Informal Logic: A 'Canadian' Approach to Argument

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Windsor Studies in Argumentation

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CHAPTER 1.

INTRODUCTION

FEDERICO PUPPO

This volume was inspired by a conversation between Christopher Tindale, Leo Groarke and myself, which took place, maybe not by coincidence at Christopher Tindale's house in Windsor. I remember that, on that occasion, I asked them if there existed an anthology, developed coherently by Canadian scholars, of articles and essays dedicated to argumentation – demarcating, so to speak, a common point of view (if there was one). We spoke briefly on the topic only for them to determine that no such text existed. Immediately this gave rise to the question that brought about the title of this volume: Does there exist something which could be called the Canadian school of argumentation or, at least, a certain way of studying and analyzing argument which would permit some sort of uniform definition for the experts actively studying in this field? Does there exist, then, a Canadian tradition amongst those that make up the greater field of the study of argumentation?

It is well known that in Canada, more precisely in Ontario, in Windsor, there is a research centre – the Centre for Research in Reasoning, Argumentation and Rhetoric (CRRAR) – founded

in 2006. This centre was the result of an important branch of study which goes by the name 'Informal Logic', which began at Windsor, and was established in part to continue that tradition. This field's beginnings and developments are recorded by J. Anthony Blair in the autobiographical essay which opens the collection of this volume. He writes about the studies and research developed by him and Johnson in the early '70s. Blair discusses the difficulties they encountered publishing *Logical Self-Defense* – their volume that expressed "the possibility of such a departure from old-fashioned approaches" (J. A. Blair in this volume) – and how, in 1978, the first "Symposium on Informal Logic" was held in Windsor – even when at that time "there was no dedicated source of literature on informal logic" (*ibid*.). This Symposium was followed, in 1980, by the first international conference, and then, only three years later, by the second, which led to "the creation of the Association for Informal Logic and Critical Thinking (AILACT)" (*ibid*). In 1984, *Informal Logic* appeared, a "blind-peer-reviewed academic journal, to appear three times a year" (*ibid*.). It was the year in which, among other things, Apple presented the first of the Macintosh series, Carlo Rubbia won the Nobel Prize for Physics and the XXIII Olympic Games took place in Los Angeles. It was also the year in which the Eastern Division of the American Philosophical Association organized a meeting in New York which included AILACT sessions. Blair and other Canadians, like David Hitchcock, took part in the event.

> During the conference David and I were approached by two tall strangers with distinctive Dutch accents (and flawless English), who introduced themselves as Frans van Eemeren and Rob Grootendorst, and asked if they could make a presentation during the AILACT session. David pointed out that the agenda had been arranged in advance and was full. Van Eemeren and Grootendorst asked if they might meet with the two of us after the session, and we agreed. We retired to a nearby pub and began a conversation that lasted, over several rounds of draft beer, well into the night, the gist of which was to exchange information. We told them about infor-

> mal logic and they told us about their new theory, which they called "Pragma-dialectics" and the newly published monograph in which they presented it, *Speech Acts in Argumentative Discussions* (1984) (copies of which they either gave us then or sent us soon afterwards), and the program they had set up at the University of Amsterdam. It was the beginning of life-long friendships. […] Soon after our meeting in New York, van Eemeren and Grootendorst asked me if I would serve on the board of a new society they were forming, which they had christened the International Society for the Study of Argumentation (ISSA), and which was going to sponsor an international argumentation conference in Amsterdam the following spring, in June 1986 (*ibid*.)

The rest, as they say, is history: in 1987 "a new journal, to be called *Argumentation*" (*ibid*.) was born and future projects and collaborations led to the radical transformation of the world of argumentation. "In the mid-1970s both Scriven in the U.S.A. and Johnson and Blair in Canada had trouble finding textbook reviewers among their colleagues who would recommend informal logic manuscripts to publishers. A decade later dozens of new informal logic textbooks were competing for adoption" (*ibid*.). And already with "the second ISSA conference in Amsterdam in 1990, an international community of scholarship had been formed" (*ibid*.).

But in all this, in view of the role played in the development of the theory of argumentation by the Canadians, "Is there any basis in any of this for what might be dubbed "the Canadian hypothesis"? Is there some role that is distinctively Canadian, or citizenship aside, a result of factors from Canada that played a role in the emergence of this field?" (*ibid*.) Blair's negative answer is as follows:

> Johnson and I did get support from our university as well as from a small conference fund from the federal government administered by a national research-funding council, but I assume that other countries had similar funding available. Given the entrepreneurial promotion of the pragma-dialectical theory by the Dutch and the readiness for change in the American speech communication com-

> munity, it seems likely that argumentation would have developed as a field without participation of Canadian pioneers such as Woods and Walton, Govier, Hitchcock, Gilbert, and Johnson and Blair. Canadians got on board partly because of the Windsor conferences, and because the *Informal Logic* journal cornered the philosophy side of the market as the journal of record for philosophically-oriented theorizing early on. Perhaps I am too close to see it, but I must confess to an inability to recognize anything distinctively Canadian about our contributions (*ibid*.).

This is an authoritative opinion which cannot be ignored. But one might wonder, if it is true, how the texts collected here, this set of essays offered for reading, makes proper sense. In answer to these doubts, I want to propose another interpretation.

John Woods (who is himself "part of the Canadian story" (J. Woods, in this volume)), in his essay, speaks of a "Canadian influence on theories of argument [that] flow from their contributions to informal logic in the aftermath of Charles Hamblin's call to arms in 1970 for the restoration of the fallacies project to the research programmes of logical theory" (*ibid*.). Embellishing Blair's story, Woods recalls

> the umbrella under which the Windsor conferences are staged is OSSA, the Ontario Society for the Study of Argumentation, in emulation of the earlier example of ISSA, the International Society for the Study of Argumentation, established in Amsterdam as the organizational, congregational and publication centre of pragma-dialectical approach to argument. The name "ISSA" has two virtues which "OSSA" lacks. It is earlier, and it is accurate. OSSA's active membership is as far-flung as ISSA's, and there is nothing noticeably Ontarian about the logics contrived by OSSAnian. A foundational work for the Canadians was published by an Englishman [i.e. Toulmin] who in due course would become an OSSA star (*ibid*.).

Woods makes express reference to the "Windsor approach to formal logic" (*ibid*.), or rather, informal logic, characterized by the fact that "formal logics – certainly those of the 1970s – were mainly about deductive reasoning, whereas most of the best of

human reasoning is deductively invalid. Seen this way formal logics simply miss most of the target set by informal logicians" (*ibid*.). Therefore,

> [f]or a good many of Canada's theorists of argument and reasoning the only point of contact with formal modelling is by way of what is mistakenly called the "translation" rules for mapping natural language arguments to their logical forms in a formal language L – usually that of first-order classical logic. In its standard understanding, translation preserves meanings or at least approximations to them. While natural languages brim with meanings, formal "languages" have none at all. It is not possible to order a hamburger in L or simply to say what your name is (*ibid*.).

We have already noted Woods' reference to a "Canadian influence on theories of argument," to the "Windsor approach to formal logic," and to a group of "Canada's theorists of argument and reasoning" (*ibid*.). Further on, he speaks about "Canadian informalists" or of an "informal logic sector of Canadian approaches to the theory of argument" and notes "that there is, as far as I can see, little concurrent inclination to denounce the popularity of formal semantics in analytical philosophy, which is home turf of Canada's informal logicians". On the other hand, "[i]n the years closely following Hamblin, perhaps Canada's most internationally recognized contribution to the theory of argument lay in fallacy theory" (*ibid*.).

Here and elsewhere Woods allows for the possibility of referring to the Canadians as a group (which he does) and tracing, among them, some common characteristics. The most relevant of which is perhaps that "[e]veryone in the Canadian informal logic community was educated in the analytic tradition. For many of them, perhaps a hefty majority, doing philosophy analytically is simply the preferred way of doing it" (*ibid*.).

The accounts of Blair and Woods are a useful prod and starting point in an attempt to understand the nature of Canadian approaches to the study of argumentation. Another part of the

story is tied to the rise of the Ontario Society for the Study of Argumentation. As Woods points out, it was inspired by ISSA, but in a way that was securely rooted in Ontario. As one of the attendees of the first conference (Leo Groarke) remembers: "Someone, I believe it was Michael Gilbert, sent around an e-mail that said something like: 'There are ten or twelve of us going to ISSA from Ontario. We are all going to make presentations and listen to our European colleagues and won't have time to listen to each other. So why don't we supplement it with a conference at home, in Ontario, where we can listen to each other?'" The end result was the first of eleven OSSA conferences, which proved so popular that they quickly expanded beyond the original vision of a conference for scholars living and working in Ontario.

In embryonic form, the development of OSSA suggests some possible ways to identify and characterize a 'Canadian' approach to the study of argumentation. It included, obviously, a geographic context (first Ontario, then Canada) and a community of scholars who share a common background as philosophers in Canadian philosophy departments. One can reasonably expect a certain way of doing philosophy that binds these scholars and makes them recognizable, together with some basic themes expressed in their research. At the same time, one of the most interesting features of this particular community is the extent to which its members move in different directions from a shared foundation that includes little more than the philosophers' traditional view –that arguments are sets of propositions made up of premises and a conclusion – and an interest in the attempt to apply this to natural language ("informal") arguments. As Woods suggests, some members of the community embrace fallacy theory, though others reject it. Some retain a pronounced commitment to formal logic, others are notable for the extent to which they reject it. In the long run, some informal logicians are heavily influenced by other trends in argumentation theory (notably rhetoric and pragma-dialectics), while others ultimately reject

the model of rationality which they began with (which emphasizes language and a rejection of emotion).

In keeping with this discussion, some of the essays in this volume critically discuss some key aspects of the traditional approach to logic. One example, the discussion of questions related to missing premises and the nature of logical consequence, analyzed by David Hitchcock, demonstrates this. He notes "the whole tradition of supposing that reasoners and arguers leave unstated a premiss on which they are relying […] rests on a mistake (Hitchcock 1998). The mistake is to suppose that the only way that a conclusion can follow definitely from premisses is logically. Logical consequence is rather a special kind of consequence, distinguished by the absence of extra-logical terms in its articulation" (D. Hitchcock, in this volume).

In his account of the methods of informal logic, Hans V. Hansen recognizes the intrinsic limits of formal logic and its virtues, contrasting them with the developments characteristic of informal logic. He at once offers us a range of ways to approach informal logic and a common definition which can encompass all of them, reformulating informal logic as a field comprised of "the set of methods of non-formal illative evaluation" (H.V. Hansen, in this volume).

In a manner relevant to this attempt to understand Canadian approaches to argumentation, Trudy Govier's essay opens the theory of argumentation to the social aspects of group dynamics. She discusses the "compositional phenomenon" that is "the application of intentional language to groups": by assuming "that groups, small or large, organized or not, can do things" she considers "responses that would purport to eliminate" the compositional phenomenon (T. Govier, in this volume). "Then [she] move[s] on to set it in the context of the theory of argument," by discussing "the Fallacy of Composition, in which we mistakenly infer conclusions about wholes or groups from premises about parts or individuals." It is a fallacy that "is genuinely a fal-

lacy, and an important one – but that the gap underlying this fallacy can be plausibly bridged in some cases" (*ibid*.). Govier rightly observes that "there is much to learn by logically probing claims about 'the Danes', 'the West', 'Muslims', and so on" provided that we remember that "the gap defining the Fallacy of Composition can be bridged insofar as group structures and relationships provide contexts for people to think together and act on the basis of their joint deliberations" (*ibid*.). This does seem present in the case of 'Canadian informal logicians,' who have thought together and acted on the basis of these deliberations, though this does not imply that they speak (or act) with a unitary voice.

Here it is worth returning to the opinion of Blair which started us on this investigation – and which expressed a negative point of view about the possibility of recognizing "anything distinctively Canadian about our contributions" (J.A. Blair, in this volume). At this point we can affirm sufficient clues to sustain the idea that there is, fundamentally, a certain tradition of thought or approach among the 'Canadians': that of informal logic and of the analytical approach to philosophy, with a particular way of looking at argumentation and reasoning, and a geographical context which spurred them to share – and often to debate – their respective points of view. This is not to say that only Canadian scholars have developed the informal logic orientation or that only Canadians are involved in its study: but it does seem that this tradition exists and that it was born and was developed in Canada, with a notable connection to Windsor.

Of course, the existence of an informal logic tradition might seem tenuous and peculiar, because we will also see that it contains no shortage of disagreements and contrasts. We will talk about this soon enough, but it may already be clear that the Canadian school of argumentation is, to the extent that it is a school, quite different from the way we would usually understand other schools. It is useful to compare pragma-dialectics, which not only has a central seat of origin, but, above all, is

recognized by a founder that has generated a series of pupils working on common themes, who have developed the theory by applying it to various fields of knowledge (excluding some differences that naturally exist between the different developments of pragma-dialectics). In the case of Canadian argumentation scholarship, the situation is largely different: yes, there is a seat (Windsor), but the commonality of the scholars who work there, assuming that there is one, is defined by the themes they work on and from the approach they use; certainly not from the presence of a common 'master' or 'founder'. Insofar as this does not exist, one might argue that there is no basic element that would allow us to recognize the existence of a school.

We will return to these considerations later. For the moment it may be said that elements of commonality have emerged (geographical connections, a common field of study and common training), even if they concern a knowledge in constant evolution. That evolution continues in this collection, in, for example, Ralph Johnson's work on one of the contributions he made to informal logic in ""Argumentation as Dialectical" (Blair and Johnson 1987[…]) where the seeds of the proposal regarding the dialectical tier may be found" (R. Johnson, in this volume).

Johnson, like Blair, remembers the beginning of the informal logic movement, which started "more than 30 years ago with the tradition in which we had been raised which I have baptized FDL," that is "the traditional logical perspective on argument" that failed to take into account the "gaps between that theory and argumentative practice" (*ibid*.).

> In real life arguments have various purposes; but no mention of purpose in FDL. In real life arguments, we often have to go with premises that are not known to be true (Hamblin); no provision for that in FDL. In real life, good arguments often fall short of validity; no provision for that in FDL. In real life, there are good arguments for and good arguments against a particular proposition or proposal (Hamblin); no provision for that in FDL. In real life, good

> arguments typically confront objections and other dialectical material; but no mention of that in FDL (*ibid*.).

The rejection of FDL led to the development of a theory meant to "bring the conception more into line with best practices" (*ibid*.). This development was assisted, in the early and mid 80s, by two developments: "a connection between our project and the critical thinking movement in North America […]the many different initiatives outside of logic, among them the pragma-dialectical approach to argumentation, and the broad international and multidisciplinary community working on argumentation theory" (*ibid*.). In this context, a "theory of argument that gives proper credit to arguments which, if not sound, are yet good, or good enough, and to arguments in which the arguer acknowledges and comes to terms with what [Johnson] call[s] dialectical obligations" (*ibid*.) was developed.

> Part of that rethinking took the form of proposing that dealing with one's dialectical obligations is an essential component of the very idea of argument, robustly considered. Arguments in the paradigmatic sense require a dialectical tier in which the arguer discharges his or her dialectical obligations: i.e., anticipate objections, deals with alternative positions, etc. That proposal had the following two presuppositions. First, the focus is on the use of argument to achieve rational persuasion. […]. Second, the focus in the first instance is on argument as it expresses itself in texts (such as found in newspaper editorials, journal articles, books etc.), as distinguished from an oral argument between two participants, which is what dialogue logics […] and the pragma-dialectical approach take as their focal point. (This is roughly the distinction between product-driven and process-driven theories.) (*ibid*.).

This last quotation raises a potentially problematic point for our analysis (soon to be joined by others): in fact, within informal logic there is a very strong debate, which has touched, among other things, the arguments put forward by Johnson. He himself reminded us: "since I originally proposed that arguments require a dialectical tier, many commentators have weighed in with

objections and challenges. Originally Govier, then Leff, Hitchcock, Tindale, Groarke, Hansen, van Rees and Wyatt – to mention just those who have gone on record with objections to that proposal" (*ibid*.). Johnson answers some of these criticisms in his essay and it is not up to us to judge whether the answer is final or not. In the current discussion the point of note is the disagreement that characterizes the debate.

To the extent that we have found the existence of a certain common tradition of thought among Canadian scholars who practice informal logic, we must also note that there is within it, a strong debate. We can see this in the differences of approach between product-driven and process-driven theories. For example, the approach of Johnson and that developed by Krabbe and Walton. This diversity of vision does not, however, negate the hypothesis that there is a Canadian 'school.' No one would deny that there was a school like Plato's Academy (perhaps the archetype of the school model) just because those who belonged to it at various times had partly different (and sometimes radically different) views which gave rise to real philosophical debate. Indeed, the existence of such debate shows that there is a certain number of scholars who, arguing among themselves on common themes, prove that a community exists and recognizes itself.

Johnson himself speaks of it when he notes that his "proposal might also be seen as a counterpoise to the tendency to broaden the range of argument" (*ibid*.), expressed by Groarke's visual argumentation and Gilbert's multi-modal argumentation. As Johnson himself notices, "if we are going to adjust our theories and approaches to include such specimens (which my proposal makes provision for), then it seems to me imperative – as a matter of balance – that we should also adjust in the other direction by also emphasizing the more developed forms of argument – those with a dialectical tier" (*ibid*.).

This is a matter we will come back to shortly, partly because the essays of Gilbert and Groarke await us. For the moment we

should observe how this indicates that informal logic is a project still waiting to be completed via a collective enterprise that has grown in parallel with the analysis of Douglas Walton. Walton, with Krabbe, was able to "attempt to systematically classify different types of dialogue representing goal-directed frameworks in which argumentation takes place" (D. Walton, in this volume). It is a work that "has had many citations, as a dialogue typology has had applications in many different fields, including artificial intelligence, law, medicine, discourse analysis, linguistics (especially pragmatics) and education. The purpose of [Walton's] paper is to survey many of these applications to see how they fit with informal logic" (*ibid*.), something that he does by drawing "an important lesson: [that] distinctions between the various kinds of dialogue can be clarified and formulated more precisely by showing how each of them relies on different approaches to the burden of proof" (*ibid*.).

The analysis conducted by Walton highlights the development (and evolution) of informal logic in a way that underscores its ability to incorporate and extend key notions in a way that is motivated by points of friction and by mutual understandings. One sees a similar push and pull in Sharon Bailin and Mark Battersby, who consider "that argumentation constitutes a significant aspect of critical thinking" (S. Bailin & M. Battersby, in this volume) and note that their "discussion will take as its point of departure three points made by Ralph Johnson:

1. the theory of argumentation should develop out of an understanding of the practice of argumentation;
2. an important feature of the practice of argumentation is that it is dialectical;
3. the pedagogy of argumentation should include this dialectical dimension (*ibid*.).

The essay by Bailin and Battersby emphasizes this third strand of thought, highlighting the usefulness of argumentation in the field of pedagogy. In the process, they emphasize the transversal nature of argumentation as a form of knowledge (something demonstrated by the reference to the legal context that closes the analysis of Balin and Battersby, which is not accidental). This makes it a true and proper method of knowledge itself, in a way that makes it a typical form of educational process. Thus, "thinking about argumentation in terms of rational persuasion may have the result of reinforcing students' tendencies to try to find support for and persuade others of positions they already hold […]. Adding a dialectical tier is a move in the right direction in that it imposes a requirement to look beyond one's own arguments" (*ibid*.), as long as the dialectical dimension is recognized in its proper, expanded role

> truly recognizing [that] the dialectical dimension means more than simply discharging one's dialectical obligation to address criticisms and objections to particular arguments. Rather, taking seriously the dialectical dimension means focusing not on particular arguments, but instead on the debate and an evaluation of competing cases in order to make a reasoned judgment on an issue (*ibid*.).

The extent to which informal logic has been extended beyond the narrow view of argument that gave rise to it (embedded within analytic philosophy) is already evident in the essay by Robert Pinto and, mostly, in the multimodal argumentation of Michael Gilbert, the visual argumentation of Leo Groarke, and the overall re-evaluation of the rhetoric due to Christopher Tindale. From this point of view, according to us, it is not by chance that it is from a previous book by Tindale (1999) that Robert Pinto makes the moves for proposing his general account of having and giving reasons in order to "shed any light on why there are different "cultures of theorizing" about argumentation – theorizing about practices which turn on the presentation and exchange of reasons" (R. Pinto, in this volume). Tindale (1999)

called attention to the logical, dialectical and rhetorical perspectives, and Pinto reminds us (by offering in a few lines the picture of the different theories we may have) that

> within each of these there are a variety of ways in which the perspectives can unfold or develop. Formal and informal logic represent quite different species of "logical" perspective on argument, and themselves divide into varieties of sub-species. The formal dialectic […], the "controversy-oriented approach to the theory of knowledge" […], the pragmatic-dialectic approach of the Amsterdam school, and the somewhat different dialogue approach that Walton takes […] are among the quite different species of dialectical approach. And finally you will find just some of often quite different approaches that may be classed as rhetorical in Aristotle, Cicero, Perelman, Wenzel, Tindale himself, as well as in the design theoretic approach to normative pragmatics inspired by the work of Scott Jacobs and Fred Kauffeld […]. However, across this broad spectrum of "cultures of theorizing" there appears to be general agreement that arguing involves offering and/or exchanging *reasons*. My aim in what follows is to outline a general account of reasons – of what it is to have them and of what is required to offer or present them (*ibid.*).

By doing this, Pinto helps us to better understand what an argument is by putting into question the reason-giving process, the role played by the speaker and, mainly, by the hearer. The same concepts of arguments, argumentation, reasons and rationality, and normativity (since for him the force of reasons is normative), are disputed. Finally, according to Pinto, it is possible to claim that "the varieties of *logical* perspective tend to emphasize questions about what is a reason for what" (*ibid.*), while "the value of making dialogue the preferred context for studying argumentation – which might be seen as lying at the heart of *dialectical* perspectives – is […] most clearly seen when we recognize the important effect that undermining and overriding considerations have on the force of reasons" (*ibid.*). The last perspective, the rhetorical, with his "value of emphasizing the effect of argument on audience" (*ibid.*) seems to Pinto "quite real" (*ibid.*). In fact

> if an argument fails to persuade an audience, the fault *may* lie in the audience's failure to accept what they *see* it is reasonable for them to accept, or it may lie in the arguer's failure to make it *manifest* to the audience that it is reasonable for them to accept what the arguer wants them to accept. Adopting a rhetorical perspective requires getting clear about what it will take to get an audience in a proper frame of mind to accept what they'll be shown it is reasonable to accept, as well as getting clear about what it will take to make it *manifest* to the audience that it is reasonable to accept what the arguer wants them to accept (*ibid*.).

In our view, such a conclusion could be read as an indication for a better understanding of the development of informal logic. To such an extent, what Catherine Hundleby discusses about Govier's account of adversariality in argumentation could play a deep role. In this latter case, the issue is about responses given by Govier (1999) to "the feminist critiques of adversarial assumptions about argumentation" (C. Hundleby, in this volume). Hundleby dissents from Govier's – but also from Walton's (2007) – accounts of politeness, according to which "politeness can reduce adversariality to a necessary minimum" (C. Hundleby, in this volume). According to her, in fact, "the gendered quality of politeness disadvantages and even disqualifies some arguers via differentially gendered measures of aggression" (*ibid*.). And, since "feminism is intrinsically controversial" (*ibid*.), it "demands adversarial engagement that politeness restricts from some of those, notably women, whose interests demand change" (*ibid*.).

Behind this discussion, and for reasons clarified by Hundleby herself in her essay, what is at stake here is the theoretical foundation of argumentation, and of concepts such as persuasiveness, cogency and rationality of the premises and their relevance, that is considered to be the basis for cogent argumentation, by considering again the role played by the dialectical tier. In any case, what seems to be clear is that a distinction between "arguing with people" and "arguing against people" should be made, so to leave room for "collaborative exchanges of reasons […] [that] may

be means for rational persuasion" (*ibid*.), for example in science and education, where "we argue without disputing a claim" (*ibid*.). From this point of view, it can be said that "we may exchange reasons without opposing each other's ideas – never mind opposing each other personally. Adversariality is not necessary or even ideal for argumentation, despite its value for democratic politics and critical thinking" (ibid.). In any case, until now, "these non-adversarial practices deserve to count as forms of argument, and argumentation theorists such as Govier seem to deny them that status only because they presume that argumentation must be adversarial" (*ibid*.).

From a more general point of view, this last remark gives to Hundleby the possibility to underline one of the characters she still finds in informal logic, that is "idealization". In fact, according to her,

> despite the intention of Govier and others to account for real reasoning practices, idealization or ideal theory persists in informal logic. While all philosophy may be normative and ideal in a generic sense, the type of abstraction and its degree may impede philosophers' ability to address concrete problems. Misguided abstraction can make our ideals too idealized or idealized in the wrong ways. Failing to account for how gendered communication practices including politeness affect norms of argumentation and for human logical frailty makes Govier's picture of the argumentative adversary problematically abstract and idealized (*ibid*.).

In Hundleby's opinion, "the oppositional mode appears universally productive only because the adversaries we have in mind are abstract" (*ibid*.), but "adversarial modes of reasoning have neither foundational nor over-riding value as means for rational persuasion" (*ibid*.), since we may have "rational persuasion among people who may disagree or doubt a proposition under consideration, but who need not have contradictory opinions" (*ibid*.). At the same time, idealization is what makes it difficult (or even impossible) to consider in a proper way the role of the arguers

themselves, which is ignored by "every major approach to argumentation theory" (*ibid*.). This counts in order to remember that "philosophers must abstract away from concrete situations – whether epistemic, ethical, or argumentative – in order to develop ideals in the broad philosophical sense of norms" (*ibid*.). But, at the same time, "we must take care not to abstract away from what we recognize to be problems demanding attention" (*ibid*.).

