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Informal Logic and the Concept of 'Argument'

Matthew John Pezzaniti
University of Windsor

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by
Matthew J. Pezzaniti

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Informal Logic and the Concept of “Argument”

by

Matthew Pezzaniti

APPROVED BY:

S. McMurphy

Social Work

S. Patterson

Philosophy, Marygrove College

C. Tindale

Philosophy

H.V. Hansen, Advisor

Philosophy

May 19, 2015

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Abstract

In this thesis I present an exploration into the concept of ‘argument’ in informal logic. I have separated the work into three major areas: the historical antecedents to the informal logicians, the Windsor group of informal logicians, and recent developments in informal logic and the concept of ‘argument.’ In doing so I provide insight into the concept of ‘argument’ within informal logic.

Dedication

To Ray and Cindy Pezzaniti who sacrificed so much to make sure I made it to university when so many people told them it was impossible. Thank you for believing in me when so many others doubted, including myself.

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Chapter I

Introduction

Informal logic and argumentation theory are rapidly developing areas of study in the philosophical landscape. While arguments have been the subject of study throughout the history of philosophy, it is only recently that we have seen a systematic research project dedicated exclusively to argumentation. That is, informal logic and argumentation theory has developed into a sub-discipline of philosophy which borrows from linguistics, cognitive science, communications, and logic. Part of the project of argumentation theory must be to explain and define its constitutive parts; thus, a theory of argument must be able to account for and define what an argument is.

Working with the conception of argument was not my original plan. In fact, I wanted to work within an already existing framework and try for a better understanding of inference. Like my concerns in epistemology, my concerns in argumentation theory were and still are how we determine that one non-deductive inference is good and another is bad. Unfortunately, or perhaps fortunately, there are many concepts of argument from which to work with in informal logic. The inspiration for this project came as a result of reading Robert Pinto's Argument, Inference and Dialectic. Wherein Pinto argues that that we require an understanding of what a good inference is in the context of an argument if we wish to have a complete theory of argument. Moreover, a complete theory of argument is necessary for a complete theory of argumentation. Despite Pinto's belief that an understanding of inference should precede an understanding of argument, without reason to take one of the informal logician's conceptions of argument over the others, as all of them have merit, it became clear that to eventually get to my goal of studying

inference, I would have to start with studying argument. This thesis is an exploration into the concept of argument in informal logic. I have provided some insight into the development of the concept of argument in informal logic historically and for where we should take the concept of argument in the future. The following three chapters discuss historical antecedents to informal logic, Windsor informal logicians, and recent developments in informal logic.

In Chapter II I begin by considering some historical sources on the concept of argument. Gaining a historical perspective on argument allows us to understand the philosophical landscape that preceded the development of argument in the contemporary sense. I first examine Richard Whately as a way to understand John Stuart Mill and then move on to Charles Sanders Peirce and Stephen Toulmin.

In the section on Mill I will focus on A System of Logic as it marks one of the first publications to reject the syllogistic or deductive conception of inference. Mill can provide insight into how contemporary thinkers understand the distinction between deductive and non-deductive arguments. Included in this, Mill provides a story about warrants, which I believe is echoed in the rest of the thinkers in Chapter II.

I will then consider Peirce, who gives us a theory of belief justification in "Fixation of Belief." Since he conceives of inference as a movement of the mind which causes one to form new beliefs, Peirce will aid in understanding my analysis of Pinto in Chapter III. Peirce's theory of guiding principles serves as an example of a warrant in argument which is a trend in Chapter II.

After Peirce I move on to the work of Stephen Toulmin who developed a model of argument which emphasises that the movement from datum to claim is licenced by a warrant.

In Chapter III I examine some of the seminal works in informal logic by authors including Douglas Walton, Anthony Blair, Ralph Johnson, and Robert C. Pinto. This grouping of Windsor informal logicians are responsible for several influential conceptions of argument in argumentation theory. I will provide context to their theories by looking at what – in their minds – was the voice of formal logic: Irving M. Copi. It was Copi's work who many of these early thinkers were rejecting or expanding to suit their pedagogical purposes and as such it is essential that the reader understand Copi's definition of argument before they can see how the Windsor group rejected or modified it.

Chapter IV focuses on recent development in argumentation theory and more specifically the work being done on how to conceive of argument. Namely, what are arguments? There seems to be two major positions right now, one which considers arguments to be speech acts and the opposing camp which takes arguments to be abstract objects. I will work through the informative debate between David Hitchcock and Geoffrey Goddu where Goddu criticizes and refines Hithcock's recursive definition of argument to better understand the debate between the two camps. I will then explore both sides of the issue by looking at a number of speech act theorists Christopher Tindale and van Eemeren and Rob Grootendorst. I will also look at a number of works by Goddu as the representatives for those who consider arguments to be abstract objects.

This investigation into the conception of argument will provide the reader with an overview of what I consider to be representative texts and theories of the historical developments which preceded the development of informal logic, the conceptions of logic developed by the Windsor group of informal logicians, and finally one of the most recent debates in informal logic. The goal of this thesis is not to attempt to develop a novel conception of argument. Instead, I will provide insights from my exploration of the theoretical landscape to the concept of argument in informal logic.

Chapter II

Historical Literature Review

Introduction

While the term 'informal logic' finds its origins in the 1970s, there are several thinkers who were doing work that would one day inform its formation and development. Whether consciously or not, many of the ideas used in the development of informal logic seem inspired by Whately, Mill, Peirce, and Toulmin.

Whately

Much of the work done by John Stuart Mill in A System of Logic (1843) seems to be a response to the popular positions of the age he wrote in. It was the opinion of Richard Whately (1787-1863) that all reasoning—both deductive and inductive—is reducible to a syllogism. Mill often contrasts his views with Whately's. Thus I will briefly present Whately's account of argument as it appears in the second edition of Elements of Logic (1827) to inform my later discussion of Mill.

> Whately defined argument as
>
> an expression in which "*from something laid down and granted as true* (i.e. *the premises) something else (i.e. the conclusion) beyond this must be admitted to be true, as following necessarily (or resulting) from the other;* and since Logic is wholly concerned in the use of language, it follows that a Syllogism (which is an argument stated in regular logical form) must be "an argument so expressed, that

> the conclusiveness of it is manifest from *the mere force of the expression,"* i.e. without considering the *meaning* of the terms*:* e.g. in this syllogism, "Y is X, Z is Y therefore Z is X:" the conclusion is inevitable, whatever terms X, Y, and Z respectively are understood to stand for. And to this form all legitimate arguments may ultimately be brought. (Bk II iii S 2; 88)

In other words, arguments are expressions that take us from something known or assumed to be true to something else that follows necessarily and is thereby true as well. That is, an argument is an expression of sentences in this form.

Whately has a strict technical sense when he refers to 'argument.' While he takes arguments to have two essential parts he writes,

> [e]very Argument consists of two parts 'that which is proved' and that by *means of which* it is proved the former is called, *before* it is proved, the *question; when proved, the conclusion* (or inference;) that which is used to prove it, if stated last (as is often done in *common discourse*,) is called the reason, and is introduced by " because," or some other causal conjunction; ... If the conclusion be stated last (which is the strict *logical form,* to which all Reasoning may be reduced) then that which is employed to prove it is called the *premises*; and the conclusion is then introduced by some *illative* conjunction. (Bk II iii S 1; 86-87)

The question then is the unproven claim that must be proven by some other, already proven, claims, reasons. The question or conclusion and the reasons that prove it can be reduced back into the standard form of an argument which consist of premises, a conclusion, and some illative conjunction. Whately holds that this syllogism is a departure from the common use of 'argument.' Thus, for Whately, 'argument' in the common use is the expression of reasoning or the sharing of reasoning. So, while logic "investigates the principles on which argumentation is conducted, and furnishes rules to secure the mind from error in its deductions" (Whately, intro. B), argument is an expression of reasons.

Mill

John Stuart Mill (1806-1873) does not provide a direct definition of argument in A System of Logic so, in order to understand his conception of argument, we must tease it out of his discussion of logic and inference. Mill considers logic both the art and science of reasoning. That is, the science of logic is determining how reasons as relationships between propositions correspond with the relationships between evidence and conclusions. The art of logic is producing rules which assure that those reasons accurately portray the actual evidence-conclusion relationship. Mill's direct definition of Logic is "Logic … is the science of the operations of the understanding which are subservient to the estimation of evidence: both the process itself of advancing from known truths to unknown, and all other intellectual operations in so far as auxiliary to this." (Mill, SL, Intro. §7). In other words, logic is concerned with inference and reasoning which Mill claims is "is simply to infer any assertion, from assertions already admitted" (Mill, SL, Intro. §2). Thus, logic is as concerned with inductive reasoning as it is with deductive reasoning.

According to Mill, "[t]he proper subject… of logic is proof." (Mill, SL, II, i, §1). A fact or statement is proved "when we believe its truth by reason of some other fact or statement from which it is said to *follow*." (Mill, SL, II, i, §1). By believing some proposition by reason of some other fact I assume Mill means to infer from something we already know to something which is unknown. Thus, he means to infer. Mill explains that to reason is "to infer a proposition from a previous proposition or propositions; to give credence to it, or claim credence for it, as a conclusion from something else" (Mill, SL, II, i, §1). If the proper subject of logic is proof and to prove is to infer from known to

unknown truths, and to infer is to reason, then logic is concerned with reasoning. In other words, logic is concerned with proof. And proof is inferring from things we already know to things we don't. Logic must also be concerned with reason specifically, the reasoning from known to unknown truth.

However, reason does not capture the full scope of logic as Mill understands it. Mill claims that the use of the word 'logic' in the historical sense to denote the theory of argumentation,

> is derived from the Aristotelian, or, as they are commonly termed, the scholastic, logicians. Yet even with them, in their systematic treatises, Argumentation was the subject only of the third part: the former treated of Terms, and of Propositions; under one or other of which heads were also included Definition and Division… More recent writers on logic have generally understood the term as it was employed by the able author of the Port Royal logic; viz. as equivalent to the art of thinking. (Mill, SL, Intro. §3).

In other words, a complete definition of logic must include the auxiliary aspects of reasoning. This includes the precision of language and accuracy of classification, definition, naming etc. Simply conceiving of logic as the science and art of reasoning is not sufficient for a complete conception of logic, rather, we must account for the supporting phenomena. Indeed, Mill looks to the common understanding to support his claim. As he says

> A man is often called a great logician, or a man of powerful logic, not for the accuracy of his deductions, but for the extent of his command over premises; because the general propositions required for explaining a difficulty or refuting a sophism, copiously and promptly occur to him: because, in short, his general knowledge, besides being ample, is well under his command for argumentative use. (Mill, SL, Intro. §3)

Mill recognizes that there are operations of intellect which are not usually considered to "fall within the meaning of the terms Reasoning and Argumentation" (SL, Intro. §3) and are used in the common understanding of logic. These auxiliary aspects of logic play a

role in a logician's arguing because he is able to command them in his argument. In other words, the auxiliary aspects of logic, classification, definition, naming etc. are used by the logician to understand how general knowledge bears on his argument.

Mill draws a sharp distinction between logic and argument or rhetoric. He claims, "the sole object of Logic is the guidance of one's own thoughts: the communication of those thoughts to others falls under the considerations of Rhetoric, in the large sense in which that art was conceived by the ancients; or of the still more extensive art of Education." (Mill, SL, Intro. §3).

For Mill, the difference between reasoning and the communication thereof is a difference between logic and rhetoric. Logic as a science and an art is concerned with the epistemic acceptability of inferences and not the social acceptability of an argument presented by one person to another. Mill comments that

> [i]t is in this sense that logic is, what it was so expressively called by the schoolmen and by Bacon, *ars atrium*; the science of science itself. All science consists of data and conclusions from those data, of proofs and what they prove: now logic points out what relations must subsist between data and whatever can be concluded from them, between proof and everything which it can prove. (Mill, SL, Intro. § 5)

In light of the fact that logic is concerned with the movement from known to unknown truths, logic is strictly the science and art of the reasoning in an epistemic sense. In other words logic is the science of determining how reasons as relationships between propositions correspond with the relationships between evidence and conclusions. The art of logic is producing rules which assure that those reasons accurately portray the actual evidence conclusion relationship. Thus, Mill submits, "[o]ur object then, will be, to attempt a correct analysis of the intellectual process called Reasoning or Inference, and of

such other mental operations as are intended to facilitate this: as well as, on the foundation of this analysis, and *pari passu* with it, to bring together or frame a set of rules or canons for testing the sufficiency of any given evidence to prove any given proposition." (Mill, SL, Intro. §7). Rhetoric then, for Mill, is akin to communicating our thoughts guided by logic. That is, rhetoric is when we communicate our reasoning to others. Thus, for Mill, argument is communicating one's reasoning.

Peirce

In this section I will continue the historical aspect of my literature review by examining the works of Charles Peirce (1839- 1914) on the concept of argument and logic.

To understand how Peirce conceives of argument we must first examine some of his beliefs about reasoning and logic. Peirce believes that the object of reasoning is "to find out, from the consideration of what we already know, something else which we do not know." (Peirce 1877, 111). The movement from known to unknown is accomplished through induction. Peirce uses 'validity' to speak of both inductive and deductive inference strength, but to avoid confusion with the modern use of 'valid,' I will use the term 'valid' only when referring to deductive arguments and the term 'strength' when referring to the inference acceptability of an inductive argument. Peirce wants to establish that good inferences are not merely objects of the mind. If we have an argument where A is the premise and B the conclusion, the question of logic is whether the corresponding facts attached to A and B are in fact in the relationship that the argument claims them to be in. If this is the case, then the argument is strong, if not then it is weak. (Peirce 1877,

112).

