a "proof or disproof" of
a thesis. This is the task he proceeds to undertake.
1.8: The Role of Classical Logic

Walton begins to address this question by investigating classical propositional logic. He thinks a favourable characteristic of classical logic is that it is truth-functional. This is a desirable attribute because it allows the assignment of truth values to atomic portions of complex propositions, which in turn enables one to assign an overall truth value to the statement itself.

The problem with truth-functional logic is that it becomes problematic when applied to natural language. Take for example the material conditional. In terms of classical logic, if the antecedent is false and the consequent true, the entire proposition is true. This seems reasonable enough until examined in terms of natural language. For instance, if I say "If p (apples are blue), then q (the N.D.P. won the 1990 Ontario election), it becomes very hard to assign an overall truth-value of "true" to the proposition. Certainly, apples are not blue, but the N.D.P. did win the election. So, given that classical logic operates with the law of the excluded middle, how are we to categorize the proposition: true or false? It’s true because the antecedent is false.

What is at issue here is the relevance of the antecedent to the consequent, something that is entirely
overlooked by classical logic. It is not the concern of classical logic whether the colour of fruit is pertinent to provincial elections, but how to determine the truth values of complex propositions given the truth values of their atomic parts. Keeping with the same example, let's assume that the rules of formal logic are applicable and regard the conditional proposition as true. Would anyone really accept such a statement as being true? No, and the reason is that the antecedent is completely unrelated to the consequent.

Walton does not completely dismiss classical logic, for it does present another beneficial quality; namely rules of validity. A valid argument in classical logic is one in which, given that the premises are true, necessarily the conclusion is true. Hence, inference patterns can model valid arguments. Walton names several which fall under this heading: Modus Tollens, Transitivity of the Conditional, Contraposition, Addition, Disjunctive Syllogism, Simplification, Conjunction, DeMorgan's Rules, Commutation, Distribution and Exportation. Walton believes that these "principles of valid inference" so closely model those of "commonplace inferences", those used in natural language argumentation, that they lend support to his contention that these rules of inference act as "regulatory structures" for those of natural language.
1.9: Walton’s Astounding Inferences

Although Walton believes that some inferences of formal logic are be mirrored by natural language, he clearly does not believe that all are applicable. He provides four examples, which he refers to as "astounding inferences" where this is not the case. I will limit myself to using two in order to illustrate his point:

1. \[ B / \text{If } A, \text{ then } B. \]
   
   Example: Socrates is dead. Therefore, if Walton sits down, Socrates is dead.

2. \[ A / \text{If not-}A, \text{ then } B. \]
   
   Example: Bananas are yellow. Therefore, if bananas are not yellow, then Socrates is snub-nosed.\(^{23}\)

The reason these examples of valid inference of classical logic fail to remain so when the transition is made to natural language argumentation is the lack of subject-matter continuity. As mentioned earlier, this presents troublesome consequences for the material conditional and truth functional logics.

Walton points out that the rule of Addition can also be construed as problematic in the pragmatic context, for the disjuncts need not be related in any manner. He notes
that it has been suggested that the material conditional and disjunct have greater difficulty making the transition to natural language than do the negation and conjunct.\textsuperscript{24}

Walton proposes that classical logic is useful only where questions of relevance do not rest on the subject matter of propositions. For these, a richer propositional logic is required.\textsuperscript{25} For that purpose, Walton turns to relatedness logic. The only marked difference of relatedness logic which distinguishes it from classical logic is that it assumes the constituent p’s and q’s are related in some way. Thus, in the case of the conditional, it is not enough that the propositions be true, they must also be related.\textsuperscript{26}

\textit{Paradoxes, Sophisms and Relatedness}

1.10: \textit{Relatedness and Conditional Statements}

If relatedness logic is to help, what it is for propositions to be "related" becomes a crucial question. Relatedness logic arose from attempts to account for conditional statements. For example, "If Socrates drinks the hemlock then Socrates takes his life." Walton maintains that a necessary condition of the statement’s truth is the spatio/temporal relationship existing
between the content of the antecedent proposition and that of the consequent.27

But this analysis of conditional statements is applicable to charges of theory/action inconsistency. Walton provides the following example. A hunter is criticized for killing game for pleasure. The hunter responds by asking his critic why he himself eats the meat of animals? Is the critic's position inconsistent? Walton believes not, on the grounds that the two propositions "Charlie kills game for pleasure" and "Charlie eats meat" are not contradictory. If it was the case that the two propositions came into the same approximate spatio/temporal act-sequence, then there may be a case for inconsistency. I would assume that Walton is considering an instance where Charlie refused to eat the animal he shot. In any case, Walton contends that relatedness logic may be of some assistance in analyzing allegations of *ad hominem*.

1.11: The Astounding Inferences Re-visited

Walton thinks that if relatedness logic can explain why his astounding inferences are invalid, then he will have found a logic that captures relevancy. In his view, spatio/temporal relatedness sheds some light on the first astounding inference. In relatedness logic, this inference is invalid because the fact that Walton sits
down has no spatio/temporal bearing on the death of Socrates.  

As mentioned previously, another way in which relatedness can be defined is in terms of the subject-matter overlap of propositions. Simply put, propositions are related only if they share some common subject matter. In addition, this would hold true regardless of the number of propositions. This provides Walton with a way to explain the invalidity of the second astounding inference for bananas and the shape of Socrates’ nose share no common ground.  

1.12: Redundant Premises  

Walton uncovers yet another form of allegation of irrelevant premises: those which are redundant, i.e., not required for the acceptance of the argument’s conclusion. Recall, an inference, either in classical or relatedness logic, is valid if the conclusion is true in all cases where the premises are true. Second, it is not required in either logic that all the premises be related to the conclusion for the inference to be valid, but just a number sufficient to prove the conclusion. So, a new type of irrelevancy surfaces: cases where there are unneeded premises for the deduction yet which are not cases of subject-matter discontinuity.  

Take the following example for illustration:
1. If logic is a science, logic is teachable.
2. Either logic is not a science or logic is teachable.
3. Logic is a science.
Therefore, 4. Logic is teachable.

Clearly, either of the first two premises is extraneous to the deduction and in that context can be labelled irrelevant, and none of the premises violates the relevant requirement of subject-matter continuity.\(^3\)

1.13: Pertinence

The last way of characterizing relevance, reported by Walton, is in terms of pertinence. Historically, Walton explains, the notion of pertinence prevalent in the Middle Ages was definable in terms of an initial proposition and those which followed that were accepted by the other participant(s) in the argument. Hence, proposition X was pertinent only if it followed from, or was inconsistent with, a subset of the accepted body of propositions. Conversely, X would be impertinent only if it had "no relationship with anything that has gone before".\(^3\) Although Walton’s treatment of pertinence is cryptic at this stage, its role will be made clearer when he goes on to consider the various games of dialogue.
Criticisms of Irrelevance In Games of Dialogue

1.14: Types of Dialogical Games

Now that I have explained the various types of conversational allegations of irrelevance referred to by Walton, I want to move on to cover his conclusions about them. Before I am able to do so, it is necessary to say more regarding games of dialogue, since they will become an important component to his concluding remarks.

Overall, Walton maintains that there are many types of dialogical games: each form having its own rules, strategies, objectives and degree of opposition between its participants. Given this diversity of games, Walton chooses what he calls a symmetrical game as his paradigm case, because in his view it replicates most others. The symmetrical model replicates the "information-seeking questioning and answering" game. Thus there would be two speakers each having a separate thesis, and allowed to utilize two types of premises: those which concern the other party's thesis and those which are responses to questions posed by the other party. The winner of the game is whoever proves their thesis first.

The asymmetrical game, one form being the "obligation game", is distinct in that it begins with an agreement of how many total moves are to be allowed. Thus the winner is either the one who proves his or her thesis
in the allotted number of moves or successfully prevents the other thesis from being proved.

An important element of the symmetrical game is that the participant's motives need not be inconsistent. That is, they may both approach the exchange with the intention of 'building a case' for a given position, utilizing each other's insights. Of course, not all games of dialogue are this co-operative, for the nature of winning some games is to disprove the 'opponent's' position. From the outset of games like that an adversarial relationship is established.

As Walton points out, this by no means is a complete enough account of dialogical games to satisfy the specifics of any particular game taken in isolation. For example, several questions would need to be answered in order that the model be rendered complete: 1. What types of questions are permissible? 2. How are questions to be responded to? 3. What notion of proof is to count as valid? 4. How should presuppositions of questions allocate commitments of the participants/disputants?

1.15: Walton Concludes

This brief summary should tell the reader enough about games of discourse to provide an adequate footing for understanding Walton's conclusion. According to Walton, conversational allegations of irrelevance are
rarely fallacies. That is, they are rarely incorrect arguments in some way, or detrimental enough to evoke any concern. Walton does affirm that some conversational charges of irrelevance may be fallacious in some way but is unsure as to where and how.\textsuperscript{35} I will proceed to review each type of conversational allegation and clarify why it is, in his opinion, not, strictly speaking, fallacious.

Starting with pertinence, Walton maintains that it is fine to introduce impertinent propositions in symmetrical games because the opponent might accept them, and that acceptance could be drawn on later. In an asymmetrical game, pertinent propositions are a good tool for both strengthening one’s own position or weakening the opponent’s. Thus, just because a proposition is impertinent at one phase of the argument does not mean it will remain so or that the initial move of introducing such a proposition is in any way fallacious.\textsuperscript{36}

Walton does acknowledge that a problem with pertinence arises in asymmetrical games such as the obligation game because, given that there is a finite number of moves allowed in the game itself, the defender could conceivably answer each question with an impertinent proposition. This consideration draws Walton to conclude that pertinence "may be partial grounds" for a charge of irrelevancy in certain asymmetrical games. Otherwise, pertinence is too vague a concept to be clearly defined and thus it is unknowable whether it is
fallacious. Clearly, the type of game plays a big role in determining the fallaciousness of the allegation.\textsuperscript{27}

For Walton, the problem with counting misrefutation as a fallacy is that within a multi-tiered argument, there will be propositions proved that are intended to lead to the ultimate conclusion. In sum, a call of wrong conclusion may be premature in the context of the overall presentation of the argument, which, however, is unknowable until the entire argument is presented.\textsuperscript{38}

Regarding questions and answers, Walton simply states that there is the difficulty of determining what will count as a direct answer due to the various types of questions themselves; hence, determining the relevancy of an answer becomes quite troublesome. Also, the type of game itself will dictate to some degree what will be regarded as a suitable response to a question. With respect to games of dialogue, Walton advises that, from the outset, safeguards should be determined to ensure that the answerer can address the question’s presuppositions.\textsuperscript{39}

Walton believes the most fundamental type of relevance to be premissary relevance, which is most aptly modelled by relatedness logic where criticisms of irrelevance are at issue. Otherwise, Walton believes that classical logic is the most comprehensive "core propositional logic for disputation". Walton also maintains that the best way to "control relevance" is
through the "local" relationship the propositions share
with each other, because globally evaluating the
correctness of argument is extremely problematic.40

1.16: Summary of Walton

The aim of Walton's account is to provide an
explanation of what people mean when they make an
accusation of irrelevancy in daily conversation. He
believes such an explanation will apply, conversely, to
relevance. To this end, Walton sees a need to understand
both the logical relations of propositions as well as
considerations regarding the context from which they were
taken. This, necessitates the examination of both formal
logic and disputation theory.

Walton's method for determining the types of
conversational allegations of irrelevance appears to be
an appeal to usage: directly observing how the concept of
relevance is used in conversational settings or referred
to in logic texts. From this evidence, Walton attempts to
determine which type provides the clearest understanding
of relevance. He finds there to be various types of
concerns which allegations of irrelevancy stem from in
natural argumentation: subject-matter continuity, arguing
to the wrong conclusion, emotional appeals, emotional
appeals by innuendo, personal attacks and issues
regarding questions and answers.
After observing all these pragmatic aspects of irrelevancy, he proceeds to look for the most appropriate logical model to fit them into in order that his findings can have a normative component. First he tries classical logic. This he finds problematic in cases where subject-matter continuity is at issue. He contends that where subject-matter is not at issue, classical logic is an adequate model, but where subject-matter is at issue, a richer propositional logic is needed.