In a certain sense, this kind of methodological suggestion – which draws attention to the concrete dimensions of argumentation – seems to be seriously taken into consideration, among others, by Michael Gilbert. For his part, Gilbert "would like to take this opportunity to examine [his] now post-teenage theory in light of the developments in our discipline" (M. Gilbert, in this volume). He does this by declaring the reasons why his perspective has not found acceptance, precisely in the context of informal logic. On one hand, Gilbert believes "that Argumentation Theory is a vital discipline that can be used to understand and hone the tools people draw on to communicate with each other, embrace agreement and avoid violence", on the other, he believes that "arguing is not a linear process with clearly defined edges and readily identifiable components" (*ibid*.). Rather, according to Gilbert, "(virtually) every argument contains at least a minimal emotional component", even if "there is nothing irrational about the non-logical modes" – "emotion and whatever logical sense goes into an argument are inseparable" (*ibid*.). It is a sign of the debate between different minds mentioned earlier. In the eyes of Gilbert, it appears that "the ability to diagram an argument, investigate it for fallacies, apply a Pragma-Dialectic analysis, are all vital tools for the argumentation analyst. Nonetheless, my sense that the richness of communication was being missed by not applying these tools within the various modes, by not applying them in a finer way, led me to believe that a great deal of importance was lost to the analyst" (*ibid*.).

> One very interesting factor that has come to the fore in the 20 or so years since I began promulgating multi-modal argumentation has been just where and where not it has, if you will, caught on. It has *not* been a major success in Argumentation Theory as performed in Canada, the United States, or Holland; three places where Argumentation Theory has definitely taken hold. These are all countries where the logical mode and the critical-logical model are dominant. While certainly eschewing formal logic as a model for marketplace argumentation, its replacement, informal logic or pragma-dialectics, is also quite structured and linear. Most importantly, it is product-orientated. Arguments are artifacts that are viewed and examined in isolation from context and situation. The arguer is irrelevant to the analysis of the dispute on pain of fallacy, i.e., argumentum ad hominem. The self-same argument given in dramatically different circumstances by very different interlocutors and audiences with very different goals and backgrounds would be assessed in the very same way. […] [A]n argument is a series of messages centred on an avowed disagreement. Everything that touches on the comprehension *and interpretation* of those messages is part of the argument. This includes the relevant emotions, physical location, personalities of the arguer and audience, gender of the arguer and audience, actions of the participants, and even possibly the weather. To say that Informal Logic and pragma-dialectics do not make room for such factors is an understatement. Multi-modal argumentation as well as Coalescent Argumentation have been well received in other places. One in particular, is Mexico […] including Spain […] my work appeals to the Latin soul (*ibid*.).

This is a strong opinion we leave for further debate. Here it suffices to say that Gilbert and multi-modal argumentation are part of the Canadian 'school' this book presents. His is work by a Canadian philosopher which is a reaction to the shared account of argument that gave rise to informal logic – work which broadens our understanding of argumentation and allows us to better understand its connotations.

Even if multi–modal argumentation has not been a major success in Canada, within informal logic, it has not been ignored. Johnson criticizes it, but also recognizes it (and visual argumentation), when he declares that his proposal might "be

seen as a counterpoise to the tendency to broaden the range of argument" (R. Johnson, in this volume). This usefully highlights an important counterpoint that has informed the discussion within informal logic – one element pushing to expand, the other pushing to limit the range of argument. As Johnson suggests, the goal can be seen as a matter of balance between these different approaches — between two branches that unfurl from the same trunk.

Looking from overseas, it seems that (to extend the analogy), wanting to cut one or the other branch would risk losing the vital sap of this tree, which finds its peculiar characteristic precisely in its luxuriant being. At the same time, it is absolutely normal for different approaches to be unraveled from the same 'school', eventually even potentially conflicting: this is how the Lyceum was born from the Academy, for example. Considered from this point of view, Aristotelian philosophy is perhaps less antagonistic to Platonic philosophy than many common readings would have us think. Taking note of these kinds of developments and recognizing them can serve to affirm one's own identity, in noting them in the case of informal logic, one can say that the proposal in this volume has been satisfied.

Leo Groarke uses his essay as an opportunity to "present a state-of-the-art account of visual argument that reflects what we have learned from the discussions that have occurred over the intervening twenty years after the publication of the first papers on visual argument" (L. Groarke, in this volume). Groarke emphasizes how "[i]n many ways, a growing interest in visual – and multimodal – argument has been driven, not by theoretical discussions of argument, but by the desire to explain the reality that visuals are widely used in real life arguments" (*ibid.*). "Acknowledging visual argument is an important first step toward an inclusive theory of argument" (*ibid.*) – the development of the ART approach provides Groarke with an opportunity to reply to Johnson and "his rejection of visual argument"

(*ibid*.) (in keeping with his preference for a narrower conception of argument that excludes visual and multimodal argumentation).

> Johnson 2005 has written that: "The … problem for a theory of visual argument is to deal with the related issue of how to 'convert' the visuals, which are the components of a visual argument, into reasons which can function as premises that are supposed to lead to a conclusion, so that the machinery of informal logic can be applied to the resulting argument." But the method I propose suggests that it is a mistake to think that we need to 'convert' the components of a visual argument into reasons that can function as premises or conclusions. No conversion is necessary. All we need to do is recognize these elements and the way that they are used in argument. […] The problem Johnson focuses on is not, inherent in visual arguments, but in his and other traditional approaches to argument, which define the key components of an argument in terms of words (either as sentences or as the propositions they refer to). If one assumes this view, then the only way to make room for visual argument components is by finding some way to convert them into verbal analogues that can play the role of premise or conclusion. The way to overcome this challenge is not by finding a way to convert visuals, but by giving up on this assumption and adopting a more expansive view of argument. Doing so can help us better recognize the argumentative roles that visuals can, qua visuals, perform (*ibid*.).

In the study of real life arguing, this seems very sensible and usefully highlights an ongoing evolution: informal logic arising as a 'heterodox' development of the traditional approaches to argumentation that remained confined within the narrow logistical boundaries, too far, as we have seen, if our interest is real life argumentation. On this point, specifically, Gilbert and Groarke (and others) have embraced multimodal and visual argumentation and expanded the scope of informal logic beyond approaches to argument "which define the key components of an argument in terms of words" (*ibid*.). Instead, these contributors to informal logic take a further step forward along the path started by informal logic's attempt to expand what began as a narrowly

defined conception of argument. As Groarke says, he is interested in "adopting a more expansive view of argument" because "[d]oing so can help us better recognize the argumentative roles that visuals can, qua visuals, perform", but also, in our opinion, to better understand and recognize the nature of argument qua argument. Here it should not be forgotten how the classical tradition assigned an important role to what, *mutatis mutandis*, could be considered a multimodal or visual aspect of argument, that is, the *actio*. This is a central element that is broadly developed with Cicero and Quintilian, a central element of the 'rhetorical reticulum' which plays a key role in their very precise conception of argumentation.

Informal logic's relationship to rhetoric is the subject of the last essay collected here, that of Christopher Tindale, who proposes a further expansion of informal logic's account of argumentation – a repositioning of argumentation that is aligned with rhetoric, in a way that "is closely related to that which can be extracted from Aristotle" (C. Tindale, in this volume). To this end, Tindale considers it necessary to overcome, first of all, the "static" concept of argument that lies "behind the way many informal logicians talk about arguments" (*ibid*.). This confirms the advances of theories like that of Johnson, which suggests that informal logic did not began with the more formal models of argument, but with the ""new" dialectical tier. It is this tier that deserves attention because it begins to push in the direction of a more rhetorical conception of argument (without quite reaching it)" (*ibid*.). Tindale's essay provides a more detailed discussion of the relationship between rhetoric and informal logic and the debate that arose in response to Johnson's account of the dialectical tier. In an attempt to understand the relationship between informal logic and other views of argument, the important point is his suggestion that Johnson's resistance to rhetorical elements may depend on the fact that "the concept of rhetoric implicated in these discussions is not as modern as his concept of argument"

(*ibid*.). Seen from this point of view, we can say that informal logic has traveled, so to speak, at 'two-speeds': quickly forward toward a more expansive view of argumentation, but at times more slowly, in a way that is reluctant to embrace the broader aspects of argumentation evident in the essays by Gilbert, Groarke and Tindale. Tindale writes:

> The definition of informal logic drawn from Blair and Johnson is still very much a logical one. They would judge informal logic to be just that – a logic. By contrast, another informal logician, Douglas Walton, sees informal logic to be essentially dialectical. […]. [But] it simply means that for Walton an argument will be something that arises in a dialogue. […] In agreement with what we have seen in the traditional model, an "argument" for Walton is simply "made up of statements called premises and conclusions" (*ibid*.).

There is no shortage of "suggestions of a more dynamic sense of argument here [as we see in Hitchcock's analysis]. But they are only suggestions" (*ibid*.). To make suggestions for a more dynamic account of argument something more is required: "it is important to establish rhetoric's relation to informal logic. Like other theories of argument and argumentation, informal logic was developed without any positive engagement with the traditions of rhetoric. Thus, bringing rhetoric into informal logic (or vice versa) is a difficult project because informal logic is already established" (*ibid*.).

In Tindale we can discern an echo of the words of Woods, who recalled how a characteristic feature of the Canadian tradition is a common philosophical training of an analytical type: previously this allowed us to identify a common characteristic among scholars belonging to that tradition. Now we can confirm this, but we must also observe how it has been a limiting factor as well. It is, in fact, precisely because of this analytical training that it was difficult, in the early days of informal logic, to attribute to rhetoric the role in understanding real life arguments that would seem to be its due. As Tindale notes, "philosophically trained

informal logicians were likely unaware that rhetoric could have anything other than a pejorative sense" (*ibid.*). More recently the situation seems to be changing:

> Recent decades have seen members of the rhetoric and speech communication communities enter into fruitful discussions with those from the informal logic community, discussions that have encouraged a more accurate appreciation of the wider senses "rhetoric" can have, including the positive. […]. It is difficult, then, to see the pejorative sense of rhetoric promoted in the work of serious informal logicians. If anything, there is a tendency toward neglect rather than dismissal […] What is still lacking in mainstream informal logic, then, is a full engagement with positive rhetoric, and that might begin with the explicit recognition of a more dynamic conception of "argument" (*ibid.*)

According to Tindale, the latter could account for the fact that "an argument is alive; it is a message of activated potential. In terms of particularly important Aristotelian terms that capture the way he conceived natural and social objects, an argument is a potentiality (*dunamis*) and two actualities (*energeia*)" (*ibid.*).

Here it is worth noting that this appears connected to a certain idea of logic as *logos* which, by itself, expresses a dynamic concept of logic, typically Aristotelian (strongly opposed by the Megarians and, later, by the Stoics, who instead cultivated precisely the static vision that will then become typical of traditional approaches): Tindale himself underscores this when he observes that "the poetic has a movement, so too must logic itself: logic has a life, and its structures have internal movement. This sense needs to be transported to the study of argumentation" (*ibid.*).

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As interesting as they are, arguments concerning the study of the possible developments of the theory of argumentation push our gaze beyond the confines of the present volume and the present essay. The latter is focused on a different question: the ques-

tion whether there is a 'Canadian overview on argumentation'. From what we have learned and can see, it seems that the question from which this volume developed can be answered in part although not definitively. The various minds that make up the variegated universe of informal logic (here only partially represented) have something in common (they spring, one might say, from the same roots) but this is not enough to speak of a tradition of unitary thought. In this regard, Woods expresses some scepticism about the possibility of a "Canadian brand" of logic.

> The Canadian brand was never as well-defined and organizationally and doctrinally sustained as the Amsterdam brand. Brands, as we know, come and go, and these two have flourished for decades now. It remains to be seen how well they hold up in the years and decades ahead. Judged from where we are now on the Canadian scene, there are clear signs of where the country's research efforts are likely to be directed. One of them is logical structure of argument and reasoning in legal contexts. Another signals a renewed alliance with cognitive, experimental and social psychology, neurobiology and the other empirical branches of cognitive science. In one of its streams, we see an effort to do for logic what Quine and others have done for epistemology, namely to give it the naturalized form which has been intermittently in play *in logic* since Bacon, Mill, Husserl, Dewey, and later Toulmin, notwithstanding the intense efforts of Frege and others to make all of logic dance to the tune of mathematics. Also of note are the already mentioned efforts to build alliances with computer science and AI, in a way perhaps of exposing how the mathematics of software engineering might leaven the insights of those whose purpose is the elucidation of human argument on the ground. Also of growing importance is the exposure of human argument-making to the plethora of work already under the belt of theories of defeasible, default and nonmonotonic consequence. Whether any of this outreach will lead to new Canadian brands remains to be seen. Ray Reiter's paper on the logic of default reasoning, was published when he was a member of UBC's mathematics department prior to his departure for the University of Toronto. Although a foundational contribution by a Canadian, no one thinks of default logics as carrying a Canadian brand. In the theory of argument the Canadian brand is, like all brands, a fleeting thing. I foresee no successor to that Canadian

throne holding sway for the next forty-seven years (J. Woods, in this volume).

Surely it must be granted that a Canadian school of logic in the strong sense does not exist. There is no common school of thought comparable to the "Amsterdam brand" which is "well-defined and organizationally and doctrinally sustained" (*ibid*.).

At the same time, Woods is speaking of logic in a much broader sense than that which is the focus of the present book. Here the question is whether *informal* logic is in some sense a school of thought that can be understood as a Canadian contribution to argumentation theory – itself understood as an attempt to understand real life reasoning. In this regard there is much of note – as this volume demonstrates, a group of distinguished Canadian scholars widely recognized for their work in informal logic and argumentation theory; the common origins in philosophy departments and analytic philosophy that have already been noted; a major journal (*Informal Logic*) that has been publishing for forty years; many scholarly books (like those in this series); and countless texts and numerous conferences within a tradition of scholarship that continues in Windsor, in Ontario, and in other provinces. The result is a number of shared issues which are shared even though those within the tradition disagree with and debate one another. At the very least this seems to make possible the talk of a shared Canadian spirit in informal logic in the same sense that we speak of Italian cuisine or French wines which do not correspond in an exact or precise way to a unique brand, but are nevertheless indicative of a group identity that everyone can recognize.

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In an attempt to understand the school issue in an examination of Canadian contributions to informal logic and argumentation theory, it is very useful to look to the 5th-4th century

BC Athens, Greece. It is well known that in this period the city experienced "the Sophists' arguments, the Socratic method and, later, the birth and development of the schools of Socrates, which we call "minor" in comparison to Plato. These are the school of asceticism of Antisthenes, which later became "cynical" with Diogenes of Sinope, the Dialectical school of Euclid of Megara and the hedonistic school of Aristippus of Cyrene. All of these men were (with the exception of Diogenes) a few years older than Plato" [E. Berti, 2010, 5. Our translation]. Among these schools' examples, the dialectical school of Euclid of Megara, also referred to as 'Megarians', can help us understand why it is possible to speak today of a 'Canadian school' or, more correctly, of 'Canadians' with reference to the theory of argumentation.

It is well understood that the Megarian school expresses a philosophical approach similar to the Eleatics and contrary to Aristotle. However, a careful reading of the sources does not allow us to confirm without reservation that Euclid of Megara founded a school, it cannot definitively be said to have existed as a school (at least in the terms in which we are used to defining schools).

> K. von Fritz has thoroughly criticized the very assumption of the existence of a Megarian school, namely the validity of that perspective of integration between Eleatism and Socratism which he considered instead a later doxographic scheme. […] The Megarian school, like all the other so-called Socratic schools, is a particular type of school: it is characterized not by a purely theoretical tradition of doctrine (like the Eleatics or the Atomists), nor by a community of scientific research (like the Peripatetic school or the Academy), nor by a strictly dogmatic or all-encompassing concept (such as Stoicism or Epicureanism), but rather by an ideal of education and life skills training for the students, without any precondition for the training of new teachers. […] This means that when we talk about "school", specifically the minor Socratics, we mean something very different from the Peripatetic, the Stoa and the Garden: there are no compulsory dogmas and well-constructed systems, but

only, as K. von Fritz has argued, the aim of "educating and training students for life" (G. Giannantoni, 1990, 44-45. Our translation).

Specifically with regard to the 'Megarians':

> it is good to understand the meaning of "school": if it is used to designate a stable and lasting educational and scientific organization in which a group of people carries out a common preparatory work, teaching and learning of knowledge, this term finds this use only in the case of the Platonic Academy, which became the most advanced scientific and cultural institution in the ancient world […]; recent criticism has gained the conviction that the classification in schools of other Socratics is above all the result of the work of schematization systematically made by the authors of successions of philosophers. However, in this case we must observe that the same work of "scholastic" systemization, accomplished by Hellenistic historiography, cannot have appeared on an arbitrary basis and without some connection to the historical reality of the facts. […] What has been said is also significant in clarifying the way in which one speaks of a Megarian "school", whose foundation is attributed from sources to Euclid. These – who were, undoubtedly, among the most devoted disciples of Socrates […] – had to build around themselves – as indeed did the other Socratics – a circle of followers, with the intent to continue, in possible ways, the work of the teacher. Therefore, this also had to be a school of life for life (L. Montoneri, 1984, 26-27. Our translation).

And so, "although we speak of the "Megarian school", one of the so-called minor Socratic schools, this classification appears hardly applicable, perhaps even out of place, given that this presumed school does not exist as a solid and unique institution nor do its members profess common and unanimously accepted doctrine" (D. Pesce & E. Spinelli, 2006, 7218. Our Translation).

The Megarian school, in the strongest sense of the term, did not exist and that is why here we referred to it as a 'school' (in scare quotes). But there certainly existed a circle of thinkers (including Plato himself) who gathered in Megara (probably around Euclid) after the death of Socrates (that Euclid certainly knew and spent time together with Plato, See G. Giannantoni,

1990, 36; W.C. Kneale & M. Kneale, 1962, 14) and that was, assuredly, still thriving in the days of Aristotle. The individual philosophers who were part of it were characterized as "being followers of the Eleatism" (G. Giannantoni, 1990, 44. Our translation) and the group, as a whole, was known by the "appellations of "eristic" and "dialectical"" (*ibid*, p.46), with the clarification that this should not lead to the error of thinking that who was labeled as such could for this reason only be ascribed as belonging to that group.

This suggests that the meaning that Plato and Aristotle attributed to the term dialecticós "does not signify belonging to a particular school, but rather the one who practices a certain philosophical or argumentative method" (*ibid*., p. 47). Likewise, the well-known polemics of Aristotle, laid out in his *Metaphysics*, should be understood in a similar way, since when we speak of the "Megarians" [Arist., *Metaph*. 3, 1046b 29] it is very likely that this should be understood as "a doctrinal and non-institutional denomination: [meaning] "those who refer to Megarian doctrines" and not "to those who belong to the Megarian school"" (G. Giannantoni, 1990, 49. Our translation). In effect, the Aristotelian formula "evidently had to allow the contemporaries of the Stagirians to easily identify the group of thinkers who he intended to refer to as representatives of a specific speculative point of view that he criticized" (L. Montoneri, 1984, 27. Our translation). This point of view is later identified with the appellation "Megarian doctrines" (Arist., *Metaph*. 3, 1047a 13), whose most noted scholar Aristotle identified, not as Euclid of Megara, but as Eubulis of Miletus, who harbored a strong hostility towards Aristotle, which was then transmitted to the Stoics (see W.C. Kneale & M. Kneale, 1962, 139).

This long digression allows us to highlight the important fact that there are in the history of philosophy (from its very beginnings) many ways to talk about "school," and that there are dif-

ferent ways to be a school (that in this case, in effect, "to be can be said in many ways"). A school can, for example, be identified:

- as a solid and unique institution, the members of which profess common and unanimously accepted doctrines and, therefore, as a stable and lasting teaching and scientific organization in which a group of people carries out a common process of preparation, teaching and learning of knowledge, recognizing authority, by experience, seniority or ability, of the founder (or group of founders);
- but also as a circle of scholars who meet with the intent to continue, in possible ways and with an educational ideal, the work of others, with the possibility of identifying some characteristic traits that allow, for each 'product', to be identified by its name brand, created and fine–tuned by a single entity;
- or, finally, even as a group of philosophers that can be denoted by a common appellation because they practice a certain philosophical or argumentative method, in the presence of an affective, amicable relationship or in any case, we would say today, with a common link between the components.

A "school" can be all these things put together or some or only one of them. A "school" must be more than a clan or random group of people. To exist, it must be recognizable by at least one of the characteristics mentioned here, in keeping with what our philosophical tradition tells us. It can be said that a "school" is, if you want, a vague concept or notion, but sufficiently precise to allow us, as does the history of philosophy, to recognize different instances (or models) of "school".

With this in mind, we can now give a positive answer to the question which began this volume: in our opinion, and for the reasons we have already stated, one can speak of a 'Canadian

school of argumentation' because there exists, at the very least, a group of Canadian scholars who practice a certain philosophical method; share common goals (to understand and teach argumentation); read and react to similar texts and ideas; carry out a common process of preparation, teaching and learning of knowledge; work within shared educational and scientific organizations; and are associated with common conferences and research centres.

The Canadian 'school' inevitably deals with works and ideas that constitute a large set of theories that, like the pieces of a mosaic, may not fit together perfectly: but, as figurative arts and music teach us, a possible dissonance does not diminish a fundamental harmony. The testimony that shows this is found in the essays that make up this volume, but also in those that, inevitably, have been left out. It is natural, in fact, that it was necessary to make choices to identify, hopefully in a way that is acceptable for most, the names of the 'Canadian' scholars who were invited to contribute to this collection, who, in turn, chose the material they would contribute.

One of the strengths of the selection is evident in the ways that the opinions we find expressed in the essays collected here demonstrate different perspectives on common themes, but in a way that reflects their dialogue with each other. These are, basically, opinions expressed by people who work or have worked in the same place (in Windsor, in Ontario, in Canada) and who, as we know, have in some cases become friends, to this the writer can personally testify. And it is in this very quality that we find, perhaps, the most important confirmation of the existence of a 'school'. Here there is an echo of Aristotle's words written in remembrance, in all probability, of the twenty years spent in the Academy of Plato (the first real school), which he attended until the age of 37:

> And whatever existence means for each class of men, whatever it is for whose sake they value life, in that they wish to occupy themselves with their friends; and so some drink together, others

> dice together, others join in athletic exercises and hunting, or in the study of philosophy, each class spending their days together in whatever they love most in life; for since they wish to live with their friends, they do and share in those things which give them the sense of living together (Arist., *Nic. Eth.*, IX, 12).

"Others join … in the study of philosophy" that characterizes the life of the Academy, translates in English the Greek term "*sumphilosophousin*", which carries a most auspicious meaning. Indeed, this is

> the first time the verb *sumphilosophein* appears in ancient Greek literature and appears to indicate the Aristotelian concept of "that in which each man finds his reason for being", of "that which men want to live for", that is, of happiness. The greatest happiness, therefore, for philosophers is not only "philosophizing" (*philosophein*), but doing it with (*sun*) friends, something that Aristotle experienced in the Academy, where they "passed the days" doing what they loved "above all others among the things that compose a life" (E. Berti, 2010, vii-viii. Our Translation).

And, *si parva licet componere magnis*, perhaps this is also true for the experiences that philosophers have made in the course of their lives in the places where they work, together with the people they work with, if they are lucky enough in the choice of their friends, and so it is true for Windsor and for the 'Canadians', whose 'school' we hope is, from now on, more easily recognizable.

This volume aims to make some contribution in this regard, without any presumption of finality, in the selection of the essays presented here we do not presume to have answered definitively the original quandary. But there is the conviction that, if nothing else, the way in which the problem was posed has a value in itself: as a philosophical question, born of a query resulting from a dialogue between people who were, such as happened to Saint Augustine and his friends in the *otium* of Cassiciacum, in a congenial place; so it was at the home of Christopher Tindale,

amongst friends discussing things they are passionate about (Christopher and Leo). Like any good philosophical experience, it will never really end, but we hope it will become a part of the debate on the subject of the 'Canadian perspective' on argumentation and therefore, on argumentation itself.

The proposal of Christopher Tindale, which closes this collection (but which is also the subject of discussion by some of the essays within it), is essentially the first essay of a hypothetical new collection. It allows expressly, from our point of view, the possibility of bringing logic back to argumentation and to rhetoric, at least with the Aristotelian intent (understood as *logos*): in this way it will finally be possible to completely emancipate logic from that typically static style of the formalist approach and, at the same time, free rhetoric from the negative interpretation that has affected it for a very long time. It is well to remember that this negative interpretation, we note in passing, had already begun at the time of Aristotle by those who adopted a logical concept that then became typical of the subsequent formalist developments and which is different and in many ways contrary precisely in relation to the Aristotelian one: we are talking about the developed concept, based on the philosophy of the Eleatics, the Megarians and, later, the Stoics (to whom, for example, we owe the idea – wrong but later in the centuries to become dominant – for rhetorical reasoning, the enthymeme, is a kind of 'defective' reasoning – Woods recalls here in his essay).

For our part, we believe that the reclaiming of the Aristotelian lesson, which we would like to call "classical" *tout court*, still waits to be fully implemented, but it is what will turn our discipline back to being the "filosofia prima" from which it cannot be ignored (it is, as it has been pointed out by F. D'Agostini, 2012, "ubiquitous") and it is necessary as a means itself of educating (as explained by Balin and Battersby). But, as we say, this is another story: that we will have to talk about another time, having already lit the spark here.

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Like any book this would not have been possible without the help and support of many people. Therefore, I would like to thank the former Dean of the Faculty of Law of Trent, Giuseppe Nesi, who in 2016 funded a research program between Trent and Windsor Universities. In this regard, I would like to express my sincere thanks to Leo Groarke of Trent University and to Christopher Tindale of The University of Windsor who, with generosity, availability and uncommon friendship, made living in Ontario an authentic philosophical experience. To them (and their families) my gratitude goes also for having welcomed and supported me and this project, and having helped me to complete it; from its birth, to the selection of the authors, even at times interceding with them, up to the publication of the volume in the *Windsor Studies in Argumentation.* My gratitude goes to those who have agreed to contribute to this collection, also for the kindness and warmth shown through their exchanges and letters.