A habit of mind is some tendency to make an inference whether we acquire this habit through personal experience or learning it as truth. A habit of mind then is simply some tendency we have "which determines us, from given premises, to draw one inference rather than another" (Peirce 1877, 112). A habit of reasoning is good if it yields true conclusions from true premises. It becomes a habit because it is useful to us. If the reasoning were to take us to false conclusions from true premises, then it would lead us to make disadvantageous decisions and we would prefer to not use that reasoning again and thus, it wouldn't grow into a habit. That is, going from true premises to a false conclusion would result in undesirable results, so we only consistently use good guiding principles. Any reasoning that is truth preserving is advantageous; thus, mental habits are formed by consistently using truth-preserving reasoning. An inference is strong or not based on the "habit which determines it is such as to produce true conclusions in general or not." (Peirce 1877, 112)

> Peirce introduces the idea of a guiding principle. He writes,
>
> The particular habit of mind which governs this or that inference may be formulated in a proposition whose truth depends on the validity of the inferences which the habit determines; and such a formula is called a *guiding principle* of inference. (Peirce 1877, 112)

A guiding principle then is a mental habit formulated into a proposition which can be said to be true or false when compared with the state of affairs in the world. In other words, a guiding principle is a mental habit in propositional form which either corresponds to the world or not. In this sense a guiding principle is a proposition, but it does not appear in the argument or reasoning. The mental habit does. So, a guiding principle is a proposition which behaves as an inference rule. For example, suppose that you drop your cell phone

into a pool of water and it stops working. We then infer that this will happen with every cell phone when dropped into water. The guiding principle is that what is true for one cell phone is true for all cell phones.

Toulmin

Stephen Toulmin (1922- 2009) could be considered an informal logician. His 1958 work, The Uses of Argument is a celebrated text in the informal logic world. Whereas Irving M. Copi, who will be discussed in chapter III, represents the rigidity of the formal climate prior to the development of informal logic, Toulmin, his contemporary, represents a handful of theorists who were beginning to go off into the informal direction. Thus, I include Toulmin in the historical chapter to better understand some of the early developments that would eventually become quite important to informal logic.

Toulmin discusses the possibilities of what kind of science logic can be. For some people logic is in the domain of psychology. To cast doubt on this position, Toulmin writes "Logic is concerned with the laws of thought—not perhaps with straightforward generalisations about the way in which people are… found to think" (Toulmin 1958, 3). Logic holds bearing on the ways in which people can or might think and Toulmin expresses this by explaining that logic is concerned with the laws of thought. Logic, for Toulmin, is not concerned with how people are found to think. The way people are found to think is the concern of psychology whereas logic is concerned with the more fundamental laws which govern the way people think. Thus, Toulmin shows that there is doubt that logic is in the domain of psychology.

Others think logic is the domain of sociology. Toulmin uses Dewey as an example of this and claims that inferences can be learned habits. That is, it is important to recognize that, when adding in a descriptive practical account of logic, one must filter through a mess of good and bad inferences. Inferences resemble habits that are passed down, both good and bad. Toulmin casts doubt on the position that logic is the domain of sociology when he warns that, "[h]abits of inference... begin by being merely customary, but in due course become mandatory or obligatory" (Toulmin 1958, 4). This includes even bad inferences.

Others think that logic should be like medicine. For these thinkers logic is meant to discover "rules of argument, in the sense of tips for those who wish to argue soundly" (Toulmin 1958, 4). Toulmin thinks the medical model of logic is problematic and explains that if we consider logic a medicine like this, it becomes "not an explanatory science but a technology, and a text book of logic becomes as it were a craft manual." (Toulmin 1958, 4).

Thus far, Toulmin has introduced and cast doubts on each of the different models of logic, the physiological, the sociological and the medical. Instead of these models, Toulmin suggests the jurisprudential model. That is, we should take on a model which asks for backing or grounding for our reasoning. Toulmin claims

> Arguments can be compared with law-suits, and the claims we make and argue for in extra-legal contexts with claims made in the courts, while the cases we present in making each kind of claim can be compared with each other. (Toulmin 1958, 7)

This comparison forces Toulmin to consider whether or not 'analogy' or 'metaphor' are even strong enough terms to describe the comparison between the jurisprudential model

and logic. The justification for a claim is compared with other arguments “not before Her Majesty’s Judges, but before the Court of Reason” (Toulmin 1958, 8). Toulmin is presenting a case for logic to be a method of justifying claims through precedence.

Accordingly, Toulmin is interested in how an argument uses a warrant to justify the move from datum to claim. The move from datum to claim is justified by a warrant. That warrant can be supported by a backing. In either case these justifications are field specific. Legal reasoning requires legal backing, biological reasoning requires knowledge of biology, etc.

To better understand warrant, we must first understand the relationship the warrant justifies, the movement from datum to claim. Data are necessary to answer the challenge of whether or not a claim is justified. Toulmin explains this by writing, “if this claim is challenged, we must be able to establish it... make it good and show that it was justifiable.” (Toulmin 1958, 97). This is accomplished by having facts or data to back up our claims. For example, the assertion Matt is handsome is justified from the personal knowledge that Matt is handsome. The “assertion is supported by producing other facts bearing on it.”(Toulmin 1958, 97). This establishes the distinction between the claim and the facts we appeal to, or the data. This distinction answers the question ' what have you got to go on?' If an interlocutor asks this question of an assertion we have made, then we can answer by giving some datum relevant to the assertion. Similarly in a legal case the evidence put forward is meant to justify the claim. The claim that Jim was responsible for the accident is supported by the evidence that he was behind the other car.

Having the distinction between data and claim requires us to further complicate the model. It is great that we have justification for our claims, but an interlocutor might

now demand how our data shows our claim to be the case. In other words they might ask "How do you get there?" (Toulmin 1958, 98). This question asks not what datum justifies the claim, but *how* does that datum justify the claim. That which justifies the relationship between the data and the claim is what Toulmin calls a warrant. Using Toulmin's example, "the knowledge that Harry's hair is red entitles us to set aside any suggestion that it is black, on account of the warrant, 'if anything is red, it will not also be black." (Toulmin 1958, 98). The warrant in this example is the idea that anything that is red is not also black. So, to justify the claim that Harry's hair is not black, we have the datum that his hair is red, and the fact that anything that is red is not also black is the warrant that justifies why the datum 'Harry's hair is red' justifies the claim that ' Harry's hair is not black.'

There are different kinds of warrants and they demand different kinds of force (Toulmin 1958, 100). Some warrants may justify their claim with absolute force, but others may only give us probable cause to believe them. Since there is a distinction between the different kinds of warrants, we need to add in a new criterion to our argument structure, a qualifier. A qualifier describes the extent to which the warrant extends. The qualifier comes in with another criterion we must add to our argument structure, a rebuttal. When we are investigating to what extent a warrant extends to a particular case, we are also forced to wonder whether special facts may be applied to this particular case. Are there things that make this warrant an exception to the rule? (Toulmin 1958, 101). Toulmin uses the letter 'R' to represent a rebuttal. For example, the conclusion 'Harry's hair is not black' is supported by the datum that Harry's hair is red. The warrant connecting these two statements is that anything that is red is not also black.

We can only speak with probability on this warrant because Harry could have dyed his hair. So the qualifier to the conclusion must change the conclusion to ' Harry's hair is most likely not black.' The thing that justifies the qualifier is the rebuttal. Since Harry could have dyed his hair we are only justified in saying that Harry's hair is most likely not black. We cannot speak certainly that his hair is not black. So now Toulmin's structure of an argument includes the datum and the conclusion, the warrant which justifies how the datum concerns the conclusion, the qualifier which examines to what extent and strength the warrant applies in each case and the rebuttal which is the question that forces us to examine how strong the qualifier may be.

Toulmin recognizes that we now need to ground our warrant. Our warrant may act as support for our move from datum to conclusion, but what justifies the warrant? Toulmin suggests, that we call this 'backing.' Backing could be legal statutes, referring to statistics, or taxonomical classification. Though they may at first glance seem similar, warrants are not to be confused with backing. Warrants behave as a bridge between datum and a conclusion while backing can be "expressed in the form of categorical statements of fact quite as well as can the data appealed to in direct support of our conclusions." (Toulmin 1958, 105). Thus, Toulmin includes the idea of a warrant which licenses the move from datum to claim in his model of an argument. This warrant can be supported by a backing if need be.

Conclusion

From this review of Whately, Mill, Peirce, and Toulmin it has become obvious that the movement from a rigid formal system (as in Whately) to a more inclusive system that we see in the 1970s with the informal logicians has important historical antecedents. The way Mill advocates inductive reasoning foreshadows the way in which Blair and Johnson will also resist the deductivist paradigm. With that being said, Mill would not have appreciated the term 'informal logic' because for him logic is the guidance of one's thoughts and any communication of those thoughts falls under the name 'rhetoric' (SL, Intro. §3). Thus, Mill would consider a large portion of informal logic to be rhetoric and not logic the way he understands it. Toulmin sets out to make a tool for users of argument and not develop a theory of argument necessarily. The most important thing to take away from this section is that Mill, Peirce, and Toulmin all had this similar story of a warrant supporting an argument. Mill thinks that we develop generalizations when we need to justify our inferences from particular to particular. These are justified with generalizations which serve as warrants. Peirce believes that warrants are the result of the mental habits we develop in practice in everyday life. We can then turn our mental habits into propositions and determine if they are true or not. Toulmin believes that warrants are used to answer how the datum justifies the claim. It does not serve as evidence for the conclusion, but can explain how the evidence presented supports the conclusion. Each of the three stories about warrants show that a warrant occurs in the background and is not a part of the argument itself. The similarity of all three thinkers in their stories about warrant show an essential characteristic about argument leading up to the development of the various conceptions of 'argument' in informal logic. The questions concerning the

role of inference will play a big role in the different ways that the informal logicians conceive of 'argument,' which will become evident in the next chapter.

Chapter III

Informal Logicians

In this chapter I will review the conceptions of argument developed by the central thinkers of the informal logic field. As such I will focus on the Windsor group of informal logicians, Anthony Blair, Ralph Johnson, Robert C. Pinto, and Douglas Walton. While there have been many people involved in developing informal logic: these four seem the most relevant to my project. Blair and Johnson are the co-creators of the namesake of the field. Walton is perhaps the most prolific author working in informal logic and thus, his opinions on these matters are influential. Lastly, Pinto, whose work inspires this project and who has an exceptionally interesting take on argument as invitation to inference. I select these four, in part because they are the obvious four to study and because each of them have a take on the concept of argument that represents informal logic; however, first I must provide some context into the development of informal logic as a discipline. In order to do this I will briefly examine the views of

Irving M. Copi as he seems to be the prominent figure that the informal logicians took to be representative of the formal logic of their day.

Copi

Much of the informal logic world is based on either a rejection or extension of the reach of formal logic, especially, the way formal logic was conceived in the 1970s. The textbook which has most frequently been used as an example of formal logic by the informal logicians is Introduction to Logic (1972) by Irving M. Copi (1917-2002). At its inception, informal logic, re-developed logic for pedagogical reasons. The goal of the Blair and Johnson in developing informal logic was, according to Johnson (Johnson 2000), "a better way to teach logic and better logical tools to put into our students' hands." (Johnson 2000, 4). As informal logic developed it became clear that there were deeper theoretical reasons for the division. Informal logic became more than just applied methods to teach formal logic, but a theoretical discipline of its own.

As a prominent formal logic text, Introduction to Logic (1972) served as a good standard for the informal logic pioneers to measure against and distinguish themselves from. Thus, much of the inspiration for the way that philosophers of logic and argument conceive of argument and logic comes from introductory level textbooks such as Copi's. Accordingly, to gain insight into the different conceptions of argument throughout the philosophical landscape I will analyze and interpret Copi's definition.

Copi defines an argument as follows:

> An argument is any group of propositions of which one is claimed to follow from the other, which are regarded as providing grounds for the truth of that one…An argument is not a mere collection of propositions, but has a structure. In describing this structure, the terms "premiss" and "conclusion" are usually employed. The conclusion of an argument is that proposition which is affirmed on the basis of the other propositions of the argument, and these other propositions which are affirmed as providing grounds or reasons for accepting the conclusion are the premisses of that argument. (Copi 1972, 7)

At the heart of this definition is a probative relationship between premise and conclusion. This definition does not stipulate that the probative relationship in an argument needs to be one of deduction. Copi's definition leaves room for other kinds of logic to be used in the construction and evaluation of an argument. His definition is inclusive of other logics, so a variety of argument structures could fit within it.

Copi's use of the term 'propositions' shows that he considers arguments to be abstract objects. This is because propositions are inherently abstract. But, Copi thinks that an argument is more than just a collection of propositions, it also has a structure. So, an argument is a collection of propositions wherein one is claimed to follow from the other(s). This collection of propositions also has a structure and it is this structure which formal logic focuses on.

Formal logic is concerned with the structure of the argument, not the content. The goal is to abstract from the content of the sentences, generate types of structures which are truth preserving and then endorse the use of those kinds of structures. For example, if a formal logician takes the argument "Socrates is a man and all men are mortal, therefore, Socrates is mortal" and replaces the content in the argument with variables and predicate constants, then they can examine the structure of the argument. That argument becomes, assuming M stands for man, R stands for mortal, and s stands for Socrates "$(\forall x)(Mx \rightarrow Rx), Ms, \therefore Rs$." If we assume that we begin with true premises and the argument never

leads us from true premises to a false conclusion, then it is a good argument. If this argument structure always preserves truth, then any argument with this structure would be valid.

Thus, for formal logicians, an argument is a collection of propositions where one of the propositions is proven by the other(s). Despite recognizing that arguments do appear in a certain context, when it comes to appraisal and evaluation, formal logicians are concerned only with structure.