Relatedness logic proves helpful in that it takes into account subject-matter continuity and temporal proximity in act sequences. Relatedness logic proves fallible however, since it fails to invalidate arguments which have redundant premises.

In addition to the various forms of relevance Walton finds, and the type of logical model which best characterized them, the types of games of disputation also prove important because they dictate the rules which govern the exchange itself. Walton’s point is that what counts as ‘irrelevant’ moves in certain types of exchanges will not be criticized as such in others, and may in fact be quite beneficial. Due to the existence of these discrepancies in the objectives of dialectical games, Walton finds that logical games provide the most stable environment in which to examine relevancy.
Walton concludes that cases of alleged irrelevancy in common discourse are seldom fallacious, in the sense that they are logically wrong. He admits some charges of irrelevancy are logically justifiable, but is unsure how exactly. The one type of relevancy which we are able to objectively monitor is propositional relevancy by way of relatedness logic.

Concerning claims of propositional relevancy, Walton finds there to be "roughly speaking" three types of claims of irrelevancy. Those which refer to: (1) relatedness of propositions, (2) redundant premises, and (3) fallacies such as ad misericordiam. Others which he identified such as misrefutation, pertinence and issues concerning questions and answers, Walton believes to be germane to other aspects of disputation. Exactly which aspects and their relation to one another, Walton never discloses.

1.17: Analysis of Walton

For the purposes of my investigation, the important question to be addressed from Walton’s conception is what makes a premise relevant to a conclusion? From my understanding of Walton, there are roughly speaking, two ways a premise can be relevant to a conclusion: globally and locally.
As I understand it, the global relationship referred to by Walton is simply a topical or issue-related consideration. Hence, generally, a premise is relevant if it is on the same topic or is related in some way to the issue under examination.

The local considerations refer to those stemming from the relationship existing between the premises themselves, as opposed to the how the premises relate to the overall conversational game. Walton’s criterion for determining the relevance of a premise at this local level is whether or not it violates the rules of relatedness logic. I think the easiest way of understanding the value of relatedness logic is to regard it as a special formal model which assumes the premises to be connected either by subject matter or, in the case of conditional statements, by temporal sequence.

It is important to recognize, as Walton does, that these two forms of relevance are not rigid in their designations. This is due simply to the fact that pragmatic discourse is extremely diverse. In sum, what may be a case of a violation of a global concern, e.g., arguing to the wrong conclusion, may also be expressed in terms of a local one. So overall, I think these two relationships can be reduced simply to topical considerations.

I think another valuable insight of Walton’s is that what are referred to commonly as fallacies of relevancy,
i.e. emotional appeals, redundancy, may not always be logically objectionable. As Walton points out, the question of logical correctness often is determined by a particular case and the type of dialectical game in which it arises.

To conclude, I understand Walton as recognizing two general ways a premise can be regarded as relevant to a conclusion. The first types take into account the relationship the premise has to the issue overall which cannot be monitored by relatedness logic. The second is concerned specifically with the relationship which exists between premises. This local relationship is best modeled by relatedness logic which takes into account subject matter overlap and, in the case of conditional statements, temporal proximity. In general, I believe these two forms are reducible to topical considerations.
2.0: Introduction

Tindale is interested in coming to some understanding of relevance as it "arises in the directly informative discourses of argumentation" and also as a consideration in the assessment of arguments themselves. Tindale thinks the term 'relevance' is used with little discretion in everyday discourse, and with no clear understanding of its meaning. For instance, relevance is used synonymously with justified, as a property something deemed relevant possesses, and possibly as a relation.

Tindale believes that we possess a far more extensive intuitive understanding of irrelevance than we do of relevance itself. This, in Tindale's opinion, has led many, beginning with Aristotle, to think that they have some understanding of relevance when in fact they don't; as if explaining the logical abnormalities provides an understanding of the commonplace.41

Tindale proceeds, first, by giving some attention to what has been said, both historically and by contemporary writers, on relevance. Second, he puts forth his own conception of relevance based on the works of logicians, both formal and informal, as well as cognitive psychologists.42
2.1: Surveying Aristotle’s Work

Tindale traces the roots of contemporary writings on irrelevance back to Aristotle’s idea of misconception of refutation or ignoratio elenchi. I have dealt with this fallacy at some length in discussing Walton’s treatment of it. Unlike Walton however, Tindale does not agree that almost any fallacy of irrelevance can be aligned under this blanket term. Tindale contends that this view disregards Aristotle’s intent. He claims that what Aristotle regarded as a misrefutation is not any line of argument that disregards the position put forth by the opponent, but rather those statements where the arguer was in error in thinking the argument presented was actually and legitimately refuted by his claims.

Tindale contrasts with ignoratio elenchi what he refers to as “deliberate irrelevance”, also found in works of Aristotle. In this case, relevance arises in a discussion of sophistry regarding how one can lead an opponent to a position that one can easily uphold. Aristotle states that such a move is, in varying degrees, necessary in argumentation. It is necessary or legitimate when it is needed to allow the argument to advance. Such a diversion would be illegitimate if it were done intentionally, for the sake of winning the debate.

Tindale believes Aristotle’s contributions to our
understanding of relevance are that arguments must either lend weight to the support or demise of a thesis, and that allegations of irrelevance are "made in relation of the context." Although Aristotle's notion of relevance is only implicit in his works, Tindale believes that it is synonymous with "belonging" in the sense of sharing in like natures. In terms of argumentation, Tindale believes the "nature" in question to be meaning; hence, an argument's premises are relevant to one another if they share the same meaning. When Aristotle says that lines of argument must either affirm or negate a thesis, he is doing so on the basis that to be relevant they must have some mutual belonging with the thesis. Tindale regards Aristotle's view as both vague and extreme--vague in the sense that it fails to adequately explain how something shares in the meaning of a thesis and extreme in that it could render relevant propositions that don't even share the same subject matter.

2.21 The Contemporary Writers

Tindale also finds illuminating the work on relevance of the contemporary cognitive psychologists Sperber and Wilson.

In Tindale's view, although Sperber and Wilson do not intend their work to define relevance in respect to ordinary usage in discourse, the outcome of their account
is quite similar. Specifically, Sperber and Wilson are concerned with relevance as a factor in communication.

Sperber and Wilson believe that human communication is "relevance-oriented". Once one knows another individual or their cognitive environment, one is in the position to be able to infer what that person or group of is likely to accept. Sperber and Wilson's main thesis stems from the observation:

that an act of ostension carries a guarantee of relevance, and that this fact -- which we will call the principle of relevance -- makes manifest the intention behind the ostension.47

Sperber and Wilson define a person's cognitive environment as:

the set of all the facts that he can perceive or infer: all the facts that are manifest to him. An individual's total cognitive environment is a function of his physical environment and his cognitive abilities.

Although we all share the same physical world and "general purposes", we differ in that we all have differing physical environments and cognitive abilities. With respect to communication, when we address an audience, our common cognitive environment is termed a mutual cognitive environment. In such a circumstance, the proposition is made manifest to those who partake of the same cognitive environment. As Tindale states in a footnote, this idea of a mutual cognitive environment is not to be confused with mutual knowledge; that is, knowledge which is shared and known to be shared.48
As I understand it, a cognitive environment is different from shared knowledge in that it is what provides the possibility for mutual knowledge. For example, if two individuals grow up in the same physical environment and have roughly speaking the same cognitive abilities, then there stands a good chance that they share some of the same assumptions and would agree on other propositions derived from them if these were made manifest to them. Hence, regardless of either person knowing what the other knows, they share a mutual cognitive environment.

For Sperber and Wilson, when a person communicates with an audience, the intent is not to alter the thoughts of that audience but rather "to modify their cognitive environment". They reason that communicators:

can have some controllable effect on their audience’s cognitive environment, [but] much less on their audience’s actual thoughts, and they form their intentions accordingly.49

So, in effect, the intention of the communicator is to make manifest a set of assumptions by producing the necessary ostensible stimuli to effectively make it "mutually manifest" to both the audience and the communicator that this set of assumptions was the set intended to be made manifest.

In order that a set of premises (or one of this set) be rendered relevant, it must provide some "contextual
effect\textsuperscript{a}. This notion of contextual effect simply means that information is relevant if and only if it modifies or improves a context "by providing further evidence for old assumptions, or provide evidence against old assumptions". Sperber and Wilson conclude that relevance is a given in an act of communication: an audience expects the information presented to be relevant, since arbitrary information would not be worthy of their attention. They construct a principle from this conception of relevance, which they refer to as the presumption of optimal relevance:

(a) the set of assumptions \(X\) which the communicator intends to make manifest to the addressee is relevant enough to make it worth the addressee's while to process the ostensive stimulus.

(b) The ostensive stimulus is the most relevant one the communicator could have used to communicate \(X\).

Tindale believes that implied in their work, the assessing of relevance in written communication--i.e. the relevance of premises, lines of argument, etc.--would require some information regarding the addressee as well as the cognitive environment of the audience.
2.3: Implications of the Sperber and Wilson

Tindale proceeds to discuss three other implications of Sperber and Wilson’s conception of relevance has on written communication.

First, their conception implies that relevance "is tied in some way to the arguer’s intention." In contrast, what is irrelevant is what is not intended by the arguer. This Tindale finds problematic, for as Aristotle showed, irrelevant information is sometimes precisely what is intended. Another way claims of irrelevance can arise which is consistent with Sperber and Wilson’s account is due to the speaker having an inaccurate understanding of the listener’s cognitive environment. This would account for a speaker regarding an assumption as relevant which really was not, as well as for an audience’s failing to process a set of assumptions. A further difficulty Tindale notes about Sperber and Wilson’s account is that relevance as a property of mental processes is troublesome when placed in the context of written discourse, because the statements are separated from the speaker or source. In these instances, Tindale believes that a more accurate approach is to regard relevance as a relation between entities such as premises, statements, or beliefs.

Second, the relevance of a text in not always
identified as such until additional information is supplied. In terms of Sperber and Wilson’s conception, this would be an instance of the audience’s not sufficiently understanding the context. For Tindale, the study of relevance "may" provide us with some explanation of how we "relate to our cognitive environment." This is an important consideration in terms of our argument’s being effective.

Third, Tindale describes Sperber and Wilson’s account of relevance as an "active" one. By this Tindale means that the information must do something to constitute being relevant: either strengthen or weaken those assumptions currently held by an audience.52

One aspect of Sperber and Wilson’s account of relevance that Tindale finds troublesome is that they refer to relevance as admitting of degrees. Hence, a proposition could be very relevant, somewhat relevant, somewhat irrelevant, etc. Tindale believes that such a view confuses relevance per se with the overall strength the new information has in altering those old assumptions held by an audience. Tindale believes that besides being relevant, new information must be regarded as true in order for it to be effective in the modification of old assumptions. Understandably, evidence may be required to fulfill this requirement.53

In a more recent piece of work, (Relevance and Cognitive Environments), Tindale changed his mind on this
point for there he maintains that relevance does admit of degrees. Tindale states that the strongest relevant information allows the audience to deduce a certain conclusion. Conversely, a premise can be said to have "weak relevance" if it merely advances information from which implications can be drawn.\textsuperscript{54}

2.4: The Relevance of Propositions

Having discussed relevance in terms of a context, Tindale moves on to investigate relevance as a relationship of propositions. In this section of his paper, Tindale explains the work of Douglas Walton found in \textit{Topical Relevance in Argumentation}. Since I have already provided an explication of Walton's view, I refrain from going into any detail here. Tindale accepts Walton's conception of relatedness logic as modelling relevance between propositions where relatedness is defined in terms of spatio-temporal proximity in an act-sequence, and/or subject matter overlap.\textsuperscript{55}

2.5: Tindale's Conception Emerges: Internal Relevance

In giving his own account of relevance, Tindale begins by questioning whether there is an irreconcilable difference between contextual relevance and the "purely" premissary. Tindale thinks that there is not. His
conception will regard relevance as, broadly speaking, a "contextual relationship" from which he will "develop an account that accommodates and advances" some of the proposals put forth by the theorists he has reviewed, namely Aristotle, Walton and Sperber and Wilson. Overall, Tindale’s account of contextual relevance has three "specific features": (i) relevance which is "internal" to an argument or discourse; (ii) the relevance between an argument or its parts and the overall issue; (iii) the relevance between an argument or discourse’s parts and the perspective of the audience.