Finally, I would like to thank the people I have come to know in these years of studying argumentation and who honor me with their friendship. People who enrich our community with their relationships of affection and sharing that we spoke about before. In particular I would like to thank, in addition to Leo Groarke and Christopher Tindale, Sara Greco, Gabriela Kišiček, Fabio Paglieri, Giovanni Tuzet and Jean Wagemans: they are not the only ones, but these are the ones I have been able to discuss the project of this book with, or some aspects of it, receiving support and valuable advice. A special thanks to Maurizio Manzin and Serena Tomasi: it is with and thanks to them, in fact, that there exists for me, in Trento, what for Plato and Aristotle was, in Athens, the Academy, a place where you can discuss with your friends things, as Heidegger would say, "which your life depends upon".

Obviously, what is written here and the choices made to compose this collection are to be considered my exclusive personal responsibility.

A number of these papers appear here for the first time, others have been published previously. Many thanks to those who have given us permission to reprint these articles. They are noted in the Acknowledgement sections of each chapter.

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CHAPTER 2.

PIONEERING INFORMAL LOGIC AND ARGUMENTATION STUDIES

ANTHONY J. BLAIR

Abstract: This paper traces, in a first-person account, my journey from an assistant professor teaching ethics and political philosophy, through (together with Ralph Johnson) teaching "applied logic", authoring *Logical Self-Defense*, organizing the first-ever symposium on informal logic, editing the proceedings, publishing and editing the *Informal Logic Newsletter* and later the journal *Informal Logic*, organizing later Windsor conferences, revising *Logical Self-Defense;* then meeting van Eemeren and Grootendorst, serving on the board of ISSA, and more – during the emergence of informal logic and argumentation theory as scholarly fields.

PREFACE

The following is an account of my participation in some of the signal developments in the infrastructure supporting the emergence of informal logic and argumentation theory in the last quarter of the 20th century.

1. BEGINNINGS

On September 1st 1967, two months after Canada's centennial celebrations, I began a 39-year appointment in the University of Windsor philosophy department in Windsor, Ontario, Canada. I was hired out of a doctoral program at the nearby University of Michigan, to teach principally philosophical ethics and political theory (which I did teach, among several other things, throughout).

Shortly before the start of the 1972-73 academic year, I was asked to help out with a new course, which my colleague Ralph Johnson had created the previous year that had proven so popular the enrolment had doubled—from 20 to 40, as I recollect—causing the opening of a second section (those were the days!). Johnson, who had been hired to teach modern formal logic among other things, called the course "Applied Logic". Its objective was to improve students' ability to analyze and evaluate the arguments about public affairs to be found in the media of the day, especially in newspapers and magazines. The textbook Johnson had selected for the course was Howard Kahane's *Logic and Contemporary Rhetoric, The Use of Reason in Everyday Life*, which had just been published in 1971. My exposure to logic had been a two-semester symbolic logic course as an undergraduate at McGill University over a decade earlier and a one-semester formal logic course as a graduate student at Michigan. I didn't have tenure at Windsor at the time, so I agreed, but I insisted that I needed Johnson to tutor me. We taught our two sections in sync, covering the same material each class, using the same assignments, tests and final exams in both sections. Most important, we discussed the material and its reception together before and after classes, and shared in the collection of examples to use in assignments, tests and exams. By the second year, while we continued to teach our two classes as two identical sections of a single course, I was at home with the material and we team-taught as equals.

2. THE ORIGINS OF *LOGICAL SELF-DEFENSE* (1973-1976)

The "Applied Logic" course continued to prove popular, although there was a heavy workload of written assignments (with a correspondingly heavy marking load), and the standards were rigorous. It was hard to get an A. In those days courses in most Canadian universities were eight months long, a full academic year. By the end of April, students and teachers in "Applied Logic" were exhausted. But the improvement in the students' analytic and critical skills over the year certainly seemed to be striking. Johnson and I were enthusiastic about the subject matter, and the students themselves recommended the course to their friends as challenging but worthwhile, so we ended up getting a growing enrollment population of serious students prepared to work.

Kahane's approach was to use the informal fallacies as analytic and critical tools. His chapters were peppered with examples of arguments, mainly about political and social issues of the day, which he analyzed and then assessed, modeling the kind of analysis and evaluation the students were expected to apply to the exercise examples at the end of each chapter. Spotting the logical blunders was not always easy, but it was satisfying, and left the critic feeling smugly superior.

Several features of Kahane's book were attractive. (1) According to Kahane, a person who is persuaded by a fallacious argument commits a fallacy no less than does a person who is guilty of making a fallacious argument. So the pressure is on the student both to recognize fallacies and to avoid arguing fallaciously. (2) Kahane made the fallacies student-friendly rather than esoteric by replacing intimidating Latin labels (with the exception of ad hominem) with descriptive English labels. (3) He introduced "new" fallacies that occurred in the arguments of the day, and dropped several from Aristotle's classic list that turned up rarely, if ever, in contemporary discourse. (4) Among the "new"

fallacies were problems with an argument's premises; not all fallacies were inferential. (5) The text is thick with examples of short arguments that people of the day made in print, which he used both in explaining each fallacy and in the chapter end exercises. (6) There was a chapter on extended arguments—those in which the author develops and defends several lines of reasoning in support of the conclusion. (7) Kahane included chapters on advertising tricks and on problems with the presentation of the news in the mass media of the day.

Johnson and I liked these features, and they seemed to contribute to the book's success in engaging students. However, before long we began to hand out revisions of portions of the text to our classes. For one thing, excellent though Kahane's examples were, they were almost entirely drawn from the American media and targeted at an audience of U.S. students. We often had to spend time providing backgrounds for examples from the textbook that were necessary if our students were to understand them, explaining such things as how the U.S. republican system of government differed from the Canadian parliamentary system. My undergraduate political science course in comparative governments paid off. We had to hunt for Canadian examples. We spent many an hour in the evening and on weekends pouring through the *Windsor Star*, the *Toronto Globe and Mail*, and *Maclean's* magazine hunting for a nice example of a straw man argument or a case of ambiguity or any of the other twenty or so fallacies that Kahane discussed.

For another thing, we began, usually on the basis of examples that didn't quite fit Kahane's description, to see the need for distinctions that Kahane overlooked or had chosen not to draw. For instance, we found examples of ambiguity some of which traded on a word's being vague—having different meanings that bleed into one another—and others that traded on an equivocation, where there is an actual switch between one clear meaning to another from one premise to the next or from the premises

to the conclusion. Or again, dealing with causal arguments we found a distinction Kahane did not emphasize needing to be made between arguments based on causal claims and arguments aimed at establishing causal claims. While we liked the category of what might be termed "premissary" fallacies, we didn't like the need to attribute bad motives to the fallacious arguers that Kahane seemed sometimes to suppose. We also wanted to make clearer and more explicit the fact that while certain patterns of argument could harbor fallacies, arguments exhibiting those patterns were not necessarily fallacious.

Where Kahane would offer a loose description of a fallacy, we found it helpful for our students to provide a set of necessary and sufficient conditions for each fallacy. This list also helped our students make their case that a particular fallacy had been committed by producing an argument for each condition being met. Kahane enjoined his readers to give their reasons for their fallacy charges, but he did not lay out a set of steps to be followed in order to do so adequately. We found that our students, once familiarized with a particular fallacy, could fairly easily recognize an instance of it, but they had a devil of a time constructing a case that would serve to establish, before a demanding, impartial judge, that the fallacy had been committed. Having the conditions of each fallacy in hand and in mind offered them a way to organize the steps in their case and to provide the detail needed. It also helped us as instructors to be able to pinpoint precisely where a student's case for a charge of fallacy was incomplete, problematic, or mistaken.

We did not appreciate at the time that our defining conditions for each fallacy were describing argument schemes, along with critical questions that would establish their fallacious use if answered affirmatively.

We liked the fact that Kahane went after sources of information, including the news media, and after advertising. But some then-recent books, such as Carl Wrighter's *I Can Sell You Any-*

thing (1972), and Edward Jay Epstein's *News From Nowhere* (1973), plus the inside information we received from Johnson's brother Bud, who worked in advertising, and from my then brother-in-law Don McNeil, who was the Canadian Broadcasting Corporation's chief TV news correspondent in Washington, led us to want to revise Kahane's stories about advertising as arguing and media news reports as sources of information as well as to apply the material to Canadian news media and advertising.

Finally, we were dissatisfied with Kahane's classification of the fallacies. He divided them into two groups: arguments that are fallacious even if valid, and those that are fallacious because invalid. Even so, his stipulative definition of validity was to our liking, for it did not rely on a distinction between deductive and inductive arguments, a distinction that is notoriously difficult to apply in practice: "A valid argument is an argument whose premises, if true, alone provide good, or sufficient, grounds for accepting its conclusion" (Kahane 1971, 3).

In the winter of 1976, we received in the mail, as did, it seems, every philosophy department in the U.S.A. and Canada, a form letter from Michael Scriven, a well known philosopher of science at Berkeley, advertising a new textbook he had written and was publishing himself, since his regular publisher, McGraw-Hill (New York), did not think there was a market for it. He said it was "for teaching reasoning skills of an elementary kind, using almost no formalism or technical vocabulary". It was designed to help students develop systematic analyses that "will handle the typical messy and often emotional arguments and prose of politics, propaganda, ethics and practical economics. The basic assumption is that doing this is difficult, important and teachable—and … better taught by a direct approach than via formal logic." This message coincided with our own motivation, and so we ordered copies of the book, called *Reasoning*.

Although Scriven argued against teaching reasoning by teaching fallacies, whereas we aimed in part at doing exactly that, we

were influenced by other features of Scriven's book. For instance, we agreed with the direct approach vs. via teaching formal logic, and we shared his view that diagrams can help portray the logical structure of arguments.

After three years of teaching the course together, Johnson and I had, in our class handouts, what amounted to most of the manuscript of a textbook of our own to replace Kahane. However, it took the McGraw-Hill Ryerson textbook salesman, Herb Hilderly, to point this out to us and to urge us to submit a manuscript to his company. (M-HR was the Canadian branch of the American publisher, McGraw-Hill.) We called it *Logical Self-Defense*; our students called it LSD. Several features of Kahane's text found their way into LSD.

3. DIFFICULTIES IN PUBLISHING *LOGICAL SELF-DEFENSE* (1976)

We sent off a manuscript (ms.) of over 500 pages to Toronto. In due course we received a letter from McGaw-Hill Ryerson regretting that the two referees who had reviewed the manuscript both recommended against its publication. The two referees' letters were enclosed. One's principal complaint was that we had not covered enough fallacies. We later learned this critic's name, and he was the author of a textbook that distinguished 92 fallacies! The other attacked the quality of the material. His letter, we noticed, was the original copy, with the author's name only covered by White-Out. I held the letter up to a light, and there, showing through the White-Out, was the author's name, clear as can be.

I was immediately suspicious of the appropriateness of this reviewer, for I knew him. He had been my discussion-group leader in my first philosophy course when I was a junior undergraduate at McGill, and I also knew him from faculty seminars I attended as a senior. He had then shown no great interest in logic, and had a traditional education at Oxford. It seemed

to us that he was from the start antagonistic to the non-traditional introduction-to-logic course that *Logical Self-Defense* represented. Moreover, it seemed evident that he had dismissed the book after reading the first few chapters, and had not read it through, for despite his contemptuously-expressed criticisms of the early chapters, he had nothing at all to say about the bulk of the book.

I was furious. After a conversation with Johnson in which we discussed lines of response, I sat down and typed up a long, heated letter to McGraw-Hill Ryerson, arguing that the reviewers represented a traditional approach whereas the ms. could only get a fair, and from M-HR's point of view, a marketing-relevant appraisal from reviewers who could entertain the possibility of such a departure from old-fashioned approaches. Without mentioning that I knew his identity, I took up and argued aggressively against the strongly critical reviewer's objections, point-by-point. I accused him of laziness and of failing to read the entire ms. and invited M-HR to show our response to him. I also included point-by–point rejoinders to the criticisms of the fallacy-favoring referee's report. Johnson read the letter and suggested toning down some of the outrage, which I did, and it went out over both our signatures.

To our surprise, M-HR agreed to send the ms. out to new referees, ones who might be more open to our approach. We later learned that it went to Michael Gilbert at York, and Terence Penelhum at Calgary. Penelhum didn't have time to do the review and suggested his former student, Trudy Govier, then at Trent, who took it on. Both Gilbert and Govier liked the concept and the contents, both recommended publication, and both said the ms. was far too long. One suggested cutting it in half; the other noted that we should leave the instructor something to say in class! M-HR agreed to consider publishing a much-shorter ms. We set to work, cutting the fat from our prose and slashing inessential material. I think we finally submitted a c. 300-page

(double-spaced) ms. and M-HR offered us a contract. The first edition was 236 pages long.

4. *LOGICAL SELF-DEFENSE* (1977)

Logical Self-Defense went through three Canadian editions (1977, 1983, 1993). Seeking riches in the American market, in 1993 we asked McGraw-Hill of New York if it would publish the third Canadian edition but with the examples and their discussion replaced with American examples. When we submitted the manuscript, McGraw-Hill insisted on sending it out for review before agreeing to publish it. The reviewers made several good suggestions, so that in revising the manuscript to respond to them, we produced an improvement over the third Canadian edition. The U.S. edition came out in 1994, and to my mind it is the definitive version of *Logical Self-Defense*. It was our impression that McGraw-Hill failed to market the book aggressively, but for whatever reason it did not sell well in the United States and in due course McGraw-Hill remaindered the book and returned the copyright to us. In 2006, through a friendship I had with Robert Trapp, an American debate coach and communication studies scholar who did some work for IDEA (the International Debate Education Association), IDEA Press (New York) published a reprint of the 1994 U.S. edition in 2006, which is still in print.

This is not the place to describe the book in detail or to track the changes made from edition to edition. I will, instead, list what seem to me to be some of its important features in general.

a. The introduction of "Acceptability", "Relevance" and "Sufficiency" as criteria of logically good arguments and violations of them, respectively, serving as a way of classifying fallacies. These criteria were picked up and used, often without attribution, by several other textbook writers. Some have even taken them to be the earmarks of infor-

mal logic. However, (a) Hansen has suggested they are not original, being already distinguished by Chaim Perelman; (b) Siegel has pointed out that sufficiency presupposes relevance, and so inferred that relevance cannot be a separate criterion, and (c) Tindale has shown that there are problems with our handling of all three criteria within the text.

b. Boxed fallacy conditions. These grew more detailed from edition to edition. One condition or set of conditions identified the type of argument, and another condition or set of conditions identified the circumstances in which an occurrence of such a type of argument would be fallacious. We thus held that it is not a particular type of argument that is fallacious, but rather particular uses of it. We thereby were adopting a sort of argument scheme theory, and Walton's view that it is not particular argument schemes that are fallacious, but instead particular misuses of them. Our conditions under which an argument of a given type would be fallacious were an independent version of Hasting's "critical questions". The boxed conditions also served as a checklist for our students, whom we required to make a case for their charge whenever they alleged that a fallacy had been committed. We had discovered that a skill in recognizing the occurrence of fallacies does not correlate with an ability to argue cogently in support of that allegation.

c. Argument analysis. The importance of an analysis of an argument under assessment that lays bare its inferential structure, and the need for a careful, context-sensitive, functional and charitable reading of texts in order to produce a fair and accurate structural analysis.

d. Argument mapping. The introduction of tree diagrams and a numbering convention, both of which convey the illative relations of the argument(s) in a text, including

meta- and meta-/meta- arguments. Some students read maps better, others read text better.

e. Complex extended arguments. The expansion of the analytic apparatus to apply to extended arguments: arguments that include many lines of support and much meta-argumentation. Thus we applied what was learned using snippets of arguments to longer, more fully developed arguments.

f. Distinction between persuasion and argument in advertising. A chapter on the "logic" of advertising that explains how the laws governing advertising are rules that permit counter-intuitive invitations to draw inferences. We also argued that advertising often, or even usually, does not use arguments to persuade, although it often uses arguments to mask more effective motivational devices. Too often communication theorists continue to treat advertising as a fertile source of examples of attempts at persuasion by arguing, to our mind missing the masking function of arguments in advertising.

g. Influence of material conditions on information via the news media. We offered advice for watching TV news and reading newspaper news reports. We assumed that these were major sources of information, regarded as reliable, that funded our students' belief formation. Our approach was not so much to warn students to watch for bias or provincialism as to know how news reports originate, get assigned and written, and must deal with unavoidable distorting properties of the respective media.

h. Use of arguments to support judgments as an aid to learning. The requirement to support a critical analysis of an argument or item of information using arguments was an important learning tool.

i. Fallacies as not-always-fatal flaws. Our emphasis on the fact that fallacies as we conceived them are often corrigible mistakes, so that receiving a charge of fallacy does not necessarily put one in fear of having to abandon a line of argument. Arguments can often be repaired in the wake of successful fallacy charges.

5. THE WINDSOR SYMPOSIUM ON INFORMAL LOGIC

Johnson and I completed *Logical Self-Defense* in 1976, probably in the early fall, for it appeared in 1977. We held the "Symposium on Informal Logic" on 26-28 June 1978, a year and a half later. So it must have been at some point in the late fall of 1976 that we decided to hold a conference on informal logic. What caused us to do so? My memory of the specifics is feeble, so I had best quote from the preface to the proceedings, which was written in 1979, a good deal nearer the event:

> The basic premise behind the calling of the Symposium was a simple one: the time was ripe. Interest in informal logic was growing rapidly. Courses in informal logic or critical reasoning were springing up at an astonishing rate across North America, and work on informal logic in the journals was increasing markedly. At the same time there was little if any contact between philosophers working and teaching in the field. In fact, what was remarkable about the proliferation of informal logic courses and writing was that it appeared to exhibit a sort of unconnected spontaneous generation. Another feature of these developments was a paucity of broadly-focused theory. (The theoretical work in the journals was largely directed in a scattered way at various informal fallacies.) Hence it appeared that the Symposium would serve to highlight the present status of informal logic and provide nurture for its further development. (Blair and Johnson 1980, vii).

We sent flyers advertising the conference to philosophy departments in universities in Canada and in the surrounding states in the U.S. Midwest. The speakers on the program were all invited, for we had no way to issue a call for papers. In fact there was

no dedicated source of literature on informal logic. Johnson and I presumed to give the introductory paper, which was a review and analysis of what literature there was. We invited: the two Canadian scholars who had been co-authoring a series of papers analyzing informal fallacies, John Woods and Douglas Walton; the two prominent American textbook authors, Howard Kahane and Michael Scriven; a Canada-based author of a book on fallacies, Alex Michalos, and from neighbouring University of Western Ontario, philosopher Robert Binkley. Finally, we invited the Wittgenstinian professor from York University, Peter Minkus, on the assumption of a Wittgensteinian influence on the emergence of informal logic. There were eight presentations over two and a half days. A ninth paper, by Thomas Tomko and Robert Ennis (who had attended the conference) was added to the Proceedings at Michael Scriven's suggestion.

In addition to more than a dozen colleagues and students from the University of Windsor, some 40-50 university faculty members mainly from surrounding provinces and states registered for the conference. In addition to the invited speakers, among the attendees who previously or later (or both) published in the field were: John Barker, Robert Ennis, David Gallup, Trudy Govier, Nicholas Griffin, David Hitchcock, John McPeck, Stephen Norris, Deborah Orr, Robert Pinto, William Rapaport, Thomas Tomko, and Sheldon Wein.

Part of the folklore of that first informal logic conference involved Professor Minkus, a stereotypically idiosyncratic and impractical professor. A hypochondriac who suffered from various real and exaggerated or imagined ailments, he arrived bearing a large bag of ointments and a shovel handle with which to apply them to his back. The student assistant who took him to his room in a university residence showed him how he could lock the door from the inside by pushing in the button in the handle, and how to open the window by sliding half the window from one side across the other. Left alone, Minkus checked the door.

Finding the button in the doorknob pressed in, he inferred that the door was locked, and then seeing nowhere to insert his door key to unlock it, he concluded that he was locked in his room. He rushed to the window to open it and call for help, but he happened to rush to the side of the window that was fixed and did not slide. In full panic, he grabbed his shovel handle, smashed the window and yelled to a passersby below that he was trapped in his room. Someone called the fire department and Professor Minkus was extricated. Our Dean of Arts, Eugene Malley, kindly picked up the bill for repairs to the window.

6. THE *INFORMAL LOGIC NEWSLETTER*

When the conference ended, several voices called for a meeting to decide what would come next. There was a consensus that the Windsor symposium should be followed up so that the enthusiasm the meeting had generated would not be allowed to dissipate. The participants gathered for a planning session. The sentiment was that we should keep in touch and there was mention of some sort of newsletter. It occurred to me that we were well-positioned to put out a newsletter and Johnson agreed, so we offered to do so. Waving a note in the air, Scriven declared, "Here's five dollars for my subscription." Others offered funds too. In the event we were able to pay for postage and other costs for $4 a year to individuals, $8 to libraries and other institutions, for four issues (that is $15 and $30 in 2017 dollars).

We were able to put together a 10-page first issue of the *Informal Logic Newsletter* the following month, July 1978. We typed it ourselves or, with the support of the Head, got help with the typing from the Windsor philosophy department secretaries. I took charge of the design, and Johnson was content to accept my aesthetic judgment. We pasted up the master copy ourselves, and had copies run off by the University print shop.

The *Newsletter* grew steadily in size. After the second issue, we reduced the print font size from 12-point to 10-point and lay

out the text in two columns (thus increasing our capacity from c. 500 words/page to c. 1,300 words/page). The first two issues were 10 and 14 sides long (5 and 7 sheets); the third jumped to 16 page sides with the two-column, 10-point font format—a roughly three-fold increase in content. By its fifth and final year, the longest issue of the *Newsletter* ran to 36 pages, a capacity of over 45,000 words—90 times the amount in the first issue.

The contents of the Newsletter started out being focused on teaching and aids to instructors. They included textbook lists, reports of textbook contents, some critical reviews of textbooks, course descriptions, puzzles for analysis, scores of examples of passages containing fallacies gleaned from newspapers, magazines and books, announcements and reports of conferences, and sample test questions. However a small note by Trudy Govier in Volume One mentioning Carl Wellman's contention in Challenge and Response that there can be arguments that are neither deductive nor inductive, provoked a short article in response by Perry Weddle. Weddle's c. 4,500-word "Inductive, Deductive," and John Woods's "What Type of Argument is Ad Verecundiam?", published in Vol. 2, No. 1, were the first scholarly articles to appear in the *Newsletter*.

Over time the percentage of space devoted to articles increased, from 30% in Vol. 2, No. 1 (1978), to 60% (75% if you count a couple of critical reviews) in Vol. 5, No. 2 (1983).

7. INFORMAL LOGIC, THE FIRST INTERNATIONAL SYMPOSIUM (1980)

My recollection of how we came to decide to publish the proceedings of the Windsor symposium is hazy. I infer that it must have been with the encouragement of Michael Scriven, for when we were unable to find a willing publisher, he undertook to publish it using Edgepress, the company he had formed to publish his textbook, *Reasoning*, when McGraw-Hill had turned it down.

Using his own money, Scriven printed 1,000 copies. It has long since been out of print.

None of the papers in the proceedings stands out today, however Johnson and I appended to our introductory chapter, "The recent development of informal logic," a list of 13 "problems and issues in informal logic" that seems to have had an influence on the direction of subsequent research. Here is the list without the glosses that were attached to the items: (1) The theory of logical criticism, (2) The theory of argument, (3) The theory of fallacy, (4) The fallacy approach vs. the critical thinking approach [sc. in teaching], (5) The viability of the inductive/deductive dichotomy, (6) The ethics of argumentation and logical criticism [the principle of charity], (7) The problem of assumptions and missing premises, (8) The problem of context, (9) Methods of extracting arguments from context, (10) Methods of displaying arguments, (11) The problem of pedagogy, (12) The nature, division and scope of informal logic, (13) The relationship of informal logic to other inquiries.

8. THE SECOND EDITION OF *LOGICAL SELF-DEFENSE* (1983)

Meanwhile, by 1982 Johnson and I were revising *Logical Self-Defense* in the light of our experience in using it as the text for our "Applied Logic" course for five years, and taking into account criticisms and suggestions by our students and by instructors and students in other universities in which the text had been used. Besides updating the examples, the principal changes in the second edition of LSD were tightening the boxed conditions for commission of each fallacy, and the introduction of a new chapter on how to construct arguments. This chapter reflected growth in our understanding of the nature of argument, based on our reading of the developing literature and our own discussions. It introduced the idea that (advocacy) argumentation is dialectical, in that it presupposes addressing a dissenting voice

and entertaining and responding to critical arguments. It made a distinction between using arguments to inquire and using them to advocate, and borrowed heavily from Jack Meiland's *College Thinking* in proposing a method for using arguments to decide what position on a controversial issue seems justified and then constructing an argued case for that position using the findings of the inquiry. Thus we were understanding argument as dialectical well in advance of our exposure to van Eemeren and Grootendorst's pragma-dialectical theory of argumentation, published in 1984, which we did not read until 1985.

9. THE SECOND INTERNATIONAL SYMPOSIUM ON INFORMAL LOGIC (1983)

By 1981-82 we were hearing murmurings from colleagues that it was time to hold another conference and in the May 1982 Informal Logic Newsletter we announced the Second International Symposium on Informal Logic (SISIL) for 22 June 1983. There were 84 registrants. Among those who were not at the first conference and who were either prominent philosophers or later published in the field (or both), were Stephen and Evelyn Barker, Seale Doss, Maurice Finocchiaro, Robert Fogelin, James Freeman, James Gough, Jaakko and Merrill Hintikka, John Hoaglund, Baylor Johnson, Fred Johnson, Charles Kielkopf, Jack Meiland, John Nolt, Richard Paul, Thomas Schwartz, Christopher Tindale, Perry Weddle, Mark Weinstein, Joseph Wenzel, Arnold Wilson and George Yoos. Repeat customers included Robert Ennis, Trudy Govier, David Hitchcock, John McPeck, Stephen Norris, Robert Pinto and Michael Scriven.

The proceedings of SISlL were not published, but many of the papers present at the conference were published as articles in *Informal Logic* (see below).