Blair

J. Anthony Blair was one of the founders of the informal logic movement in the 1970s. A large part of that movement was bringing logic into everyday life by embracing context rather than shunning it as the formal logic of the day did. Therefore, it is strange for him to dedicate a section of his book to defining argument without context. He, of course, recognizes that "discourse can be identified as argumentation or as containing arguments only in the light of a given particular interpretation of it. Arguments are embodiments of meaning, and meaning is generated by participants' understanding of the situation" (Blair 2012, 191). In light of this, he argues that "The particular meaning of sentences, or how they are understood, are thus not accessible aside from their contexts, that is, particular situations of their use" (Blair 2012, 191). It would seem that this belief leaves no room for a theory of argument *sans* context. However, Blair makes an elegant distinction between how argument is used and what argument is. He says

> once we have a particular understanding of the discourse that makes it out to be argumentation, and we have a particular understanding of the argument in

> question, we can then ask, from whatever perspective we occupy, whether the reasoning of that particular argument as it stands, so understood and at that moment, is any good--that is, in our judgement to what extent do the considerations adduced support the proposition in question, or to what extent should they be taken to support it? (Blair 2012, 191)

Even though all of our interpretive tools require context, it is possible to work through the context and ask normative questions about its support. This is only possible if we can understand argument as it is rather than how it is used. Blair argues that

> to avoid losing sight of arguments as distinct from their uses is that [he] think[s] we need to keep in the forefront of our attention the fact that we do not yet have the *logic* of arguments worked out. We do not yet have a normative logic for arguments that everyone agrees is right. (Blair 2012, 191)

Blair thinks there is something to be gained from also conceiving of arguments without context. Namely, a step towards developing an account of the logical norms of arguments. (Blair 2012, 195). In other words, Blair recognizes that even though he is one of the most ardent supporters of a context-driven understanding of argument, there is something to be gained from also understanding argument in a more abstract way. A logic of argument would give us a different sort of criteria to evaluate an argument. This criteria would be based on epistemic justification, not on the acceptance or denial of the participating arguers. Blair understands that the participants in an argumentation imbue meaning into the propositions uttered throughout and thus it is impractical to interpret arguments without context, but a logic of arguments requires that abstraction from context. Thus, Blair develops a definition of argument that does not depend on context or its involvement in argumentation.

Blair's conception of argument focuses on reasons. He says, "at the heart of things, I suggest, are reasons–reasons for beliefs or for believing, reasons for attitudes or for emotions, or reasons for decisions about what to do" (Blair 2012, 189). One

important thing to note is that Blair's focus on reasons also focuses on psychological attitudes. By including the emphasis on, attitudes, and emotions, Blair's conception of argument is focused on whether or not an argument can be the inspiration for changing a psychological states that is, can the argument convince you to change your beliefs, which is, in essence, persuasion. Persuasion is something Blair sets out to avoid in this definition of argument. Thus, we must look further into Blair to understand what he means by reasons for believing. I interpret him as saying a reason for believing are hypothetical considerations. In other words, that a reason is one which could be persuasive. A consideration is capable of determining an intellect to adopt a positon or not (Blair 2012, 189).

Blair then further explains that we should conceive of arguments as "a set of one or more propositions to be an argument (understanding 'proposition' in the broad sense) just when all but one of them constitute a reason for the remaining one" (Blair 2012, 189). By 'proposition' in the broad sense Blair simply means that we should understand propositions as the meaning behind the sentence instead of the utterances themselves. That is, propositions in the broad sense are what we can believe or not. Blair justifies his use of 'proposition' over claim in his definition of argument. Blair's defines argument

> in terms of propositions rather than claims because claims are tokens of a type of speech act, namely, the action of assertion, or putting forward a proposition as true which is a kind of communication with others that carries with it the obligation to defend the proposition claimed if challenged, and so connects argument analytically with persuasion. (Blair 2012, 1989)

Blair wishes to avoid the connection with persuasion because he is setting up the abstract notion of argument so as to develop a logic of argument. Thus Blair uses propositions which he understands to denote the meaning behind the utterance in this conception of

argument. He claims that "[w]hat constitutes support is an epistemological question, understanding epistemology in a broad way, so as to be the theory of the justification of attitudes and various kinds of normative propositions as well as beliefs." (Blair 2012, 189). So, despite the terms that he uses having psychological connotations, Blair is discussing a definition of an argument as it is, not as we can interpret it. As he says "I am talking about what an argument is, not about how to recognize one, or how to reconstruct expressed arguments, or how to evaluate one" (Blair 2012, 191). The difficulty with language arises simply because an argument cannot be recognized independently of its context, and Blair is not talking about how to do, recognize, or evaluate arguments, he is talking about how to conceive of argument in a way which allows us to develop a logic of argument. It is difficult to understand this idea because you cannot give an example of what an argument would look like outside of its context. What Blair must do is craft a set of essential conditions that would make up an argument absent the context, then he can look at the logical structure of argument.

Blair argues that arguments are not simply propositions but their relationships as well. He argues that the Toulmin model is useful because "its concept of "warrant" makes explicit the inference rule that is functioning in any argument, and being able to refer to the inference rule at work provides a way of distinguishing kinds of logical criteria" (Blair 2012, 189). That is, Blair is using the Toulminian structure of datum, claim, and warrant because it makes it so clear that the inference is also an essential part of an argument. Picking out the warrant allows an argument appraiser to see how the inference works in the argument. The essential idea, says Blair, is that "an argument, or more precisely, a unit of argument, is a compound proposition consisting of a proposition

together with a consideration that supports it, other things being equal" (Blair 2012, 190). In other words, an argument is a collection of propositions (in the broad sense) in which "all but one of them constitute a *reason* for the remaining one" (Blair 2012, 189). By reason we mean some proposition which epistemically justifies a change in belief, but this does not require the argument to be viewed in the context of an argumentation. A reason for some proposition or a consideration can "include more than one proposition, so it is not a premise, but a group of premises. The consideration tends to show that the proposition is true, or reasonable, or probable or plausible, other things being equal." (Blair 2012, 190).

Thus, an argument consists of a set of premises, which we understand as propositions which behave as a consideration or reason for the conclusion, by right of some warrant or inference rule. This warrant or inference rule is justified epistemically, not psychologically. This means that it is concerned with what supports or licences any given person to adopt a belief, attitude, etc.

Blair introduces the idea of the illative unit, or the illative core. This illative relationship is best characterized when Blair explains,

> at the heart of the activity of argumentation is the argument that has been made. In its smallest possible form, this unit of argument is a single integrated set of one or more propositions adduced as grounding or evidence in support of a claim: "This, therefore that," which we will dub the "illative unit." In the absence of this illative core, the probative heart of argumentation, the institution of argumentation has no anchor. (Blair 2012, 43)

The illative core, then, is the most basic unit that comprises argument. It is a collection of propositions in a probative relationship. A probative relationship is one where one member of the relationships proves the other or at least attempts to. But it is not the case

that an illative core is the only relevant feature of an argument we wish to study. In fact, Blair acknowledges that "there are instances where the probative function of an argument is inessential to its social dynamic… or completely unrelated, to the real issue between the protagonists." (Blair 2012, 43). In other words, the actual disagreement between the two arguers could not even be connected with the content of the argument. The point here is that, logic and epistemology as a discipline have underestimated the value of the non-probative aspects of arguments. Put simply, although there is that essential illative core in an argument, there is much more going on than just that. Or, as Blair puts it, "the point that illation is essential for argumentation does not imply that arguments are adequately modeled by a simple "this, therefore that" truth demonstrating structure."(Blair 2012, 43). Illative units in an argument fulfil many functions including, support for premises, shifting the burden of proof, and refuting alternative positions. Furthermore, illative units do not always mark a truth, some will establish probability and others plausibility. This line of reasoning does not diminish the value of the illative unit or illative core. What Blair is arguing for here is that the term "illative unit" "does not denote an argument type or function, just the basic simplest premise-conclusion component from which any argument is built." (Blair 2012, 43). In other words, illative units and the illative core are necessary but not sufficient conditions for an argument. It is implausible to make sense of an argument which does not contain at least one "this, therefore that" relationship between propositions, however, it is not the case that the illative core captures the complete picture of what an argument is or how it functions.

This section has focused on what Anthony Blair thinks argument is and not on how to recognize or evaluate argument. Thus, according to Blair, an argument is a

collection of propositions in a probative relationship with each other wherein one is supported by the others. This is the illative core of an argument.

Johnson

In Manifest Rationality (2000), Ralph Johnson reformulates the entire conceptual framework for what it means to talk about argument, inference, and rationality. Therefore, this section will discuss these components in a different, seemingly odd, order. Johnson reconceptualises inference, argument, and implication each to be their own types of reasoning which belong to their own respective logics. Accordingly, argument does not contain an inference, but is a type of reasoning which is only understood in the context of argumentation. Hence, I begin this section by discussing inference and reasoning, then move to manifest rationality, and then, finally, I will discuss argument.

Before we can understand Johnson's conception of argument we must first understand his characterization of inference. Inference is a type of reasoning for Johnson which coheres with induction. Argument then, does not contain an inference, but is a different type of reasoning. Inference and argument are two different types of reasoning each with their own respective logics. In chapter four of Manifest Rationality Johnson argues that "deductivism and positivism [induction] are not really theories of argument at all" (Johnson 2000, 93). The former is a theory of implication and the latter a theory of inference. In other words, inductive logic is concerned with inferences which is different from informal logic which is concerned with argument. Inference in Johnson's view is "the transition of the mind from one proposition to another in accordance with some

principle; at its best, guided by the theory of probability" (Johnson 2000, 94). This casts inference as a mental movement of the mind from one proposition to another based on some probabilistic warrant. One's mind goes from P to Q on the basis of W, Where "W" is some rule grounded in probability. Or, as Johnson puts it,

> we should abandon the idea that an argument consists of a set of premises plus a connection, an inference, from those premises to the conclusion, in other words, the truth behind conductivism is that arguments ought not to be represented as inferences. Arguments (at least the central instances of them) and inferences (at least the central instances of them) are entirely distinct, although related species of reasoning. (Johnson 2000, 95)

Thus, we cannot understand the role of inference in argument because inference is not sufficient for argument. Argument, in this model is a type of reasoning entirely different from inference.

Johnson understands argumentation to be a practice which embraces, increases, and exhibits rationality. In other words, argumentation is "characterized by manifest rationality" (Johnson 2000, 163). The word 'manifest' means that the rationality present in the social exchange should be plain to the participants, whether they are the arguer, critic or interested spectators.

Embracing rationality means that the participants must support the idea of rationality in some way or another. They must hold rationality in esteem as a way of making decisions or handling affairs. One could choose any number of ways to do such things: Johnson offers the possibilities of "authority, intuition, speculation and so forth" (Johnson 2000, 162). In other words, there are multiple ways to handle one's business and to engage in the practice of argumentation but participants must embrace rationality as the best way. Argumentation requires that its participants embrace rationality so that

they hold the other participants and themselves to a high standard when arguing. In other words the love of argument is the way in which argumentation polices itself from poor reasoning.

Indeed this regulative factor of embracing rationality depends and lends support to the fact that argumentation requires mutual rationality. There must be more than one rational entity to engage in argumentation. Accordingly, argumentation exhibits rationality. That is, the participants engaging in argumentation are engaging in the practice of being rational: to give and receive reasons and entertain objections. Johnson claims that arguers participating in argumentation should be rational. Rationality does not require argumentation, and thus someone could, conceivably, be rational without ever having engaged in an argument. One of the roles of argumentation with respect to manifest rationality is that it serves as an example of rationality.

Argumentation both depends on rationality and increases it. The practice of argumentation makes the participants more rational and increases the amount of rationality in the world. The practice of arguing improves both the arguer and the critic. If the critic proves the arguer's argument faulty, the arguer now can accept and understand why his reasoning doesn't work. This allows her to move forward and develops a better position. If the arguer proves the critic's objection weak, then the critic will be able to move on from that objection and either accept the arguer's position or develop new criticisms. Each interaction of argumentation then can and will improve the rationality of the participants and therefore increases the overall rationality of the world.

To say that argumentation is characterized by manifest rationality is to say that its rationality is apparent to participants and observers. The fact that argumentation exudes

rationality to all those around it makes it plain that if one is to engage in argument, they must use rationality and answer the strongest objections. In other words, the open exhibition of rationality creates a sort of culture of demanding the best arguments possible of its participants. This amounts to a social and self-policing of rationality in the context of argument. That is, to plainly avoid meaningful objections would not only not be rational, "it would not **look** rational" (Johnson 2000, 164). To put this in another context, football teams have a culture of practicing against your teammate's best efforts; it will make better players of both you and your teammate. If one team member is not prepared and consistently makes mistakes, they are ostracized from the team until they prove they are ready to play. The player doesn't want to experience this punishment so they make sure they are prepared. This punishment is not administered by the coach, but the other players and in turn the player polices herself to avoid public shame. This is the same sort of self-policing that is done in Johnson's model of argumentation. One performs with a sort of rational effort in argumentation lest they be thought to be not rational by the other participants in the social exchange.

Thus, argumentation both leans on rationality and supports it. Admiration for rationality is necessary for the participants to uphold themselves and their peers to high standards and rationality requires the policing of argumentation to ensure that people are using strong rational practices in their own reasoning.

Johnson agrees with Blair's idea of an illative core of an argument, but believes that it does not constitute a complete account of argument. The traditional ways of approaching logic fails according to Johnson to "give adequate representation of the dialectical character of argumentation." (Johnson 2000, 165). There is an essential

dialectical character of argumentation that needs to be accounted for when conceiving of argument. Johnson uses Plato's Republic as an example. In the Republic "Plato often had his interlocutor raise objections that would have been raised by an opponent if he were present." (Johnson 2000, 152). It seems that Johnson is trying to show that Plato must have recognized the value of the dialectic because he used it as a tool in developing his philosophical arguments. Johnson calls material wherein the arguments are being formulated in response to objections and criticisms the dialectical tier. The dialectical tier is an essential part of any conception of argument and, in order to bring the dialectical tier into a conception of argument we must ground our conception in argumentation.

Previously in Manifest Rationality Johnson argued that "one of the principal defects in current ways of conceptualizing argument is that these tend to be structural in character, ignoring the purpose(s) of argument. But that is really only part of the story" (Johnson 2000, 154). Johnson feels that the purposes of argument and further, the context that arguments are situated in have an effect on the argument that cannot be ignored. As Johnson puts it "to develop an adequate understanding of argument, we must situate it within the practice of argumentation." (Johnson 2000, 154). In other words, we lose an adequate understanding of an argument without the context of the social interaction it is a part of. In order to ascertain a full understanding of argument, we must include the context.