Tindale’s attraction to relatedness logic, over a purely formal model, is in its capacity to treat validity as contingent rather than necessary. Hence, the context and meaning of statements becomes very important in order to assess their validity.

Tindale states that internal relevance is possibly a minimal sense of relevance that exists between propositions put forth in support for a claim. Tindale states that they need not involve the main claim of the argument and at times premises are regarded as irrelevant when they were intended to support merely a claim not central to the argument.

Tindale goes on to say that internal relevance is one way to assess the overall relevance of an argument and consequently one way to judge its strength. But relatedness logic is not without its limitations for
internal relevance. Tindale provides the following example: "Wayne Gretzky is clean shaven"/"Wayne Gretzky is one of the premier hockey players in the world." In this case Walton’s suggestion of subject-matter overlap and spatio-temporal proximity are of little help in determining the relevance of these two propositions. Little help in that both these conditions are satisfied by the propositions: the subject i.e. Wayne Gretzky is contained in both assertions, and he does play hockey and is clean shaven. Yet the first proposition is irrelevant to the second.57

Tindale believes that what is needed in cases like these is the effective condition placed on relevance by Sperber and Wilson. Hence a premise is relevant only if it affects our beliefs regarding the other. Tindale does not wish to disregard completely the requirements of spatio-temporal proximity in act sequences or subject matter overlap, for they can be said to partially constitute this requirement. He believes that the condition he requires for internal relevance is something like Sperber and Wilson’s contextual effect, whereby a premise or claim must have some effect on the audience’s beliefs to be regarded as relevant. In terms of the Gretzky example, this requirement nullifies any claim of a relationship of relevance existing between the two propositions. I am assuming that Tindale makes this claim on the basis that only statistics determine the quality
of a player’s performance and not their physical appearance. ⁵⁸

Another point worthy of mentioning made by Tindale regarding internal relevance follows from what has been said previously. Since the relevance of premises requires them to have some affect on the beliefs of the audience, by either strengthening or weakening those beliefs, relevance can be said to be either positive and negative. Negative relevance should not be confused with irrelevance. Negative relevance simply refers to those propositions which run contrary to the beliefs we, as individuals, already acknowledge as our own. In support of his contention of negative relevance, Tindale states that although the position that there is only positive relevance is a plausible stand, it becomes problematic when one advances a premise that effectively undermines one’s position. On this basis, Tindale upholds that relevance can be either positive or negative. ⁵⁹

2.6: Topic-Relevance

The second aspect of contextual relevance Tindale distinguishes is topic relevance. For Tindale, topic relevance is constituted by the relation an argument or discourse has to the overall issue, ⁶⁰ which he acknowledges to be an "important aspect of the context". In essence, to be topically relevant an argument or piece
of discourse must "accurately represent the issue" or thesis, if one has been established previously. To violate this principle is to either argue to the wrong conclusion, if done innocently, or commit a Straw Person if done deliberately. Overall, diversions must be justified in terms of the topic; that is, have some bearing (directly or indirectly) on the central issue. Failure to comply with this principle results in fallacious reasoning.61

2.7: Audience-Relevance

The third aspect of contextual relevance Tindale discusses is "audience-relevance". Tindale regards audience-relevance as possibly the "key contextual consideration," for it determines the ultimate success an argument has. Tindale's audience-relevance stems from Sperber and Wilson's notion of contextual effect, whereby old assumptions are either strengthened or weakened by the discourse. In terms of an argument, this idea presents a problem, for often an arguer wishes to advance new ideas.

Although logic provides some guidelines as to what ideas are acceptable, the age-old epistemic problem of how new ideas enter the mind becomes pertinent.62 Tindale holds that it is improbable that new assumptions are taken into one's mind apart from some connection with
assumptions already held. Audience-relevance then requires that information being given that is not already regarded as acceptable by that audience be related to what assumptions they do hold.

In Tindale's view, successful arguers must be judged in accordance to the manner in which they achieve a goal and not simply in terms of whether they achieve it or not.63 He believes that a good argument is one in which the audience is led via strong reasoning from committed beliefs to the claim the arguer is advancing.64

Tindale defends his conception of audience-relevance against the objection that it appears to endorse the manipulation of audiences: that is, not only can one relate one's argument to the audience one is confronted by, but also one can exploit it by using "selective reasoning" to bring it to the conclusion being advocated. Tindale regards the latter move in discourse not as a violation of audience-relevance, but as a violation of an ethical nature.65 What Tindale is saying is that to select argumentative moves that will get the audience to where you desire it to go knowing full well that it will follow your path unquestioningly is unscrupulous in that it robs the audience of its autonomy. It is one thing to advance premises in an argument which lead and or mould an audience's beliefs so that it accepts the arguer's conclusion, and quite another to deliberately choose premises held by an audience for the mere guarantee
of its accepting the position advanced. The former, Tindale regards as sound argumentation, the latter, as quite unethical.66

2.8: Summary of Tindale

Tindale approaches relevance from the standpoint of argumentation. In his view, relevance is a term used quite liberally in discourse, with little discretion. He thinks that the concept of irrelevance is an intuitively understood concept which has led many writers, beginning with Aristotle, to believe that they knew more about relevance than they actually did. Tindale contends that these writers erred in their belief that being able to recognize instances of an illogical nature implied that they knew what made good logical sense. What is of merit in Aristotle’s writings on relevance is that they are tied to lending weight, either in support of or in opposition to, a thesis. According to Tindale, another valid point made by Aristotle is that allegations concerning relevancy are always made in terms of a context.

After this short historical survey of the concept of relevance, Tindale turns to the writings of the cognitive psychologists, Sperber and Wilson. In their work, Tindale
finds the concept of relevance is related to the cognitive environment of the audience. This modification of the cognitive environment is termed contextual effect.

Tindale sees three implications of Sperber and Wilson’s work: (1) Relevance is linked to the arguer’s intention. (2) Where one perceives relevance and another does not can be explained as due to one person not sufficiently understanding the context. (3) The relevant information must do something, or provide some contextual effect.

On Tindale’s own conception, relevance has three aspects. First, there is internal relevance. Internal relevance is a relation which exists between premises and a conclusion, and is best modelled by relatedness logic. The benefit Tindale sees with this form of propositional logic is that in it, validity is contingent on the relatedness of the propositions. The drawback relatedness logic has for Tindale is that in some cases premises which are contained in valid arguments of relatedness logic still are irrelevant. He sees contextual effect as supplementing relatedness logic in overcoming this problem. Tindale also believes that relevance can be either positive or negative and does admit of degrees.

The second aspect of relevance, Tindale calls topic-relevance. For Tindale, if an argument has no bearing on the topic or issue at hand, it will in effect be arguing
towards the wrong conclusion, or if done intentionally, be a Straw Person fallacy.

The last form of relevance in Tindale’s conception is audience-relevance. Audience-relevance refers to the effect the information has on the audience, i.e., contextual effect. Tindale believes that contextual considerations are most important for audience-relevance. What he is concerned with is the manner in which the arguer achieves her purpose. Simply put, she must lead her audience from what they already know, to something that they do not, or modify in some way what is already known to them. Tindale is quite clear that he is not suggesting that an audience be swayed by any means possible to get them to accept the conclusion being advocated. Rather, he believes that to build upon or modify the beliefs of the audience is the result of an effective piece of discourse.

2.9: Analysis of Tindale

Overall, Tindale is interested in explicating a notion of relevance that accounts for what we mean when we claim a piece of information is relevant and that illuminates relevance as a component in the evaluation of arguments.

Generally speaking, I think Tindale believes the
relevance of a premise to be a perception of the mind which comes about through a relation shared between information and the cognitive environment of the listener. This view is different from the belief that relevance is a property which premises possess.

What makes a premise relevant to a conclusion? Quite simply, that someone perceives it to be relevant. The important question then is why is relevance perceived? From my interpretation of Tindale, I think this question would involve four factors:

First, there is the presumption that what is being presented is relevant. So relevance is perceived because the listener tries to perceive it. This I take to be a form of the principle of charity, in the sense that one ought to attempt to frame the premise as relevant. So the listener must ask: Is there some way that the claim can be understood as relevant? If this turns out to be impossible, it may be that the premise is indeed irrelevant, or it may be that more information is required from the source.

Second, the information must have a bearing on the issue. This suggests that topical considerations have an important role to play in why relevance is perceived. If I understand Tindale correctly, being on topic is a necessary condition for an item of information to be regarded as relevant. But simply being on topic is not a sufficient condition or guarantee that information will
be perceived as relevant, which brings me to the third factor.

Third, information must be supplied in such a way that it produces some contextual effect. In brief, for the premise to be perceived as relevant, it must be perceived to supply the argument with something. The premise must either add to or subtract from the acceptance of the conclusion. If it fails to do so, the premise is probably irrelevant.

Four, the speaker can ensure that the audience perceives the contextual effect of the information, and hence its relevance, if the information is presented in such a way that it effectively influences its cognitive environment.

To conclude, I believe Tindale's notion of premise relevance is built from the idea that relevance is a cognitive perception stemming from the relations propositions have with the listener's cognitive environment. I have argued that this perception is caused by four inter-related factors: (1) presumption of relevance, (2) topical considerations (3) avoiding redundancies (4) presenting the material so that it influences the audience's cognitive environment.
Chapter 3: James Freeman: Relevance, Warrants, Backing, Legitimitude And The Logical Enterprise.

1.0: Leading Principles

James Freeman begins explaining his conception of relevance by introducing Pierce’s notion of a leading principle of an inference. For Pierce, every mature adult possesses habits of thought which enable him or her to reason inferentially. In the context of an argument, the antecedent judgment is known as the premise, the consequent as the conclusion. The leading principle, which may or may not be formulated into a proposition, is the habit of thought which cognitively draws one from the premise to the conclusion. According to Freeman, not only is it through these leading principles that we perceive relevance, but also they are the best approach in explaining and understanding why we perceive relevance.

Freeman believes it necessary to draw a distinction between a leading principle, qua "inference rule" or warrant, and qua statement or proposition. The leading principle is a generalization which may be, but is not necessarily, appealed to explain why a premise is perceived as relevant to a conclusion. The inference rule is the formulated version of the habit of thought. A
proposition is merely a step or move towards a conclusion. The proposition will only be accepted as relevant by people who possess the same habit of thought or inference rule as the person putting forth the proposition. This leads Freeman to believe that relevance proper is best understood/explained in terms of warrants or inference rules.

3.1: Inference Rules

Freeman prefers to focus on inference rules as opposed to propositions because they are what license us to make inferential moves, thereby allowing us to accept a conclusion from a number of premises. A leading principle can function as a premise if one finds it necessary to include or explicate it, but an inference rule will not be a premise. An inference rule differs in that it is formulated in terms of variables: it is not something we consider directly when we infer a conclusion; rather, it reflects our inferential habit.

According to Freeman, just as we each develop other habits, we also develop inferential habits. This element of individuality accounts for relevance being perceived by some and not by others. In some instances, premises are believed to be directly relevant to a conclusion, and in others only indirectly. A premise is indirectly relevant in the sense that only in tandem with a number
of others or with an intermediary conclusion is it deemed relevant. This prompts Freeman to further refine his model of warrants.

Freeman believes the relevance of premises should not be understood as A is relevant to B. Rather, relevance is better understood theoretically in respect to a whole system of inference habits or warrants. This is not to say these inferential habits or their accompanying warrants are logically correct, but rather that they are the ones being relied upon by the reasoner. In this respect, this stage of Freeman’s account is descriptive rather than normative.