10. AILACT (1983)

SISIL saw two significant outcomes. One was the creation of the Association for Informal Logic and Critical Thinking (AILACT), with the purpose of promoting these fields and organizing sessions at the American Philosophical Association (APA) and the Canadian Philosophical Association (CPA). AILACT continues to this day, regularly organizing sessions at the Eastern, Central and Pacific annual APA conferences. The CPA initiative did not catch on. Informal logic and critical thinking papers were included in CPA programs and meetings of the Ontario Philosophical Association, but attracted negligible new audiences.

11. *INFORMAL LOGIC* (THE JOURNAL, 1984)

The other outcome of SISIL was the encouragement due to the attendees' support for Blair and Johnson's intention to transform the *Informal Logic Newsletter* into a blind-peer-reviewed academic journal, to appear three times a year. The last issue of ILN, Vol. V, No. 2, came out in July 1983; the first issue of the journal, *Informal Logic* (numbered Vol. 6, No. 1),[1] published and edited by Blair and Johnson, came out in January 1984. The founding editorial board included, Robert Binkley (Western Ontario), Robert Ennis (Illinois), Trudy Govier (independent scholar), Merrill Hintikka (Florida State), David Hitchcock (McMaster), Howard Kahane (Maryland), Richard Paul (Sonoma State), Robert Pinto (Windsor), Nicholas Rescher (Pittsburg), Michael Scriven (Western Australia), Dougas Walton (Winnipeg), John Woods (Victoria) and George Yoos (St. Cloud State). Chaïm Perelman was invited but declined, saying that the journal was too pedagogical and not sufficiently theoretical for his participation.

1. The conceit was that the five volumes of the *Newsletter* should be included in the numbering system of the journal. This has led to some confusion over the years. I now think we would have been better advised to consider the newsletter and the journal separate enterprises.

In 2000, Blair & Johnson invited their colleague in the Windsor philosophy department, Hans V. Hansen, and Christopher W. Tindale, to join as co-editors. In 2017, *Informal Logic* is in volume 37, available only on-line and open-access, and with Johnson's and Hansen's retirements as co-editors in 2016, is edited by Blair and Tindale. *Informal Logic* is unusual in that it is published by individuals—Blair, Johnson, Hansen and Tindale.

12. MEETING VAN EEMEREN AND GROOTENDORST AND THE INTRODUCTION TO PRAGMA-DIALECTICS (1984/85)

In December 1984, I took advantage of the Eastern Division of the American Philosophical Association meetings in New York City to take my family there for a few days during the Christmas Holidays while I attended the AILACT sessions at the APA. Also attending from Canada, among others, was David Hitchcock of McMaster University in Hamilton, Ontario, who was a member of the AILACT executive. During the conference David and I were approached by two tall strangers with distinctive Dutch accents (and flawless English), who introduced themselves as Frans van Eemeren and Rob Grootendorst, and asked if they could make a presentation during the AILACT session. David pointed out that the agenda had been arranged in advance and was full. Van Eemeren and Grootendorst asked if they might meet with the two of us after the session and we agreed. We retired to a nearby pub and began a conversation that lasted, over several rounds of draft beer, well into the night, the gist of which was to exchange information. We told them about informal logic and they told us about their new theory, which they called "Pragma-Dialectics" and the newly published monograph in which they presented it, *Speech Acts in Argumentative Discussions* (1984) (copies of which they either gave us then or sent us soon afterwards), and the program they had set up at the University of Amsterdam. It was the beginning of life-long friendships.

13. THE FORMATION OF ISSA AND THE FIRST AMSTERDAM CONFERENCE (1985/86)

Soon after our meeting in New York, van Eemeren and Grootendorst asked me if I would serve on the board of a new society they were forming, which they had christened the International Society for the Study of Argumentation (ISSA), and which was going to sponsor an international argumentation conference in Amsterdam the following spring, in June 1986. My role would be to do my best to publicize the conference among philosophers in Canada and the United States and encourage their participation, and to help with the vetting of abstracts and the editing of the planned proceedings. I learned that they had asked Charles Arthur Willard of the University of Louisville to play the same role among those focusing on argumentation in the speech communication scholarly community in the United States. Thus the four of us became the "Board" of ISSA. Later, when they decided to hold an ISSA conference every four years, van Eemeeren and Grootendorst instituted an annual prize for lifetime achievement in argumentation studies, three of the four winners to be keynote speakers at the next conference, they consulted Willard and me about who should receive an ISSA Prize. I served on the ISSA "Board" through six ISSA conferences, until my retirement from the University of Windsor payroll in 2006 (due to a then-extant government policy of compulsory retirement at age 65).

This invitation had an impact on my scholarly career and on my life as a whole. It exposed me to the Amsterdam theory, to the world-wide argumentation scholarship that was exhibited at ISSA conferences, and to scores of acquaintanceships from Europe and North America, many of which turned into friendships. And because I was associated with informal logic, my profile at ISSA helped to publicize our journal and our conferences in Canada. Also it resulted in invitations to be a visiting scholar in Amsterdam for two and three month periods, deepening my

Dutch friendships and my fondness for Amsterdam, Leiden, Groningen and The Netherlands in general.

Following our retirements as professors, and our stepping down from the ISSA board, the new board bestowed ISSA prizes on van Eemeren (2011), me (2012) and Willard (2013). (Grootendorst had died from cancer in 2000.)

14. *ARGUMENTATION* (THE JOURNAL, 1987)

At the first ISSA conference in 1986 plans were already afoot to launch a new journal, to be called *Argumentation* and published by Reidel (which became Kluwer in 1988, and Springer in 2005). Its managing structure reflected the need at the time to signal wider participation than just The Netherlands. The Editor-in-chief was Swiss (Jean-Blaise Grize, Neuchâtel); the editors Dutch (Frans H. van Eemeren) and Belgian (Michel Meyer, Bruxelles); the managing editors Dutch (Rob Grootendorst) and French (Christian Plantin, Lyons); the editorial board was French (Jean-Claude Anscombre, Paris), Swiss (Marie Jeanne Borel, Lausanne) and Belgian (Marc Dominicy, Bruxelles). I was invited to join what was called the advisory board, along with fellow Canadians John Woods and Douglas Walton; Americans Sally Jackson (Oklahoma), Perry Weddle (UC Sacramento), Joseph Wenzel (Illinois), and Charles Willard;. (Louisville) and, among others, such luminaries as Umberto Eco (Bologna), Jürgen Habermas (Frankfurt) and Olivier Reboul (Strasburg). Within five years *Argumentation* had become established. When Meyer resigned, Kluwer supported its continuation under van Eemeren's leadership, as Springer does today. I was well acquainted with the Dutch and the North Americans. Of the others I met Michel Meyer, Marc Dominicy, Jean-Claude Anscombre and Marie Jeanne Borel. I later got to know and hit it off with Christian Plantin, whose work I particularly admired.

Johnson and I were invited to submit an article for the first issue of *Argumentation*. As was our custom, one of us would write

the first draft of a joint article or chapter, then the other would write in constructive changes, the initial drafter would then make further changes, creating a third draft, and so on, back and forth, until we were both satisfied with the latest draft. I wrote the initial draft of "Argumentation as dialectical" and Johnson's changes were minimal. It became one of our most-cited papers. In it we laid out how our understanding of the dialectical character of argumentation provides a basis for identifying the arguments in written texts, and for evaluating the adequacy of premises and of the premise-conclusion link in arguments. It held that arguments are motivated by doubt or question, and aim to serve an epistemic function: to provide reasonable grounds for beliefs.

15. SCHOLARLY ACTIVITY (1980'S)

By the late 1980s, informal logic was becoming entrenched as field of scholarship. *Informal Logic* and *Argumentation* were able to fill their pages from a steady and growing stream of respectable articles. Conferences were being organized elsewhere than Windsor and Amsterdam—I recall one at George Mason University in Washington, D.C.; several were put on by John Hoagland at Christopher Newport College (now University) in Newport News, VA, beginning in 1985; Alec Fisher organized one at the University of East Anglia in Norwich, England in 1988; and there were others.

16. THE ALTA CONFERENCES

Joseph Wenzel, a scholar of argumentation and rhetoric in the field of Speech Communication at the University of Illinois, had come to SISIL in 1983. Wenzel, like Willard, later, made me aware of a large community of scholarship in argumentation and debate located in speech communication departments in American universities. It had its own journal, the *Journal of the American*

Forensic Association (JAFA), and in conjunction with the Speech Communication Association in the U.S., it held a biennial summer conference at the winter skiing resort of Alta, Utah, near Salt Lake City. At Wenzel's urging, I attended the 1985 Alta conference and so became acquainted with a parallel universe (to informal logic) of argument theory. Like informal logic, but a little earlier, members of this community were moving away from classical logic—in their case, Aristotelian class logic—and they had early on discovered both Toulmin and Perelman and Olbrechts-Tyteca, who turned them away from formal logic in general as an adequate theory of argument and argumentation. I became aware of a large body of work by Wenzel (a senior figure), Wayne Brockriede, Douglas Ehninger, Daniel O'Keefe, Barbara O'Keefe, Sally Jackson, Scott Jacobs, Charles Willard, Thomas Goodnight, David Zarefsky, Michael Leff, Dale Hample, Robert Trapp, Ray McKerrow, Carole Blair, Bill Balthrop, Bill Benoit, Pamela Benoit, Karen Tracy, Robert Craig, Jerry Hauser and many others. And I got to meet most of these people, to count most of them as congenial acquaintances, and to consider several of them as friends.

17. LOOKING BACK

The account so far has been a chronology of one person's passage along a scholarly pathway that many others travelled, if not along the identical route, then at least across similar territory and perhaps in a somewhat different order. Is there a story here? As Hansen (2017), following White (1980), has written, "A chronology puts events in temporal order. A narrative builds on a chronology by selecting events from the chronology and giving them an interpretation, a meaning" (p. 7). Is there anything that can turn this chronology into a narrative? Is there a story line in these travels? I think perhaps there is one.

I suggest that this chronology reports one view from inside what, from the outside, can be described as the story of the development of a field

of international scholarship. In the mid-1970s both Scriven in the U.S.A. and Johnson and Blair in Canada had trouble finding textbook reviewers among their colleagues who would recommend informal logic manuscripts to publishers. A decade later dozens of new informal logic textbooks were competing for adoption. The first Windsor Symposium gathered (mostly) philosophers in 1978; the first SCA/AFA biannual Summer Conference at Alta, Utah gathered speech, rhetoric and communication scholars in 1979. A decade later the world of argumentation scholarship had been transformed. In 1988 the *Journal of the American Forensic Association*, in one reflection of the new state of affairs, changed its name to *Argumentation and Advocacy*. In the prominent speech communication scholar Charles Arthur Willard's 1983 monograph, *Argumentation and the Social Grounds of Knowledge*, there is no reference to informal logic or pragma-dialectics; but in Willard's 1989 monograph, *A Theory of Argumentation*, Blair and Johnson and informal logic, and van Eemeren and Grootendorst and pragma-dalectics are all to be found in the index. By the time of the Third International Symposium on Informal Logic, at Windsor, and the sixth Speech Communication Association/American Forensic Association Summer Conference at Alta, Utah, both held in 1989, and the second ISSA conference in Amsterdam in 1990, an international community of scholarship had been formed. People like me attended all three conferences.

I end this chronology at the point that we are able to understand it as one person's perspective—one participant-observer's perspective—on the birth of a field of scholarship, argumentation studies. In looking back, we can see collections of overlapping subject matters and the competing or coexisting theories developed to try to make sense of or even to understand those subject matters. There is no field without ideas and the ideas were proliferating. It is equally true, however, that without journals and publishers to provide venues to publicize and communicate those theories to a wide and varied audience, who absorb

and then respond, led to embrace, or reject, or modify what is thus communicated, and without conferences to bring people literally together, to listen to one another and converse—without the infrastructure—it would be hard for a field to develop. There are no ideas without channels of communication. There was a happy mix of simultaneous and interacting intellectual and infrastructural developments.

Is there any basis in any of this for what might be dubbed "the Canadian hypothesis"? Is there some role that is distinctively Canadian or, citizenship aside, a result of factors from Canada that played a role in the emergence of this field? Johnson and I did get support from our university as well as from a small conference fund from the federal government administered by a national research-funding council, but I assume that other countries had similar funding available. Given the entrepreneurial promotion of the pragma-dialectical theory by the Dutch and the readiness for change in the American speech communication community, it seems likely that argumentation would have developed as a field without participation of Canadian pioneers such as Woods and Walton, Govier, Hitchcock, Gilbert, and Johnson[2] *and Blair. Canadians got on board partly because of the Windsor conferences, and because the Informal Logic journal cornered the philosophy side of the market as the journal of record for philosophically-oriented theorizing early on. Perhaps I am too close to see it, but I must confess to an inability to recognize anything distinctively Canadian about our contributions*.

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2. Johnson is an American citizen, as is Pinto, but both spent their working lives at the University of Windsor in Canada.

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CHAPTER 3.

FORMAL MODELS

JOHN WOODS

Abstract: The most highly developed account of formal models in philosophy can be found in what has come to be called *formal semantics.* In its pure form, a formal semantics is the model theory of an abstract and purely formal logistic system. The formal language L of any such system is an artificial one, carrying none of the meanings to be found in natural language. In its less pure and philosophically more adaptable form, a formal semantics is a theory of truth for a natural language modelled on how the pure theory formally represents truth in L. Once truth is defined for a formal language, it is easy to define logical truth and logical implication modelled on the pure theory's provisions for their formal representation in L. As an expository ease I'll call these adaptations "applied formal semantics."

A nearly unanimous theme that runs through Canadian approaches to argument is that formal logic is of little value, if any, in representing how best to get at the logical structure of argument in everyday life, not only about commonplace things but about anything at all that human beings argue about, including the Continuum Hypothesis or black holes. There are in the Canadian literature various instances in which "social license" of formality is contemplated and sometimes granted. Most notable perhaps is the Canadian fondness for argument-schemata. But nowhere in this literature is there any social-license consideration of consigning the

burdens of natural language argumentation to the representational devices of either pure or applied formal semantics. Not even in those cases in which systems of logic are adapted for use in fallacy theory, was any ever chosen for its model-theoretic provisions.

That alone makes a chapter on formal models in a book about Canadian argumentation theory stand out like a sore thumb, raising the question of whether it belongs there. My answer is that the present paper is no sore thumb, and that it has a perfectly proper place in a book like this. In the pages to follow, I'll try to show that even an applied formal semantics of the mother tongues in which humans advance their arguments is saturated with problems which haven't yet been laid to rest. I will suggest that, in its sweeping indifference to formal semantics, the Canadian theorists of argument have shown an intuitive reluctance which reflects great credit on them.

"The most reliable way of carrying out a proof, obviously, is to follow pure logic, a way that, disregarding the particular characteristics of objects, depends solely on those laws upon which all knowledge rests. Accordingly, we divide all truths that require justification into two kinds, those for which the proof can be carried out purely by means of logic and those for which it must be supported by the facts of experience. But that a proposition is of the first kind is surely compatible with the fact that it could nevertheless not have come to consciousness in a human mind without any activity of the senses." Frege, 1879[1]

1. THE FORMALIST PRESENCE IN INFORMAL LOGIC

To a dominant extent, the Canadian influence on theories of argument flows from their contributions to informal logic in the aftermath of Charles Hamblin's call to arms in 1970 for the restoration of the fallacies project to the research programmes of logical theory. A good early overview of informal logic's self-directed remit is provided by Ralph Johnson and Tony Blair in "Informal logic: The past five years, 1978-1983" in the *American Philosophical Quarterly*.[2] It was clear even that early on, that infor-

1. Gottlob Frege, *Begriffsschrift, a Formula Language, Modelled upon that of Arithmetic, for Pure Thought*, in van Heijenoort 1967 at pages 5-82.

2. Vol. 22 (1985), 181-196. See also *Informal Logic*, 7 (1985), 69-82, Douglas Walton, *Informal Fallacies*, Amsterdam: John Benjamins, 1987. Earlier was John Woods,

mal logic had been spurred to more than just one revival. In addition to fallacies, dialogue logic and dialectical logic received an even more productive boost, made so by the fact that there were bustling developments already in full swing in the more formal and mathematical treatments of these matters. Similar developments were taking root in logic programming and other computational approaches to reasoning and arguing. Adaptations of the modal logics of knowledge, time and action were also being made. Informal logicians who took the path of dialogue and dialectic had more fellow-travellers to talk to than those who took the fallacies path. The dialogue and dialectic path-takers had large and rapidly developing current literatures to react to and learn from.[3] The fallacy path-takers had no current literature to immerse themselves in, and were driven to the desperate expedient of consulting the leading undergraduate textbooks

"What is informal logic?" in Ralph H. Johnson and J. Anthony Blair, editors, pages 57-68, Point Reyes, CA: Edgepress, 1980, and later his "The necessity of formalism", in John Woods, *The Death of Argument: Fallacies in Agent-Based Reasoning*, pages 25-42, Dordrecht: Kluwer, 2004, and "The informal core of formal logic", pages 43-61, *The Death of Argument*. I add now a stylistic remark: Since I myself am part of the Canadian story, I shall adopt the following conventions. When I refer to me as a participator in this literature I'll adopt the third person perspective. When I refer to myself as the person writing this essay, I'll adopt the first person perspective.

3. See, for example, E. M. Barth and Erik C. W. Krabbe, *From Axiom to Dialogue: A Philosophical Study of Logics and Argumentation*, Berlin and New York: de Gruyter, 1982. In the first year of its publication, *Argumentation* published Jaakko Hintikka's "The fallacy of fallacies", 1 (1987), 211-238, in which fallacies were worked up within an interrogative logic of game-theoretic cast. In a number of places, the influence of Hintikka's foundational contributions to epistemic logic was also discernible. In Woods and Walton's *Fallacies: Selected Papers* 1972-1982, there are nineteen chapters, and no fewer than nine of them involve dialectical factors. The influence, direct or otherwise, of epistemic logic is discernible in six of them. Ralph Johnson is a bit more circumspect in his engagement of dialogical and dialectical considerations. See his *Manifest Rationality: A Pragmatic Theory of Argument*, Mahwah, NJ: Erlbaum, 2000. Even so, pragmatic and dialectical considerations including Johnson's own recognition of the dialectical tier, are evident in all the Canadian writings. See, for example, Robert C. Pinto's, *Argument, Inference and Dialectic: Collected Papers*, Dordrecht: Kluwer, 2010. In their dialectical tilt and pragmatic and contextual sensitivities, these papers are typical of Canadian practice.

for use in introductory logic classes in universities and four-year colleges. Virtually without exception, they saw in them abundant confirmation of Hamblin's own already low opinion of how, if at all, they handled fallacies. In no time at all, informal logicians would be publishing what they hoped would be better introductory texts.[4] Certainly they were no substitute for frontier scholarship and, in that regard, the newly minted fallacy theorists had little to rely on but their wits, their intuitions, and the older literatures that had been put into an undignified retirement by the overthrow of logic by mathematics, drawing upon what they took to be adaptable features of current literatures in philosophical logic. The significance of the comparatively scant references in note 1 of this essay to Canadian publications in which there is explicit reference to informal logic by title is that, by and large, Canadian informalists had their say about the nature of their subject by just getting on with the job of developing it.

It might strike us as strange that a book devoted to the Canadian influence on theories of argument arising from contributions to informal logic, should make room for a chapter on formal models. It will have been noticed in earlier chapters of this volume that the organizational, congregational and publishing centre of the Canadian movement in informal logic is the University of Windsor, inaugurated in 1979 by the First International Symposium on Informal Logic. A number of the movement's leading figures are based in Windsor. Even more are based elsewhere in the country, and several score more are "honorary Windsorites" from foreign climes. As of today, at least four or five of Windsor's locals made their reputations elsewhere, and two of its first three elders weren't always Canadian. The umbrella under which the Windsor conferences are staged is

4. Ralph H. Johnson and J. Anthony Blair, *Logical Self-Defense*, Toronto: McGraw-Hill Ryerson, 1977; John Woods and Douglas Walton, *Argument: The Logic of the Fallacies*, Toronto: McGraw-Hill Ryerson, 1982; David Hitchcock *Critical Thinking*, Toronto: Methuen, 1983; and Trudy Govier, *A Practical Study of Argument*, Belmont, CA: Wadsworth, 1985. All are still in print in newer editions.

OSSA, the Ontario Society for the Study of Argumentation, in emulation of the earlier example of ISSA, the International Society for the Study of Argumentation, established in Amsterdam as the organizational, congregational and publication centre of the pragma-dialectical approach to argument.[5] The name "ISSA" has two virtues which "OSSA" lacks. It is earlier, and it is accurate. OSSA's active membership is as far-flung as ISSA's, and there is nothing noticeably Ontarian about the logics contrived by OSSAnians.[6] A foundational work for the Canadians was published by an Englishman who in due course would become an OSSA star.[7]

Among locals and awayers alike, the Windsor approach to formal logic ranges from hostile and dismissive to the highly acquiescent. There is a theme that runs throughout that strikes me as certainly right. It is the confident belief that all the going formal logics of 1979 would have had a hopeless time in elucidating the logical structures of everyday argument and inference, including, by the way, the everyday inferences of Frege, Russell and Tarski. Human reasoning is inherently practical, but there are no people in the standard logics of deduction. Those logics were and still are the wrong keys for those locks.

A good many informal logicians think that the principal reason for this alienation is that formal logics – certainly those of the 1970s – were mainly about deductive reasoning, whereas most

5. I must confess to a disliking of the word "argumentation". There is no need for it in English. "Argument" will do all of the heavy lifting intended for "argumentation". It is a count noun and a mass term, and it honours the process-product divide. I've decided on a slight indulgence. If the reader will grant me "theories of argument", I'll grant him an occasional "argumentation theory."

6. We might note that, since the beginning, Windsor's Tony Blair has served on ISSA's executive committee. *Argumentation*'s editor-in-chief, Frans van Eemeren has had a lengthy presence on *Informal Logic*'s editorial board, and John Woods is one of *Argumentation*'s three editors and a member of the *Argumentation Library*'s editorial board.

7. Stephen Toulmin, *The Uses of Argument*, Cambridge: University of Cambridge Press, 1958

of the best of human reasoning is deductively invalid. Seen this way, formal logics simply miss most of the target set by informal logicians. This is true as far as it goes. But it too readily cedes to the formal logics of deduction their *bona fides* as accurate expositors and assessors of what a human reasoner is up to when he makes what he intends to be a truth-preserving argument, that is to say, a deductively valid one. I shall say more of this three sections hence when I briefly survey the route from Tarski to Quine to Donaldson which brought to philosophy the *formal semantics* of the mother tongues in which we humans frame our arguments. Suffice it to say for now that the formal logics of that day were encumbered by two problems. One, as we just said, is "the missed target problem" and the other is "the conceptual distortion problem." By this I mean that the more abstract our representations of a natural language concept, the greater the likelihood of making it unrecognizable in the formalizing wash. Jointly these problems produce what I'll call the *formalist crisis* for theories of real-life argument and inference. In what follows, I'll consider the crisis' prospects of relief. But first, something more should be said about the words "formal" and "model".

2. THE UNRULINESS OF "FORMAL MODEL"

The expression "formal model" is ambiguous in English, as are the two words within. They are unruly and challenging ambiguities. "Formal" ranges all the way from the correctness of one's words to our Sovereign Lady the Queen, to the suit one dons at his nuptials, to the abstractions of plane geometry. Models model clothes on the runways of Milan and in the design centres of Paris. Toy-stores sell models of World War II Spitfires, and sometimes, for good or ill, Dads are models emulated by their sons. In first-order classical logic, a model is a set-theoretic structure, and in macroeconomics models are mathematical entities of a quite different construction. In climate science, they are yet another kind of mathematical thing. Sometimes a model is a way the

world couldn't possibly be, and that the good that's sometimes in it is a strictly collateral benefit. This happens when reflecting on how *this* particular aspect of the world couldn't possibly be, we are led to see how *that other* feature of the world actually is. In other cases, a theorist formalizes a concept simply by giving it a biconditional definition. In still others we give our arguments formal expression when we avoid enthymematic formulation. Sometimes a formalization of something is a pictorial representation of it or a schematic rendering. It might also be true that, in some cases, real-life arguments are pictorially advanceble.[8] For all this semantic fog, some clear lines are discernible. Simplifying slightly, formal logics of argument heavily traffic in applied mathematics. Informal logics of argument show little trace of it.[9]

For a good many of Canada's theorists of argument and reasoning the only point of contact with formal modelling is by way of what is mistakenly called the "translation" rules for mapping natural language arguments to their logical forms in a formal language L usually that of first-order classical logic. In its standard understanding, translation preserves meanings or at least approximations to them. While natural languages brim with meanings, formal "languages" have none at all. It is not possible to order a hamburger in L or simply to say what your name is.

This present view of formal languages requires historical qualification. When we turn to Frege's treatment of the sentential calculus in the *Begriffsschrift* of 1879, we see that he was serious in saying that the formulae of his "formula language of pure thought" would be both vehicles for real thought and susceptible to affirmation and denial. A horizontal stroke or *Inhaltsstrich* prefixed to a formula ϕ signifies its propositional content or the thought it expresses, as with "$-\phi$" for example. When a small

8. See, for example, Leo Groarke, "Logic, art and argumentation", *Informal Logic*, 18 (1996), 105-129, and J. A. Blair, "The possibility and actuality of visual argument", *Argumentation and Advocacy*, 33 (1996), 23-39.

9. A questionable exception, as I think is the over-modelling of inductive argument and non-demonstrative belief revision in the probability calculus.

vertical line is attached to the left side of the content stroke, a *Urteilsstrich* or judgement stroke is formed. The two combined together come to be called the assertion sign. The content stroke prefixed to ϕ signifies the judgeability of its content. When the judgement stroke is prefixed, it expresses the affirmation of the thought conveyed by ϕ. Negation works in the following way, "-⊤-ϕ" signifies the negation of ϕ, and " | -⊤ϕ" the denial of ϕ. There is no inkling of these strokes in what has long been the standard notation for classical sentential logic. The last part of the English subtitle of the *Begriffsschrift* is also important. Frege's formula language of pure thought would be "modelled upon that of arithmetic". It is provable in number theory that 2 + 2 = 4. Frege wanted a formal language capable of saying that same thing, but not in the workaday language of arithmetic. What Frege wanted from his formula language is the means to say that 2 + 2 = 4 without the necessity to mention or quantify over numbers. In this way, the way of logicism,[10] Frege's formal language would be purpose-built for the reduction without relevant loss of number theory to the pure logic laid out in the *Begriffsschrift.* It would be designed from the get-go to give to arithmetic a comfortable truth-preserving home.