By argumentation, Johnson means "the sociocultural activity of constructing, presenting and criticizing and revising arguments." (Johnson 2000, 154). This activity is to be understood in a network of customs and habits. In virtue of argumentation being a cultural activity it does not have a centralized set of standards. In other words the people

who govern the interaction and develop the standards are participants in that specific culture. In other words, “typically there are no written rules to govern the practice but, rather, a shared understanding that allows for significant variation in how people actually work it out.”(Johnson 2000, 155).

Despite believing that the broader social interaction is essential to understanding argument, Johnson tries to maintain the distinction between argument and argumentation. Johnson wants to maintain this distinction because he “want[s] to separate the normative issues that surround the practice of argumentation from those that surround the process of arguing, and both of those in turn from issues that concern the product.” (Johnson 2000, 156). Thus, Johnson’s move to maintain the distinction is a theoretical choice that will allow his theory a normative perspective.

By the practice of argumentation Johnson simply means an interchange wherein two or more agents are trying to persuade the others of some position. Johnson explains that in “the typical interchange, there is a difference in point of view that has crystallized around an issue and one of the participants. The arguer is attempting to persuade the other of the truth of the thesis being advocated.” (Johnson 2000, 156). The process of argumentation can take on many forms and can go on for years.

The social interchange wherein one person attempts to persuade the other is the process of arguing and the product of that interchange is argument itself. Specifically argument is what happens when “[a]t a certain point in the process, the arguer distils elements from what has transpired in the process and encodes them in the form of an argument.” (Johnson 2000, 159). This argument can appear in speech or text and comes out as a product of the process. In virtue of being a product of the social interchange, the

argument bears an imprint of that interchange. Johnson cites a proverb which puts it eloquently saying “As the twig is bent, so the tree is inclined” Thus Johnson commits himself to understanding argumentation in hopes of better understanding the product, argument.

Argument as traditionally understood was a collection of propositions and the focus was on the structure of the relationships of those propositions. Johnson departs from the traditional view of argument and introduces the two tiers of argument. He does this by first arguing that the structural view is inadequate for three reasons

> First, argument cannot really be grasped as structure without reference to the purpose(s) that the structure is meant to realize. Second, the real structure is more complicated than the standard view would suggest. There must be more to an argument than just reasons leading to the conclusion; a dialectical tier is also necessary. Third, our approach suggests that an adequate conceptualization of argument cannot be had apart from seeing it as a product situated in the practice of argumentation. (Johnson 2000, 177)

These reasons amount to the criticism that Johnson mounts earlier in *Manifest Rationality*; that we cannot understand argument without reference to its broader social context, argumentation. In other words, Johnson is, in a sense, simply reinforcing his argument that argument must be understood in terms of argumentation.

The purpose of argumentation is rational persuasion (Johnson 2000, 159). This is accomplished in part by the first tier, the illative core, which is “meant to initiate the process of converting others, winning them over to the arguer’s position.” (Johnson 2000, 160). The illative core is when “reasons are produced to justify a target proposition, which is the conclusion.” (Johnson 2000, 160). The first tier is the argument structure devoid of context. That is, it is the solitary product of argumentation but does not include information about the argumentation it is a product of. Johnson sees that if we are to

rationally persuade someone, we must anticipate the objections and criticisms that will surely follow any attempt to persuade a rational interlocutor. Given that the goal of argumentation is to rationally persuade and it seems unlikely that we can consider the illative core on its own an exercise in rational persuasion, "the process of argumentation must include a second—dialectical—tier in which objections and criticism are dealt with" (Johnson 2000, 160). In other words, if we assume that the goal of argumentation is to rationally persuade someone, then we need a conception of argument that has a hope of being successful. An argument with only the first tier will not be effective at rational persuasion. Moreover, the first tier will not be effective in rational persuasion because of the objections and criticisms that a rational interlocutor would have. Thus, a second tier which anticipates and deals with those objections is necessary. Johnson dubs this the second tier, the dialectical tier.

Johnson takes great pains to show why we should include a dialectical tier in our conception of argument. Later in Manifest Rationality, he shows how that conception might work in practice. That is, how the dialectical tier affects an argument. Dialectic is more than just speech between two parties, "[g]enuine dialogue requires not merely the presence of the other… but the real possibility that the logos of the other will influence one's own logos." (Johnson 2000, 161). Allowing one's own logos to be influenced is essential to argumentation and argument. This means that the arguer allows feedback from their interlocutor to influence their product. Put simply, arguments, as a product of argumentation, are influenced by the interlocutor in that the author of the argument makes amendments as a result of what the interlocutor says. In this sense, the argument, as a product, changes to respond to the interlocutor. This is how the dialectical tier affects

arguments. Without an account of the dialectical tier, we would have an incomplete theory of argument, so says Johnson.

In light of manifest rationality, and fleshing out the dialectical tier, Johnson provides a refined definition of argument as

> a type of discourse or text--the distillate of the practice of argumentation--in which the arguer seeks to persuade the other(s) of the truth of a thesis by producing the reasons that support it. In addition to this illative core, an argument possesses a dialectical tier in which the arguer discharges his dialectical obligations. (Johnson 2000, 168)

It is important to keep in mind that this definition is stipulative and an attempt to understand the centre of a broader spectrum of how the term "argument" is used. That is, this definition is the combination of Johnson's understanding of the centre of a range of uses for the term "argument" and his recommendation for how we should define the term. This definition includes the dialectical element that Johnson thinks is essential to understanding argument, makes no reference to the premises and conclusion, emphasizes argument as part of the practice of argumentation, and makes reference to purpose, with the notion of structure in a secondary role. In other words, this definition of argument keeps in mind that argument must be understood in the context of the broader social context of argumentation and gives this greater importance than structure.

In this section I have gone over Johnson's (2000) views on argument, argumentation, and logic. There are three aspects of Johnson's view which stand out; his view that argument is a type of reasoning in the context of argumentation, the inclusion of the dialectical tier in the definition of argument, and the development of manifest rationality. Manifest rationality asks that argumentation be transparent and encourages rationality in society.

Pinto

In this section I will discuss the contributions to informal logic by Robert Pinto. The phrase "argument is an invitation to inference" consistently pops up in the literature on argument and this is the result of Pinto's work. As such, I will focus on the way that Pinto develops his conception of argument, inference, and argumentation.

In Argument, Inference and Dialectic (2001) Robert Pinto initially casts inference as "the mental act or event in which a person draws a conclusion from premises, or arrives at a conclusion on the basis of the consideration of a body of evidence" (Pinto 2001, 32). Pinto firmly argues in favour of the identity of reasoning with inference. He anticipates and rejects the possible objection to the identification of reasoning with inference (Pinto 2001, 32) by using Johnson's argument which draws a distinction between reasoning and instances or species of reasoning. That is, reasoning is having, seeking, or giving reasons while explaining predicting, asserting, arguing, defining and clarifying are simply instances or species of reasoning. This distinction shows that Johnson thinks that inference is just one type of reasoning.

Pinto expresses Johnson's point of view as the claim that "[i]nference is one of the kinds of act or event that occur in the course of the process of reasoning, but not the only kind." (Pinto 2001, 33 note). Contrasting this, Pinto's view is that "the relation of inference to reasoning is a relation of part to whole, not a relation of species to genus" (Pinto 2001, 33 note). In other words, inference is an essential property of reasoning, not just an instance of a type.

Pinto's dedication to viewing inference not as just one type of reasoning, but as a

part of all of reasoning shows that the role for inference in argument is not just the relationship between the premises and conclusion, but also in the construction of the argument itself. This is because the ordering is either another type of inference being made, or a part of the relationship between the propositions.

The role of inference in argument muddles the definition a little bit. In an attempt to keep inference away from the psychologism criticism presented by Frege, Pinto illustrates and sides with Walton (1990) and van Eemeren and Grootendorst (1984) by arguing that a necessary condition for something to be an argument is that it serves as an instrument of persuasion. (Pinto 2001, 36). There are two, significant, implicit claims being made here. The first is that something is an instrument of persuasion only if the person presenting the instrument intends for it to be persuasive. Furthermore, there is a distinction between argumentative inference and non-argumentative inferences and this distinction depends on the intention of the arguer. In other words, an argumentative inference is one which the arguer intended to have the hearer to make. A non-argumentative inference is equivalent to making deductions, inductions, abductions, about the world without the influence of another's intention. This treatment of inference is done before Pinto introduces his idea of argument as invitation to inference.

Pinto initially casts an argument as "[a] set of statements or propositions that one person offers to another in the attempt to induce that other person to accept some conclusion" (Pinto 2001, 32). He later refines this definition and expresses it more eloquently as an invitation to inference (Pinto 2001, 36). Arguments as invitations to inference is in line with Pinto's views "that both acceptability of premises and suitability of inferential link are best conceived as relative to persons at times" (Pinto 2001, 21).

That is, he is committed to grounding arguments as “instruments of persuasion” (Pinto 2001, 36). Indeed Pinto goes on to point out that the goal of argument can show us how we should conceive of argument. If he is correct in his claim that the goal of argument is “to effect an inference in the person to whom it's addressed (and not simply to effect acceptance of its conclusion)” (Pinto 2001, 36), then we can see a greater emphasis on the communication of the inferential relationship between the propositions and not just the conclusion. In other words, what an argument attempts to do is, lead the hearer down the same path the speaker took. An argument demonstrates how one can get from some premises to some conclusion.

Pinto draws on a comparison between argument and inference in that they both have premises and conclusions (Pinto 2001, 36). Furthermore, he claims that the comparison becomes intelligible “if we view the premisses that are put forward by the arguer as intended to elicit assent to the argument's conclusion by forming the basis of an inference drawn by the person to whom the argument is addressed” (Pinto 2001, 37). In other words, it is important that the addressee accepts not just the truth of the conclusion, but that they accept that conclusion in virtue of the support given by the premisses. This idea is reinforced by Pinto when he gives us conditions for the success and failure of an argument. An argument succeeds

> when the persons to whom they are addressed accept their conclusions on the basis of their premisses. Arguments fail when the addressee either refuses to accept their premisses, or accepting their premisses does not draw the intended conclusions from those premises. (Pinto 2001, 37)

From these conditions we see the emphasis on the addressee arriving at the conclusion in virtue of the premisses presented. Having your interlocutor agree with your conclusion

does not mean your argument was successful. For example, Jim presents to Kim the argument “My knee hurts, so, it is raining.” Kim agrees that it is raining, but does so in virtue of her hearing on the weather forecast that it would rain today. Despite Jim and Kim agreeing on the truth of the conclusion, “it is raining,” they do so for different reasons. In Pinto's conception of argument, Jim's argument was unsuccessful.

Pinto gives us criteria for an argument to succeed, but this does not mean that the argument was actually any good in a normative sense. In other words, even if an argument succeeds, if it convinces someone to accept the conclusion based on the support of the premises, it could still be a bad argument in the normative sense. Pinto discusses this in terms of argument appraisal. He claims that if his conception of argument is correct important evaluative question is “ought the addressee to make the inference which the argument invites?” (Pinto 2001, 37). Accordingly, Pinto thinks that the question of “ought the arguer to have offered this particular argument to this particular audience” (Pinto 2001, 37), is important to an appraisal of argument. Here we see the tension between succeeding by being persuasive and other rhetorical concerns, and a good argument. In other words, it seems there is something more to a good argument than simply persuading the addressee in virtue of the premises. That something more is strength of the inference, or “ought (the inference) to be made by the person to whom it is addressed” (Pinto 2001, 37). Here we see that one of the essential questions of argument appraisal is whether or not the inference ought to have been made by the addressee on the basis of the premises presented. Pinto shows us that we again must address the matter of what a good or bad inference is if we wish to have a normative theory of argument. Furthermore, if a normative theory of argument is necessary to have a normative theory

of argumentation, then we require a normative theory of inference to have a normative theory of argumentation.

For Pinto, arguments should be understood as linguistic behaviour that presents premises and a conclusion that encourages the addressee(s) to accept that conclusion in virtue of the premises. The intention to persuade is an important feature which separates Pinto's conception of argument from inference or reasoning.

Pinto conceives of argumentation as “an interactive social process involving two or more people, in which the principal goal is to induce belief or agreement through the presentation of arguments” (Pinto 2001, 32). *Prima facie* there is very little difference between Pinto's conception of argument and argumentation; both are interactions wherein the goal is to induce belief through the presentation of arguments. What sets them apart is the scope of each concept. Argumentation is the entire enterprise of the social interaction whereas an argument is just a unit within that larger enterprise. In other words, a normative theory of argumentation would include rules for engaging discussion, what kinds of arguments are permissible and what aren’t (admittedly this would lean on a normative theory of argument), etc. Simply put, argumentation is the whole of which argument is a part.

In summary, Pinto understands inference to be a mental event of belief transition which is subject to a wide array of scrutiny. Pinto conceives of an argument to be the act of inviting someone to make some inference based on the premises you presented them with. An arguer communicates premises which evoke the inference to be made in the hearer’s mind. Argumentation is the social interaction between two or more people wherein the goal is to persuade each other using arguments.

Walton

In "What is reasoning? What is argument?" (1990), Douglas Walton conceives of argument simply as a "social, interactive, goal-directed tool of persuasion" (Walton 1990, 401). It is important to note the emphasis on the social nature of argument in Walton's definition. The major difference between Walton's conception of argument and that of the formal logicians before him is that Walton thinks that it is important to ground our understanding of argument in the social context in which it is created. That is, we need to include the context in which the argument is born to make full sense of it.

Walton begins his meditation on the nature of arguments by criticizing the traditional formal logic conception of argument. Specifically he attacks two components of the traditional conception. First he asks, in response to the claim that an argument consists in reasons for the approval or denial of something, do the reasons have to be good reasons? Presumably, there could be bad reasons for accepting a claim. This led Walton to the conclusion that "It should not follow from a definition of 'argument' that all arguments are good and that there are no bad arguments" (Walton 1990, 409).