4.2: Descriptive Relevance

Freeman differentiates between two forms of descriptive relevance: immediate and mediate. Immediate descriptive relevance relies on a system of inference rules only where that system contains an inference rule which licenses the move from A to B. Mediate descriptive relevance relies on an intermediary variable between A and B to establish the relevance of A to B.71

Freeman acknowledges that these differences between immediate and mediate descriptive relevance are not in any sense rigid. In sum, what one person perceives as immediately relevant may not be perceived as relevant at all to another, or, as merely mediately relevant.
Arriving at a consensus may require that additional statements and/or warrants be provided.

Freeman goes on to say that although descriptive relevance is important for conceptual clarity, it alone is of no help in terms of argument evaluation. Without a normative element, any statement could be regarded as relevant to any other, provided that some form of a warrant was provided. Clearly, then, there must be a way to differentiate sound inferential habits from those which are not.\textsuperscript{72}

### 3.3: Backing of Warrants

Freeman tackles the thorny issue of normative relevance by relying on Toulmin’s notions of a warrant and backing. According to Toulmin, one may legitimately challenge the acceptability of a warrant. Why should a certain inference rule be accepted in a given circumstance? Some form of justification is necessary for warrants. In Toulmin’s words:

Standing behind our warrants,...there will normally be other assurances, without which the warrants themselves would possess neither authority nor currency--these other things we may refer to as the backing.

For example, one could claim "A Bermudan will be a Briton" and "A Saudi Arabian will be a Muslim" and be
queried "How do you know?" The former is answered by appealing to the laws which govern British citizens, and the latter to sociological statistics. Clearly, then, these warrants are of different types, which suggests that there will be various standards in judging the appropriateness of the backing of warrants.

Freeman states that these different types of standards for the backing of warrants presupposes a typology of warrants. Although providing a complete typology goes well beyond the scope of his paper, Freeman does give some guidance as to how he thinks the typology would unfold.

3.4: Types of Warrants

Freeman makes a distinction between "formal" and "material" warrants. A formal warrant is one which "permits us to infer a conclusion of a given form from premises of a given form". For example, modus ponens would count as a formal warrant, as would all other valid inference rules of formal logic. Freeman believes validity to be sufficient criterion of the backing required to legitimize formal warrants.

Material warrants are those found in informal logic; that is, in inferences which do not require the rules of validity to be deemed acceptable. For instance, the two cases above where laws of citizenry and sociological
statistics were appealed to would count as examples of material warrants, as would analytic truths. Analytic truths come under this category because to know that "All bachelors are unmarried men" requires an understanding of the language, which falls outside of the domain of formal rules of validity.

Since validity does not provide the backing for material warrants, Freeman goes on to discuss how in fact such warrants gain their credibility. To Freeman, material warrants depend on the support of their underlying generalized conditionals. Freeman's point is this: in each case of a material warrant, there is an underlying generalization which the warrant relies on for its acceptance. These generalizations, in turn, rely on knowledge of the domain in question for their acceptance.

In the case of British subjects, the underlying generalization would be something to the effect that "Persons born in Bermuda are (generally speaking) British subjects." This generalization relies specifically on the statutory laws and legal provisions of Britain. To Freeman, since laws are a product of "legislative enactment" they "are a matter of stipulation, and invoke our knowledge of stipulation in justifying" such warrants. Freeman calls such warrants stipulative.

Analytic propositions such as "All bachelors are unmarried men" rely on conceptual knowledge to establish their truth. These generalizations Freeman refers to as
"conceptual" warrants. In the case of most Saudi Arabians being Muslim, an entirely different corpus of knowledge is being relied on for their truth: empirical data. These generalizations Freeman calls empirical warrants.

3.5: Empirical Warrants Explained

In the remainder of his essay, Freeman concentrates on empirical generalizations to flesh out how their warrants are supported and how degrees of support can be determined. Freeman chose empirical generalizations to focus on for three reasons; First, they cross over many domains; and are thus important to argumentation as a whole. Second, based on the work of Cohen, Freeman believes he can devise a "criterion of acceptability" for empirical generalizations which will be of benefit in defining normative relevance; even if it is qualified merely in terms of empirical warrants. Third, refining these definitions of normative relevance will give some sort of account of normative relevance which will further tie in with the Toulmin model.75

The questions Freeman is concerned to answer are as follows: How do we ascertain the inductive reliability of an empirical generalization? And what amount of inductive support is there for it?
1.6: The Bee Example

Consider the following empirical generalization: Bees discriminate colour. Through experimentation, Karl von Frisch found that bees continually returned to a blue piece of cardboard with sugar water on it. Obviously, this generalization could not be substantiated solely on this finding, for many questions would have to be addressed to ultimately verify the statement. Questions such as: Are the bees responding to the shade of the card not its colour? Are they responding to the position of the card? Are they responding to the smell of the card? Is their discrimination of colour limited to only blue? and so forth.

Eventually, experiments were devised by Frisch to test for these possibilities, and he found that his initial hypothesis was correct: Bees discriminate colour. Cohen finds Frisch's work to supply a "general notion of inductive support for empirical generalizations." That general notion is that the variety of relevant evidence has a direct relation to the verifiability of a hypothesis. The key concept to note here of course is relevant evidence. In terms of the bee example, relevant evidence would be only that which is germane to the bee's discrimination of colour.
1.7: Relevant Variables

Freeman explains that relevant variables are a distinctive class of features which are recognized from antecedent knowledge as having a potential for falsifying the hypothesis." For instance, all the places where the card would be situated in testing the bees' behaviour would constitute a class of locations: This class constitutes one of the relevant variables.77

Relevant variables are factored into the testing procedure for empirical generalizations by being ranked according to their falsifying potential. The first testing of the hypothesis would consist of leaving all the relevant variables at their "normal values". This simply means that relevant variables are not taken into account in the initial test. If the hypothesis fails at this stage, the generalization can be said to have no support.

If we assume that this initial stage is completed with a positive result, the relevant variables can be factored in. This is done by isolating each variable and devising a test which would eliminate it as a possible falsifying factor, leaving all other relevant variables normal. Starting with the relevant variable most detrimental to the hypothesis, the test would then be conducted. If the hypothesis was able to withstand the test, it could be said to have "second grade support". The testing procedure would continue in this fashion
until the list of relevant variables, and their combinations, had been exhausted. If the hypothesis failed at some level of the testing procedure, it could still be said to have some support, at least qualified in terms of the tests it did hold up against.

Freeman says that Cohen fails to disclose just how many times a hypothesis must successfully defeat each relevant variable to be regarded as logically sound. Freeman believes that Cohen overlooks this fact due to his conception of the testing process and of what assumptions are held by the person conducting it. In sum, it is believed that in testing a hypothesis, only the relevant variables considered are detrimental to it. Also, if a relevant variable, or combination of them, falsifies a hypothesis once, it should do so repeatedly. So, assuming that the data is replicable at some stage in the testing, then the number of replications is irrelevant in "assessing degrees of inductive support". If some level of testing is found to have contradictory results, the relevant variable should be reassessed or the generalization should be categorized so that the disparity in results is eliminated. Doing so should produce replicable test results.
3.8: Legitimility

Next, Freeman goes on to introduce Cohen’s concept of "legitimility". Legitimility is a term given to the support provided by some stage of tests in the overall procedure. If a hypothesis resists falsification at the first stage where all relevant variables are given normal values, the hypothesis can be said to have n+1 degree of legitimility. If the hypothesis withstands all testing for relevant variables, it can be said to have nth degree of legitimility. Cohen believes there to be two levels of legitimility n+1 and n+2. According to Cohen, n+2 is the highest level of legitimility and is germane only to logical truths. The n+1 level of legitimility includes all laws of nature which are regarded as such because they are able to hold up under all testing. Another difference between the two categories is that logical truths are so by virtue of logical necessity, whereas laws of nature are so by natural necessity.80

Cohen also wishes to attribute some degree of legitimility to a hypothesis which successfully withstands testing for one sound relevant variable. Cohen reasons that to regard a hypothesis as nullified if it only passes some tests would be to reduce it to the level of a hypothesis that could pass no test whatsoever. Since
this would not be the case, some degree of legismilitude would have to be assigned.

1.9: Factors Affecting Legismilitude

Although degrees of legismilitude are assignable to empirical generalizations and are what give them acceptability, the assignments are always in respect to a number of tests -- tests which are based on the perceived relevance of the variables to a "class of generalizations". This model is workable only with respect to the current body of knowledge. Hence, as knowledge grows, current relevant variables can cease to be so and others can rise to the forefront. Subsequently, revising legismilitude may be in order. As such, legismilitude is a "relational" concept.81

1.10: Legismilitude and the 'Big Picture'

Freeman thinks that understanding legismilitude as "relational to a state of knowledge" provides a way, "given a certain epistemological perspective", to link it to argument theory. Freeman believes that this viewpoint is pragmatism.

According to pragmatism, knowledge is not built from a static body of foundational truths, but develops over time through the dialectical process. In this context,
controversy is the impetus for inquiry. Freeman maintains that the process of inquiry can be explained in terms of a dialectical model. According to Freeman, "rational inquiry" entails "an exchange between two interlocutors, a proponent and a challenger." The position of the proponent represents the current beliefs of the rational community. The challenger thus challenges, in all or part, by putting forth some hypothesis or claim. The proponent in turn challenges the basis of such a claim. It is then up to the challenger to provide sufficient evidence to prove the claim as acceptable, or in other words, as advancing the rational community as a whole.82

This epistemic model is mirrored or reflected through dialectical argumentation: both pragmatism and argumentation assume there to be, ideally, two rational parties who engage in an orderly manner to resolve some point of contention or opposition. In argumentation, the challenger, being representative of a class of rational inquirers, scrutinizes the claim in terms of its truth. The criterion of truth, in turn, is based on the current state of knowledge of a given subject/issue and of that possessed by the participants in the exchange. Points of a dialectical exchange are representative of the broader and ongoing epistemic inquiry. The converse is also true: "notions relative to states of knowledge" can be "generalized to notions relative to dialectical situations."
Freeman explains that in terms of legitimility, participants determine its degree based on their knowledge: their warehouse of accepted data from which intuitions of the relevance of variables is fostered and perceived. Thus, the factors that determine the degree of legitimility a variable is assigned are as follows: the current state of knowledge, the knowledge possessed by the participants, and stage or point in the dialectical procedure itself.\footnote{83}

1.11: Legitimility and the Normative Component

Freeman uses the concept of legitimility to account for the normative conception of relevance which he is working towards. This raises the issue of how much support is required in order that a generalization can be regarded as having proper support? In providing an answer to this question, Freeman refers back to the bee experiment and the values of legitimility that can be assigned to its relevant variables.

Remember that if a generalization passes all tests, it can be said to have \( n+1 \) degree of legitimility. Freeman believes that a minimal requirement for normative relevance is that the degree of legitimility be at least greater than 0. In sum, it would have to pass at least one test. In terms of the example, a bee would have to be able to differentiate colours in at least one
situation for the two propositions to be relevant. Without this requirement, "A is a bee, therefore A discriminates colours," would be false, the conclusion having no support or legisimilitude. Given Freeman's criteria for empirical warrants, the premise would be irrelevant.

Freeman questions whether this minimal requirement is sufficient for a normative sense of relevance. For instance, suppose that it is known that the bee's ability to discriminate colours depends on the intactness of its antennae. If a bee is known to have broken antennae, is it correct to say that it will discriminate colours because it is a bee? This becomes problematic because under normal circumstances (the bee's antennae undamaged) the statement is true and the warrant is justified. Here, the warrant or tests which are relied on for the acceptability of the claim that bees discriminate colours can be challenged. Can normative relevance include such situations where warrants are rebutted?