The idea that the formal language of a logistic system is entirely devoid of propositional content arises from a somewhat later source. In Hibert's quest for a logic freed from the burdens of propositional content, truth and meaning, launched the proof theories in which this quest is fulfilled.[11] In due course, modern logic would accommodate both model theory and proof theory, and would prove important correspondences between them. But for that to happen, both parties had to agree (and did) that the

10. Frege develops the philosophical case for logicism in *The Foundations of Arithmetic*, translated by J. L. Austin, Oxford: Blackwell, 1950. First published, in German, in 1884.

11. David Hilbert, "On the foundations of logic and arithmetic", in van Heijenoort 1967 at pages 129-138. Original German text of a talk in 1904 to the Third International Congress of Mathematicians.

respective properties in correspondence were definable over a common artificial language bereft of content, and incapable of expressing thought.

I come back now to Frege, briefly. By the time Frege issued the first volume of *Basic Laws of Arithmetic* in 1903, the judgement stroke " | –" would be given a new role to play. It would now signify a function from names to truth values. Formal sentences formerly taken to be thought-expressing were now names of truth functions. Accordingly, "—ϕ" would be a name that denoted the truth-value (*Wahrheitswert*) the True (T), and since all names therein must also denote truth-values, the horizontal line must assign truth-values to them, notwithstanding their own thought-inexpressibility. In these cases, they would name truth-value the False (F).[12] This is yet another striking difference from today's standard logics in which only sentences are assigned truth-values.[13]

The point to emphasize is that the state in which classical logic has been for decades is one in which formal languages are semantically dead, prompting thereby the question of whether they are capable of semantic revival by mathematical means.

A more accurate term for what are misdescribed as translation rules from English to L is "*mapping* rules", rules attempting to establish one-to-one correspondences between natural language expressions and their formal counterparts in L. Consider a simple example. For every logician of every stripe, validity is a property of interest, and especially valued are procedures which reliably determine its presence or absence in arbitrarily selected cases. One way in which an argument's validity in English is tested is by using the mapping rules to find its counterpart argument in L, which is said to be its "logical form". The formal language has a well-defined notion of validity instantiable by L's

12. "Truth-value" is Russell's rendering of "*Wahrheitswert*" in Appendix A of *The Principles of Mathematics* 1903

13. I will provide further citations in various places ahead.

formal arguments. The further features of formal validity are provided by L's model theory, giving to "validity" a meaning in the metalanguage of L that it certainly does not possess in English. For that reason it is helpful to use "validity" to denote what valid English arguments have and "*validity" to denote what *valid formal arguments have. Even so, formal *validity and the mapping rules conduce to a good end. For, whenever an English argument maps to a formally *valid one in the model theory of classical logic, the English argument is also *valid, or as we may also put it, *formally *valid*. The mapping rules have this interesting feature. They reflect back to English arguments the *validity of its logical form in L. This is the *backwards reflection property* with respect to *validity.

It turns out that any formally *valid argument of English is also valid, i.e. is such that its conclusion follows of necessity from its premises jointly. The English term "necessity" has no formal counterpart in L. There is nothing in this logic to which "necessity" can be mapped. From which we may conclude that, whatever "*valid" means in L, it does not mean that the conclusion of an L-argument follows of necessity from its premisses jointly. Still *validity in L implies validity in English. Although the mapping rules are a perfect test of formal *validity in English, they are only a partial test of validity in English. The reason why is that the "atomic" or simple indicative sentences of English have meanings and the atomic wffs of L have none. The atomic meanings of English enable meaning connections, some of which generate validity as in the well-worn example of the "coloured shirt argument":

1. The shirt is red
2. Therefore, the shirt is coloured.

Since the conclusion of this argument follows of necessity from its premiss, it is valid. But its form in L is

1′. *p*
2′. *q*

which is not *valid (and not valid either).[14]

This creates a nontrivial problem for the mapping rules. For the rules to have the backwards reflection property for *validity it is necessary that the set of English atomic sentences not stand to one another in any semantic or logical relation. They must be pairwise semantically and logically inert. I know of no logic textbook that develops the right filtration device for inputting the atomic sentences of English to the function described by the mapping rules in ways that avert coloured shirt problems.[15]

Everyone in the Canadian informal logic community was educated in the analytic tradition. For many of them, perhaps a hefty majority, doing philosophy analytically is simply the preferred way of doing it. I won't be able to say my piece about the place of formal models in argumentation theory without having my say about the dominant presence of formal semantics in philosophy, especially the analytic philosophy of language. And I won't be able to do that without a quick Cook's Tour of *conceptual analysis*. I'll turn to that now. Formal semantics will come right after.

3. PHILOSOPHY GOES ANALYTIC

Formal semantics has a twofold parentage. One is a crisis in the foundations of arithmetic. The other is a crisis in analytical philosophy. A proper understanding of it requires that we make some brief mention of them. The crisis in arithmetic was prompted by Frege's conviction that all of higher mathematics

14. A similar difficulty attaches to the map from sentences such as "The tabletop is oval and the tabletop is rectangular", made inconsistent by virtue of predicate-meanings. Its formal representation in L is the formally consistent wff "p ∧ q".

15. For a bit more on this, interested readers could consult Woods' *The Death of Argument*, pages 48-53, chapter 3, "The informal core of formal logic".

has secure foundations in number theory. The question was whether number theory is able to furnish its own foundations. Towards the close of the 1870s Frege came to believe that it could not. If arithmetic's foundations couldn't be found elsewhere, Frege feared that all of mathematics would topple into a rubble of confusion and mystification, causing massive collateral damage to the sciences. In 1893 Frege thought he'd found the answer he'd been seeking. The answer lay in *logicism.* In the first volume of his *Basic Laws of Arithmetic*,[16] Frege thought he had demonstrated how every true statement of arithmetic could be matched in a truth-preserving way to a formula of pure logic in which there is no reference to or quantification over numbers. The logic in question was of Frege's own invention (or if preferred, discovery) which was a second-order functional calculus of great ingenuity. If Frege's solution held, the mathematical foundations' crisis would be averted.

Frege was also implicated in the rise of analytic philosophy, with the publication of papers in the 1890s such as "Function and concept", "On concept and object" and "On sense and reference", and later in the late 19 teens "Thought" and "Negation"[17]. Another important source was G. E. Moore, with early papers in the short interval from 1899 to 1903, such as "The nature of judgement", "The refutation of idealism" and "Kant's idealism" and the classic *Principia Ethica*.[18] Moore was instrumental in con-

16. Gottlob Frege, *Basic Laws of Arithmetic: Derived Using Concept-Script*, volumes I and II, translated and edited by Philip A. Ebert and Marcus Rossberg, with Crispin Wright, Oxford: Oxford University Press, 2013. Volume I first appeared, in German, in 1893 and II in 1903.

17. "Function and concept" in Peter Geach and Max Black, editors, *Translation from the Philosophical Writings of Gottlob Frege*, pages 42-55, Oxford: Blackwell, 1970; "On concept and object", in Geach and Black, pages 181-193; "On sense and reference", in Geach and Black, pages 56-78; "Thought" in Peter Geach, editor, *Logical Investigations*, pages 1-30, Oxford: Blackwell, 1977; and "Negation", in Geach, pages 31-53.

18. "The nature of judgement", *Mind*, 7 (1899), 176-193; "The refutation of idealism", *Mind*, 12 (1903), 433-453; "Kant's idealism", *Proceedings of the Aristotelian Society*, 4 (1903), 177-124; and *Principia Ethica*, Cambridge: Cambridge University Press, 1903.

verting Russell from a McTaggartian idealism to the methods of conceptual analysis. Moore likened the elucidation of a concept of philosophical interest to the decomposition of a substance of chemical interest by chemical analysis. Concepts were either simple and unanalyzable or complex. Simple concepts were intelligible as they stood and in no need of clarification. If a complex concept were in need of clarification, it would be provided by an analysis that decomposed into its simple constitutive subconcepts. Largely independently, Russell and Frege had converged on a common understanding of how to provide a conceptual analysis of the notion of set.[19] It would be provided by Frege's axioms or basic laws, laid out in the first volume of *The Basic Laws of Arithmetic.* This convergence was furthered by two other points of agreement. Russell agreed with Frege's logicism, according to which number theory could be reduced without relevant loss to pure logic. He also agreed that set theory was an essential part of the pure logic required for this reduction.

In 1902, Russell wrote to Frege with the news that the axioms of his set theory harboured a contradiction. Frege promptly and ruefully replied eight days later.[20] This, the infamous Russell paradox, would create the crisis of analytical philosophy. Frege and Russell had agreed that Frege's axioms provided a conceptual analysis which revealed the true nature of what it is to be a set. Russell expressly asserted that, thanks to the paradox, no philosophical analysis of the concept of set was possible. Frege briefly dithered and then permanently retired from the philosophy of arithmetic. As Frege and Russell saw it, what made the paradox a crisis for conceptual analysis was not that the original axioms were mistaken – principally Basic Law V which served as a Comprehension Axiom. Frege and Russell were among the

19. For most of his working life as a philosopher of arithmetic, Frege eschewed the term "sets" in favour of "courses of values of concepts", and Russell favoured "classes".

20. Bertrand Russell, Letter to Frege, in Jean van Heijenoort, 1967, pages 124-125; and Gottlob Frege, Letter to Russell, in van Heijenoort at pages 127-128.

last descendants of the long line from Aristotle, in which an axiom was true, necessary, primary, most intelligible, and neither needful of nor susceptible to independent demonstration.[21] So understood, the axioms for sets disclosed that it lies in the very nature of sets that there aren't any. But without sets transfinite arithmetic is impossible. So Frege turned the dial to geometry, and Russell borrowed the empty name "set" (actually "class") and applied it to objects defined into theoretical existence by nominal definition.[22] Since arithmetic can't get by without something *like* sets, Russell set about making something up and placed it within the regulatory control of the mathematical theory of types. The crisis of analytic philosophy was that conceptual analyses are sometimes horrifically wrong, notwithstanding their appearance of *à priori* certainty.

If we charted the jolt that analytical philosophy was dealt in the months from 1902 to 1903, we could chart it on a "concept clarification line", with an intuitive concept K at the far left, and on the far right a stipulated new concept K* with the same name but not the same denotation:

K: _____ K*[23]

Assuming K to be analyzable, its immediate successor on the line would be K(A), that is, K in its analyzed state. As we see from the sharp change from 1902 to 1903, what the line in its present configuration tells us is that K is uninstantiated and K* is a theorist's creation of some other concept. It would be a mistake, however, to see the clarification of a *consistent*[24] concept in such harsh binary terms. It wasn't to be a matter of "Analyse it or for-

21. Frege would later say that Basic Law V hadn't carried quite the same conviction for him as did the previous four axioms. I do not think, however, that this remained for long his considered opinion.

22. Bertrand Russell, *The Principles of Mathematics*, 2nd edition, London: Allen and Unwin, 1937. First published in 1903; pp. 27 and 114.

23. A word of caution: my concept-clarification line is not a Fregean stroke.

24. More carefully: "widely believed to be consistent and neither known nor believed to be otherwise".

get it and change the subject!" To help see why, it would repay us to take note of the impact of logical positivism on what would retain the name of analytic philosophy. If there were space for it we could have a small section entitled, "Philosophy goes scientific". We don't, so we won't. We'll make do with something a good deal briefer. The two features that one associates with scientific philosophy is its interests in using numbers to achieve a qualitative concept's clarification by making it more precise. I'll call this *conceptual explication.* The other already has a name – *rational reconstruction.* A common example of explication is the representation of the idea of degrees of likeliness by real numbers via the probability calculus in the unit interval. A celebrated example of rational reconstruction was Carnap's attempted reduction of the physical world to the phenomenal one in the *Aufbau.*[25] Putting K(E) for an explication of K and K(RR) for its rational reconstruction, we see that the conceptual clarification line, more fully realized, provides four options for K, not just two:

K: _____K(A) _____K(E) _____ K(RR) _____K*

Each option is a form of *making.* Analysis makes a concept explicit. An explication makes it *precise*. A rational reconstruction makes it *over*. A stipulation changes the subject and makes a new concept *up*. With these options available, we can easily see Russell pleading that instead of just stipulating a new concept of class in his theory of types, he was rationally reconstructing the old one. But we couldn't find for Russell unless he conceded that there was little of the true nature of the intuitive mathematical concept of class in its rational reconstruction. From this, a more general point can be made. The further we proceed from the clarification line's leftmost node rightward to its terminus, the intuitive concept becomes progressively less recognizable in its successors.

25. Rudolf Carnap, *The Logical Structure of the World: Pseudoproblems in Philosophy*, Berkeley and Los Angeles, University of California Press, 1967. First published, in German, in 1928.

From which we must also see that all forms of conceptual clarification are conceptual distortion to one degree or other, and some are a good deal more distorting than others.

4. FORMAL SEMANTICS

The name "formal semantics" was coined by Tarski in what John Burgess thinks was an act of theft. Although Burgess was joking, he was making a serious point. Tarski's tort was to take a name in common scholarly and lay usage and re-apply it without formal notice (no pun intended) to something entirely different.[26] As Tarski used the word, a semantics is the model theory of a formal logistic system. As everyone else uses the word, semantics is a theory of meaning for natural languages. "Well", some might say, "what's all the fuss about? Doesn't the model theory of first-order classical logic (say) assign something like meaning to its formal expressions, strings and sequences?" If we were to ask these sceptics where they would be inclined to place a theory of Tarskian meaning on our concept clarification line, they might tick the explication box. That would be a mistake. A good case can be made for ticking the stipulation box instead, thereby making the original concept of meaning unrecognizable in the made-up concept.

Tarski's contribution to model theory was in the slipstream of Frege's early recognition of the need for it and the important advances in the early part of the 1900s, notably by Löwenheim in 1915 and Skolem in 1919/20, in what came to be known jointly as the Löwenheim-Skolem theorem.[27] The theorem asserts that any theory in first-order logic with identity has a countable

26. John P. Burgess, "Tarski's tort", in his *Mathematics, Models and Modality: Selected Philosophical Essays*, pages 149-168, New York: Cambridge University Press, 2008.

27. Leopold Löwenheim, "On possibilities in the calculus of relatives", in van Heijenoort, pages 228-251, and Thoraf Skolem, "Logico-combinatorial investigations in the satisfiability or provability of mathematical propositions: A simplified proof of a theorem by L. Löwenheim and a generalization of the theorem", in van Heijenoort, 252-263.

model if it has a model at all. Tarski would later prove that the "upward" version of it, showing that theories with infinite models also have models of every infinite cardinality. I mention these seemingly arcane results not to dwell on them here but rather to underscore the sheer distance of Tarskian models from the structural regularities of human argumental life. But the last thing models are is distant from the commonalities of a standard good second-year *textbook* on deductive logic, with which everyone in the Canadian corps will have had to deal as an undergraduate or graduate student and later, in some cases, as a teacher of formal logic.[28] The importance of saying so lies in this. It is simply not true that Canadian informalists are unacquainted with models in this sense. The fact that they don't put them to use in their own work indicates the conviction that, so used, Tarski models neither add value nor pay for their keep. But the fact remains that there is, so far as I can see, little concurrent inclination to denounce the popularity of formal semantics in analytic philosophy, which is home turf of Canada's informal logicians.

What follows now, as briskly as I can do it, is a refresher of what everyone already knows about model theory. A logistic system L is a theory which distributes properties of interest over entities constructed in its formal language L. The language arises from a lexicon of basic expressions, including those designated as atomic formal sentences or wffs. Formation rules recursively define all the non-atomic ones. The lexicon, and formation rules are part of L's syntax. L's syntax provides an infinite array of proper names each carrying its own unique index, as well as an infinity of individual variables also uniquely indexed. Rules also provide for the binding of an individual variable by quantifiers prefixed to the same variable. The syntax's further parts recursively define sequences of formal sentences, and generate pro-

28. An excellent example is George Boolos, John P. Burgess and Richard C. Jeffrey, *Computability and Logic*, 4th edition, Cambridge: Cambridge University Press, 2002. (Fallacies aren't discussed there.)

cedures for the ascription to them or their constituent parts of properties such as theoremhood, deducibility, proof, provability, and (syntactic) equivalence and (syntactic) consistency. L's semantic or model-theoretic part provides interpretations which fix L's domain (or universe) D with respect to which truth-values are the denotations of L's syntactically rendered wffs. D is an infinite set of otherwise uncharacterized individuals, each individuated by a unique index. Functions map particular parts of L's syntax to correspondingly specific elements in or set-theoretically constructable from L's domain. L's semantical rules provide rigorous specification, for the interpretation in question, of the properties of reference, quantification and *n*ary predicate-denotation, and therefrom the further properties of satisfaction, truth, valid sentence or logical truth, valid sentence-sequence, entailment, (semantic) equivalence and (semantic) consistency.

In the metalogic of classical first-order logic, further results are also provable. If L's predicates are monadic, validity is a decidable property. Monadic or not, there also exists between L's syntactic and model theoretic properties a one-to-one correspondence by which ϕ is a theorem of L's syntax iff it is a logical truth of its semantics. Close by is the equivalence of syntactic deducibility and semantic entailment. Logics having this property are said to be complete with respect to their semantics. Logics in which the correspondence is not only one-one but also onto are sound with respect to their syntax. While everyone concedes that the atomic wffs (well-formed formulas) of a formal "language" are entirely meaningless, it is often (and mistakenly) said that the logical particles of such a language – e.g. the connectives of the sentential calculus – have the meanings conferred on them by the system's formation rules for molecular wffs, whereby truth conditions are imposed on sentences in which particules occur. This is not true. What the formation rules assign are truth-values, of which in first-order logic there are only two, T and F. Every wff is assigned one or the other and

never both. T and F are undefined abstract *objects* denoted by wffs. They are not linguistic objects, and so the question of their having meaning doesn't arise. In natural languages such as English, truth and falsity are *properties* ascribed to linguistic objects by the predicates "is true" and "is false", neither of which occurs even in the model theory of classical logic. It is said, however, that "ϕ denotes T" *formally models* natural language sentences of the form "'S' is true" by way of a formal representability relation R. But there is in the Canadian literature, and everywhere else in the argumentation community virtually no work on how R is structured so as to deliver the desired result. Consider again the difficulties discussed in section 2 posed by the mapping rules from English to counterparts in L.

The term "truth-value", as we now see, is a tort. So are *all* the following, the very terms that make up the working vocabulary of Tarski's semantics: "*vocabulary", "*sentence", "*name", "*predicate", "*argument", "*proof", "*theorem", "*syntax", "*truth", "*valid (sentence)" "*valid (argument)", "*entailment", "*semantics", and on and on.[29] None of these expressions bears any recognizable resemblance to what those terms actually mean in pre-tort reality. The qualification "formal" no more makes a formal sentence a kind of sentence than the qualification "fools'" makes fools' gold a kind of gold. Here are two further examples to consider. In the semantics of L a formal sentence is true in an interpretation I iff it has a model in I, iff every countably infinite sequence of elements in I's domain of discourse D satisfies ϕ in I. ϕ is satisfied by a countably infinite such sequence S iff the following conditions are met: If ϕ is an atomic wff of the sentential calculus, it is satisfied by S iff ϕ denotes T in I. if ϕ is an atomic wff of the predicate calculus with *n*-ary predicate ψ, S satisfies ϕ in I iff for each denota of its singular terms stand to one another in a way that structures them as *n*-tuples of the class of *n*-tuples denoted by the predicate ψ. If ϕ is a wff in the form ⌜~ψ⌝ for arbi-

29. Also, recall our discussion of *validity in section 2.

trary wff ψ, S satisfies ϕ iff it doesn't satisfy ψ. If ϕ is a wff in the form ⌜ψ∨ψ'⌝, S satisfies ϕ iff it satisfies ψ or satisfies ψ' or both. If ϕ is a wff in the form ⌜$\forall x_k$ (ψ)⌝, with x_k is the variable whose index is k in I, S satisfies ψ iff every countably infinite sequence of elements in D differing from S at most in its kth element satisfies ψ.

The second example is more quickly dealt with. From its very foundation, logic has had an abiding interest in entailment. When considered as a property of pairs of English sentences A and B the still dominant view of what "entails" means has it that A entails B iff it is logically impossible for A to be true and B false (or anyhow not true). It is utterly routine for teachers of logic and others who should also know better to paraphrase this as "A entails B iff it is logically impossible for A to be T and B to be F (or anyhow not T). This is false. As we've already seen, T is an undefined object of the formal semantics of L, thus making "A is T" ill-formed in English and L alike, vitiating thereby the lazy paraphrase of the dominant definition of "entails" in English. Here is how it goes in L: ϕ entails ψ iff there is no interpretation in which ϕ has a model but ψ doesn't. More specifically, there is no interpretation in which every countably infinite sequence of its D-elements satisfies ϕ yet does not satisfy ψ. No one with any sense and without an axe to grind would say that in these formal notions of truth in I and entailment there is a recognizable presence of the truth and entailment in natural language.

Paragraphs ago I surmised that if an analytic philosopher of the present day were asked to place Tarski's concepts of truth in an interpretation and of entailment in all of them, he would hover over the point at which the line moves from analysis to explication. But as is now apparent that would be more hopeful than accurate. The right place over which to hover is the terminus, the place at which the ever-torting Tarski just made these things up while retaining the original names.

"What in the world would motivate Tarski to have gone so far?", people will ask. The answer lies in the Liar paradox which, as Tarski saw it, did to theories of truth in natural languages what the Russell paradox did to sets. Tarski blew very hot and only very slightly cold about the fix that the concept truth was in. In hot moments, he echoed Frege and Russell in thinking that it lies in the very nature of truth in natural language that no sentence of natural language is true – in other words, that the truth predicate has a null extension. In more reflective moments he thought, as did Russell about sets, that natural languages simply couldn't get along without a consistent predicate for truth operating in something like the way Russell thought the predicate "set" had had to be made to work. At this juncture, it is convenient to mark two sides of Tarski's intellectual personality. Considered purely as a model theorist, Tarski thinks that natural language is a dead duck. But as author of "The concept of truth in formalized languages", he turned his sights to truth's rehabilitation in natural speech.[30]

The post-1902 Russell wanted a new concept that would serve the purposes for which the logical paradox had disabled the intuitive concept of set. So he made one up. Tarski, the model theory pioneer, wanted a concept that would serve the same purposes in L from which the semantic paradox had disabled the intuitive concept of truth. He wanted to rehabilitate the logicist claim that for every true proposition of arithmetic there exists a truth-preserving relation to its unique counterpart in the *theorems of pure logic.[31] So he made up a new concept of truth, and got

30. Alfred Tarski, "The concept of truth in formalized languages", in *Logic, Semantics and Metamathematics: Papers from 1923-1938*, translated by J. H. Woodger, 2nd revised edition, with an editor's introduction and analytical index by John Corcoran, pages 152-278, Indianapolis, IN: Hacket, 1983. First published in Polish in 1933.

31. A gentle reminder. In first-order logic, the word "theorem" is a tort. The theorems of L bear no recognizable resemblance to what "theorem" means in English – a statement shown to be true by way of valid proof. "Proof" here also occurs with its ordinary meaning.

on with the logicist programme. The new concept with the old name is the one we've just finished tarrying over. The question that now presses is whether this make-up of truth can preserve the original intent of logicism. The answer is that it cannot. When it was originally proposed that every true statement of arithmetic is provable in pure logic without the need to refer to or quantify over numbers, "true" carried its intuitive mathematical meaning. I don't think that Frege and Russell were fully seized of the alienations effected by the new logic's defections from everyday mathematical speech. By the 1930s, Tarski appears to have cottoned on to the alienation from semantic reality effected by pure logic's model theory.

After 1931 Tarski will have been aware of an extraordinary technical feat pulled off by Gödel in his famous incompleteness paper.[32] Gödel's proof depends on a device of his own origination called Gödel-numbering, for arithmatizing syntax in a formal representation FA of Peano arithmetic, PA. In particular, Gödel showed that the primitive recursive functions of PA are formally representable in FA. Without that subproof, the incompleteness proof fails. The formal representability relation that mapped FA's primitive recursive functions to PA's met two essential conditions. One was that the map was isomorphic. The other was that its representations of the properties of PA's primitive recursive functions caused no telling misrepresentation of how these functions actually work in PA. The representation relation had two essential virtues. It was *tight* and *straight.*

Let's come back to our concept-clarification line, with particular reference to how the intuitive concept of truth fares in Tarski's model theory. On the face of it, and rightly, it fares very badly. But upon reflection, there is something that might be done to repair the damage. We could postulate a relation of formal

32. Kurt Gödel, "On formally undecidable propositions of Principia Mathematica and related systems I", in van Heijenoort 1967 at pages 592-616. First published, in German, in 1931.

representability mapping Tarski truth language truths, suitably adjusted to handle the havoc imposed on intuitive truth by the Liar. Call this relation R. The question that now arises is obvious: Is R both provably tight and straight? The answer is that it is not.[33]

Even so, in his 1935 paper Tarski assigned himself two tasks. One would be the reformulation of the model theory of standard first-order logic to spare its own truth predicate from the ravages of paradox. The second was to turn his sights on natural language truth-predicate which would yield to Tarski's formal representability ambitions. Thus the title of this classic paper is correct with respect to the first objective and wholly misses the mark with respect to the second.[34]

In his formalized language, Tarski handled the formalized truth predicate in the way that post-paradox set theorists handled the new concept of set. In each case infinite hierarchies were called into play. In the case of truth, sentences of the language were sorted into levels. At level one, no attributions of truth are allowed. At level two, truth-ascriptions can be made of the sentences at level one and only they. The levels pile up into the transfinite, directing truth-ascription at each level so as to keep the Liar at bay. Nowhere in the hierarchy could a sentence be found that ascribed falsity to itself. No sentence on any level would be allowed to ascribe falsity to itself. Given that a formal language is

33. More details are available in Woods, "Does changing the subject from A to B really provide an enlarged understanding of A?", *Logic Journal of the IGPL*, 24 (2016), 456-480.