Walton then introduces and criticizes Copi's definition of argument as found in the second edition of Introduction to Logic

> An argument, in the logician's sense, is any group of propositions of which one is claimed to follow from the others, which are regarded as providing support of grounds for the truth of that one. Of course, the word "argument" is often used in other senses, but in logic it has the sense just explained.

Walton asks, what is meant to be 'claimed' here, and 'regarded as providing support'? These critical questions expose that Copi's definition presupposes some social, dialectical feature to argument. That is, because the definition says that one proposition is claimed to

follow from the others, it must be relying on some sort of social commitment of an agent to its truth in the face of some opposition. Despite this implicit dialectical feature Copi does not recognize a dialectical conception of argument. Walton argues that suppressing the dialectical aspect of argument is typical of a traditional formal logician's use of the term 'argument'. This, so says Walton, has been the case since Aristotle, "where there is an attempt to suppress the idea of an interactive context of discussion" (Walton 1990, 409).[1] Furthermore, Walton argues that formal logicians have historically made this move as a result of a "perceived need… to see the concept of argument as a purely objective notion that can be captured by the formal logic of propositions and truth values. In this standard approach, the dialectical meanings of the term "'claim;' are suppressed, and never again mentioned" (Walton 1990, 409). In other words, Walton is claiming that formal logic, as a discipline, has avoided including the dialectical aspects of argument in order to make argument better suit their theoretical goals. From this criticism we can see that Walton takes the dialectical aspect of argument to be essential to understanding the phenomenon. Moreover, it seems that Walton considers the dialectical context from which the argument is born to be essential for any meaningful understanding of that argument. That is, we cannot make sense of an argument without understanding the social context of its creation.

In light of his criticisms, Walton defines argument as "[a] social and verbal means of trying to resolve or at least to contend with, a conflict or difference that has arisen or exists between two (or more) parties. An argument necessarily involves a claim that is advanced by at least one of the parties" (Walton 1990, 411). This definition, while

[1] I take this to be an unsympathetic reading of Aristotle. Specifically in that it ignores Aristotle's rhetoric. Which includes a more complete explanation of the dialectical process of argument.

broader than the formal logician's in some respects is narrower in others. Specifically, it is broader because Walton's definition roots argument as a social practice centered on a conflict or difference between parties. While this definition is broader because it includes the dialectical aspect of argument, it is narrower because it can limit the analytical tools available in appraisal.

Understanding difference to be at the origin of argument leads Walton to differentiate between the different types of conflict and thereby different types of argument. Some examples of types of conflict are, conflict of opinions, unsolved problem, or persuading. The different kinds of conflict lead to understanding argument in different ways based on those conflicts specifically the context of those conflicts. That is, a critical discussion will be a different kind of argument than an inquiry. Thus, we must change our conception of argument to include these different kinds of conflicts that argument resolves.

Having the different types of argument relate back to the different types of conflict seems to root argument in dialogue, but Walton claims that "argument often occurs in dialogue, and to understand an argument, it is very often highly important to know something about the context of dialogue in which the argument has occurred" (Walton 1990, 412). This admits that not all arguments occur in dialogue, but Walton does not explicitly address how else an argument could appear. This is especially problematic given that Walton's definition of argument includes social and verbal conditions. If an argument is required to be social and verbal, it seems problematic to claim that it can exist outside of the context of a dialogue.

Walton's conception of argument differs from the others in informal logic because it centers on the dialogical. While, ten years later, Johnson (2000) brings in the dialectical tier, Walton in 1990 has introduced the idea that there is a dialogical aspect argument.

Goldman

Alvin Goldman is known for championing social epistemology in the early 1990s. Social epistemology seeks to understand the role that social context plays in an epistemic situation. There is an interesting similarity here between the goals that spawned development of social epistemology and informal logic. In the introduction to their entry on social epistemology in the Stanford Encyclopedia of Philosophy, Goldman and co-author Thomas Blanchard, write

> Until recently, epistemology ... was heavily individualistic in focus. The emphasis was on evaluating doxastic attitudes (beliefs and disbeliefs) of individuals in abstraction from their social environment. The result is a distorted picture of the human epistemic situation, which is largely shaped by social relationships and institutions. Social epistemology seeks to redress this imbalance by investigating the epistemic effects of social interactions and social systems. (Goldman and Blanchard 2015)

The goal to account for a wider array of phenomena by including the context that beliefs and knowledge were born from perfectly mirrors the development of informal logic. Accordingly, Goldman has some interesting insights into argument which I will explore in this section.

Goldman introduces his concept of argument by contrasting it with argumentation.

> a piece of argumentation in my sense is not an argument. An argument is a set of sentences or propositions understood abstractly without reference to any speaker or audience. Argumentation is a sequence of speech acts by one or more speakers. The relation between the two is that argumentation involves the endorsement or criticism of an argument by a speaker. (Goldman 1999, 132).

While argumentation is the social exchange, presumably by means of speech acts, using, endorsing, and criticising arguments, arguments themselves are sets of propositions. Since, the distinction Goldman draws places speech acts as belonging to argumentation, not arguments, he does not conceive of arguments as a collection of speech acts and I interpret his use of 'abstractly' to mean that arguments are abstract objects. Argument, the way Goldman seems to conceive of it is comprised of a set of sentences or propositions which, presumably, hold some sort of justificatory or probative relationship with each other. These sets of propositions cannot be uttered or written, they are abstract objects. Since the distinction between argument and argumentation is a difference between speech acts and abstract objects, arguments are abstract objects.

Goldman conceives of the rules of argumentation to be "folk rules" that require arguers to conform to the criteria of a reliable informant, as cited above, as well as other rules. The rules, according to Goldman are "tacitly learned and represented in the minds of ordinary people" (Goldman 1999, 135). These rules are derived from the "cooperative enterprise of information sharing" (Goldman. 1999, 135). Goldman continues this line of reasoning by saying that "the rules of good argumentation are inspired by a communal quest for greater knowledge" (Goldman 1999, 135). Since argumentation is concerned with the cooperative enterprise of increasing knowledge, there will be folk rules that pertain to it that do not bear on argument. Specifically, rules for argumentation would require rules to govern the interaction between interlocutors, something which argument,

as Goldman conceives of it, does not require. Thus, the rules for good argumentation should be distinguished from the rules for good arguments.

Goldman's criteria for a good argument is the traditional one in logical theory. That is, an argument is good in the weak sense if the "conclusion is well supported by the premises, either deductively or non-deductively. An argument is good in the strong sense if it is good in the weak sense and all of its premises are true" (Goldman 1999, 135). In other words, arguments are good in the weak sense if they are strong or valid, and they are good in the strong sense if they are sound or cogent.

Goldman further distinguishes between two types of argumentation, factual and practical. The latter "aims at decision making; it engages with the question of what to do" (Goldman, 1999, 132). While the former is "concerned with belief; should a proffered conclusion be believed or not?" (Goldman, 1999, 132). That is, the distinction between practical and factual argumentation is no more than a difference in the goals of the interlocutors uttering the arguments. That is, argumentation aimed at convincing someone they should cross the street at this moment may use many of the same premises as the argumentation about whether or not the street is safe to cross. In other words, the distinction seems to be based on the differing goals of the agents who partake in these kinds of argumentation, not an essential difference in the way the interactions unfurl.[2] Goldman also distinguishes between monological and dialogical argumentation. The former only having one speaker while the latter has two.

[2] This is important to note because it could lead to being forced to posit a massive number of categories. If the distinctions between different types of argumentation are based on their goal, then we could hold that there are argumentation types of all sorts including legal, causal, and limitless subcategories of the two we already have. For example, we might say that every token of a type of practical reasoning has its own goal and therefore each token is its own type of argumentation.

Goldman offers a conception of argument and argumentation which understands argumentation as a social practice which has its own folk rules and argument as an abstract object which is subject to epistemic standards. Arguments are sets of propositions and in virtue of that Goldman understands arguments as abstract objects.

Conclusion

In this chapter I have discussed some of the seminal works in informal logic. Pinto, Walton, and Johnson are concerned with a dialectical treatment of argument as a response to the traditional formal logic model of argument. Meanwhile, Blair seems to tread most closely to the project of formal logic. Even though his inspiration for co-founding a movement to bring context back into the study of logic, his illative core and overall goals for an informal account of argument focus on abstracting the logical structure from the context. That is, Blair admits that the context of natural language arguments is important, but he does not want to completely abandon the project of formal logic, to find good logical structures in arguments. Blair points out the use of keeping in mind arguments sans context in hopes of developing a logic of argument. Blair seems to simply disagree with the methods formal logic had been using during that time and with the obsession with deductive reasoning. Blair is sympathetic to the project of developing a normative logic for argument, but knows that there is no agreement in the community on what that logic is (Blair 2012, 191). In other words, as much as Blair departs from the traditional formal logic model, he is also rather similar. The difference seems to be that he has taken on the same project with a new subject matter and thus must develop new methods and logics. As such Blair's conception of argument is not all that different from Copi's, at the heart of both definitions is a set of propositions in a probative relationship. Blair's notion

of argument is more inclusive and includes an account of how arguments are used in their context, but at the heart the illative core mirrors Copi's conception of argument. That is, the illative core which is the 'this, therefore that' relationship includes propositions which hold a probative relationship, the illative unit, to each other is more or less the same definition as Copi's. The difference between Blair and Copi then, is the difference between the kinds of reasoning that they are examining and the methods they use. While Copi would want to consider arguments with deductive inferences and subject them to derivations, truth tables, truth trees, etc., Blair wants to consider the kinds of arguments that occur in every day discourse, and thereby whatever reasoning we find in them, and create a new set of methods of examining and evaluating arguments.

Johnson departs from Blair's and the formal project of trying to account for the logic of argument. At least he does so insofar as he does not think that inference should be included in the definition of argument. He argues that argument and inference "are entirely distinct, although related species of reasoning" (Johnson 2000, 95). In other words, Johnson gets rid of this traditional definition of argument which considers argument to be a set of propositions with a probative relationship, an inference. For Johnson this traditional definition is simply not enough, there needs to be considerations of the dialectical tier. This marks the change in the attitude of informal logicians towards a quasi-rhetorical stance. In other words, but including the dialectical tier Johnson has begun to include aspects of the social context in his definition of argument.

One criticism of Johnson comes from Trudy Govier (1998) in "Arguing Forever? Or: Two Tiers of Argument Appraisal" where she argues that it is not clear when the dialectical obligations of an arguer are satisfied. It seems the case that these obligations

would be satisfied according to a reason or manifest rationality. Johnson's position could be strengthened by the rhetorical notion of audience. If Johnson adopted some notion of audience he could account for this criticism by saying that one's dialectical obligations are fulfilled when the reasonable audience would be satisfied. Thus, while he would likely not take this consideration kindly, Johnson seems to have introduced a number of ideas from rhetoric in a more traditional way.

Pinto also added in ideas from rhetoric in a more traditional way when he adds in the notion of invitation to inference. By adding-in the notion of invitation to inference Pinto has included the uptake of the audience as well as the intention to persuade into the definition of argument. By uptake I am speaking of whether or not an arguer's interlocutor comprehends the argument being presented and whether or not they are persuaded by it. Argument on both Blair's and Johnson's model does not necessarily have this direction towards persuasion. While it is the case that Johnson thinks that argumentation is rational persuasion, his model of argument is an illative core with a dialectical tier. The dialectical tier does not answer to an interlocutor's objections, but to rationality itself. Blair's definition appeals to some logic of argument and Johnson's appeals to rationality. Both are concerned with an appeal to truth or truth preserving structure but not with persuading an interlocutor. The persuasion, in their model, it seems comes as a result of the arguments being strong or good. Pinto marks a departure from this because he includes that intent to persuade in the definition of argument.

Walton in 1990 anticipated and possibly influenced the other informal logicians from the University of Windsor to make the move to a conception of argument which includes the dialogical/ dialectical context of the social situation. His conception of

argument is more firmly rooted in the dialogical than others such as Blair who maintains that there is an illative core which can and should be evaluated without the social context.

Overall, the project of the informal logicians was to take the study argument out of the stilted abstract model provided by formal logic and bring it into its natural environment. Johnson, Pinto, and Walton amended their definition of argument to accommodate a dialectical aspect while Blair recognized that there was a dialectical component and wanted to keep some of the virtues of the traditional model. Thus, the development to the theory of argument that informal logic as a discipline seems to have had, at least in this grouping, is the development that argument must have some dialectical component if we wish to understand it in its natural context.

Chapter IV

Are Arguments Abstract Objects (or Speech Acts)?

Introduction

This chapter examines a recent area of interest in the study of argument, namely the question of whether or not arguments should be considered as speech acts or as abstract objects. This is an ontological question about arguments, but it is a necessary question to ask in order to develop a clear understanding of argument. Whether arguments are abstract objects or a collection of speech acts will drastically change a theory of argument. The theory that arguments are abstract objects has been most recently supported by Geoff Goddu. The view that arguments are speech acts has been reinforced by Frans van Eemeren and Rob Grootendorst, David Hitchcock, and Christopher Tindale. In the following pages I will briefly give an account of speech acts to help understand the claim that arguments are speech acts. I will also give an explanation of arguments as abstract objects through the distinction of abstract and concrete. I will then explore Goddu's criticisms of Hitchcock's definition of argument to better understand the different explanatory power that these two theories can offer.

Speech act theory looks deeply into the effect of our sentence utterances. The philosophers responsible for the development of speech act theory like J.L Austin and John Searle thought not only about what meaning sentences had, but also about what we could do with those utterances. That is, they recognized that we use sentences to accomplish tasks in society by using speech. A speech act is some act of uttering that communicates meaning not necessarily through the components of the sentence alone.

This is because speech acts occur in a context affecting the way words are used to communicate meaning. For example, I say to you "You will do the dishes" it is unclear whether I am demanding you do the dishes or predicting that you will in the future. Given the proper circumstances, if you are my child, this will properly be understood as a demand. Similarly, if you suppose that you are my friend who is complaining about your roommate not doing the dishes and you threaten to stop picking up after them, my saying "you will do the dishes" will be properly understood as a prediction. Thus a speech act is an utterance of a sentence under some circumstances which gives off meaning that is more than the sentences would normally give.