Freeman does not think so, on the ground that a "warrant does not establish relevance in a situation where the warrant does not apply." This problem can be eliminated if we raise our standard for the legisimilitude of warrants from anything above 0, to 1. Thus the generalization would be required to pass all tests regarding all abnormal conditions. But such a restriction would create another problem, because where
the one criterion was too weak, this one appears too rigid, given all the possibilities for abnormal conditions. 86

1.12: Rebuttal Values

Freeman solves this problem by introducing the notion of a rebuttal value. A rebuttal value is a sum assigned to a relevant variable which could potentially falsify the generalization. Conversely, all other values of the relevant variable Freeman terms "non-rebutting values". Integrating non-rebutting values into a definition of normative relevance can only be done in conjunction with a notion of presumption. For Freeman, presumption, in terms of a statement's acceptance, is a relationship existing between a statement, a point in a dialectical exchange and a participant in that exchange. Hence, both the challenger and the proponent are bound by the notion of presumption. The presumption requirement is that a statement is acceptable, relative to a certain point in the exchange, if the other participant is "obligated to concede" it. The obligation is based on the challenger's knowing that the statement passed tests of its relevant variables, having no objection to the statement, and the like. In essence, at that point in the
exchange, the challenger must presume the statement is justified, in a normatively relevant sense, and concede it.87

1.13: Conclusion

Freeman can now unveil his definition of normative relevance. A proposition is normatively relevant to a proposition with respect to a warrant if, and only if, the relevant variables pass tests such that there is some positive value above zero assignable to its justifiability and that there is the presumption that they are non-rebutting.88

Freeman closes by mentioning some questions that are not answered by his account of relevance: First, is the distinction drawn between formal and material warrants appropriate? Furthermore, if it is, what are their sub-types? Are empirical and stipulative warrants genuinely different types or do they just require different forms of testing for their backing? Second, how do relevant variables work for non-empirical propositions? The answer, Freeman believes, can only be ascertained from a more general account of what an inductive argument is, which has yet to be fully explicated by informal logicians.89
2.14: Summary of Freeman

Freeman began by introducing Pierce’s notion of a leading principle. For Pierce, leading principles are habits of thought which permit us to reason inferentially. Although Freeman accepts this idea, he believes that it is in need of further clarification. Hence, Freeman distinguishes between leading principles, inference rules or warrants, and propositions.

For Freeman, propositions are simply premises or moves towards the conclusion of an argument. Leading principles are reflections of our habits of thought and are expressed in the form of generalizations. Leading principles differ from premises and inference rules in that they need not be stated in the argument as premises. Inference rules or warrants can never function as premises, either stated or unstated, for they mirror our inferential habits. As such, we can only express them in terms of formal calculi. Overall, Freeman prefers the warrant/inference rule approach for gaining an understanding of relevance because warrants are what actually license us to infer a conclusion from one or more premises.

Freeman maintains that we develop inferential habits just as we do all other habits: that is, some are good, and some are bad. These differences account for why some recognize the relevance of a premise, and some do
not. Since it is possible to possess bad or illogical habits of thought, the concept of relevance must include a normative aspect.

For Freeman, the normative element of his theory of relevance is provided through a warrant's backing. Freeman holds that the correctness of an inferential habit depends on the context of the argument. Thus different inference rules will be backed in different ways, such as by laws, or by statistics of the domain in question. Freeman believes these different ways a warrant can be legitimately backed imply a typology of warrants, and distinguishes between two main types: formal and material warrants.

For Freeman, formal warrants are those which permit us to infer a conclusion necessarily from the premises. Clearly he is referring to deductive inferences. These warrants Freeman believes are backed by validity.

Material warrants are those which license us to infer a conclusion from one or more premises inductively; that is, non-necessarily. These types of warrants, Freeman states, are expressed in generalizations which are backed by domain-specific knowledge.

Freeman examines empirical warrants in particular because they are so generic in terms of their use in argumentation. Empirical warrants can be understood to be supported in terms of their legitimacy, namely the degree of support the evidence obtained provides.
Specifically, the number of relevant variables that the claim can withstand being tested for.

Since legismimilitude is dependent on the current state of knowledge, it is a relational concept. Freeman maintains that legismimilitude can be tied to argumentation because pragmatism mirrors the dialectical process. According to pragmatism, knowledge is built up over time through the process of inquiry. This process of inquiry, according to Freeman, is no different in a dialectical argument: they both assume two rational parties engaging in an orderly manner to resolve some point of contention.

Freeman ties the notion of legismimilitude into his normative conception of relevance by introducing the idea of a rebuttal value. The rebuttal value is simply the degree assigned to a relevant variable which would falsify the generalization. Overall, the backing of the warrant must be presumed to be non-rebutting if it is be regarded as acceptable.

Freeman concludes by presenting his definition of normative relevance: A proposition is normatively relevant to a conclusion with respect to a warrant, if and only if, its relevant variables pass tests such that the degree of legismimilitude is above zero and that it is presumed its warrants are non-rebutting.
3.1b: Analysis of Freeman

I maintain that the backing of warrants is the most important aspect of Freeman’s theory, because they account for two very important facets of relevance: (1) they give rise to our inferential habits. (2) they account for proper inferential habits.

To explain, I believe that, given Freeman’s conception of relevance, the backing of warrants foster our inferential habits. Because the backing of warrants come from either rules of logic or from knowledge of a certain domain, I interpret Freeman as saying that one’s inferential habits rely on rules of inference or domain specific knowledge. Hence, without some form of appeal to logic or knowledge of a domain, regardless of its correctness, inference habits will not develop and relevance will not be perceived.

This is not to say that perceptions will always be correct. A person without knowledge of a domain may not perceive the relevance of some information, and someone without logical training may perceive relevance where they should not. In sum, sound or correct inference habits require some level of proficiency in formal inference rules and some genuine knowledge of the domain under scrutiny. Recall also that, due to pragmatism, what will be regarded as ‘genuine’ knowledge may alter over time.
Chapter 4: The Logicians Compared

4.0: Addressing Question One

Now that I have examined three of the conceptions put forward by the informal logicians, I am ready to address the first question that I set out with: namely, is there agreement among them as to what constitutes premise relevance? In the following, I will argue that although each conception I have looked at is unique in the sense that each logician has his own story to tell, the work of Walton stands apart from that of Tindale’s and Freeman’s, whose work I have found to be compatible in significant respects.

4.1 Isolating Walton from Freeman

To begin: Walton’s method is distinctive in that he is predisposed to formal logic. From this basis, he investigates virtually all the forms of relevance found in natural conversation and attempts to fit them into the best formal model. In so doing, he concludes not only that there are many forms of relevance and ways we communicate, or "conversational games", but also that relatedness logic is the best formal model to appeal to for normative purposes. He is not arguing that relatedness
logic is applicable to all forms of conversation, for
Walton is quite clear about the fact, that depending on
the game, being logically irrelevant is quite acceptable
if it results in the game’s victory.

For Walton, the appropriate role of relatedness
logic is to uncover fallacies of relevance found at the
propositional core of conversation. Outside the
boundaries of propositions, Walton contends that
relevance is not a sound component for evaluation because
at this global or topical level other factors come into
play, making it impossible to isolate cases where
irrelevance can be applied to a formal model. What
precisely relevance is, Walton never tells us, for as I
have stated above, his main concern is to find the model
which best monitors for irrelevance. I believe that his
predisposition to discovering the formal model as an
evaluative tool is the reason he is drawn away from
explaining what relevance is.

Freeman, on the other hand, presents quite a
different story about relevance. He too is concerned with
a way to monitor relevance in argumentation, but he is
also concerned with discovering what relevance is. This
leads him to the notion of inferential habits. When we
construct arguments and evaluate them, we rely on our
logical instincts to detect what is relevant and what is
not. They are not necessarily correct, but they are the
one’s we possess and use.
Formal logic has quite a different role to play in Freeman’s conception of relevance than it did in Walton’s. For Freeman, having knowledge of formal logic is necessary in order that we learn the deductive rules of validity. The reason these rules of validity are important is not that they provide the best model from which to evaluate arguments in natural language. Rather, because they help to foster our intuitions of relevance, or inferential habits themselves. Although formal logic has a very important role to play in our perceptions of relevance and their evaluation, it is not the modelling role which Walton described.

Another key difference between the views of Freeman and Walton is that Freeman’s view of relevance is descriptive in a practical sense. Unlike Walton, who described the various ways issues of relevance arose in disputation, Freeman describes how relevance operates in arguments, and develops a conceptual model for it. This results in Freeman’s enhanced Toulmin model of warrants. I am regarding this as a more practical description of relevance because in my opinion it is truly how questions about relevance are dealt with.

Consider a simple example. Suppose I argue: "Since I am a man, therefore, I will die." Someone questions how my premise is relevant to my conclusion. I could respond by stating that since all human beings are mortal, at some point we all die. Conceptually, my response is
operating as a warrant: It is what I thought linked my premise to my conclusion, thereby displaying its relevance. In turn, I believe this warrant to be logically sound because it stems from my belief that "From x is a human, I can logically infer that x is mortal." This, in Freeman's terminology is my inference habit which could function as my warrant's backing if it was required. In this case, the backing of my warrant is legitimized by the validity of class logic. The license or inference pattern would be: "x is a q, all q's are M, therefore, x is an M". I think this example adequately shows that, loosely speaking, Freeman's model of relevance is accurate in practical terms. In addition, I believe that Freeman's model illustrates that premise relevance is not a simple relation of premises to a conclusion, but involves a whole system of inferential steps.

In summary, I believe that Walton's conception of relevance can be distinguished from Freeman's in that their orientations differ. Walton is predisposed to formal logic in order to find the model which best suits uncovering irrelevance and ignores the concept of relevance. Freeman is more concerned with discovering what relevance is and finds formal logic as a starting point for our intuitions of relevance. I think their works can also be distinguished from the standpoint that Walton's provides a purely cursory description of several
forms of relevance in conversation, whereas Freeman
develops his conceptual model of relevance from a
descriptive view of the inferential process we invoke
when we regard a premise as relevant and how we go about
legitimizing that belief.

4.2: Walton and Tindale Distinguished

I will now proceed to show how Tindale’s work can be
distinguished from that of Walton, and that it is more
compatible with Freeman’s.

First, I think Tindale is more interested with
coming to an understanding of what relevance is, than as
using it as an evaluative tool in argument assessment. In
this regard, I think this aligns him more with Freeman
than Walton.

Tindale does agree with Walton that relatedness
logic is the best model of formal logic to illustrate the
relevance of propositions. But at this point Tindale and
Walton part company. Tindale believes that relatedness
logic is limited in serving this purpose because it fails
to account for contextual considerations, that he
illustrated with the Wayne Gretzky example. I should note
that Tindale believed that Walton was aware of contextual
considerations, but never made it explicit, as evidenced
by his contention that propositional relevance can be
reduced to spatio-temporal proximity with respect to act
sequences and subject matter continuity. Regardless, I think the reason Tindale rejects relatedness logic as being a sufficient model proves to be the most important difference between him and Walton.

Recall that Walton does not believe that relevance can be monitored at a global level. As I understand it, this is precisely what level Tindale draws on to form his notion of contextual effect. For Tindale, a piece of information is relevant to an argument if, and only if, it does something for the argument. So aside from the condition of preventing information from being redundant, it forces the arguer to communicate effectively with the audience. This I believe is a requirement of relevance at a global level, but one which is necessary to perceive relevance at the propositional level. In sum, the Wayne Gretzky example satisfies the relevance requirements of relatedness logic, but it does not satisfy the audience. The fact that Wayne Gretzky is clean shaven does nothing to convince the audience that he is a premier hockey player. Consequently the premise is regarded as irrelevant.

Overall, then, I think Tindale’s view of relevance can be distinguished from that of Walton in respect to their orientations, as Tindale is more concerned with developing a conception of relevance as opposed to irrelevance. This is one area which I believe Tindale’s and Freeman’s work are compatible. I have also argued
that Tindle’s work differs from Walton’s in that his condition of contextual effect moves him away from accepting a conception of relevance that is limited to a strictly propositional relationship such as the one advocated by Walton.