34. There is little work on the model theories of formalized languages by Canadian informal logicians. A notable and artful exception is the translation of Tarski's follow-up paper of 1936 by Magda Stroika and David Hitchcock's translation of "The concept of following logically", *History and Philosophy of Logic*, 23 (2002), 155-196. Polish and German originals first published in 1936. The more common title in English is "On the concept of logical consequence", a translation of the original German title of 1936, "Über den Begriff der logischen Folgerung". The Stroika and Hitchcock translation is more faithful to the German. A Polish friend tells me that the same holds for the Polish title.

a made-up thing with a name that's not its own, there is no real shock in making room in its lexicon for an infinite number of inequivalent truth predicates. Let's call this theory Tarski's theory of *truth.

Having fixed *truth for formal languages, Tarski now turns to natural languages and their home predicates for truth. What Tarski wanted was a theory of truth in natural language that would be modelled on his theory of *truth. This could be accomplished in one or another of two ways. He could infinitely enlarge a natural language's number of truth *predicates* in the way that he'd done in his theory of *truth, or he could retain a single truth predicate and assign it infinitely many meanings in any given natural language. Either way, predications of truth could be subject to ascription constraints by predicate-rank or the particular meaning which the univocal predicate had at that level. English would be spared the chaos of paradox.

Whatever we may think of Tarski's theory of *truth, there is nothing to be said for his theory of truth, beyond that it has all the virtue of theft over honest toil, as Russell said of another thing.[35] Tarski's theory of truth in English is false on empirical grounds. It so greatly distorts the truth about truth as to make it virtually unrecognizable in Tarski's approach. Even had Tarski established a tight relation of formal representability that hooked up the theory of *truth with the theory of truth, it could not have been a straight one. That leaves the theory of truth hovering midway between the terminus of the conceptual clarification line and its rational reconstruction node. In 1944, Tarski published a somewhat more accessible account of his treatment of truth.[36] In no time at all, the formal semantics bug bit hard, and an

35. Actually the axiom of reducibility.

36. Alfred Tarski, "The semantic conception of truth", *Philosophy and Phenomenological Research*, 4 (1944), 341-375. Here, too, we have a misleading title, in which truth is a natural-language property and "semantic" means "model-theoretic". Tarski's most accessible account, and also the shortest, is "Truth and Proof", *Scientific American*, 220 (1969), 63-77.

ambitious literature in the philosophy of language flowed forth, attesting throughout to the determination of analytic philosophers to get to the bottom of truth and meaning in natural language, with methods pioneered by Tarski.

If the modern history of the philosophy of language in English-speaking communities is our guide, the habit of calling logic's model theoretic provisions for its formulas a truth conditional semantics for them[37] now spreads to English itself in a suitably adjusted retrofitting. With it comes the quite striking allied assumption that the meaning of an English sentence is uniquely determined by its truth conditions, that is, its honest-to-goodness no-sneer-quotes *truth* conditions. We can plot the rise of this surprisingly captive idea from Tarski's provisions for artificial languages to Suppes' application of them to the philosophy of science the so-called semantic theory of scientific theories and to Davidson's appropriation of them for the languages of mankind.[38]

In "Truth and meaning", Davidson writes as follows:

> "Much of what is called for [in a Tarski-style theory of truth] is to mechanize as far as possible what we now do by art when we put ordinary English into one or other [regimented] canonical notation. The point is not that canonical notation is better than the rough original idiom, but rather that if we know what the canonical notation is canonical for, we have as good a theory for the idiom as for its kept companion."[39]

37. More accurately, a T-conditional semantics.

38. Patrick Suppes, *Studies in the Methodology and Foundations of Science: Selected Papers from 1951-1969*, Dordrecht: Reidel, 1969, and *Representation and Invariance of Scientific Structures*, Stanford: CSLI Publications, 2002. See also Frederick Suppe, *The Semantic View of Theories and Scientific Realism*, Urbana and Chicago: University of Illinois Press, 1989. Donald Davidson, "Theories of meaning and learnable languages", reprinted in *Inquiries into Truth and Interpretation* at pages 3-15. Oxford: Clarendon Press, 1984, "Semantics for natural languages", reprinted in the same collection at pages 55-64.

39. Donald Davidson, "Truth and meaning", reprinted in *Inquiries into Truth and Interpretation* at pages 93-108. Emphasis in the original.

It is worth noting how closely what Davidson is saying here resembles what teachers of logic often say to disgruntled students smart enough to see that the mapping rules that take (certain classes) of natural language arguments to their logical forms in L are defective. The teacher will admit the difficulty and encourage the student to apply the rules with intuitive discretion. This, by the way, is not bad advice. It is easier for us to avoid sentences that meaning-imply others or are at odds with them also by virtue of meaning, than to produce well-made theories of these properties. Still, it's an embarrassing situation for the mapping rules. As normally stated, they are insufficient to deliver the backwards reflection property for *validity in the absence of a principled theory of making-entailment and meaning-inconsistency, neither of which can be modelled in a logic that provides for entailment and inconsistency by logical form.

Davidson's is an empirical theory. No empirical theory of any note or durability is wholly free of non-empirical elements. But some theories are a good deal more empirical than others. Some are only glancingly empirical. Mathematical physics is less empirical than theoretical physics and it, in turn, less so than population genetics. Davidson's theory of truth is empirical in roughly the way that theoretical physics is, namely, not all that much so. It is a theory embodying high-octane minglings of the empirical and the theoretically distortive. Davidson is fully aware that there is too much in natural English – indexicals for instance or action sentences – to be captured by a finitely axiomatized theory of truth in formalized languages with Tarskian biconditionals mapping chunks of English to L. Convention T is the problem. It is a fundamental constraint in Tarski's theory, providing that "Snow is white" is true just in case snow is white. But if, for example, we wanted to include sentences with indexicals for time and place, Convention T would deny them admission. It is not simply the case that "It is now cold here" is true just in case it is now cold here. Accordingly, Davidson constructs a two-

step approach to natural language meaning. In much simplified terms, step one will draw from Tarski what works for a fragment of context-independent English, and step two will develop a way of mapping one-to-one some of the contextually sensitive ones that Tarski can't handle to regimented sentences of English which are thought to repair those omissions.

We won't understand Davidson unless we understand that, in canonical notation, the logical particles of L are neologisms that enter the lexicon of beefed-up English with a presumptive precedence over their counterparts in unenriched English. For example, "∀" now joins the lexical ranks of "all" and "every", but it enters with stipulative intent and provides ready occasion to summon up Burgess's warning. What "all" and "every" used to mean in unenriched English, they now mean what "∀" means in L. Similarly, the theory of truth that is good for canonical English is the theory of *truth for L. Then "⊨" enters the lexicon of the metalinguistic regions of spoken English as another neologism, displacing the native's "logically true" and, in two-place contexts, the native's "entails".[40] So there is something not quite to like in this rather dismissive passage of Davidson's. In light of the difficulties currently in view the canonical notation intervention carries nontrivial risk of a stipulationist high-jacking of precisely that ordinary idiom which Davidson assures us is no less good than the good of its canonical notation. I admit to thinking, however, that Quine's manic extensionalism seriously distorts Tarski's message, and that Quine's influence on him places Davidson himself at two removes from Tarski.

40. Some readers might think that I've taken this point too far. Why would we be so hard on "⊨"? Why couldn't it simply be a notational variant of "entails" or, as the case may be "logically true"? The reason why is that the model theoretic property denoted by "⊨" is not at all the property denoted by "entails" or "logically true".

5. HOW CRITICAL IS THE FORMALIST CRISIS?

In the early 1970s virtually any philosopher working in the informal logic sector of Canadian approaches to the theory of argument would have known about formal semantics and wouldn't have been much alarmed by it, provided it was put to uses for which it was best suited. It was also true that when these researchers talked about the suitability of formal methods and formal models for real-life argument, they need not have been thinking (and often weren't) of formal semantics in the model-theoretic sense. Even so, the prevailing mood was, and still is, more *anti* formal methods than *pro*. Of course, there was a minority who thought that formal measures could be productive in ways that took proper notice of the variabilities in what real-life argument aims for and the manner it is affected by context in the formal logics of deduction, not because of coloured-shirt problems and the problems posed by formal representability presumptions, but rather for the straightforward reason that most good argument and most good reasoning is invalid. (Thus, the missed target problem.) There are several reasons for these dissatisfactions. One, as we have seen, is that formal systems can't represent meaning connections in natural languages upon which good inferences often crucially depend. Another that we haven't mentioned yet is that formal systems tend to conflate conditions on implication with rules of inference, an equation that doesn't hold true in natural language.[41] A third reservation was the indifference of formal systems to the crucial impact of context and agency on the success or failure of real-life argument. In due course, there arose the idea that there was nothing wrong with these logics in relation to what they

41. The classical paper is Gilbert Harman, "Induction: A discussion of the relevance of the theory of knowledge to the theory of induction", in Marshall Swain, editor, *Induction, Acceptance and Rational Belief*, Dordrecht: Reidel, 1970.

were designed for,[42] and nothing intrinsically misbegotten about the idea that they can profitably elucidate their own respective subject matters.

Why not, then, consider adapting existing logics, or building new ones, with a view to capturing in suitably formalized ways the peculiarities that matter for the realities of human argument-making on the ground? Early examples were the efforts by Woods and Walton to model composition and division arguments in Tyler Burge's formal theory of aggregation,[43] and to do the same for *petitio principia* in formal systems of epistemic logic in conjunction with those of formal dialectic.[44] The notion of formal dialectic was itself an attempt to broaden the formal modellability of human argument, in the way that ancient logic dealt with contentious argument.[45] Indeed the whole sweep of the Woods-Walton Approach was one that adapted various pre-existing logical formalisms to the varying characteristics of real-life argument, especially those that give rise to fallacies in what had become to be known as fallacies in the traditional sense. In that sense, a fallacy ticks the following boxes: It is an error of reasoning; it is committed with a frequency exceeding the reasoning-error norm without regard to sex or gender distinctions, ethnicity, (adult) age, or nationality; it is an inviting and attractive error that disguises its wrongfulness; and its rate of post-diagnostic recidivism is extremely high; in other words the error

42. Notably their varied and sometimes rivalrous contributions to the foundations of mathematics.

43. "Composition and division", *Studia Logica*, 36 (1979) 381-406. Reprinted as chapter 8 in *Fallacies: Selected Papers*. Tyler Burge, "A theory of aggregates", *Noûs*, 11 (1977), 97-118.

44. "Arresting circles in formal dialogues", *Journal of Philosophical Logic*, 7 (1978), 73-90. Reprinted as chapter 10 in *Fallacies: Selected Papers.*

45. See for example, Aristotle's foundational contribution in *On Sophistical Refutations*, in Jonathan Barnes, editor, *The Complete Works of Aristotle: The Revised English Translation*, two volumes, Princeton: Princeton University Press, 1984; I, 278-314.

is incorrigible.[46] One thing that soon became apparent to post-Hamblin researchers is how different in kind the fallacies on the traditional lists tended to be. Why, for example, would we think that there is a common structural core shared by the *ad baculum* fallacy and the fallacy of hasty generalization? Whereupon was born the logical *pluralism* which underlay the Woods-Walton Approach.[47] In more recent times, there have been aggressive attempts to re-engineer approaches to real-life argument in formal systems of increasingly sophisticated mathematical complexity, which have attracted little Canadian participation and

46. Not every fallacy theorist accepted the traditional concept of fallacy. See, for example, Gerald Massey, "Are there any good arguments that bad arguments are bad?" *Philosophy in Context*, 4 (1975), 61-77; "In defense of asymmetry", *Philosophy in Context*, 6 (1975), 44-45, supplementary volume; and "The fallacy behind fallacies", *Midwest Studies in Philosophy*, 6 (1981), 489-500. See also Hintikka, "The fallacy of fallacies" 1984. Much later came John Woods' "Lightening up on the ad hominem", *Informal Logic*, 27 (2007), 101-134; "The concept of fallacy is empty: A resource-bound approach to error", in Lorenzo Magnani and Li Ping, editors, *Model Based Reasoning in Science, Technology and Medicine*, pages 69-90, Berlin and Amsterdam: Springer, 2007; and "Begging the question is not a fallacy", in Cédric Dégrement, Laurent Keiff and Helge Rükert, editors, *Dialogues, Logics and Other Strange Things: Essays in Honour of Shahid Rahman*, pages 149-178, London: College Publications, 2008 (with Dov Gabbay). In *Errors of Reasoning*, Woods generalizes these findings, arguing that the traditional list of fallacies fails to instantiate the traditional conception of them. In the interest of historical accuracy, I should point out that some of these dissenters dissent from different doctrines. Massey dissents from the idea that a fallacy is an argument or inference that disguises its invalidity. Hintikka rejects the view that fallacies are errors of inference. Woods accepts the traditional conception of fallacy and rejects the traditional list.

47. The Amsterdam School's van Eemeren and Grootendorst are leading critics of W & W's pluralism in fallacy theory. Writing in 1992, they say: "The systematic exploration of advanced logical systems in order to analyse fallacies is characteristic of Woods and Walton's approach, [according to which] every fallacy needs, so to speak, its own logic. For practical purposes this approach is not very realistic... One only gets fragmentary descriptions of the various fallacies... Ideally one unified theory that is capable of dealing with all the different phenomena is to be preferred." (Frans H. van Eemeren and Rob Grootendorst, *Argumentation, Communication and Fallacies: A Pragma-Dialectical Perspective*, Hillsdale, NJ: Erlbaum, 1992; p. 103.)

only slight and equivocal attention.[48] I have it on good authority that Woods is drawn to the construction of heavy equipment technologies by the fun of making them up. When well-wrought, he sees them as works of intellectual high art. Woods harbours for the BGW attack-and-defend networks no conscientious aspirations for the conceptual clarification of the concept of adversarial argument in real life. He doesn't, however, slight the as-yet unfound good that sometimes lies in formal models that distort their original targets beyond recognition, when they lead to a better understanding of things not-yet heard of. Recall here Bohr's and Planck's utter distortion of the Newtonian concept of light in a way that helped turn physics in a direction that would greatly enlarge our understanding of the natural world, as if by chance. Not by chance, Woods thinks, but by Bohr's and Planck's amazing nose for powerful new ideas.

Although the Woods-Walton Approach is still recognized as something of foundational significance, it had actually run its course by the mid-1980s after a scant decade or slightly more of dominant play, especially in fallacy theory. In looking back now, I think that it can be said with some assurance that the good that Woods and Walton saw in modelling real-life argument and inference formally arose from the efficiencies of *simplified exemplication* and, even more so of *finite expressibility*. It is a lesson easily learned from a first course on the sentential calculus that, while there are infinitely many wffs in its formal language L, they are finitely expressible or representable as follows:

48. Howard Barringer, Dov M. Gabbay and John Woods, "Temporal dynamics of support and attack networks: From argumentation to zoology", in Dieter Hutler and Werner Stephan, editors, *Mechanizing Mathematical Reasoning*, Berlin: Springer-Verlag, 2005; "Network modalities", in G. Gross and K. U. Schulz, editors, *Linguistics, Computer Science and Language Processing*, London: College Publications, 2008; and "Modal argumentation networks", *Argumentation and Computation*, 2-3 (2012), 203-227. Also notable is the turning of some argumentation theorists to AI. See here Douglas Walton, *Witness Testimony Evidence: Argumentation, Artificial Intelligence and Law*, New York: Cambridge University Press, 2008.

1. p_1 is an atomic wff.
2. If p_n is an atomic wff, so is p_n+1.
3. Nothing else is an atomic wff.
4. If ϕ is an atomic wff, it is a wff.
5. If ϕ is a wff, so is $\ulcorner\sim\phi\urcorner$.
6. If ϕ and ψ are wffs, so are
   $\ulcorner\phi \wedge \psi\urcorner$
   $\ulcorner\phi \vee \psi\urcorner$
   $\ulcorner\phi \supset \psi\urcorner$
   $\ulcorner\phi \equiv \psi\urcorner$
7. Nothing else is a wff.

Another thing we can say with even greater assurance is that in the early 1970s Woods and Walton certainly had *not* intended to say their piece about fallacies in the manner in which Tarski had tried (and failed) to say his piece about truth in natural language.

In reaction to Charles Hamblin's challenge to restore fallacy theory to its proper home in logical theory, Canadian contributions to the logics of argument, have been numerous, varied, and in a number of respects highly influential, as witness the work of Walton and his colleagues on *argumentation schemes*.[49] Walton's emphasis on argumentation schemes for elucidating the striking type-complexity of human argument has considerably shaped the study of argument internationally. It also reflects a difference of opinion about what makes a system formal. For most of its long history, logic had been formal in Aristotle's sense, in which real arguments would be represented by sequences of natural language sentences whose general terms have been replaced by *schematic letters*. From Frege onwards, formalization would be

49. Walton, Christopher Reed and Fabrizio Macagno, *Argumentation Schemes*, New York: Cambridge University Press, 2008; and Walton, *Methods of Argumentation*, New York: Cambridge University Press, 2013.

provided by semantically barren artificial "languages" in which quantification serves to bind *free variables*.[50] There is a world of difference between a schematic letter and a variable. Variables are bindable by quantifiers. Schematic letters are not. Consider the schema "All A are B" together with its proposed counterpart in L, "$\forall x, A(x) \supset B(x)$". The latter is a fully expressed formal sentence of L or in a suitably regimental canonical notation. The former is not itself a sentence of English. It is a schematic rendering of numberlessly many sentences got by uniformly substituting general terms of English for the schematic letters "A" and "B". The expression "For all A, B, (All A are B)" is in several respects not well-formed in English or L. In looking back, one might think that the early days Canadians with an eye on formal modelling favoured the formalization via variables approach, but more recently have returned to the fold of argumentation schemes. This, I think, is a misconception. Here is why.

In the years closely following Hamblin, perhaps Canada's most internationally recognized contribution to the theory of argument lay in fallacy theory. If it were distinctive of the Woods-Walton Approach to call into service pre-existing logical formalisms or readily adaptable ones, this wouldn't be the case for the others. One thing is clear in retrospect. Whatever Woods and Walton thought they were doing in the 1970s and early eighties, it was *not* what Woods decidedly did try to do in 1974 with his *Logic of Fiction: A Philosophical Sounding of Deviant Logic*.[51] In that book, Woods wanted a systematic theory of reference, truth and inference for literary discourse, using a formal semantics defined over a formalized language for modal logic, adapted to the needs of a fictionality operator. This was not what he and Walton were up to in their fallacies work. What they were doing

50. Gottlob Frege, *Begriffsschrift*, Halle: Louis-Nebert, 1879. Also in van Heijenoort 1967.

51. The Hague and Paris, Mouton. Second edition, with a Foreword by Nicholas Griffin, volume 23 of Studies in Logic, London: College Publications, 2009.

together falls a long way short of a formalist crisis.[52] In the first place, they were using pre-existing theories as *examples* of how points of interest to fallacy theorists might be worked up. For example, W & W modelled their approach to the *petitio principii* in the way that certain game-theoretical dialogue logicians handled attack-and-defend arguments. Moreover, in all cases in which logical symbolism was employed, the intention was simplification, and the means of attaining it was schematic. Even in those cases in which W & W borrowed from pre-existing theories that had been formalized to a degree that would support a formal semantics, they would not be a material feature of their borrowings. From which we may safely conclude that, for all the occasional anxieties of their critics, the W & W Approach was never at risk for the formalist crisis. It came nowhere close to having missed the target problem and it ran no risk of making its target concepts unrecognizable by virtue of their formal misrepresentations. Mind you, that is far from a wholesale absolution for the errors and shortcomings that remain.

6. WHITHER?

The Canadian brand was never as well-defined and organizationally and doctrinally sustained as the Amsterdam brand. Brands, as we know, come and go, and these two have flourished for decades now. It remains to be seen how well they hold up in the years and decades ahead. Judged from where we are now on the Canadian scene, there are clear signs of where the country's research efforts are likely to be directed. One of them is logical structure of argument and reasoning in legal contexts.[53]

52. I now think that what Woods was doing with fiction in 1974 was the real formalist crisis. For more, see his *Truth in Fiction: Rethinking its Logic*, forthcoming in the *Synthese* Library.

53. In addition to Walton's contributions already noted, see Woods, *Is Legal Reasoning Irrational? An Introduction to the Epistemology of Law*, Volume 2 of Law and Society, London: College Publications, 2015.

Another signals a renewed alliance with cognitive, experimental and social psychology, neurobiology and the other empirical branches of cognitive science. In one of its streams, we see an effort to do for logic what Quine and others have done for epistemology, namely to give it the naturalized form which has been intermittently in play *in logic* since Bacon, Mill, Husserl, Dewey, and later Toulmin, notwithstanding the intense efforts of Frege and others to make all of logic dance to the tune of mathematics.[54] Also of note are the already mentioned efforts to build alliances with computer science and AI, in a way perhaps of exposing how the mathematics of software engineering might leaven the insights of those whose purpose is the elucidation of human argument on the ground. Also of growing importance is the exposure of human argument-making to the plethora of work already under the belt of theories of defeasible, default and nonmonotonic consequence. Whether any of this outreach will lead to new Canadian brands remains to be seen. Ray Reiter's paper on the logic of default reasoning, was published when he was a member of UBC's mathematics department prior to his departure for the University of Toronto.[55] Although a foundational contribution by a Canadian, no one thinks of default logics as carrying a Canadian brand.[56] In the theory of argument

54. For recent Canadian work in this vein, see Woods, *Errors of Reasoning: Naturalizing the Logic of Inference*, 2013/2014. For important work from OSSA honorary Windsorites, see Maurice Finocchiaro, *Arguments About Arguments: Systematic, Critical and Historical Essays in Logical Theory*, New York: Cambridge University Press, 2005; James B. Freeman, *Acceptable Premises*, New York: Cambridge University Press, 2005; Finocchiaro, *Meta-argumentation: An Approach to Logic and Argumentation Theory*, volume 42 of Studies in Logic, London: College Publications, 2013; and Fabio Paglieri, editor, *The Psychology of Argument: Cognitive Approaches to Argumentation and Persuasion*, volume 59 of Studies in Logic, London: College Publications, 2016.

55. Raymond Reiter, "A logic for default reasoning" *Artificial Intelligence*, 12 (1980), 81-132.

56. See here J. Anthony Blair and Ralph H. Johnson, editors, *Conductive Argument: An Overlooked Type of Defeasible Reasoning*, volume 33 of Studies in Logic, London: College Publications, 2011. Although the editors are Canadian, the chief promoter of the conductive cause, Carl Wellman, is not.

the Canadian brand is, like all brands, a fleeting thing. I foresee no successor to that Canadian throne holding sway for the next forty-seven years.

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CHAPTER 4.

THE PROBLEM OF MISSING PREMISSES

DAVID HITCHCOCK

Abstract: Theorists of argument suppose that arguments with definite conclusions that do not follow logically from their premiss or premisses have a "gap-filling" unexpressed premiss, whose identification and addition to the stated premiss or premisses would produce an argument whose conclusion does follow logically. A common explanation for the omission of a premiss, found from Aristotle to Quine and Copi, is that arguers leave unstated known information that the readers or hearers can supply for themselves. Traditional Aristotelian logic developed a method for supplying the supposedly omitted premiss in the case of incomplete categorical syllogisms. This traditional approach has two weaknesses. The first weakness is that not every argument that is supposed to have a gap-filling unstated premiss is an incomplete categorical syllogism. This weakness can be remedied by recognizing that filling out an incomplete categorical syllogism by adding the appropriate categorical statement is a special case of constructing a covering generalization of the argument. The second weakness is that there is indeterminacy about what covering generalization to supply, with respect to both which repeated components of the argument are to be subject to generalization and how broadly to generalize over them. This weakness can be remedied by adopting a policy of maximum generalization, subject to constraints of context and plausibility. A more fundamental objection to this approach is phenomenologi-

cal: people reasoning and arguing in ways that are not logically compelling have no awareness of having omitted a premiss, even when they are reasoning something out for themselves. The whole approach of postulating an unexpressed gap-filler rests on a mistake, the mistake of supposing that there is a gap. Rather, logical consequence is a special case of a broader concept of consequence that includes material as well as formal consequence. The question to be asked in evaluating an argument with a definite conclusion is not how to expand it so as to make the conclusion follow logically but whether it has a non-trivially acceptable covering generalization that supports counterfactual instances. The broader concept of consequence has been recognized by Bolzano, Peirce, Ryle, Sellars, Toulmin, George, Brandom and others, but has not yet been recognized in introductory logic textbooks. It needs to be.

1. INTRODUCTION

At the First International Symposium on Informal Logic, held in Windsor, Ontario in June 1978, Ralph H. Johnson and J. Anthony Blair outlined a research agenda (Johnson & Blair 1980, pp. 25-26) for the sub-discipline of philosophy which their conference made newly self-conscious, a sub-discipline subsequently recognized by the International Federation of Philosophical Societies (FISP) under the title "philosophy of argumentation".[1] In their "unclassified and partial list of problems and issues in informal logic" (Johnson & Blair 1980, p. 25), there appeared what they called "the problem of assumptions and missing premises", which they characterized by a set of questions:

> What exactly is a missing premise? What different kinds of assumptions can be distinguished in argumentation? Which are significant for argument evaluation? How are missing premises to be identified and formulated? Are these just practical and pedagogical questions, or theoretical as well? (Johnson & Blair 1980, p. 25)

1. In the first circular for the FISP-sponsored World Congress of Philosophy in 2018, philosophy of argumentation is the 57th of 99 alphabetically ordered sections to which one could contribute papers (https://www.fisp.org/documents/WCP%202018%20First%20Circular%20English.pdf; accessed 2017 12 06).

Subsequently Ennis (1982) distinguished three types of implicit assumptions in arguments: backups implicitly assumed as support for a stated premiss, presuppositions without which a premiss of the argument would not make sense, and gap-fillers needed by the argument or implicitly used by the arguer to make the conclusion follow logically from the stated premiss or premisses.