There is a distinction between 'locution,' 'illocution,' and 'perlocution.' A locution is the act of uttering some sentence. The illocution is that of intending something by the use of the locution. That is, what act you perform with the locution, ask, report, promise, etc. The perlocution is the recognition of the audience of the person's illocutions. For example, when I utter the directive "close the door" the locution is the act of uttering the sentence, the illocution is the locution and the circumstances that give the speech act the meaning it has, and the perlocution is the recognition of the audience which means that they understood the meaning of the speech act and closed the door. If the audience hears the speech act but does not close the door, then the perlocution failed to take effect.

In 1979 John Searle developed a taxonomy of illocutionary speech acts. He identified five kinds of speech acts and this taxonomy is still used today in argumentation theory. According to Searle, and later van Eemeren and Grootendorst, speech acts come in the form of assertives, directives, commissives, expressives, and declaratives. An

assertive is the guarantee of the truth of some proposition by the utterer. For example, the reader's utterance "this is a good thesis" is an example of an assertive because they are committed to the truth of the utterances. Directives are when the speaker is in a position of authority over the listener and they give them an order. When the thesis committee tells the Master's candidate to leave the room, it is a directive. Commissives are those which the speaker takes on a commitment, for example, when the Master's candidate promises to make revisions, he has performed a commissive. Expressive speech acts are those which allow the speaker to communicate their feelings for example when the Master's candidate thanks his committee for approving his thesis he is performing an expressive. Declaratives are speech acts which change the state of affairs simply by their utterance. When the committee tells the Master's candidate that he has passed his defence, he is now a graduand and on his way to receiving his Master of Arts.

Concrete objects are objects which are material or exist in the physical world. They have causes and effects and can serve as them as well. A concrete object is any particular object which has a spatio-temporal location in the world. For example the chair on which the reader is sitting is a concrete object. The concept of a chair is an abstract type of which the chair the reader sits on is a token. Events are also concrete objects; they have causes and effects and take place in space and time. For example a tsunami is caused by a rapid displacement of water and has the effect of damaging coastal cities. Actions are a type of event and, therefore, are also concrete. Actions are events which are intentionally brought about by people. For example, throwing a ball, running, fighting a war. Some actions are done through speaking and writing: these are speech acts. Since actions are spatio-temporal they are concrete objects.

Abstract objects are objects said to exist in such a way that they are not part of the spatiotemporal world. Abstract objects neither cause nor effect anything in the physical world. An abstract object is something that is only apprehendable through the mind and not through the senses. For example, numbers are abstract objects which play no causal role in the concrete world. What we see when we see numbers on a page are numerals which are symbols which represent the abstract objects. Numbers can be apprehended through the mind, but we do not have the ability to smell the number 345. Abstract objects, specifically propositions, are useful when we wish to understand how two sentences such as "the cat is on the mat" and "die Katze auf der Matte" can have the same meaning but be represented by completely different symbols in completely different languages. Both sentences name the same abstract object which is the meaning that the two sentences share. Another useful feature of abstract objects is that they can help us understand how the same sentence can have two different meanings. The sentence "I am the Queen of England" is true when uttered by the Queen of England, but false when uttered by the author of this thesis. The sentence is true when uttered by the Queen because the proposition behind the sentence "I am the Queen of England" is that Elizabeth II is the Queen of England. However when the author of this thesis utters the same sentence, he (Matthew Pezzaniti) is asserting that he is the queen of England, which he is not. Thus, someone might want to consider arguments as abstract objects instead of speech acts or sentences, which are both concrete objects, because they can point to the meanings behind the concrete objects. In other words, thinking of arguments as abstract objects allows one to consider the propositions behind the utterances that express them.

The concept of 'argument' in the Pragma-Dialectical theory of Argumentation

The pragma-dialectical approach was developed at the University of Amsterdam. Frans van Eemeren and Rob Grootendorst, being multi-lingual, were privy to a distinction between argumentation as a product and argumentation as a process that van Eemeren claims does not come through clearly in the English language.[3]The product vs. process distinction is as it sounds: argumentation as a product is an entity that is created by the argumentation process. Argumentation as a process, on the other hand, is the social interaction itself. In their definition, van Eemeren and Grootendorst maintain this ambiguity. In their 2004 book, A Systematic Theory of Argumentation they offer a stipulative definition of argumentation. Formally, their definition is that:

> Argumentation is a verbal, social, and rational activity aimed at convincing a reasonable critic of the acceptability of a standpoint by putting forward a constellation of propositions justifying or refuting the proposition expressed in the standpoint. (Van Eemeren and Grootendorst 2004, 1)

This definition of argumentation shows four important aspects of the way van Eemeren and Grootendorst have conceptualized argumentation. First, they understand it as a verbal activity, but the specification of verbal misrepresents the versatility of the pragma-dialectical approach. The pragma-dialectical approach can accommodate written word and not just verbal utterances. Van Eemeren and Grootendorst point this out by saying "[a]rgumentations can be in written form and externalizable" (Van Eemeren and Grootendorst , 2004, 2 Note). Second, argumentation is a social activity which is directed at other people. Third, it is a rational activity, and fourth it is always in regards to a standpoint or a point of view. In other words, argumentation is a social activity wherein

[3] Frans van Eemeren explained this in his introductory lecture at the ISSA argumentation summer school 2014 in Amsterdam.

standpoints are presented, supported, and criticized on the basis of reasons through specific linguistic behaviours.

It is important to note that not just any communication counts as a standpoint or an argument. A piece of communication is an argument or a standpoint only when "they occur in a context where they fulfill a specific function in the communication process." (van Eemeren and Grootendorst. 2004, 3). In other words, a piece of communication counts as a standpoint,

> […] if it expresses a certain positive or negative position with respect to a proposition, thereby making it plain what the speaker or writer stands for. And a series of utterances constitutes an argumentation only if their expressions are jointly used in an attempt to justify or refute a proposition, meaning that they can be seen as a concerted effort to defend a standpoint in such a way that the other party is convinced of its acceptability. (Van Eemeren and Grootendorst, 2004, 3)

So something is a standpoint only if it is obvious that the holder of that standpoint genuinely holds a certain belief or position. An argument consists of a series of utterances attempting to justify or defend a standpoint. Interestingly, a standpoint seems to have a similar role as the claim in the Toulmin model where it is understood as a proposition the protagonist presents (and which the antagonist can demand justification for). Accordingly, argumentation is the collection of utterances which justifies one's own argument or refutes the standpoint of an interlocutor.

However, the way in which van Eemeren and Grootendorst are using the term "argumentation" is different from ordinary usage of the term. Their use of argumentation does not fit into the product use either. Instead, it seems that in respect to justifying a standpoint, they use argumentation to mean something akin to justifying or, as a native English speaker might put it, "arguing for." Put simply, 'argumentation' in the way it is

used by van Eemeren and Grootendorst when referring to justifying a standpoint seems to be more similar to what would be traditionally called a "reason" or a "premise". This is best represented in A Systematic Theory of Argumentation when van Eemeren and Grootendorst claim "Argument schemes pertain to the kind of relationship between the explicit premise and the standpoint that is established in the argumentation in order to promote a transfer of acceptability from the explicit premises to the standpoint" (Van Eemeren and Grootendorst 2004,4). This shows that van Eemeren and Grootendorst understand a standpoint to have a similar role as a conclusion or claim. Thus, for van Eemeren and Grootendorst, a standpoint is a conclusion in an argument and an argumentation is the premises in favour of that conclusion.

Thus far, in this section, I have explored the different ways that the Pragma-dialectical approach uses 'argumentation.' In one sense, argumentation is a social activity whereby people present, criticize, and justify each of the other's standpoints. In another sense, argumentation is a collection of reasons for a standpoint. In effect, these two senses of argumentation are translatable to any given set of terms used by other theorists. For example, O'Keefe's argument$_1$ and argument$_2$.

Daniel J. O'Keefe introduced argument$_1$ and argument$_2$ in "Two Concepts of Argument." Argument$_1$ is the utterance or the act of presenting an argument while argument$_2$ is the social exchange of arguing. As O'Keefe puts it, "an argument$_1$ is something one person makes (or gives or presents or utters). While argument$_2$ is something two or more persons have (or engage in)." (O'Keefe, 1977, 121). For example, Jaleel utters the argument 'A' to John and John responds with 'B' where 'B' is a counter

argument to A. The act of uttering 'A' to John is an example of argument$_1$ while the fact that the two have presented arguments to each other is an example of argument$_2$.

Essential to the Pragma-dialectical conception of argument is the critical discussion. A critical discussion is the social exchange between two or more people. In effect when we are engaging in argumentation in the pragma-dialectical lens, we are engaging in a critical discussion. It is not enough to simply understand an argumentation as a social activity wherein people exchange standpoints and offer reasons in their support. We must understand that what is essential to an argumentation is that there is a difference of opinion in the first place. Without a difference of opinion, there is no need for a critical discussion and thus there is no real argumentation occurring. Thus, this section will explore the concept of a difference of opinion and then the notion of critical discussion.

Van Eemeren and Grootendortst criticise their predecessors such as Toulmin and Perelman and Olbrechts-Tyteca for developing theories that only provide descriptive accounts of argumentation. These descriptive approaches lack "a normative dimension that does justice to dialectical considerations" (van Eemeren and Grootendorst 2004, 50). The goal of argumentation in the pragma-dialectical approach, on the other hand, is to settle differences of opinion. There are defective or flawed ways of settling differences of opinion, so, van Eemeren and Grootendorst suggest that we should create a normative theory guiding argumentation. In other words, "the set of theoretical instruments that we need has to contain rules and procedures that indicate which moves are admissible in a critical discussion" (Van Eemeren and Grootendorst 2004, 50). This is a departure from the work done on argumentation in the past, because it tries to make explicit a set of rules

which guide us towards the creation of a reasonable method of settling differences of opinion.

Van Eemeren and Grootendorst distinguish themselves from the formal dialectical approach. Formal dialectics is an approach, developed by Barth and Krabbe, which establishes a set of formal procedures "by which it can be dialogically determined whether or not a thesis is logically defensible" (van Eemeren and Grootendorst, 51). The procedures developed by Barth and Krabbe are designed to test whether or not a thesis will logically stand up to one's scrutiny. The procedures are to be conceived of as reasoning which imitates argumentation between a proponent and an opponent. The proponent can argue using concessions that the opponent is logically required to make, but the proponent is responsible for answering all arguments that are offered counter to their own position. The opponent must defend all of the concessions the proponent attacked. The general form of this argument is that the proponent will try to force the opponent to make concessions which the opponent has attacked earlier in the discussion. The important differences are that the formal dialectics try and formalize the dialectical process. The pragmatic approach is just that, it is practical. This means that the pragma-dialectical approach is rooted in the kind of dialectical conversations that exist in natural language. Additionally the goal of formal dialectics is to determine the truth of the matter of disagreement whereas the purpose of a critical discussion is to settle the difference of opinion on the acceptability of a standpoint. For this reason, a critical discussion can be considered as an exchange of views where both sides of the discussion try and determine if their positions are defensible or not—based on how their reasoning can stand up to critical doubt or objections. This is a superior method to the formal dialectical approach,

because it has a pragmatic element to it. The moves that can be made to settle a difference of opinion are conceived as speech acts.

The pragma-dialectical approach shows its interest in argument when is discusses argumentation structure, specifically, "the "internal organization" of each individual argumentation" (Van Eemeren and Grootendorst 2004, 4). Van Eemeren and Grootendorst go on to explain that the internal organization can be explained by argument schemes. The latter, as they describe them, are "just like logical argument forms such as *modus ponens*, abstract frames that allow for an infinite number of substitution instances" (Van Eemeren and Grootendorst 2004, 4, note). It seems that van Eemeren and Grootendorst do have a concept of argument, which they call "the internal organization of a singular argumentation". However, there are rules about what counts as acceptable internal organization. According to the eighth rule of the critical discussions, standpoints must be defended by an appropriate argumentation scheme. (Van Eemeren and Grootendorst 2004, 150; Van Eemeren. 2010. 8, note). In other words, good arguments are those that fit into an appropriate scheme and are also strong or valid.

Thus, in the pragma-dialectical tradition, a good argument is one which is either a formally valid argument, or one which fits into an accepted argument scheme. Furthermore, the pragma-dialectical approach calls what has traditionally been called "argument", the internal organization of an argumentation for a standpoint. Argumentation for a standpoint is what has traditionally been called arguing for, or presenting reasons or premises. Argumentation proper in their scheme is a social activity aimed at convincing a reasonable critic of the acceptability of a standpoint based on a constellation of propositions put forward. In the broader lens of this chapter, which is

concerned with whether arguments are speech acts or abstract objects, the pragma-dialectical remains unclear. Argumentation is the act of putting forward a constellation of propositions, which are abstract objects. However, a standpoint is an expression uttered in a specific context, which is a speech act.

Hitchcock on the concept of 'argument'

Hitchcock begins his 2006 paper "Informal logic and the concept of 'argument' by establishing the two senses of 'argument.'" In English, there are two senses of the term 'argue.' There is the disputational sense, and the reason-giving sense. Arguing in the disputational sense is seen as a fight or, as the name suggests a dispute. The disputational model requires more than one arguer whereby at least one of them is attempting to persuade the other of their position. The arguers sometimes use emotion or hostility to argue, and do not necessarily provide valid reasons or support for their conclusions. The disputational model more closely resembles a fight than what informal logicians would consider an argument.

Arguing in the 'reason-giving sense,' on the other hand, is when an arguer presents his or her position and offers support for it. The support for the position will consist of one or more reasons. Hitchcock claims that "[t]he expression of the point of view and the provision of one or more reasons in its support constitute a complex of speech acts." Speech acts perform functions as a result of our utterances. They communicate meaning that is beyond the meaning of the words in the sentence. For example, speaking the commissive "I promise to do the dishes," holds the speaker to the commitment that they perform a specific action. An assertion is a specific type of speech

act which is a commitment to the truth of some proposition. So, if someone says “The cat is on the mat” the speaker has committed themselves to the truth of that claim. Hitchcock claims that when an arguer presents their position and provides reasons, this creates a complex of statements which have illocutionary force.