4.3: Walton, Tindle and Freeman Contrasted

I will now go on to show one other area which distinguishes the work of Walton from that of Tindle and Freeman. As it turns out, I believe this issue is the most important in showing the compatibility of Tindle and Freeman’s views; that being how relevance is determined. Although Walton talks at length about how relevance is ultimately decided by the participants in a certain conversational game, the final say on the matter is given to relatedness logic. I find this view markedly different than that of Tindle and Freeman. Tindle upholds relatedness logic to a degree, but his notion of contextual effect really differentiates his view from Walton’s, as I have argued above. So relevance for Tindle is ultimately the relation information has to a conclusion as decided by an audience. This relation, in turn, is subject to the present state of knowledge. So, in effect, the determination of relevance is dependent on both the audience and a state of knowledge.
Freeman agrees with Tindale on this issue. Recall that relevance for Freeman is decided by the acceptance of the premise’s warrants, which is done by attaining the acceptance of the warrant’s backing, which in turn the challenger must concede if the warrant’s backing is proved to be what he terms "non-rebutting", or non-
 falsifying. Freeman contends that the legitimacy of warrants (at least empirical ones) is contingent on the present state of knowledge. Relevance for Freeman is ultimately a perception based on what is found acceptable to the listener, provided you are able to substantiate your inferential moves. In the case of some types of warrants, that is dependent on the state of knowledge. Hence, I believe Tindale and Freeman hold that in some respects, relevance changes as our state of knowledge does. The changes do not affect the concept of relevance itself, but our judgements concerning it, that is, what is deemed to be relevant. This view of relevance I believe distinguishes Tindale and Freeman from Walton, who seems to have a much more static conception of the concept of relevance.

Thus far I have shown how Walton’s work on the concept of relevance can be distinguished from that of Tindale and Freeman. His overall purpose is much different and hence the determinants of relevance are too. I have also shown how Freeman’s and Tindale’s views on relevance are agreeable with respect to these two
issues. These similarities I believe are important, but in order for me to establish that their views are substantially alike, I will have to prove that Freeman’s warrant model of relevance is not irreconcilable with Tindale’s notion of cognitive environments. I will now proceed to do just that.

4.4: The Compatibility of Tindale and Freeman

In a more recent piece of work Tindale maintains that warrants can be effective in illustrating the contextual effect of information "if they provide supplementary information on the challenged premise rather than simply clarifying the relevance of the challenged premise." First, I must admit that I find this position of his very confusing because I believe that they both amount to the same thing. Regardless, Tindale believes warrants are a good tool, whereas Freeman emphasizes them as conceptual steps in our inferential process. Are these two views compatible?

I think that they are. For Tindale, the relevance of information is perceived because it relates to what the audience already knows, or what can be made manifest to it. By his own admission, warrants can effectively serve this purpose. Freeman, on the other hand, makes no mention of cognitive environments, but I do not think he would disagree that warrants and their backing can work
to make a challenger perceive a proposition’s relevance by altering their thinking towards the proposition in question. The key issue here seems to be whether that act of convincing the challenger is a modification of their cognitive environment or a modification of their inferential process. I think these two views are quite compatible because I do not think that Tindale would disagree that perceiving the relation of relevance is an inferential process.

In conclusion, I think that although Tindale and Freeman present their views within different conceptual frameworks, their views are compatible. Freeman’s warrants serve to modify the cognitive environment of the audience and that Tindale’s notion of cognitive environments can be explained in terms of Freeman’s model of warrants.
Chapter 5: The Legal Literature On Relevance

5.0: Confronting the Objections

Before going on to investigating the legal literature, I must defend doing so against the possible objections that it is an appeal to authority or practice.

To this objection my defence goes as follows: First, my interest in going to the legal literature is not to legitimize anything that was said by the informal logicians. Thus I am not attempting to argue that X’s account of relevance is right by virtue of coinciding with what is said in the legal literature. This, I believe, takes care of the appeal to authority.

Another reason for going to the law is that it may shed some light on Freeman’s questions regarding stipulative relevance.

In dealing with the appeal to practice, I think it can be argued that, if not the best way, certainly a sound form of understanding relevance is to look at how it is used in argumentative contexts, law would certainly fall into this category. Also there may be a lesson to be learned here from Wittgenstein in that a search for a quintessential meaning of relevance with its accompanying normative criteria may in fact lead into the proverbial fly-bottle or linguistic trap. It may be that we can only
talk about relevance as a primitive notion or in generalities, unless presented with an actual example.93

There is no improper appeal to authority or to practice by looking into the legal literature on relevance. To that task I now turn.

5.1 Introduction

My treatment of the legal literature on relevance will concentrate on the works of John H. Wigmore and James Thayer. I have chosen them to represent the legal theorists because they are the classical writers in legal theory.

In order to set the stage for their conceptions of relevance, I will begin with a quote from John H. Wigmore:

Whether in domestic or commercial or national or international affairs, no day passes without basing some action consciously upon evidence. And of all the disputes and discords and dissensions and differences that today prevail anywhere, might we not almost say that three quarters of them would disappear if the parties could take an equal view of the evidence on which they rely, and could thus agree upon the underlying facts? All this is said as a reminder that Evidence is not merely a subject for courts and lawyers and juries. It is a universal field of thought, and the use of it in courts of justice in only one phase. That phase, however, rests on certain pervasive principles of logic and psychology common to all thinking about Evidence. 94

The interesting point to note here is that Wigmore
defines evidence as broadly as he does. According to him, wherever there are arguments, there are appeals to evidence. Hence, judicial reasoning on evidence is not unique, but relies on the same factors to form a decision as does any other area of inquiry. In terms of my investigation, I think this view of Wigmore's can be interpreted two ways. First, since evidence proper is not confined to law, what is said by the legal theorists will be no different from what is said by the logicians. Second, even if what is said by the legal theorists does differ from what the logicians say, it should still be applicable to arguments outside of law.

5.2 Legal Terms in a Legal Context

The area of law I will be looking at is called the law of evidence, for it is this area of the literature which addresses relevance. Now before discussing details, I think it is important to define the terms and context in which they are employed.

According to Wigmore, legal arguments, in their most general form, are syllogistic. Hence, in a legal proceeding, a tribunal is presented with two premises for deliberation: the Major and Minor. The Major premise in this context is the law itself. The Minor premise attempts to establish the accused as either innocent or
guilty of the Major premise and held accountable accordingly.

In attempting to establish the correctness of the Minor premise of the argument, the tribunal may require information of fact and of law. When facts are required, the tribunal "must obtain or receive data that will enable it to reason and to reach a belief as to that proposition, one way or the other." Wigmore's model of legal arguments may be overly simplistic, but it does accurately distinguish between the two issues before the court: that is, what is given and what must be determined.

Collectively, the rules which regulate the tribunal's data constitute the law of Evidence. In evidence, a fact is "any event or act or condition of things, assumed (for the moment) as happening or existing." A fact-in-issue is the fact which the tribunal is attempting to ascertain the correctness of or thing to be proved, called the probandum. Wigmore goes on to say that evidence:

signifies any facts considered by the tribunal as data to persuade them to reach a reasoned belief upon a probandum. This process of thought by which the tribunal reasons from fact to probandum is termed inference. The remarks of counsel analyzing and pointing out or repudiating the desired inference, for the assistance of the tribunal, are termed argument."
Evidence, then, concerns the determination of relevant facts to a probandum before the court. Wigmore goes on to question why rules of evidence are needed: "Are not the ordinary principles of reasoning, as known to us all, sufficient here as elsewhere?" Wigmore replies that although the science of proofs has been studied for many years and contributions have been made by many fields, none alone takes into account the peculiarities of a trial. As a result of the various complications that a trial situation presents, rules of admissibility establish what evidence will be heard.97

5.3. Admissibility

Now that I have described some of the general terminology of the courts, and the form Wigmore conceives their argumentation to take, I will introduce how the courts determine what is to be entered into evidence. The hearing of evidence by the courts is regulated by the rules of admissibility. Regarding circumstantial evidence, Wigmore explains the rationale for having rules. The first rule introduces the notion of probative value.

Wigmore states that "evidence must of course be based upon rational grounds of everyday logic; i.e. must have some probative value." This is not to say that all evidence having probative value will be heard, for only
that "of appreciable probative value" will be.
Furthermore, not all evidence satisfying this latter requirement will be heard either, because probative evidence may be restricted on grounds of policy. The policy restrictions are an attempt to regulate the human element inherent in the trial process. Such policies fall into three classes: Undue Prejudice, Unfair Surprise and Confusion of Issues. Hence, a piece of evidence might satisfy the logical requirements, yet be disallowed because of its potential prejudicial effect.

For Wigmore, the concept of probative value is at the heart of the logical aspect in determining what is evidential. When we speak of probative value we "naturally refer for guidance to the science of logic" 98 Wigmore ties relevancy and probative value together when he states: "Here the law is concerned with the rules of logic and inference as applied in practical experience, i.e. with Relevancy". 99 In fact, he uses the two terms synonymously when he says: "Admissibility, then, is a quality standing between Relevancy, or Probative Value, on the one hand, and Proof, or Weight of Evidence on the other."

5.4: Admissibility and Relevancy Related

The distinction Wigmore draws between Admissibility and Relevancy was by no means universally accepted, as he
acknowledges. Wigmore reports that his view is opposed from two directions. First, it has been argued that Relevancy and Admissibility are regarded as synonymous, and second it is argued that there are no legal rules of relevancy.

Regarding the first objection, Wigmore argues that to equate Relevancy with Admissibility is a confusion of terms. For Wigmore, Relevancy proper designates the rules "defining the sufficiency of probative value". Admissibility proper is what is allowed to be heard; that is, what is regarded as probative and which no policy restricts. 100

In dealing with the second objection brought against his position on Relevancy and Admissibility, Wigmore argues that there are legal precedents which are no less logical because they are legal. Precedents, he concedes, may lead to "illogical law", but should still be respected by the profession. For Wigmore, as long as the Courts make judgments on matters of logic, there will be "rules of law which must be observed".

In making this claim, Wigmore quotes a famous judgment made by C.J. Cushing in State v. Lapage. Cushing states that although questions of relevance are initially a question of logic and common-sense, it has been decided so consistently that certain facts have "bearing upon" certain issues, that such evidence should be regarded as the common sense. This evidence, in Cushing's opinion,
necessitated the authority of law. Thus precedent, for Wigmore, isn’t the sole determinant of relevance in legal proceedings, but it certainly has a role to play.\footnote{101}

In summary, Wigmore believes that a fact must meet two criteria to be admissible. First, it must be relevant or probative and second, must be free from the restrictions of the court’s policy. Thus, relevancy is a necessary, but not a sufficient condition of admissibility. Consequently, the concept of relevance and that of admissibility must be regarded as distinct.

In terms of my study, it is worth noting at this point that although the controversy involves the relationship between logic and law, that is for the purpose of ascertaining the criteria of Admissibility and not Relevancy. Hence, I will not elaborate on this issue further and accept Wigmore’s contention that Relevancy is a distinct concept from Admissibility. I will now proceed to examine Wigmore’s concept of probative value.

5.5: The Law’s Relation of Law to Logic

Wigmore states that it is assumed that offered evidence in courts of law will have "some bearing on the proposition at issue" and that this question concerning probative weight is much the same in all contexts. He says:
One might suppose that the question would be essentially one of the ordinary laws of reasoning, whether it were to be decided, as here, by a judge and jury, or by the audience of a lecturer,...or by a class in rhetoric.

According to Wigmore, in law there are two considerations which make "the application of the laws of reasoning" peculiar to it. These are noteworthy because they provide the rationale for how questions of logic are addressed:

The first consideration is that, so far as the tribunal can attempt expressly to deal at all with logical questions, it can do so only roughly and loosely and in a general way. To begin with, in courts as elsewhere, while the laws of reasoning must underlie inevitably all the operations of reasoning, they are, as a rule, followed instinctively and not with conscious skill. Little attempt is made deliberately to recognize or to apply them. The process of demonstration and decision in legal tribunals is an employment of the principles of reasoning upon a grander scale than is found in any other activity of life; yet the methods of logic are seldom alluded to in terms by judges or by advocates.

The reader will notice two assumptions made by Wigmore in the above quotation. First, he assumes that the laws of reasoning are known to all, and second, that they apply to judicial reasoning. He continues:

Again, wherever a rule or a principle may be adopted in the effort to employ the recognized tests of reasoning, no attempt can be made to furnish ideal tests. Details, refinements, contingencies, exact distinctions, which the ideal principle would demand, may be and must often be neglected in order that the test may be serviceable. Perhaps it may be necessary to take a mean of convenience, and to lay down a specific and unshifting rule which will sometimes operate arbitrarily or unequally. Where
general principles are declared, they may satisfy themselves with reaching fairness in the main.