The postulation of gap-fillers arises quite naturally from paying attention to real arguments.[2] Almost always, the conclusion of a real argument is not a logical consequence of its premiss or premisses.[3] However, if the stated premiss or premisses and the

2. By real arguments, I mean arguments that people produce in their efforts to justify their claims or to explain why they hold the opinions that they do or to point out the consequences of others' positions or to accomplish any other communicative purpose (except serving as an example in a logic textbook or as part of a Socratic question-and-answer refutation).

3. The point holds on any accepted conception of logical consequence, whether information-theoretic, modal, model-theoretic, set-theoretic, substitution-theoretic, schematic, speech-act-theoretic, or syntactic. An information-theoretic conception (Corcoran 1998) takes a proposition c to be a consequence of a set ∋ of propositions if and only if the information in the propositions in ∋ includes the information in the proposition p. A modal interpretation (Bradley and Swartz 1979; Etchemendy 1990) takes a proposition c to be a consequence of a set ∋ of propositions if and only if p is true in every possible "world" (i.e. state of affairs) in which the propositions in ∋ are true. A model-theoretic conception (Tarski 2002/1936) takes a sentence c in a formal (or formalized) language to be a consequence of a set ∋ of sentences in that language if and only if c is true on each uniform interpretation (or re-interpretation) of the extra-logical constants in c and in the sentences in ∋ on which every sentence in ∋ is true. A substitutional conception (Quine 1970) takes a sentence c in a formal or formalized language to be a consequence of a set ∋ of sentences in that language if and only if the sentence obtained from c as the result of any uniform substitution on the extra-logical constants in c and the sentences in ∋ is true if every sentence obtained from the sentences in ∋ by this substitution is true. A schematic conception (Quine 1972) takes a sentence c in a formal or formalized language to be a consequence of a set ∋ of sentences in that language if and only if c and ∋ are instances of at least one set of schemata c(x1, …, xn) and ∋(x1, …, xn) containing no extra-logical constants for which every instance of c(x1, …, xn) is true for which the corresponding instances of the sentence schemata in ∋(x1, …, xn) are true. A speech-act conception (Kearns 1997) takes a statement or propositional act c to follow from a set ∋ of statements or propositional acts if and only if a

stated conclusion are not hedged by such qualifiers as 'perhaps' or 'generally' or 'may', the conclusion will typically be a logical consequence of an expansion of the argument in which a premiss is added. Thus the notion arose that such arguments have an unexpressed premiss, variously described as missing (Johnson & Blair 1980), tacit (Hitchcock 1983), hidden (Gough & Tindale 1985), or suppressed (Copi & Cohen 2002).

2. THE TRADITIONAL APPROACH

The failure of most real arguments to conform to logicians' conceptions of the consequence relation has been recognized since the time of Aristotle, who found this failure in the speeches of orators and explained it as due to their accommodation of the limited attention span of their audience, for whom arguments needed to be concise and should therefore omit components that the audience could supply for themselves:

> An enthymeme is a rhetorical proof… The enthymeme must be a syllogism, with few <premisses>, often fewer than the primary syllogism. For, if any of them is familiar, it is not necessary to state it, for the hearer himself adds it. For example, <to show> that Doreius has won a crowned contest, it is sufficient to say that he has won at the Olympics, and it is not necessary to add that the Olympics are crowned, for everybody knows <that>. (Aristotle, *Rhetoric* I.1.1355a6, I.2.1357a16-20; my translation[4])

person is committed to accepting c who accepts the statements or propositional acts in ∋. A syntactic conception (Tarski 2002/1936) takes a sentence c in a formal or formalized language to be a consequence of a set ∋ of sentences in that language if and only if c is deducible from ∋ using the rules of inference of a sound logic for that language. There are variants on these conceptions. They are not equivalent to one another. In particular, application of the conceptions defined in terms of a formal or formalized language requires "translation lore" whose use requires judgment and can be quite complicated. The differences among the conceptions turn out to be relevant to the task of extending the concept of logical consequence to cover so-called "material consequence" (Sellars 1953).

4. *"esti d'apodeixis rhêtorikê enthymêma ... anankaion ... to d' enthymêma syllogismon, kai ex oligôn te kai pollakis elattonôn ê ho prôtos syllogismos· ean gar êi ti toutôn gnôrimon, oude dei legein· autos gar touto prostithêsin ho akroatês, hoion hoti Dôreius stephanitên agôna*

By the "primary syllogism", Aristotle here means the syllogism found in attempts like that of Socrates in Plato's "peirastic" (testing) dialogues to refute his interlocutors' theses. It is the kind of reasoning for which Aristotle subsequently developed the first system of formal logic, his categorical syllogistic. By definition, the conclusion of a syllogism follows necessarily from its premisses.[5]

Aristotle used the word 'enthymeme' (Greek '*enthymêma*') for the syllogism's rhetorical counterpart, which he took to be characterized by reasoning from likelihoods or signs (Aristotle, *Prior Analytics* II.27.70a10[6]). For Aristotle, it was not a defining feature of an enthymeme that it has fewer premisses than a "primary syllogism", only a frequent occurrence. Stoic logicians, however, defined an enthymeme as an incomplete syllogism.[7] Their definition became accepted in the European logical tradition. With syllogisms taken to be Aristotelian categorical syllogisms, with two premisses and a conclusion each of subject-predicate form and of a definite quality (affirmative or negative) and quantity (universal, particular or singular), the textbook tradition distinguished three types of enthymemes: first-order enthymemes in which the major premiss (the premiss containing the predicate of the conclusion) was missing, second-order enthymemes in which the minor premiss (the premiss containing the subject of the con-

nenikêken· hikanon gar eipein hoti Olympia nenikêken, to d' hoti staphantês ta Olympia oude dei prostheinai· gignôskousi gar pantes" (OCT text, ed. W. D. Ross)

5. "A syllogism is an argument in which certain things are posited and something other than the things laid down results of necessity through the things laid down" (*Topics* I.1.100a25-27, my translation). *"Esti dê ho syllogismos logos en hôi tethentôn tinôn heteron ti tôn keimenôn ex anankês symbainei dia tôn keimenôn"* (OCT text, ed. Ross). Similar definitions can be found in Aristotle's *Sophistical Refutations* (164b27-165a2) and in his *Prior Analytics* (I.1.24b18-20)

6. "An enthymeme is a syllogism from likelihoods or signs" (Aristotle, *Prior Analytics* II.27.70a10, my translation). *"Enthymêma de esti syllogismos ex eikotôn ê sêmeiôn"* (OCT text, ed. Ross).

7. "The enthymeme is an incomplete syllogism" (Epictetus, *Enchiridion* I.8.3; my translation). *"... atelês syllogismos esti to enthymêma"* (Teubner text, ed. Schenkl).

clusion) was missing, and third-order enthymemes in which the conclusion was missing (Copi & Cohen 2002, p. 270). The limited number of types of two-premiss categorical syllogisms made it possible to construct a sound and complete system for filling out incomplete categorical syllogisms of the three orders, helped by such generalizations from Aristotle's results as the principles that the middle term shared by both premisses must be "distributed" at least once, that a universal conclusion follows only from universal premisses, that a negative conclusion follows only if there is exactly one negative premiss, and so forth.

Consider, for example, the argument that birds are reptiles, because they are vertebrates, are suspended in a membrane in their embryonic stage, and are descended from the most recent ancestor of living turtles, crocodilians and lizards. The conclusion is a universal affirmative statement whose subject is the term 'birds' and the premiss is another universal affirmative statement with the same subject. To make this argument into a categorical syllogism, one needs to supply a second premiss that links the predicate of the stated premiss to the predicate of the conclusion. The only categorical statement that does so in a way that produces a categorical syllogism is a universal affirmative statement whose subject is the predicate of the stated premiss and whose predicate is the predicate of the conclusion: All vertebrates that are suspended in a membrane in their embryonic stage and are descended from the most recent ancestor of living turtles, crocodilians and lizards are reptiles. The same method can be used to find a statement whose addition as a premiss or a conclusion will transform any incomplete categorical syllogism into a complete one.

Although Aristotle located the supposed omission of a premiss in the speeches of orators, samplings of arguments in scholarly books and in calls to radio talk shows have found a similar failure to conform to logicians' models (Hitchcock 2002; 2009). In fewer than 10% of the arguments discovered in either context (6% of

the scholarly arguments, 7.7% of the spoken arguments) was the conclusion a logical consequence of the premiss or premisses.

Aristotle's explanation of this phenomenon continues to be repeated, both in theoretical works (e.g. Quine 1972, p. 169) and in introductory logic texts (e.g. Copi & Cohen 2002, p. 269). Acceptance of the explanation that a premiss has been omitted from such arguments naturally raises the question of how one is to discover the premiss that has been omitted, especially in circumstances like the analysis of a written or recorded argument, where one cannot ask the author to supply it or to assent to one's suggestion as to what it was.

3. FIRST WEAKNESS: LIMITED SCOPE

The traditional approach of turning an incomplete categorical syllogism into a complete one has at least two weaknesses. First, not every argument whose conclusion is not a logical consequence of its premiss or premisses is an incomplete categorical syllogism. We can ignore arguments whose conclusion is not a statement or is qualified by a word like 'probably' or 'presumably' or 'perhaps' or 'possibly', since there is no statement that can be added to such arguments as an additional premiss to make the conclusion a logical consequence of the expanded argument's premisses. Even setting aside such arguments, we can find arguments whose conclusion is not a logical consequence of their premiss or premisses but which are not incomplete categorical syllogisms. Consider for example the following argument, put forward by a woman caller to a radio phone-in program discussing the wish of a married woman to go to dance clubs without her husband:

> I think the reason why the wife wants to go to clubs is because she would prefer to feel younger again. You know, when you go to clubs, you know that you have it when you can pick up guys and stuff. I think she wants that, and the husband either doesn't have the need or he doesn't have it. So I think he should give her a break

and if he doesn't enjoy going give her that one night with the girls (Hitchcock 2009, "Appendix", p. 3).

This is a complex argument, which requires some analysis to tease out its structure. The ultimate conclusion, introduced by the word 'so', is supported immediately by the statement that immediately precedes it. This supporting statement is a conjunction, whose first conjunct repeats in somewhat different words the idea of the initial statement, for which the second statement in the paragraph is offered in support. Filling in anaphoric references, deleting the framing introductory phrases "I think" and "you know", construing "it" as referring to sex appeal, and using a standard numbering system, one might analyze the argument as follows:

1.1 When you go to clubs, you know that you have sex appeal when you can pick up guys and stuff.

1. The reason why the wife wants to go to clubs is because she would prefer to feel younger again. (The wife who wants to go to clubs wants to know that she has sex appeal.)

2. The husband either doesn't have the need to know that he has sex appeal or doesn't have sex appeal.

C. The husband should give his wife a break and if he doesn't enjoy going to clubs give her that one night out going to clubs with the girls.

The main argument from premisses 1 and 2 to conclusion C would be extremely difficult to massage into the form of an incomplete categorical syllogism. Nevertheless, its conclusion is an unqualified statement that does not follow logically from its premisses. To fit the argument into the logician's model, one needs some way of attributing an unstated premiss to it. But the approach of treating it as an incomplete categorical syllogism does not provide such a way.

The limited applicability of the traditional approach can be overcome by recognizing that filling out a first-order or second-order incomplete categorical syllogism is a special case of a more general procedure. It can be shown by complete enumerative induction that the premiss generated by the traditional approach is logically equivalent to a covering generalization of the argument with respect to the term shared by the stated premiss and the conclusion. We can use Aristotle's Doreius argument as an example, taking 'Doreius', the grammatical subject of both the premiss and the conclusion, as the shared term. To construct a covering generalization of such a one-premiss argument, we form a conditional statement with the premiss as the antecedent and the conclusion as the consequent:

> If Doreius has won at the Olympics, then Doreius has won a crowned contest.

We then replace the shared term with a variable of the appropriate type, in this case a variable ranging over individuals:

> If x has won at the Olympics, then x has won a crowned contest.

Formally, there should be an initial quantifier 'for every x', but we take the universal quantification to be conveyed by the use, borrowed from algebra, of small letters from the end of the alphabet as being implicitly universally generalized. We then transform the statement into something logically equivalent but more intelligible:

> Everyone who has won at the Olympics has won a crowned contest.

This is precisely the assumption that the traditional approach would supply. It can be shown by complete enumerative induction on the moods of the categorical syllogistic that the covering generalization of a first-order or second-order incomplete categorical syllogism with respect to the term shared by its premiss and its conclusion is logically equivalent to the statement whose

addition as a premiss would transform the argument into a complete categorical syllogism.

Let us then apply the more general approach to the main argument of the dance clubs example. To construct a covering generalization, one forms first of all the argument's associated conditional, i.e. the (material) conditional whose antecedent is the conjunction of the argument's premisses and whose consequent is the argument's conclusion. In the above example, we get the following conditional associated with the main argument:

> If the reason why the wife wants to go to clubs is because she wants to know that she has sex appeal and the husband either doesn't have the need to know that he has sex appeal or he doesn't have sex appeal, then the husband should give his wife a break and if he doesn't enjoy going to clubs give her that one night out going to clubs with the girls.

Next, one identifies the repeated content expressions in the conditional, making sure to include at least one content expression shared by the antecedent and the consequent but also noting content expressions repeated in the antecedent but not occurring in the consequent.[8] By a content expression I mean a word or phrase that can be replaced by a single independently significant word without loss of grammaticality (Hitchcock 1985, p. 84). In Aristotle's example, the phrase 'Doreius has won' is a content expression, because it can be replaced by the independently significant word 'win' without loss of grammaticality. In our current example, the repeated content expressions in the argument's associated conditional are "the wife", "go to clubs", "has sex appeal", and "the husband". Putting variables of the appropriate type in place of these phrases, and assuming introductory uni-

8. The reason for doing so anticipates the ultimate status of such a covering generalization as an inference-license rather than a premiss. Without the requirement of an overlapping variable, there is no real inference to license. A conclusion could be said to be a "consequence" of a set of premisses merely because it was true or merely because the premisses were not all true. See (Hitchcock 1998, pp. 24-27).

versal generalizations over these variables, one gets the following (simplified) generalization of the associated conditional:

> If x wants to do F because x wants to know that x has G and y either does not want to know that y has G or does not have G, then if y does not enjoy doing F y should let x do F.

Finally, one transforms the generalization into something more intelligible. In our example, the result might be a statement like the following:

> One person should let another person do what they want to do if the second person has a reason for doing it that the first person does not share.

The reader may think that this statement is too general as a candidate for the missing premiss of the dance clubs argument. We will consider this objection in due course.

4. SECOND WEAKNESS: INDETERMINACY

Extending the scope of the traditional approach in this way addresses its first weakness, that not every logically incomplete argument is an incomplete categorical syllogism. But a second weakness remains, which as it happens both the Doreius argument and the dance clubs argument illustrate. Any argument whose conclusion is not a logical consequence of its premiss or premisses can be expanded in more than one way so as to make the conclusion a logical consequence of the premisses of the expanded argument.[9] Consider Aristotle's Doreius argument.

9. The added premiss must entail (i.e. logically imply) the original argument's associated material conditional. Otherwise, it would be consistent to assert the added premiss and to deny the associated conditional. But denial of a material conditional is logically equivalent to assertion of its antecedent and denial of its consequent. If the conditional is an argument's associated conditional, this amounts to assertion of the original argument's premiss(es) and denial of its conclusion, thus rejecting the claim that the conclusion follows from the premiss(es) along with the added premiss. Given that the associated conditional cannot coherently be supported by denial of

If we take the traditional approach to completing it, we obtain the unstated premiss that anyone who has won at the Olympics has won a crowned contest. This assumption follows logically from the assumption that Aristotle supposes will be supplied by the hearer, that the Olympics are a crowned contest. But it is logically weaker. For it would be true if, for example, the Olympics were not a crowned contest but it was a requirement for competing in the Olympics that one have previously won a crowned contest. (Here we use a modal conception of logical consequence to show that Aristotle's unstated premiss is not a logical consequence of the unstated premiss generated by the traditional approach to enthymemes.)

One can however transform Aristotle's example so that the traditional approach generates Aristotle's assumption. To do so, one needs to massage the stated components so as to make the entire repeated phrase "Doreius has won" into a term. One might for example rephrase the argument as follows:

> Some contest at the Olympics is a contest which Doreius has won; therefore, some contest which Doreius has won is a crowned contest.

With this rephrasing, the traditional approach generates the assumption that every contest at the Olympics is a crowned con-

its antecedent or affirmation of its consequent (on pain of inconsistency in the first case and begging the question in the second case), it needs a logically stronger statement to support it. The obvious candidates for such a logically stronger statement are universal generalizations of it. But any such generalizations can vary with respect to which extralogical components of the associated conditional are subject to generalization and how broad is the scope of the generalization. For many formal languages, in fact, including the languages of first-order classical and intuitionistic logic, it is a theorem (the Craig interpolation theorem) that, if one formula entails another, there is an intermediate formula such that the first entails the intermediate formula and the intermediate formula entails the second, an intermediate formula that contains all and only the extralogical symbols in the first and second formulas (Craig 1957, p. 267). Thus, if a supposedly logically incomplete argument is symbolized in such a language, there will be an alternative to the proposed missing premiss that is an interpolant between it and the argument's associated conditional.

test, which is the assumption that Aristotle supposed the hearer can supply.[10] Aristotle based his choice on what he assumed every hearer knows. But what of the many arguments that people encounter where they do not have the required background knowledge to select a known truth as the completion of a supposedly incomplete argument?

Aristotle's Doreius argument illustrates one way in which it can be indeterminate which unstated premiss to attribute to a supposedly incomplete argument: how much or how many of the repeated components of the argument are to be abstracted from (or generalized over) in constructing the unstated premiss. Do we abstract from (generalize over) 'Doreius' or over 'Doreius has won'? Another example of this sort of indeterminacy, used in (Hitchcock 1985), is the argument sometimes heard that marijuana should be legalized, because it is no more dangerous than alcohol, which is already legal. Here we have three repeated terms: 'marijuana', 'legal', 'alcohol'. If we generalize on all three terms, we get as an unstated assumption of the argument that anything that is no more dangerous than another thing should get whatever status that other thing has. But it seems unfair to attribute to the argument an assumption that generalizes over 'legal' and to object that driving a car is no more dangerous than cycling, which is already unlicensed, but that nobody would agree that driving a car should be unlicensed. It seems fairer to the argument not to treat 'legal' as a variable component.

The marijuana argument illustrates another way in which it can be indeterminate which unstated premiss to attribute to a supposedly incomplete argument: how broadly to generalize over a repeated component of the argument. Intuitively, it would be unfair to generalize so broadly over the repeated terms 'marijuana' and 'alcohol' as to expose the argument to the objection

10. For the proof that the traditional completion of the above incomplete categorical syllogism is logically equivalent to its covering generalization with respect to the shared term 'contest which Doreius has won', see the appendix.

that not wearing a seat belt is no more dangerous than hang gliding, which is already legal, but that it is not the case that not wearing a seat belt should be made legal. The unfairness illustrates a felt need to restrict the scope of the generalization over 'marijuana' and 'alcohol' to recreational drugs: Any recreational drug that is no more dangerous than a legal recreational drug should be legalized.

Such restrictions of the scope of a covering generalization apply particularly to what I came to call 'occasional arguments' (Hitchcock 2011). Quine (1960) used the term 'occasional sentence' to refer to a sentence whose truth-value is partly a function of the occasion of its utterance. Similarly, an occasional argument is an argument whose inferential scope is partly a function of the occasion of its utterance. The following is an example, provided by Robert Ennis in an e-mail communication:

> … when Michael Scriven and I were trying to find our way to Detroit airport in the car he rented, I said at one point, "The sign says 'Chicago' [to the right], so we should turn right there." (We were trying to get on I-94 going to the airport.) (e-mail communication, 2009 June 8)

The quoted argument, including Ennis's bracketed elaboration, has as a premiss that the sign says 'Chicago' to the right and as a conclusion that we should turn right "there", i.e. at the place where the sign points. The repeated content expressions in the argument are thus 'the sign' and '[to the] right'. The covering generalization with respect to these repeated content expressions is that we should turn in the direction indicated by any sign that says 'Chicago'. This generalization is a plausible candidate for an implicit premiss of Ennis's argument, with the caveat that it needs restriction to the situation in which Ennis advanced his argument. For example, after having gotten on I-94 going to the airport, at the exit ramp from I-94 to the airport, it would be a mistake for the driver to turn at that place in the direction indicated by a sign that said Chicago. The inferential scope of

Ennis's argument is indicated by the additional information that he supplied in his e-mail message. He and the driver were trying to get on I-94 going to Detroit airport. As one can confirm by consulting a road map, and as he and the driver both knew at the time, they were on I-96, having come across the Ambassador Bridge from Windsor, where they had been attending a conference. To restrict the scope of the covering generalization, it is necessary to supplement the premisses with the relevant contextually available information that is mutually known by the arguer and the addressee, thus producing the following expanded argument, displayed in a standard form:

1. We are on I-96 after having crossed the Ambassador Bridge.
2. We are trying to get on I-94 going to Detroit airport.
3. The sign says 'Chicago' to the right.

C. We should turn right where the sign says.

The supplementation of such occasional arguments has the function of specifying the scope of a plausible covering generalization. It does not make the conclusion a logical consequence of the expanded set of premisses. The repeated content expressions in the expanded argument are 'we', 'the sign', and 'right'. The covering generalization with respect to these expressions, when reformulated for intelligibility, is that anyone on I-96 after having crossed the Ambassador Bridge who is trying to get on I-94 going to Detroit airport should follow the signs that say 'Chicago'.

After this introduction of the concept of an occasional argument, we can return to the objection that the covering generalization supplied for the dance clubs argument was too general. The proposed covering generalization was that one person should let another person do what they want to do if the second person has a reason for doing it that the first person does not share. The argument, however, seemed very specific to the issue of what a husband should let his wife do. In the context, there is a

concern, pointed out explicitly by the talk-show host, that "most of them [dance clubs—DH] are pick-up joints". The caller's claim that the wife wants to go to dance clubs in order to know that she still has sex appeal is thus implicitly a denial that she wants to go to them in order to pick up a man with whom she will be unfaithful to her husband. She doesn't want to pick up a guy; she wants to know that she still *can* do so. The caller assumes that the wife would be willing for her husband to accompany her but that he is not interested in going to dance clubs, thus reinforcing the implicit denial that she wants to be unfaithful to her husband. With these aspects of the context identified, we can treat the dance clubs argument as an occasional argument and expand it somewhat as follows:

1. The reason why the wife wants to go to clubs is because she would prefer to feel younger again. (The wife who wants to go to clubs wants to know that she has sex appeal.)
2. The husband either doesn't have the need to know that he has sex appeal or doesn't have sex appeal.
3. The wife who wants to go to clubs does not want to be unfaithful to her husband.

C. The husband should give his wife a break and if he doesn't enjoy going to clubs give her that one night out going to clubs with the girls.

With this expansion of the argument, the most plausible covering generalization will restrict the scope of those who permit behaviour and those whose behaviour is permitted to husbands and wives respectively. Treating 'the wife', 'the husband' and 'go to clubs' as repeated content expressions subject to generalization, one gets the covering generalization that a husband whose wife wants to do something to know that she has sex appeal and not in order to be unfaithful to him should allow her to do it if he is not interested in accompanying her.

The Doreius argument, the marijuana argument and the dance clubs argument illustrate in various ways the indeterminacy of

the approach of constructing a covering generalization for a supposedly incomplete argument in order to make its conclusion follow logically from its premiss or premisses. If more than one content expression is repeated, it is indeterminate which of them is to be generalized over. If the variable that replaces a repeated content expression does not disappear in the simplification of the covering generalization, the scope of this variable (i.e. in a formal language the universe of discourse) is indeterminate. Features of the context may be supplied as additional implicit premisses in order to specify this scope.

To deal with this indeterminacy, I proposed in Hitchcock (1985, pp. 93-94) that one should attribute to an unhedged argument whose conclusion is not a logical consequence of its premiss or premisses the most general possible covering generalization that was plausible in the context. Specifically, subject to considerations of context and plausibility, one should generalize over the entirety of a repeated molecular content expression rather than over a proper part of it, over all distinct repeated content expressions, and over the entire category of items of the kind signified by a repeated content expression.

This approach goes as far as one can in rescuing the traditional approach to filling out with one or more missing premisses an unqualified argument whose conclusion is not a logical consequence of its premiss or premisses. It addresses the weaknesses of the limited scope of Aristotle's categorical syllogistic and the indeterminacy of the thesis that an argument of this sort implicitly assumes a covering generalization of the argument.

5. A FUNDAMENTAL OBJECTION

There remains, however, a fundamental objection to the claim that the assumption so supplied is an implicit premiss of the argument, left unstated because hearers or readers can supply it themselves. The objection is phenomenological. If we pay attention to our own mental processes when we are reasoning to our-

selves in this allegedly incomplete way, we have no awareness of having omitted a premiss. Further, it would be incoherent to suppose that we are leaving out a premiss because our intended audience can supply it, because we ourselves are the intended audience. Readers can recall for themselves a recent inference of the type discussed in this chapter, and can verify the absence of an unstated premiss in their thinking.

The whole tradition of supposing that reasoners and arguers leave unstated a premiss on which they are relying, I maintain, rests on a mistake (Hitchcock 1998). The mistake is to suppose that the only way that a conclusion can follow definitely from premisses is logically. Logical consequence is rather a special kind of consequence, distinguished by the absence of extra-logical terms in its articulation. Consequence in general can be characterized schematically or modally. Schematically, a conclusion follows definitely from a set of premisses if and only if the argument is of a form that rules out non-trivially, for both actual and counter-factual cases, that the premisses are true and the conclusion untrue (or, more generally, non-acceptable). The conclusion of Aristotle's Doreius argument follows in this way from its premiss, because it is of the form 'x has won at the Olympics, so x has won a crowned contest' and this form not only has no actual counter-examples but would not have counter-examples if others had won at the Olympics; further, the absence of counter-examples is not due to the absence of any instances with a true premiss or to the absence of any instances with an untrue conclusion (Hitchcock 2011). To determine whether the conclusion of an unqualified argument follows from its premiss or premisses, one needs to investigate whether it has such a form. The so-called implicit premiss is thus not a premiss, but the articulation in statement form of a possibly valid schema. If one's purpose in considering an argument is to determine whether its conclusion follows, constructing an implicit premiss is a superfluous spinning of wheels. It is more direct to seek

a counterfactual-supporting covering generalization that would license the inference from premisses to conclusion. For this purpose, it may be necessary to appeal to known features of the context of utterance of the argument that narrow the scope of the variables in the covering generalization, i.e. in a formal context to specify the universe or universes of discourse over which the variables range. Articulation of these features attributes one or more implicit premisses to the argument, and to this extent the implicit premiss tradition has some merit. But the point of such supplementation is not to make the conclusion a logical consequence of the supplemented set of premisses but to narrow the scope of the substantive covering generalization in virtue of which the conclusion follows.