The reason-giving sense of argument does not necessarily require two people. Hitchcock thinks that an argument is a complex of speech acts. The conclusion of an argument can be any speech act, but the premises must be assertions. A reason-giving argument is a presentation of reasons and a conclusion which may be part of a social interaction like the disputational sense of argument. The reason-giving sense attempts to remain emotionally neutral and non-hostile. Informal logicians are concerned with the reason giving sense of ‘argue’ and ‘argument.’

Hitchcock comes to the conclusion that “to offer supporting reason by uttering a sentence ... is to perform some sort of assertive.” (Hitchcock 2006, 104). It is important to note that the assertive Hitchcock is referring to here is not simply the verbal speech act. He also includes things that can be restructured as a speech act. To make sense of a supporting utterance we must understand it in the assertive. Since the most significant difference between assertions and other speech acts is that assertions have a truth value, we can safely conclude that for Hitchcock the supporting premises in an argument must have a truth value.

Hitchcock allows for the ability to express support for a conclusion without uttering a sentence, which can occur by means of visual arguments, body language etc. A conclusion can also be expressed non-verbally. Hitchcock points out that the common theme of these types of reason giving and conclusions is “a commitment to the truth of a

proposition" (Hitchcock 2006, 105). If it can be translated into an assertion, then a non-verbal mode of communication can be a premise in an argument.

From this, we can understand that an argument is made up of premises which are assertions, activities, or utterances that can be translated to assertions. Meanwhile, a conclusion does not need to be an assertion. Any speech act can serve as a conclusion. For example, the conclusion "So, you get the mail" is a directive which is justified by the assertion "I am tired." A speech act does not need to be an assertion in order to be considered as a conclusion in a reason-giving argument. An argument consists of a conclusion and one or more supporting premises. So, arguments can have conclusions that are not assertions, so long as the premises are assertions and they are presented as providing support for the conclusion.

While it is essential that premises support the conclusion, the actual move from premise to conclusion is not explicitly stated in arguments (Hitchcock 2006, 105). Hitchcock understands inference through Pinto's claim that arguments are invitations to inference. An inference is "the mental act or event in which a person draws a conclusion from premises, or arrives at a conclusion on the basis of a body of evidence" (Pinto 2001, 32). Like the other components of an argument, the premise and conclusion, the inference is also an act. It is the mental act of drawing a conclusion or arriving at a conclusion from the supporting premises.

Inferences are mental events which occur between the speech acts. Inferences are often explained or expressed through illative expressions. Arguers use illative expressions to show their listener(s) which speech acts are premises, which are conclusions and how they work together. An illative expression is a word that indicates a

premise, such as ‘because” or ‘since,’ or indicates a conclusion with words such as ‘thus’, or ‘therefore.’ To put it more simply, according to Hitchcock, an illative expression marks a specific inferential movement or relationship between two or more speech acts. For example, in the argument ‘Sial is sick, therefore, he will not be coming into work today,’ the illative expression ‘therefore’ shows that the premise ‘Sial is sick.’ supports the conclusion ‘Sial will not be coming into work today.’ The act of arguing is the process of moving from the premises to the conclusions. It is through the implicit or explicit illative expressions that we can document the moves (or inferences) between the premises and conclusions.

Now, I turn to Hitchcock’s set of sentences which comprise his recursive definition of argument. A recursive definition offers a definition of something with reference to itself. There is a base clause and then a number of clauses which are reducible to that base clause. In this case there is a base clause (condition 1) and then three recursive clauses (conditions 2-4) which extend or clarify the scope of the item defined in the base clause, and a closing clause (condition 5) limiting further extensions. Hitchcock lays out his recursive definition in the following conditions.

> 1. Any set of the form {<c, ∵, P>} or {<P, ∴, c>} is an argument where the conclusion c is a speech act of any type, ∵ is a premise indicator, ∴ is a conclusion indicator, and the set P of premisses is a set of one or more assertives.
>
> 2. Any set equivalent in meaning to a set of the form described in clause 1 is an argument.
>
> 3. If a conclusion in an argument A is a premiss in an argument B, then A ⋃ B is an argument.
>
> 4. If {<P, ∴, c>} is an argument, and A is an argument, then so are {<A ⋃ P, ∴, c>} and {<A, ∴, c>}. Similarly for {<c, ∵, P>}.

> 5. Nothing is an argument unless it can be constructed in a finite number of steps using the above rules. (Hitchcock 2006, 114-116)

In this recursive definition '∴' is a symbol for the illative expressions indicating concluding like 'therefore.' '∵' is a symbol for the illative expressions indicating premising like 'since.' The symbol '∪' stands for union which is the combining of sets. Thus, when Hitchcock says 'A ∪ B' he means that the set 'A' and the set 'B' are combined. The base clause states that an argument is any set of speech acts of the form that the conclusion is the case since the premises are the case or that the premises are true and therefore the conclusion follows. Additionally the base clause states that the conclusion is a speech act of any time and the premises are speech acts which must be assertives. In summary Hitchcock defines argument as

> [...] a set of one or more interlinked premise-illative-conclusion sequences. Such sequences can be interlinked either through chaining together, when the conclusion of one sequence is a premise in another, or through embedding, when one sequence is a premiss of another. A premiss is an assertive, conceived as not necessarily asserted by anyone, and a conclusion is a speech act of any type, conceived as not necessarily performed by anyone or urged upon any addressee… In other words, arguments are abstract structures. When expressed, whether in language or in images or in physical behaviour, an argument invites its addresses to accept each conclusion on the basis of the acceptance of the assertives in its immediately supporting reasons. (Hitchcock 2006, 121).

Hitchcock's definition, then, is that an argument is an abstract structure consisting of a set of interlinked premise-illative-conclusion sequences. This means that argument is an abstract set of speech acts including hypothetical sets of speech acts. While the premises must be assertives, the conclusion of an argument could be any kind of speech act.

Refining Hitchcock's definition of 'argument'

In this this section I will use Goddu's (2009) paper "Refining Hitchcock's Definition of 'Argument'" To give the most thorough explanation of Hitchcock's position. In this paper Goddu works through Hitchcock's position systematically and thus it serves as a great lens to better understand Hitchcock's position and what is necessary for the speech act position to work well.

Goddu discusses what he takes to be several outcomes that Hitchcock would want his recursive definition to fulfil. To keep within the scope of this chapter I will only focus on the first two. Goddu writes them as follows: "Outcome 1: Arguments are in the ontological category of acts" (2009, 2), "Outcome 2: The definition should exclude uncontroversial non-arguments" These outcomes are Goddu's interpretations of what outcomes Hitchcock has for his definition of 'argument' in the reason-giving sense and not explicitly stated by Hitchcock himself.

Hitchcock's base clause in his recursive definition of reason giving 'argument' is

> 1. Any set of the form {<c, ∵, P>} or {P, ∴, c>} is an argument where the conclusion c is a speech act of any type, ∵ is a premise indicator, ∴ is a conclusion indicator, and the set P of premisses is a set of one or more assertives.

Goddu takes this clause to be problematic because it takes arguments to be sets which are abstract objects, whereas outcome 1 takes arguments to be acts. Sets are abstract objects, and as such they are atemporal. Since sets are not acts and something cannot be both an act and an abstract object at the same time, the base clause contradicts outcome 1. As Goddu puts it " "[t]he problem is that the base clause (clause 1) of the proposed definition violates this outcome, since the entities defined as arguments in clause 1 are sets, not

acts" (Goddu 2009, 2). In other words, the problem with the base clause is that it violates the outcome that arguments should be classified in the ontological category of acts.

Goddu next considers the option that the ontological problems he presented for Hitchcock's definition could be avoided by taking out the illatives as a part of the set of speech acts. Goddu refines the base clause again to say

> 1a. any set of the form <P,c> is an argument where the conclusion c is a speech act of any type and the set P of premises is a set of one or more assertives. (Goddu 2009, 3).

This refined base clause removes illatives from the clause in order to avoid the tension between Hitchcock's supposed outcome (that arguments should be in the ontological category of speech acts) and the base clause that originally called arguments a set of speech acts. We might be able to understand arguments as speech acts or sets of speech acts, heuristically, but not while there is also the tricky situation of illatives because illatives are not speech acts.

In conjunction with this refined base clause, Goddu attributes to Hitchcock the outcome that a definition of argument should not include uncontroversial non-arguments. To put it more simply, a definition of argument should not be so permissive that things that are not arguments could fulfil the sufficient conditions laid out by that definition. The refined base clause authored by Goddu does violate this outcome. For example, in 1860 Matt utters 'There are burn marks on the ground.' Then in 1995 Jared asserts 'Lightning must have struck.' Under Goddu's refined base clause, this would count as an argument. This violates outcome 2, according to Goddu, because we would not want to classify this as an argument.

Goddu's refined clause is presented for illustrative purposes, though. He is trying to point out that the way Hitchcock presents the role of illatives is problematic. The issue is that Hitchcock wants these indicator words to premise and conclude the speech acts. Goddu quotes Hitchcock

> In such a sequence, the illative does the work of premising each reason and concluding each conclusion; hence, we do not need to mention these acts in characterizing the reason and conclusion. (Hitchcock 2006, 107).

This shows that Hitchcock expects that illatives can do the work of premising and concluding in a set of speech acts. In his own words, Hitchcock says that to premise an assertive "is to put it forward as a (perhaps partial) basis for inferring a conclusion," and to conclude a speech act "is to put forward for acceptance on the basis of one or more assertives offered as supporting reasons." (Hitchcock 2006, 106). That is, to premise an assertive is to offer it in support for inferring a conclusion and to conclude a speech act is to present it as something which can be inferred on the basis of support given by some premises. Unfortunately, Goddu points out, the indicator words which are illatives, "cannot do this on their own" (Goddu 2009, 3).

So, if illatives are excluded from the ordered set, then there is nothing premising or concluding the speech acts we wish to count as premises and conclusions. This may be asking too much of indicator words. Thus Goddu refines the base clause yet again to say

> 1b. Any set of the form {<P, c>} is an argument where c is a concluded speech act of any type and P is a set of one or more premised assertives. (Goddu 2009, 4)

This formulation of the base clause remains problematic because it still violates outcome 2. For example, Matt's premise 'there is a burn mark on the ground' is part of his argument that he should not step on that part of the ground and Jared's conclusion that

‘lightening has struck’ is concluded from the premise that there is a tree split and with burn marks all about it. Both assertives are premised and concluded respectively, but there is a problem with their aim. That is, making it a necessary condition that the component speech acts are premised and concluded does not guarantee that the premised and concluded assertives will be premised and concluded about each other. There needs to be something further in terms of guaranteeing continuity between premise and conclusion, if we are to maintain the speech act theory.

Goddu’s attempt to refine Hitchcock’s recursive definition of ‘argument’ exposes some of the problems with Hitchcock’s speech act theory of argument. Specifically the role of illative expressions and whether or not we can make sense of a definition of ‘argument’ without positing sets and thereby positing ‘arguments’ as abstract objects.

Goddu on the product/process ambiguity

In the following paragraphs I will explore a paper written by Goddu wherein he challenges the need for argument to be subject to the process/product ambiguity and further develops the case for arguments as abstract objects.

In “Is ‘argument’ subject to the product/process ambiguity?” Goddu argues that the product/process ambiguity does not apply to argument, since arguments are abstract objects and thus are not subject to the product/process ambiguity. In this section I will review and evaluate Goddu’s claims.

Goddu creates a set of conditions for what it means for a word to be subject to the process/product ambiguity. He claims,

> To say that a word is subject to the process/product ambiguity is to say that (a) there is a sense of the word that refers to an activity; (b) there is a sense of the word that refers to an object or thing; and (c) the object or thing is in some sense the result or outcome of the activity. (Goddu 2011, 84)

The third condition captures something unique about this ambiguity. That is, the object that we are referring to is a result of the process. This is what distinguishes a process/product ambiguity from an act/object ambiguity. So to understand argument as being subject to the process/product ambiguity we must understand the object sense of the word 'argument' as a result of the process of arguing. This becomes central to Goddu's argument as he goes forward. "Argument," he claims, satisfies the first two conditions, but this only warrants talking about "arguments" using the act/object ambiguity.

Goddu asks his readers to suppose that they hold that arguments-as-objects are sets of propositions and poses the question "should you accept that these sets of propositions are the product of arguing?" (Goddu 2011, 78). No, he says, propositions are abstract objects. This means they are atemporal and therefore they cannot be produced. From this Goddu concludes that "whatever is the product of acts of arguing, if there is such a product, it is not a set of propositions that is an argument." (Goddu 2011, 78). In other words, if we are to understand argument as a set of propositions, then it cannot be a product of the process of arguing because the term "process" denotes a causal relationship. Any cause must precede its effect and therefore something atemporal could not be the product of a process. Since propositions are abstract objects, an argument that is a collection of propositions is also an abstract object. Hence, an argument cannot be the product of the process of arguing.

Goddu then defends his position against the possibility that arguments are not composed of propositions, but instead sentences. If arguments are made up of sentences, then there is still a problem with cause and effect. Goddu asks his reader to consider the sentence tokens in his paper. He says,

> Those sentence tokens came into existence long before being spoken aloud or read here. If my act of arguing occurs when the sentences are spoken aloud to an audience or read here, then the sentence tokens exist prior to the act of arguing. Hence, the sentence tokens are not the product of the act of arguing. (Goddu 2011. 81)

Essentially, if we want to understand arguments as the token events of speaking sentences in some order, then we cannot think of the arguments as products because the mental activity of constructing the argument must precede the utterance of the argument. Therefore, arguments cannot be sentence tokens.