Here, Wigmore is addressing the difficulties that applying the laws of reasoning to legal arguments creates. Because Wigmore would seem to be more comfortable with a logic that provides ideal tests, it is quite probable that the logic that he is referring to is formal logic. The difficulties of applying formal logic to natural argumentation, or that type found in the courtroom, has been clearly displayed by the informal logicians I reviewed earlier and is one of the reasons they wish to analyze the concept of relevance. Wigmore concludes:

Finally, the logical powers employed must be those of everyday life, not those of the trained logician or scientist. The conclusions and tests of everyday experience must constantly control the standards of legal logic. Moreover, the possibilities of fraud must exclude much that is probative but capable of abuse.102

Here Wigmore clearly believes that legal logic will not mirror that found in logic texts of any type; either formal or informal. I take his reasoning to be that prospective jurors do not make decisions on reason alone, nor are they expected to. The best the courts can achieve in this regard is to only admit evidence which is logically probative, and exclude that which will unduly arouse the emotions and cloud the decision making
process. In any case, these quotations give Wigmore’s first reason for thinking that there is a particular application of logic to law: strictly speaking, law can deal with logic only in an unrefined fashion.

The second consideration which Wigmore believes makes reasoning in the legal context distinct is that the real question underlying rules of evidence is whether something is worthy of being heard. The issue is Admissibility and not whether the evidence provides sufficient proof—the issue of Demonstration. In common law jurisdictions, the former is a question decided by the judge, the latter by the jury. As Wigmore states, natural scientists, historians, etc. can pass judgment on facts as they please, or store and consider information of a remote nature. In law, this judgment is monitored by the judge as in no other area of controversy.103

Wigmore believes that overall both these considerations can be distilled down to the same issue: namely, the generality and practicality of the legal process and "the whole law of probative value." Wigmore goes on to say that of greater importance is:

to require a generally higher degree of probative value for all evidence to be submitted to a jury than would be asked in ordinary reasoning. The judge, in his efforts to prevent the jury from being satisfied by matters of slight value, capable to being exaggerated by prejudice and hasty reasoning, has constantly seen fit to exclude matter which does not rise to a clearly sufficient degree of value. In other words, legal relevancy denotes, first of all, something more than a minimum of probative value.
Each single piece of evidence must have a plus value.\textsuperscript{104}

Remember, however, that the judge is not concerned with the overall sufficiency of the evidence he allows to be heard; merely that what is heard will in some way contribute to the decision. Overall then, judicial probative value must be somewhat higher than that outside of law and yet below a level of complete proof.\textsuperscript{105}

5.6: Ascertaining Probative Value

How is probative value to be ascertained? Wigmore, in keeping with his earlier remarks, states:

The process of adducing evidence and passing upon probative value is and must be based ultimately on the canons of ordinary reasoning, whether explicitly or implicitly employed.\textsuperscript{106}

At this stage, I have to acknowledge that Wigmore’s view of the relation of law and logic, exemplified by the passage above, can no longer go unnoticed. If he is right and legal reasoning relies on the canons of ordinary reasoning, then it looks as though the analysis of legal reasoning will be of no benefit in our attempt at understanding the concept of relevance. Moreover, Wigmore makes it clear that probative value is not strictly or objectively a rational undertaking:
The circumstances that judicial reasoning on questions of probative value is usually not conducted professedly according to logical rules, and that it looks to practical purposes attainable by simple and rough rules, warn us not to attempt to test this reasoning too steadily and minutely by logical rules.  

What becomes central to deriving the probative value of a fact is how strong an inference it supports in light of other conceivable hypotheses. This decision is understandably grounded in logic and experience.

Since determining the probative value of facts rests on other possible explanations of those facts, Wigmore introduces two methods of logic which, on occasion, may be of assistance in making the decision.

5.7: Logical Methods

The first process Wigmore introduces is what he calls the "Method of Agreement". For weighing the relative plausibility of one scenario over another, the method of agreement proposes that the facts be adduced in light of "substantially similar (not identically the same) conditions". For instance, if it is alleged that a person's illness was caused by eating food at a certain restaurant, the most compelling or probative evidence would be testimony of others who ate there at roughly the same time, ate the same dish, and showed the same symptoms. Such evidence would be relevant in the sense
that it would lend support to the acceptance of a plausible inference or line of reasoning relative to the others.

The second test, Wigmore refers to as the "Method of Disagreement". Here, instead of attempting to establish a correlation through the similarity of cases, an essential disagreement is sought. For example, if a producer of paint is sued for having a faulty product, highly probative evidence would be that which displayed some factor unique to the plaintiff’s circumstance that could account for the quality of the product. Thus if it could be shown that the plaintiff’s house was exposed to sewer gas which other houses were not, and the plaintiff’s house paint peeled off in a month and everyone else’s lasted five years, such evidence would be highly probative in light of all other conceivable circumstances.\(^{108}\)

The methods of agreement and disagreement cited by Wigmore originated with John Stuart Mill. Mill designed these methods to reveal the causes of events or phenomena. Thus for these methods to be of benefit, their use must be restricted to reasoning about causes.\(^{109}\)

5.8: Checking Inferences

Another method Wigmore provides to check inferences he terms the transmutation of propositions. Although
Wigmore argues that it is of no help in ascertaining probative value, some of his critics disagree, as we will see. Recall that Wigmore held that legal arguments are syllogistic. But he concedes that legal arguments themselves are not presented in clearly syllogistic or deductive terms. This is due to the number of unexpressed premises and principles which tie the propositions together to build the inference. Thus Wigmore suggests that any inductive argument can be turned into a deductive one simply by transmutating the premises so that everything is made explicit. To illustrate, consider the following example: "Last week the witness A had a quarrel with the defendant B; therefore, A is probably biased against B". The generalizations this inference depends on could be stated as follows:

1. Many people feel negative towards people that they've had disagreements with.
2. Having bad feelings towards another usually biases one against that person.

Wigmore contends that although the transmutation of propositions can be done for all inductive arguments, as a tool for gauging the probative value of premises it is "useless".

The reason Wigmore doesn't believe the transmutation
method is helpful in determining probative value is that it simply diverts attention from the syllogism to the inference of the Major premise. This point is also made by informal logicians against the deductive reconstructionists. It is argued that adding a premise to render an invalid argument valid will simply shift the focus of the objection from the inference to the new premise. Moreover, as Wigmore notes, the inferring that some physical act actually occurred from testimonial and/or circumstantial evidence is still inductive reasoning, regardless of how it may be made to appear deductive.111

5.9: Summary of Wigmore

In summary then, Wigmore believes that relevancy in inductive arguments is measured in terms of probative value. Probative value is assigned to propositions in light of the inferences they support, taking into account all other lines of argument. Probative value cannot be ascertained strictly by any rules of logic; one need only to take into account all possible counter examples and make a decision on that basis. What counter examples are entertained can vary according to different individuals due to their differences in experience and logical acumen.
5.10: Wigmore's Contemporary: James Thayer

The views of Wigmore did not go unchallenged by his contemporary, James Thayer. Although I will point out issues where they clearly disagree, I do not want to give the impression that they are rivals in substantial ways, at least in terms of relevance. Consider Thayer’s remarks regarding relevance: "...which forbids receiving anything irrelevant, not logically probative". He is clearly equating relevance with probative value just as did Wigmore. And concerning Admissibility he says: "unless excluded by some rule or principle of law, all that is logically probative is admissible."112 Again on the topic of Admissibility Thayer proclaims that it is "determined, first by relevancy, an affair of logic and experience, and not at all of law..."113

Another extensive area of agreement for Wigmore and Thayer is the relationship between law and logic. In Thayer’s words:

the whole process of legal argumentation, and the rules for it, essential as these are, and forever pressing upon the attention, are mainly an affair of logic and general experience, not of legal precept. I say mainly, because the reasoning process, in its application to particular subjects, gets always a tincture from the subject-matter. Undoubtedly there are rules of legal practice and procedure, qualifying and restraining the free processes of reason; so that it is a proper qualification, when we use the term legal reasoning; not because, as compared with reasoning in general, it calls into play any different faculties or involves any new principles or methods...114
In terms of at least two classical legal theorist’s writings on Evidence, there is substantial agreement in how or what terms relevance is defined, namely, probative value.

5.11: Critics of the Classics

George F. James, in his article "Relevancy, Probability and the Law", takes issue with the court’s operating with a conception of legal relevancy which denotes a higher level of probative value than logical relevancy. In his view, this practice has caused a lot of confusion as to what evidence should be deemed admissible.

In making his argument, James provides some interesting insights into Wigmore’s contributions to the law of Evidence on the topic of relevance.

James begins by stating that relevance:

is not an inherent characteristic of any item of evidence but exists as a relation between an item of evidence and a proposition sought to be proved.

James thinks that if a piece of evidence adds to or subtracts from the proving of a proposition, then it is relevant to that proposition. If the proposition is provable in the case, or if it is linked in the chain of
proof of which the conclusion is under consideration by the court, the evidence has probative value.\textsuperscript{115}

For James then, irrelevance can be framed either because the evidence is not probative to the proposition which it was brought forward into support, or because the proposition which it does support is not before the court.\textsuperscript{116}

James goes on to address the question of how probative value should be ascertained, that is, how to govern whether particular facts bear on particular issues. Setting aside the controversy pertaining to whether precedent is helpful, James investigates logic.

James refers to the method of converting inductive arguments to deductive ones, introduced by Wigmore, and argues that such a method can be helpful in clarifying the probative value of the proposition by illustrating an argument’s validity.

One example James uses to illustrate this runs as follows: "People who make repairs to their machinery after an accident show consciousness of negligence. A made such repairs; therefore A is guilty of negligence."\textsuperscript{117} As James points out, the question that must be addressed is in what logical sense "people" will take in the major premise. Does people refer to All people or to Some? If the argument is intended to be "Some people who make repairs to their machinery after an accident show consciousness of negligence. A made such
repairs; therefore A is guilty of negligence", the argument clearly contains a fallacy. It cannot be assumed that A falls into that class of some people who are guilty of negligence that repair their machinery after an accident. If the argument’s major premise is intended to be: "All people who make repairs to their machinery after an accident show consciousness of negligence", then the argument is equally flawed. As James indicates, it would be hard to find someone who would accept that literally all people who repair their machinery after an accident are consciously guilty of negligence. The repairs could be undertaken simply for preventative measures. Hence, James believes that the transmutation of the initial argument was beneficial in showing its invalidity.

James also believes that transmutations work for arguments based on probabilities. He cites the following example: "Men’s fixed designs are probably carried out: A had a fixed design to kill B: therefore, A probably did kill B." The generalization of human character on which this argument depends is: "Men’s fixed designs to kill are probably carried out." The problem with the argument, is that we are still unable to ascertain, with any certainty, that A probably did kill B. Even if we were to concede that more people who had fixed designs to kill actually did, in comparison to the general public, we are still unable to draw any conclusion about A’s guilt from their intent. All
we can conclude is that the probability of A's guilt is more probable, knowing his intent. In this instance, the benefit of transmuting the initial argument into its quasi-syllogistic one in that "we know to what degree of proof we have attained, and do not overstate the results".

In the remainder of the article, James argues that Wigmore's definition of "legal relevancy" should be abandoned by the courts and replaced by Thayer's. Since this controversy is concerned with the admissibility of evidence, I will refrain from elaborating on it further.119

4.12: One Final Issue

The last issue I want to address through the legal literature is whether relevance admits of degrees. According to Adler and Michael in The Nature of Judicial Proof, relevance quite clearly does not. They contend that the degrees "of remoteness of relevancy must not be understood as meaning degrees of relevancy. A proposition is either relevant or it is not...".120 What can admit of degrees is probative force, but again probativity does not vary: either one or more propositions is probative of another, or it is not. Regardless of the amount of probative force a proposition has, if the proposition has any degree of probative value, it is relevant.
Conversely, if the proposition has zero probative force, then it is irrelevant. To be probative/relevant, the proposition must have some positive amount of probative force greater than zero.¹²¹

On this point, I agree with Michael and Adler. I think the reason relevancy is thought to be divisible is because the concept of relevancy is being confused with the amount of proof it supplies for a conclusion. But a lack of evidence is not an inadequacy of relevance. For instance, suppose I argued that because I saw one black crow, all crows were black. The fact that I saw one that was black is relevant to my conclusion, however minimal its probativity.¹²² So, like Michael and Adler, I agree that relevance is an "all or nothing" concept which is not divisible into degrees.