Goddu then reflects on the danger of the process/product ambiguity being misattributed to argument. There is a desire or intuition that arguments must be the product of something. Maybe, says Goddu, "arguments are better described as being discovered rather than produced"(Goddu 2011, 83). If arguments are abstract objects and cannot be produced, it does not mean that we know all of the arguments out there existing abstractly. We could be discovering new arguments instead of producing them. To this Goddu claims

> even if arguments turn out to be the sort of thing that is produced, there seems little reason right now to say that they are the product of acts of arguing. They, or the expressions of them, may be the result of various acts of imagination, reflection, etc., but that does not make them the product of acts of arguing. (Goddu 2011, 83)

That is, even if arguments are the sort of things that is produced, they are not produced by arguing simply because of the causal relationship that is implied with that ambiguity.

This harkens back to Goddu's earlier arguments when he entertained arguments as a collection of propositions and as a collection of sentences. Simply put, an argument cannot be a result of the argument if the arguer must construct the argument before engaging in the process of arguing. Thus, it may make sense for an argument to be the result or product of imagination, reflection, reasoning, etc., but not arguing.

Therefore, for Goddu, arguments—regardless of one's chosen ontology of arguments—"exist prior to the relevant acts of arguing or are constituents of those acts of arguing—they are not the products of those acts of arguing"(Goddu 2011, 87). That is, it does not matter if one thinks that arguments are made up of sentences, speech acts, propositions, etc., arguments must precede or be part of the process of arguing and therefore cannot be the product of that process. Goddu suggests that if we merely wish to distinguish acts of arguing from arguments-as-objects, we should drop the product/process ambiguity altogether. This is because the process/product ambiguity implies that third condition that the object sense of the word "argument" is a product or result of the act and therefore "argument" is subject to the criticisms that Goddu lays out in his paper. Goddu admits that the act/object ambiguity does hold in the definition of argument. Therefore, if we wish to express that ambiguity, we should adopt the term "act/object" instead of "process/product."

Tindale

In "Static and Dynamic Models of Argument" (2014), Christopher Tindale reviews the advances informal logic has made in reframing and defining argument to fit with natural language use. He does so by contrasting it with its predecessor, formal logic. Tindale

argues in favour of a dynamic model of argument. The dynamic model is different from the static models that have been developed thus far in informal logic because it considers argument in its context, focusing especially on one's audience and the audience's role in the construction of argument. In this section I will review Tindale's dynamic model as a new definition of argument and will then present some criticisms.

Tindale's use of the term 'static' refers to the traditional model of abstracting, separating, distilling the argument from the social event in which it occurred. The static model "exemplifies the idea of product alone, without any relation to the argumentative situation that gave rise to it" (Tindale 2014, 4). The problem with this is that thinking of the product of argumentation as a finished product causes us to miss all sorts of important details which are needed to evaluate and understand an argument, the rhetorical aspects. According to Tindale, thinking of argument in this static way ignores the rhetorical aspects that are essential to argument whereas the dynamic model does not.

Tindale reinforces his views by taking on a discussion of the relationship between inferences and arguments. Inferences commonly understood the way Copi (1996) explained it reads,

> "*Inference* is commonly defined as a process in which one proposition is arrived at and affirmed on the basis of one or more other propositions accepted as the starting point of the process"… ; and "Corresponding to every possible inference is an argument and it is with these arguments that logic is chiefly concerned." (Quoted in Tindale 2014, 2)

Copi's conception is problematic, according to Tindale, because he conflates arguments and inference. Tindale recalls Blair's (2012) call for caution that while it is often possible to switch between argument and inference, the two are distinct and conflating them could be problematic in some cases. The essential difference is that argumentation is not

necessary for inferring. According to Blair this is called reasoning; when someone reasons they are inferring or are drawing inferences. Tindale's view goes further than Blair's, he explains that when someone communicates their reasoning to someone,

> to present an argument to them, the activity involved is different. The reasons offered in the argument may be different from the reasons that person inferred [from], because the audience is different and requires different strategies. (Tindale 2014, 3).

In other words, when the audience changes so can the reasons or the way the reasons are presented. On Tindale's view the audience is essential to the construction of the argument and this makes Copi's view that arguments and inferences are one and the same impossible.

Tindale then works through Toulmin and Johnson and their different conceptions of argument. From this Tindale reports that informal logic is very much a reaction to formal logic's dominance over the field of argument studies during the inception of informal logic. Tindale acknowledges the advances made by these informal logicians which were, he says, "[b]orn from a need to make the logic class more relevant for its students" (Tindale 2014, 13). Tindale's purpose in pointing out the rebellious tone of informal logic's formation is to point out that there is still a shadow of formal logic present in the conceptions of argument presented by the informal logicians. The initial goal of informal logicians was to treat 'real' arguments in their natural environments rather than the made-up and contrived examples of the older textbooks" (Tindale 2014, 13). This focus on understanding arguments in their everyday environment unfortunately did not quite happen as thoroughly as one would have hoped. Informal logic conceptions of 'argument' still focus "primarily on the product, and the concept is still largely a static one" (Tindale 2014, 16).

Tindale attributes the failure to properly reformulate the conception of argument away from the static nature of the traditional sense to informal logic's failure to have a positive engagement with rhetoric. Particularly the rhetoric movement started by Chaim Perelman and Olbrechts-Tyteca. Tindale shares a rather telling quote from Perelman:

> it is on account of the importance of audience that I bring the theory of argumentation together with rhetoric rather than styling it an *informal logic*, as do the young logicians of today who take an interest in argumentation, but for whom the word 'rhetoric' retains its pejorative aspect. (Perelman 1989, 247; quoted in Tindale 2014, 18-19)

By quoting Perelman, Tindale offers support to his claim that had informal logic embraced the role of rhetoric in argumentation a dynamic model of argument may have come sooner. In any event, the important aspect to emphasize from this section of Tindale's paper is that he thinks the failure to reformulate the concept of "argument" by including the natural environment of an argument into its conception is due to the failure to accept rhetoric into the theoretical landscape of argumentation theory.

Tindale then proposes a dynamic model of argument. An argument, he says, is alive. He compares the notion of an argument to the way Aristotle conceived of natural and social objects in De Anima, or On the Soul, (1984), "an argument is a potentiality (*dunamis*) and two actualities (*energeia*) (Tindale 2014, 23). Aristotle used these terms to explain the interactions of the parts of a human being, the body and the soul. Tindale explains,

> a soul is the first actuality (activation) of a body that has life potentially. Then, the second actuality is any expression of that initial activation. For example an eye (a "body") has the potential for sight (the first actuality) but may be asleep. When the eye is actively seeing it expresses the second actuality. (Tindale 2014, 24)

For argumentation the first actuality is the movement "within an argument from the premises to the conclusion (while there is not yet any uptake, any adoption (literally))" (Tindale 2014, 24). This is the internal movement that the mind follows, this is the illative core, or the inference of the argument. The second actuality depends on the uptake, and is found in the audience. The first actuality seems to be the traditional illative core, while the second actuality is the rhetorical elements of an argument (particularly the audience). It is important to note here that Tindale casts these as movements which fit into his overarching idea that arguments are social events, and not abstract objects or sets of acts. This understanding of argument using the two actualities points out a missing half to the static conception of argument.

The dynamic conception of argument captures the living aspects of argumentation. That is, it captures the moving parts of the dynamic conception. It does so because it includes the

> organization and a dissemination, since it collects ideas and then moves them internally from premises to conclusion, and then externally to an audience. And it has features that facilitate both of these movements. (Tindale 2014, 24)

In this sense, an argument is the dynamic movement of organizing reasons and claims into a structure or argument that can be communicated to others. It is important to understand this as a social event because the audience plays a role in the organization of that argument itself. While these are two distinct actualities, I think it is consistent to understand a relationship wherein the organization and dissemination work together to create a more persuasive argument to share with others.

In his paper Tindale shows that the static definitions of 'argument' that have been developed by informal logicians lack the social context they initially set out to include.

Tindale then presents the inclusion of rhetoric into the conception of argument as a solution. In doing so, he develops a dynamic theory of argument which understands argument as a changing, moving entity. He also includes a pair of movements, both internal and external. This novel method of considering arguments allows for us to include the social context in which they are produced.

Tindale offers an important history lesson to philosophers about not excluding possible intellectual avenues because of a previous historical bias. There are some problems, however, with his conception of argument. First, it is not clear what he takes to be the ontological status of argument. Are they speech acts, or abstract objects. Are they products of some process or are they the process themselves? It seems consistent with the body of his work that he thinks of arguments as speech acts.[4] Unfortunately, if Tindale conceives of arguments as speech acts, then he should address the kinds of criticism offered by Goddu in his paper "Towards a Foundation for Argumentation Theory" (2014).

Goddu's argument is that arguments are either acts or abstract objects. Acts are not repeatable. Argumentation theorists take arguments to be repeatable, therefore, argumentation theorists must take arguments to be abstract objects.

Repeatable entities, Goddu says, "can happen, exist, or be instantiated more than once" (Goddu 2014, 6). Material objects are repeatable, but acts are not. It stands to reason that if I have a mug and my colleague has a mug, that we do not possess the very same mug. So, these are two tokens of a type of object, in this case the mug. Argumentation theorists who take arguments to be acts also assume they are repeatable.

[4] Through personal correspondence.

The problem arises when we both consider arguments to be repeatable and acts. For example, I kick the door, now I take a second and kick the door again. These two actions are two tokens of the type of act of kicking the door, but they are not two performances of the very same act. This is because temporal location is one of the identity conditions of an act. Therefore, two acts cannot be identical. Therefore, if arguments are acts, then arguments are not repeatable. Two arguments might be tokens of the same type of act, but this would make the argument an abstract object in the sense that they must appeal to a non-spatiotemporal type that they might be tokens of. In other words, acts have spatiotemporal identity conditions. Thus, if arguments are acts, then they too have spatiotemporal identity conditions. If arguments as acts have a spatiotemporal identity condition, then two acts of argument cannot be understood as the same argument. Rather, the locus of the meaning of the phrase "I used Jim's argument" would be found only if we assumed some sort of argument type, which is inherently abstract. So, if Tindale is committed to arguments being acts only, then he must admit that arguments are not repeatable.

It is of course possible that Tindale would have no problem with arguments being non-repeatable. In one sense there is a distinction to be made between repeating an argument and mentioning an argument. To repeat the same token action is impossible, to mention an action repeatedly is possible. I cannot give the very same argument that Anselm gives, but I can mention his argument in an effort to share it. When I am mentioning an argument I am not repeating the action of arguing for the conclusion. Rather, I am simply mentioning someone else's argument. In this sense for Tindale, and others who maintain a speech act theory of argument, arguments are not repeatable.

When we consider that audience plays a crucial role in the formation and nature of argument, it may be the case, that each time a person makes the argument in favour of Socrates' mortality they are making a new argument. Indeed, this may be settled by the next problem I have laid out. In his paper Tindale argues that we cannot conflate inference and argument because reasoning is a different activity from arguing when an audience is involved. Specifically, the reasoning we use changes according to our audience. My criticism of this is that this would not change the argument as Tindale says, rather it would spring forth a whole set of new arguments in such a way that with each new audience for an argument, there would be a new argument. If Tindale adopts this change, and I hope he would, he could welcome Goddu's claim that arguments are not repeatable.

Conclusion

It appears that the relevant question to ask about argument in the contemporary theoretical climate is an ontological question. Namely, "what is argument?". To answer this, theorists from both sides of informal logic, rhetoric and the more formal side, seem to be holding strong to the theory of arguments as a collection of speech acts. In this chapter, Tindale, van Eemeren and Grootendorst, and Hitchcock were used as examples of this.

There is a strong case for arguments to be considered abstract objects. It seems impossible for the intuitive outcomes of a theory of argument to hold that arguments are solely speech acts and not include some story about abstract objects. This becomes clear

when one hears the arguments by Goddu. It is in large part a matter of versatility, we can do more with the term 'argument' if we consider arguments to be abstract objects. This includes being able to say that two utterances with the same sounds, inferences, and propositions are the same argument. Indeed allowing that arguments are abstract objects allows us to include propositions into the definition of argument. Seemingly the biggest problem with the abstract object account is the nature of the relationship between the social activity of arguing and the objects themselves. That is, how do abstract objects influence the physical world? Goddu answers this by arguing that developing or discovering new arguments could be a result of imagination or reasoning.

Supposing, for now, it is the case that arguments are abstract objects, this does not mean the work done by speech act thinkers is obsolete or a dead end. It is true that we should not consider arguments solely as a speech act complex, but there is undeniably an act of arguing in our common lexicon. This phenomenon of arguing requires explaining and governance. For example, abstract object theory does not give us the tools to answer questions like "who had the more convincing argument?" Speech act theories of arguments in tandem with the abstract object theories of argument could provide some insight into this. Additionally, the social event of arguing requires rules and regulations for its participants lest arguing devolve into squabbling or fighting. This can be handled by a theory like Pragma-dialectics which stipulates a set of standards for how to engage in arguing. The speech act theory seems more equipped to handle these problems. Indeed, the major thrust of the arguments-as-abstract objects camp is that we cannot consider arguments to be acts alone not that we should abandon that there is an argumentative reality altogether.

In this chapter I have discussed the current debate over the ontological nature of argument. Between the two options, that arguments are either abstract objects or collections of speech acts, the former seems the more likely candidate. I came to this conclusion by entertaining the views of prominent scholars of this camp. I then explored some of the criticisms of the speech act theory of argument through recent work by Goddu in "Refining Hitchcock's Definition of Argument." I then explored another work by Goddu "Is argument subject to the product/process ambiguity?" wherein he further develops a theory of arguments as abstract objects by wondering if argument needs to be subject to the product/process ambiguity and by extension if it makes sense to make that distinction. In summary, a theory that posits that an argument is an abstract object gives us more explanatory power and more flexibility when talking about arguments. Thus, we should consider arguments to be abstract objects.

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VITA AUCTORIS

Matthew Pezzaniti was born in 1989 in Newmarket Ontario. He graduated from Newmarket High school in 2008. From there he went to Saint Mary's University where he obtained a Bachelor of Arts with honours in Philosophy and Sociology in 2013. He is currently a candidate for the Master's degree in Philosophy at the University of Windsor and hopes to graduate in summer 2015.