5.13: The Legal Literature Summarized:

Loosely speaking, legal arguments are considered to be syllogistic; that is, composed of a Major and Minor premise. The Major premise is constituted by the law itself and the Minor premise is what the court is to decide upon; whether X is guilty of Y.

The court in its decision making considers facts. In law, facts are events, acts or conditions of things assumed to be true. A fact-in-issue is something under consideration by the courts, or the thing to be proved--
also known as the probandum. When the tribunal relates facts to the probandum, they do so by way of inference. Remarks concerning which inference is best supported by the facts are termed argument.

What evidence is heard by the courts is determined by the rules of admissibility. This is how relevance factors into the legal literature. The first requirement of admissible evidence is that it is relevant. As I discovered, the relationship between Relevance and Admissibility was highly contentious. There is, however, unanimous agreement that relevance is designated by what is probative.

Probative value is determined through common sense, that is; it is determined through logic and experience. In law, it is understood that probative evidence is what lends support to a thesis, either positively or negatively, in light of all other possible explanations.

Wigmore proposed two logical methods of determining probative value: the Method of Agreement and the Method of Disagreement. Wigmore also introduced a method of checking inferences which he refers to as the transmutation of propositions, which simply means to make all the inferential moves in the argument explicit so as to render the argument deductively valid. In Wigmore’s opinion, this method is of no help in determining probative value because it diverts attention away from the issue of the major premise and places it on the
inference itself. On this point, James disagreed with Wigmore on the basis that knowing the strength of the inference would be of help in ascertaining the probative value of the proposition in question. This he believes can be accomplished by converting inductive arguments into quasi-deductive terms.

I also looked at the writings of Wigmore's contemporary James Thayer. I found them to be in agreement on the issues of the relationship between law and logic and that relevance is a matter of probative value which is based on common sense and experience. Where they disagreed was in how the concept of relevance was to function in terms of admissible evidence. Clearly Thayer believed that all probative evidence should be heard, unless restricted by policy. Wigmore, on the other hand, thought that only evidence possessing a "plus value" of probative force should be deemed admissible. Because this disagreement is concerned with the issue of admissibility of relevant evidence, and not what constituted relevance itself, I did not elaborate on it at length as it does not pertain to by inquiry.

I also found in the legal literature that relevance and probativity do not admit of degrees. What can vary is probative force. For a proposition to be relevant/probative, it must have some amount of probative force greater than zero. If a proposition has no probative force, then it is irrelevant.
6:14 Addressing My Second Question

At this stage I want to address the second question I began with, which is this: Is there substantial agreement as to what constitutes relevancy in the legal literature? Clearly there is. All the legal theorists who I reviewed defined relevance in terms of probative value. There was also a consensus that probative value is adduced in terms of common sense and one’s experience.
Chapter 6: Conclusion

6.0: Addressing My Third Question

Now that I have reviewed the works of three informal logicians and the works of three legal theorists, I believe I am in the position to address the question of whether the legal literature is helpful to the logical enterprise. I must admit that it is not; at least not in any substantial way. What the legal literature does is clear up some collateral issues regarding the qualities of relevance which some informal logicians insist it possesses.

The legal literature I have relied upon as my primary sources are the writings of the classical theorists, Wigmore and Thayer. My conclusions, therefore, must be qualified accordingly. They hold with respect to those classic texts. Contemporary legal writing on relevance could well differ, and lead to quite different conclusions about the bearing of legal writing on the philosophical problems discussed by the contemporary informal logicians.

I think in fairness to the legal literature I must acknowledge that its conception of relevance comes about purely for the sake of practical employment. The legal writer’s concern is only to clarify the concept of
relevance as it arises in legal matters, for legal purposes, and not to analyze the concept of relevance per se. Their view, which I agree with, is that the latter task should properly be left to the logicians. Hence, to criticize their writings because they fail to produce such an account would be unfair. Keeping this in mind, I will proceed by reporting what I did find interesting to my investigation from their work.

The first important point is that relevance in the law is defined in terms of probative value, and what determines probative value is common sense and experience. I am not in disagreement with this view, but it does illustrate how undeveloped the legal conception of relevance is, at least from the standpoint of an informal logician attempting to clarify the notion of probative value from their work. I think the work of Tindale and Freeman especially illustrates just how complex the notion of probative value is. This is not intended as a criticism, but merely as an observation.

Tied to this legal notion of probative value is the issue of whether the tools the legal literature cite as being beneficial in ascertaining probative value actually are useful. I will maintain that they are, in a modest way.

I think that when we are confronted with matters of similar facts bearing on similar issues, we intuitively question whether there are any relevant variables or
scenarios that would potentially falsify the claim. Surely it is sound advice to invoke the Method of Agreement and Disagreement consciously if need be, but I do not think that these methods alone insure their intended results. Rather, I hold that it is our capacities to think critically and our bank of experiential knowledge, not any particular method, which will provide the answers to questions regarding the similarity of facts being relevant to certain issues.

Also on the topic of calculating probative value, I think the transmutation of propositions is of limited benefit. In my view, what it does help to clarify is the implication relations holding between propositions. I maintain that it does effectively illustrate the warranting of the inference, but it does not shed any light on the issue of probative value. As we saw with Freeman's work, the support a premise receives is not attained by the warrant itself, but in the legitimacy of the warrant's backing. If the warranting proposition can be legitimately backed, we must concede that the proposition it warrants is relevant. Hence, the transmutation of propositions is not much assistance in ascertaining the probative force of a claim.

The final issues raised in the legal literature that bear on my investigation are: (a) that evidence can be either negative or positive, and (b) that relevance can admit of degrees. I have already stated my position on
the issue of relevance as of admitting of degrees, but I
think the view that evidence or propositions having
negative or positive relevant qualities is wrong for the
same reason; that is, it confuses the evidence with its
effect.\textsuperscript{12}\textsuperscript{3} As I have stated previously, I take relevance
to be an "all or nothing" type concept, as such, to allow
for it to possess negative and positive qualities would
be an inconsistency. In sum, I believe that giving
relevance or evidence qualities just confuses its effect
on the conclusion.

6.1: Afterword

I undertook this investigation in order to see
whether the writings of the legal theorists might be of
any assistance to the informal logicians in coming to an
understanding of the concept of relevance. I began by
reviewing the work of three informal logicians to see if
they were in agreement as to what constituted relevance.
I then proceeded to review the works of two classical
legal writers in order to determine whether they agreed
as to what made up the concept of relevance. Finally, I
looked at whether the views held by the legal writers
were of any help to the informal logicians at coming to a
better understanding of the concept of relevance. To
conclude, I will state my findings by addressing the
three questions with which I began.
Question #1: Is There Any Agreement As To What Constitutes Premise-Relevance Amongst the informal Logicians?

After reviewing the works of Douglas Walton, Christopher Tindale and James Freeman, I found them to present different accounts of what constitutes premise relevance. I have argued that Walton's conception distinguishes him from Freeman and Tindale, mainly because of his predisposition to a formal model. I have also argued that the views of Tindale and Freeman are quite compatible although they view relevance from differing conceptual frameworks.

Question #2: Do The Legal Theorists Agree As To What Constitues Relevance?

After reviewing the legal literature, I found that the legal theorists agreed that relevance is defined in terms of probative value, which is decided by common sense and experience.

Question #3: Is The Legal Literature On Relevance of Any Help To The Work of The Informal Logicians?

I have argued that the legal concept of relevance, as discussed by the classic writers, mainly Wigmore,
provides no significant assistance to the informal logicians in coming to an understanding of relevance due, to its theoretical simplicity. I have suggested that this is because their interest in relevance is purely from a practical standpoint, thereby lacking the level of theoretical analysis which the informal logicians are interested in. I did find however that the legal literature was of benefit in clarifying the issues regarding the qualities which the concept of relevance is thought to possess by some of the informal logicians.
Notes


2. Walton, p. 2.

3. Walton, p. 3.

4. Walton, p. 3.

5. Walton, p. 4.


7. last 3 paragraphs, see Walton, p. 5.


18. Walton, p. 22.


24. Walton, p. 27.
27. Walton, p. 35.
28. last two paragraphs, see Walton, p. 36.
30. Walton, p. 49.
31. Walton, p. 50.
32. Walton, p. 61.
33. last three paragraphs, see Walton, p. 59.
34. Walton, p. 60.
35. Walton, p. 71.
36. Walton, p. 64.
37. Walton, p. 65.
38. Walton, p. 61.
40. Walton, p. 73.
42. Tindale, p. 3.
43. Tindale, p. 5.
44. Tindale, pp. 5-6.
45. Tindale, p. 7.
46. Tindale, p. 8.
47. Tindale, pp. 9-10.
49. Tindale, p. 10.
50. Tindale, p. 11.
51. Tindale, p. 12.
52. Tindale, p. 13.
56. last two paragraphs, see Tindale, "Contextual Relevance", p. 23.
58. Tindale, p. 25.
60. Tindale, p. 27.
61. Tindale, p. 28.
62. Tindale, p. 29.
63. Tindale, p. 30.
64. Tindale, p. 31.
65. Tindale, p. 32.
66. Tindale, pp. 33-34.
68. Freeman, p. 2.
69. Freeman, p. 3.
70. Freeman, p. 4.
71. last two paragraphs, see Freeman, p. 7.
72. last two paragraphs, see Freeman, p. 8.
73. last two paragraphs, see Freeman, p. 9.
74. Freeman, p. 10.
75. last three paragraphs, see Freeman, p. 11.
76. last two paragraphs, see Freeman, p. 12.
77. Freeman, p. 13.
79. Freeman, p. 15.
80. Freeman, p. 16.
81. Freeman, p. 17.
82. Freeman, p. 18.
83. Freeman, p. 19.
84. last two paragraphs, see Freeman, p. 20.
85. Freeman, p. 21.
86. Freeman, p. 22.
87. Freeman, p. 23.
89. Freeman, pp. 25-26.
90. Freeman, pp. 1-2.
91. Christopher Tindale, "Contextual Relevance In Argumentation", pp. 22-23.
95. last two paragraphs, see Wigmore, p. 6.
96. all quotes from this paragraph, see Wigmore, p. 7.
98. Wigmore, A Student’s Textbook, pp. 52-53.
100. for last two paragraphs, see Wigmore, On Evidence, Vol.I., Bk.I, Ch.II, Sect. 12, p. 38.
102. for all quotations of this section to this point, see Wigmore, On Evidence, Vol.I., Bk.I, Ch.III, Sect. 27, p. 88.
113. Thayer, p. 269.
114. Thoyer, p. 271.


116. James, p. 691.

117. James, p. 696.

118. James, p. 697.

119. James, pp. 698-699.


121. For the distinction between probative and relevant see Michael and Adler, pp. 84-85.

122. Idea for this example taken from J. Anthony Blair, "Premissary Relevance (And Reliable Argument Schemes)", paper delivered at the McMaster Conference on Relevance, McMaster University, June, 1991., pp. 8-9.

123. For the argument of negative/positive relevance confusing the premise's effect on the conclusion, see George Bowles, "Favourable Relevance and Arguments", informal logic, XL.1, Winter 1989., pp. 1-2.
References

Books


Papers


Freeman, James B. "Relevance, Warrants, Backing, Legisimilitude, And The Logical Enterprise", a paper delivered at the McMaster Conference On Relevance, McMaster University, June, 1991.


Tindale, Christopher W., "Relevance and Cognitive Environments", a paper delivered at the McMaster Conference On Relevance, McMaster University, June, 1991.
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