6. MATERIAL CONSEQUENCE

Recognition of a broader conception of consequence than logical or formal consequence is not new. George (1983) finds it already in Bolzano's 1837 *Wissenschaftslehre* (Bolzano 1972/1837), in the form of a substitutional conception of consequence where not all the content expressions need be subject to substitution. Peirce (1955/1867-1902) recognized that people reason in accordance with, rather than from, what he called "leading principles". Ryle (1950) argued that a hypothetical statement like 'If today is Monday, tomorrow is Tuesday' is not a premiss of a corresponding argument like 'Today is Monday, so tomorrow is Tuesday", but rather the principle in accordance with which the conclusion of the argument is drawn. Sellars (1953) argued that there were not only formal rules of inference but also material rules of inference, which determined the meaning of descriptive terms; his student Richard Brandom has developed that idea in his "inferential semantics" (Brandom 1994; 2000). Toulmin (1958) influentially distinguished the "data" or "grounds" (Toulmin, Rieke & Janik 1978) on which arguers based their claims from the "warrants" that licensed the transition from grounds to claim and

pointed out that most warrants were substantive rather than analytic.

In my own work, I have developed a schematic conception of consequence that includes both formal and material consequence, and have extended this conception to defeasible inferences with a modally qualified conclusion. The end result of this development is the following statement:

> A conclusion follows from given premisses if and only if an acceptable counterfactual-supporting covering generalization of the argument rules out, either definitively or with some modal qualification, simultaneous acceptability of the premisses and non-acceptability of the conclusion, even though it does not rule out acceptability of the premisses and does not require acceptability of the conclusion independently of the premisses (Hitchcock 2011, p. 224).

Of two contemporary accounts of the truth-value of counterfactual statements, those of David Lewis (1973) and Judea Pearl (2009), Pearl's structural model semantics is easier to apply than Lewis's closest world semantics when determining the truth-value of a counterfactual instance of a covering generalization (Hitchcock 2014), and gives intuitively correct results. The consequence relation described in the above-quoted statement satisfies three of the five structural rules of consequence identified in (Gentzen 1964/1935)—namely, reflexivity, contraction and permutation. It satisfies restricted forms of the cut rule and the weakening rule (Hitchcock 2017, pp. 174-177). There is scope for further investigation of the expanded conception of consequence.

Despite these contributions, introductory textbooks continue to treat logical consequence as the only kind of definite consequence relation, and to give advice on filling out arguments whose conclusion is not a logical consequence of their premiss or premisses so as to make it a logical consequence of the expanded argument. Thus the main problem of missing premisses in contemporary logical education is the problem of failing to recog-

nize that in general no premiss is missing. In this respect, the logical tradition in its conservatism has not yet gotten beyond Aristotle's mistake.

APPENDIX

We can use the rephrasing of Aristotle's Doreius argument to provide another example of proving the logical equivalence of the traditionally supplied completion of a categorical syllogism to the covering generalization of the argument with respect to the term shared between premiss and conclusion. We need to prove that the covering generalization of the rephrased argument with respect to the term 'contest which Doreius has won' is logically equivalent to the statement that every contest at the Olympics is a crowned contest, which is the statement generated by the traditional approach to such an enthymeme. To do so, we infer each statement from the other. The following proof deduces the traditionally generated statement from the covering generalization:

1. For every F, if some contest at the Olympics is F, some F is a crowned contest. (covering generalization)
2. If some contest at the Olympics is a non-crowned contest, then some non-crowned contest is a crowned contest. (from 1, by instantiation)
3. But no non-crowned contest is a crowned contest. (logical truth)
4. Hence no contest at the Olympics is a non-crowned contest. (from 2 and 3, by *modus tollendo tollens*)
5. That is, every contest at the Olympics is a crowned contest. (from 4, paraphrasing)

Now we deduce the covering generalization from the traditionally generated statement:

1. Every contest at the Olympics is a crowned contest. (traditionally generated statement)
2. Suppose (for conditional proof) that some contest at the Olympics is F. (assumption)
3. Then some F is a crowned contest. (from 1 and 2, by existential quantifier elimination, universal quantifier elimination, conditional elimination, and existential quantifier introduction)
4. Hence, if some contest at the Olympics is F, then some F is a crowned contest. (from 2 and 3, by conditional introduction, discharging supposition 2)
5. Hence, for every F, if some contest at the Olympics is F, some F is a crowned contest. (from 4, by universal quantifier introduction)

The first half of the proof illustrates the need to be judicious in choosing one's instantiation of the covering generalization when deriving the traditionally supplied additional premiss.

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CHAPTER 5.

ARE THERE METHODS OF INFORMAL LOGIC?

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Abstract: This paper addresses one of the practical problems that arise in connection with the evaluation of natural language arguments, namely, how to determine their logical strength. Pursuing this problem will invite a comparison between formal and informal logic. Which of these two approaches is best for evaluating the logical strength of natural language arguments (NLA's)? The claim has been urged that informal logic is best suited to the job or that it is at least just as well suited to it as formal logic is. That may well be so, but how are we to decide? A framework is developed that will give us some guidance in answering these questions.

Imagine that you have received a grant to study the argumentation surrounding a topic of current interest, the arguments about whether there should be unrestricted building of energy-producing windmills, for example, or whether your country should be involved in an overseas war, or whether we should eat genetically modified foods. You want to know all the different arguments that have been given on this topic, for and against, over a given period of time in such-and-such sources (these newspapers, these web-sites, those radio programmes). Not only do you want to know what arguments have been given, you also want to know which ones are good arguments and which ones are not good. But you can't do all this work yourself. You need others to help you.

Enter at this point: the graduate students. One of them is writing a thesis on Kierkegaard, another on the concept of social justice, and the third on the private-language argument. Being graduate students there can be no doubt about their intelligence and commitment; however, none of these students has had any special training or background in the analysis or evaluation of natural language arguments, at least not those that are found outside the philosophy seminar room. So, since the Dean has told you that these are the helpers you must use if you want your grant, you now have a practical problem: how do you prepare these people to help you with your research?

I will use this story as a way of motivating and orienting a discussion about one of the practical problems that arise in connection with the evaluation of natural language arguments, namely, how to determine their logical strength. Pursuing this problem will invite a comparison between formal and informal logic. Which of these two approaches is best for evaluating the logical strength of natural language arguments (NLA's)? The claim has been urged that informal logic is best suited to the job or that it is at least just as well suited to it as formal logic is. That may well be so, but how are we to decide? What would justify our answer that the one approach is better than the other? Below, a framework is developed that will give us some guidance in answering these questions.

The concept of 'logical evaluation' is ambiguous because some people use it broadly to include both the evaluation of premisses and the evaluation of the premiss-conclusion relationship, whereas others use 'logical evaluation' narrowly to refer only to the evaluation of the premiss-conclusion relationship – that is, to the evaluation of the extent to which premisses are sufficient for their conclusions on the assumption the premisses are acceptable. To avoid confusion, I use the term *illative evaluation* to refer to the evaluation of the premiss-conclusion relationship in an argument or inference. The general problems that concerns us, then, is, how to determine the *illative strength* of arguments, and how to justify our illative judgments. The practical

and more immediate problem facing us is to decide on a serviceable method of illative evaluation that will be easy for our new-found assistants to learn, and enable them to report back in fairly short order on the illative strength of the arguments they are studying.

1. IN PRAISE OF FORMAL LOGIC

The virtues of formal logic are many. One of them is that it focuses on the premiss-conclusion relationship, ignoring the question of premiss acceptability. True, formal logic texts introduce the concept of a *sound argument* as one which is deductively valid and has true premisses. But the introduction of this concept usually comes at the point where the author(s) wants to distinguish logical pursuits from extra-logical ones. The truth is that formal logic doesn't have much to say about premissary questions except to offer a broad three-fold classification which sorts them into necessarily true propositions (logical truths), necessarily false propositions (logical falsehoods) and contingent propositions. The first two kinds of propositions are of interest to formal logicians and philosophers and mathematicians (the premisses (axioms) of formal systems must be logical truths) but they are hardly of interest to anyone else since the premisses of NLA's are for the most part made of contingent propositions. Formal logic has no means of evaluating contingent propositions as true or false, and that is why formal-logic texts do not have exercises on determining the truth or falsity of such propositions. Hence, formal logic is aware that it cannot take it as part of its business, in general, to pronounce on premiss acceptability, and that therefore its true concern must be restricted to illative issues and not the logical evaluation of arguments in the wide sense. This is not to say that formal logicians do not have views about premiss acceptability; surely, they do, but those views are not part of the formal logic they espouse: they are something else, tacked on. We should not be surprised then, when, at least since the nineteenth

century, the preference has been to identify logic with the study and evaluation of premiss-conclusion relationships and disassociate it from premissary questions. "[T]he rules of Logic," wrote Whately in the 1820's, "have nothing to do with the truth or falsity of the Premises; except, of course, when they are the conclusions of former arguments" (Whately 1875: 153), and about 175 years later we have Skyrms expressing almost the same view when he writes that, except in special cases, "It is not the business of a logician to judge whether the premises of an argument are true or false" (Skyrms 2000: 15).[1]

Many informal logicians take the practical task of their discipline to be, in the broad sense, the logical evaluation of *arguments*, and hence they include both premissary and illative questions in informal logic. I believe this creates a dilemma which I would rather see informal logic avoid. For, any questions of premiss acceptability that reach beyond the very familiar, or common sense, must be shared with colleagues in particular disciplines such as history, politics, economics, biology, statistics, etc. as well as those in more general fields such as epistemology, philosophy of science, rhetoric and dialectical studies. People with special training in field *F* will, in general, be in a much better position to say whether a statement belonging to *F* is acceptable than a logician would be. Although informal logicians, to their credit, have been among those who have urged that the standard for premisses must be acceptability rather than truth, informal logic has hardly any means of determining whether premisses actually meet the standard of acceptability. Thus, informal logic decrees that the premisses of arguments of, say, economics must be acceptable without having any means to determine whether or not they are acceptable. Judgments about premisses in field *F* must ultimately be made by experts in field *F* or by informal

1. Angell (1964: 43) concurs, writing that "traditional logic has *not* concerned itself much with the *acceptability of reasons*; the main concern has been the analysis and critique of *argument connections*".

logicians who happen to be experts in field *F*. Thus, with regards to premissary questions, informal logicians are not in any better position than that of formal logicians. Conversely, the experts about premiss acceptability in special fields do not make a study of how to evaluate illative relationships. I do not mean that they are not discriminating in their illative judgments. They work with the standards implicit in their fields, but they make no specialty of the study of illative goodness or the practical problem of how to determine it. Accordingly, my preference is to use 'informal logic' in a narrow sense, parallelling that of the range of formal logic, such that it is concerned only with issues that pertain to illative evaluation.

It will be observed that informal logic can indeed be of help in the evaluation of premisses, for it can detect inconsistency, vagueness or ambiguity – all things that weaken a premiss set. This is true enough, but these are means of negative evaluation. Premisses can be logically innocent, but this is not enough to say that they are acceptable. Passing this kind of test means only that the premisses are *not unacceptable* on semantic grounds; it does not show they meet the standard of acceptability. So, informal logic, as it is broadly understood in argumentation studies, doesn't have means for the positive evaluation of premisses

The other horn of the dilemma is that if informal logic is an instrument for evaluating arguments that includes the evaluation of premisses, then it must limit itself to a very narrow range of arguments – those whose premisses belong to common sense, or are "everyday", or require no special training or knowledge at all. Perhaps there is such a domain of knowledge. However, if informal logic is to be circumscribed by being restrained to deal only with arguments whose premisses are of this kind, then the scope of informal logic will be so restricted that it can be neither of great interest nor of great value.

So, the dilemma is this: either informal logic is inadequate for any kind of premiss evaluation other than basic semantic criti-

cism (vagueness, ambiguity, inconsistency) OR, its range of application being only as wide as common-knowledge premisses, informal logic will be so limited that it has little practical import. Given these two discouraging consequences of including premiss evaluation as part of informal logic, it is advisable that informal logic should be restricted to the range of illative evaluation. Narrowing informal logic in the way that I propose does not diminish the importance of argument evaluation. Argument evaluation is the larger enterprise that gives significance to the less encompassing field of illative evaluation. But by narrowing informal logic to deal only with illative issues we not only have the benefit of distancing ourselves from other approaches to argument evaluation (rhetorical and dialectical approaches, for instance[2]) and setting up a unique area of study; moreover, we also prepare the ground for a comparison with formal logic that puts both parties on equal footing.

Let us now consider other virtues of formal logic. Not only does formal logic value conceptual clarity (the basic concepts are few and well-defined), it is devoted to *methods* of illative evaluation, to making them perspicuous and transparent. Different methods of formal logic have been identified and detailed: the truth-table method, for example, the truth-tree method, normal form methods, the Venn and Euler methods, natural deduction method, etc. (see Quine 1982 whose book is called *Methods* (plural) *of Logic*). All these methods share the same *conceptual standard of illative goodness*. It is deductive validity. Judgments about formal validity, however, are seldom made by direct appeal to the conceptual standard, but rather by testing the argument against some *operational standard*. *Truth-table validity* — that an argument is truth-table valid only if there are only T's in the final column of the table — is one such operational standard, and each of the methods of formal logic has its own operational

2. Both rhetorical and dialectical approaches to argument evaluation incorporate standards of premiss acceptability.

standard in the service of the conceptual standard. The various methods of formal logic (used for testing for validity) are really methods for determining whether an argument satisfies an operational standard of illative goodness. The truth-table method consists of an operational standard (there should be all T's in the final column), a set of concepts (e.g. the definitions of the truth-functional constants, etc.) and a set of techniques (e.g., how to construct a truth table, how to compute the value of the final column, etc). Employing the techniques constitutes a test for seeing whether the operational standard has been satisfied. If the operational standard is satisfied, so is the conceptual standard. The other methods of formal logic have analogous anatomies.

There are many illative methods of formal logic but in what follows the truth-table method will stand in for all of them as *the* method of formal logic for the sake of making the comparison with informal logic. (The same points of differences and similarities with informal logic could be made as well with any of the other formal logic methods.[3])

The formal-logic method of illative evaluation of NLA's is attractive for several reasons. One of these is that it can help us decide hard cases, i.e., those which are near the edge of or beyond our intuitive competence. Most of all, however, formal methods are intertwined with a satisfying answer to the question, 'What makes an argument logically good?'. Postulating logical form as the source of illative goodness is in line with our philosophical urge to seek the real truth behind surface appearances, the deep structures that underlie the surface grammar of arguments. Thus, taking the natural language arguments (NLA's), transforming them into formal language arguments (FLA's), making illative evaluations of the FLA's by one of the methods of formal logic, and then extending our findings to the original NLA's, seems like a good method. But this way of illatively evaluating NLA's has come under criticism.

3. Natural deduction, not being an effective method, is the exception.

One reason is that it is sometimes difficult to find the right FLA equivalent to an NLA. Moreover, it may be that the illative strength of some NLA's just can't be captured in a corresponding FLA, resulting in the disadvantage that the target argument must remain either mis- or unevaluated. Furthermore, the formal logic we have is meant for arguments that are to be measured by the deductive standard, but it is generally recognized that not all arguments are like that; some of them are more reasonably evaluated by, say, an inductive standard of illative strength. Also, because formal logic can only give us a verdict of 'valid' or 'invalid', using formal logic we cannot ever arrive at intermediate judgments of illative strength: no judgments like 'pretty good, but could be better' are possible, yet, intuitively, that seems to be the appropriate thing to say about the illative strength of many NLA's. Finally, formal logic requires a lot of learning; maybe six-months to a year to get comfortable with the predicate calculus and its modal extensions. Given these problems (and others not mentioned here) we can see that although there is much to appreciate about formal logic, there are also some reasons to be dissatisfied with it as a way of making illative evaluations of NLA's—reasons enough to consider alternatives.

2. ARE THERE METHODS OF INFORMAL LOGIC?

If illative evaluation is what is wanted and formal logic has significant shortcomings, then we may consider an alternative — informal logic, for instance. Informal logic attempts to do what formal logic does but without relying on logical forms. We are thus led to wonder whether there are methods of illative evaluation for NLA's that eschew a reliance on logical form. In *The Logic of Real Arguments* (1988), Alec Fisher suggests that there might be. In this paragraph, which nicely summarizes Fisher's goals, the word 'method' occurs five times.

> Our objective is to describe and demonstrate a systematic method for extracting an argument from its written context and for evaluating it. We want a method which will apply to a wide range of both everyday and theoretical arguments and which will work for ordinary reasoning as expressed in natural language (and not just for those made-up examples with which logicians usually deal). We also want a method which draws on the insights and lessons of classical logic where these are helpful, but which is non-formal and reasonably efficient (both requirements exclude a method which requires us to translate real arguments into the symbolism of classical logic). Besides all this we want a method which is teachable and which combats – to the proper extent – our tendency to rely on experts. (Fisher 1988: 128)

Fisher's method is clearly the kind of method that should interest us but we must narrow it down two times. First, we will leave aside the part of the method having to do with argument extraction, and concentrate on the method of argument evaluation. Second, because argument evaluation has two parts, "its premisses must be true, . . . , and its conclusion must *follow* from its premisses" (Fisher 1988: 130), we must separate out what concerns us. It is the 'following-from' part of argument evaluation that Fisher thinks constitutes 'the big question' (ibid.) and also 'the interesting question' (Fisher 1988: 5), and it coincides exactly with what we are focussing on — *illative questions.* Are there then methods of informal logic — methods of informal illative evaluation — just as there are methods of formal illative evaluation? Do informal logics have conceptual standards of illative evaluation? Do they have operational standards? Are there informal methods for determining whether the operational standards have been met, consisting of key informal concepts and informal techniques?

Consider the following extant approaches to argument evaluation in the informal logic literature: the fallacies approach, first suggested by Aristotle and developed by Copi (1961), and adapted by Johnson and Blair (1977); the deductivism approach, championed by Whately at the beginning of the nineteenth cen-

tury, and still favoured by the brothers Groarke (1999, 2009); the logical analogies approach urged by Burbidge (1990); the argument schemes approach, much in favour recently, and developed by Douglas Walton (1996). There is also the approach using argument warrants, central to Mill's logic (1843), and furthered by Toulmin (1958). Finally, there is something we might call "the thinking about it" approach; it is the method advocated by Fisher (1988), and also by Pinto and Blair (1993), which involves thought experiments to see whether conclusions follow from premisses. Although, for the most part, these approaches have not been presented as methods, never mind full-blown methods, they include many of the nuts and bolts needed to be reconfigured as methods of illative evaluation. Let us see how far we can go with this.

We may begin by comparing a method built on Aristotle's list of fallacies in the *Sophistical Refutations* with the truth-table method in formal logic. Aristotle's fallacies are fallacies of following-from,[4] so they can be part of a method of illative evaluation. The *conceptual standard* for formal logic is that of deductive validity. Aristotle has a narrower conceptual standard, that of syllogistic consequence: a conclusion follows from premisses if, and only if, the premisses necessitate the conclusion, the premisses cause the conclusion and the conclusion is non-identical to any of the premisses.[5] The *operational standard* on the formal logic side (we have agreed) will be that of truth-table validity whereas for the fallacies method it will be that of not committing any of the fallacies on the A-list (the inventory of fallacies in Aristotle's *Sophistical Refutations*). The *test* for the formal method is to determine whether there are only T's in the final column whereas on the fallacies method it is to determine whether the argument commits any of the fallacies on the A-list. The techniques involved on the formal side consists of making truth

4. Some see more in Aristotle's fallacies; I don't. See Woods and Hansen 1997, 2001.

5. See the first page of *Prior Analytics*, *Topics*, and *Sophistical Refutations*

tables and computing the values of compound sentences. For the fallacies method the technique consists of carefully reading the argument and then comparing it to each of the definitions that identify the fallacies on the A-list, one-at-a-time. The concepts involved on the formal side are the basic concepts of propositional logic; on the informal side they are the component concepts in 'syllogistic validity' and the definitions of the fallacies.

As a second illustration, let us consider a method based on argument schemes. What conceptual standard goes with that method? Walton has written as follows:

> Although the term valid does not seem to be quite the right word to use with many of these argumentation schemes, still, when they are rightly or appropriately used, it appears that they are meeting some kind of *standard of correctness of use* . What is important to come to know is what this standard is, for the most common and widely used schemes especially, and how each of the schemes can be tested against this standard. (Walton 1996: 1)

From the gist of his project it seems that Walton is proposing a conceptual standard that is different from the deductive and inductive ones we are most familiar with. It is that *an argument is illatively good if its premisses (on the assumption that they are acceptable) establish a presumption that its conclusion is acceptable*. This we may dub the standard of 'presumptive validity'. What then might the relevant operational standard be? The evaluation of arguments, on the schemes method, is guided by the unique set of critical questions associated with each of the schemes. These questions can be classified, some pertaining to the acceptability of the premisses, others to illative strength, and so on. In constructing an informal method of illative evaluation based on argument schemes, we restrict ourselves to the questions relating to illative strength. Let us then propose the following as an operational standard: an argument is presumptively valid if it satisfies the questions (pertaining to illative strength) associated with the scheme of which it is an instance. The concepts of the method are

found in the schemes and the associated questions, some of them like 'probable', 'plausible', 'consistent', 'commitment', 'cause', etc. are technical and/or theory laden. The technique of the method will consist of fitting the NLA's to schemes, asking the relevant questions, and evaluating the illative strength of the argument on the basis of the answers to the questions.

I think that, with some work, similar comparisons can be made for the other approaches to informal illative evaluation: logical analogies, warrantism, and the methods of thinking about it. That is, all the informal approaches mentioned above can be analysed in such a way that they emerge as having the shape of a method, complete with standards, tests, concepts and techniques — just like formal logic.

3. ANALYSING AND COMPARING THE METHODS

When stated, methods give us discussible procedures for dealing with difficult questions. They can be scrutinized, criticized, and possibly improved. If there is more than one method available to achieve a given end, the methods can be compared with each other. For illative methods, I propose to compare them under three different headings: the *characteristics* of methods, the *content* of methods, and the *functional adequacy* of methods.

(a) *Comparing the Characteristics of the Methods*

Under 'characteristics' we may first identify the kind of standard a method embodies. Is it an ideal standard (like Platonic forms) appropriate for evaluating argumentation? Or a precise standard such as deductive validity used to evaluate arguments by the deductive standard? Or a minimum standard, specifying that an argument is premiss sufficient if it is *at least* up to a certain mark, like the standards of inductive and presumptive validity? Another aspect of methods is whether they are direct or indirect. Using schemes, or truth-tables, or warrants, seems to be a direct method of evaluation since no other arguments will be involved

than the one being evaluated. The method of logical analogies, however, is an indirect method since it decides the illative value of an argument by comparing it to another argument whose illative value is given or assumed. One can also ask whether a method is polar or bipolar; that is, whether it is capable of giving both the result that arguments are illatively strong and the result that they are illatively weak. The truth-table and schemes methods are bipolar, but natural deduction is not, nor is a method built on an incomplete list of fallacies (kinds of mistaken inference). Finally, we ask whether a method can be used to give us judgments of intermediate illative strength i.e., whether it is scalar. It seems that the method of formal logic cannot do this and neither can methods of fallacies, but a schemes method could, since it involves several questions of which some can receive a favourable answer and others not, and so, overall, we might conclude an argument is of intermediate illative strength. How methods can be compared under these headings just introduced is displayed in Table 1.

	Formal logic	*Fallacies (Copi)*	*Logical analogy*	*Schemes*
Standards	Precise	Precise & Minimum[6]	Precise	Minimum
Direct	Direct (truth table)	Direct	Indirect	Direct
Polarity	Bipolar	Polar (negative)	Polar (negative)	Bipolar
Intermediate judgements	Not possible	Not possible for some; possible for others	Not possible	Possible

Table 1. Comparing the Characteristics of Methods

6. Copi includes both deductive and inductive fallacies.

(b) Comparing the Content of the Methods

Methods can also be compared in terms of their *content*, by which I mean their operational standards, concepts and techniques. The content of methods is what is especially important for the practical dimension of our inquiry. What the student assessors need is help with making judgments about premiss sufficiency. If they are left to their intuitions, we can expect their judgments to vary greatly and, moreover, not to be justified. Having concepts, techniques, and standards tied together in a method, if that is possible, is a fix for both these problems.

Some of the points of contrast have already been noted, but a few further observations may be helpful (see Table 2). For the fallacies method, the concepts it employs are the definitions of the fallacies, and the technique it uses is that of investigating arguments to see whether they have committed any of the fallacies. As for deductivism – in one of its guises – the technique is to 'reconstruct' arguments such that they are deductively valid according to the semantic conception of validity, and then determine whether the newly added validity-making premiss is acceptable. The concepts then are those of 'semantic validity' and 'statement acceptability'. Fisher's method of 'thinking about it' relies essentially on the concept of the 'assertibility question' and the notion of a 'field' or 'subject of study'; the technique for his method is that of thought experiments. Interestingly, different techniques ask different abilities of the argument assessors: all the methods require an ability to read and understand arguments carefully, but some methods require the ability to work with mathematical-like symbols, some require familiarity with the field to which the argument belongs, and some require the power of imagination. From this we may anticipate that some assessors will be better suited to some methods than to others.

	Formal Logic method	*Fallacy method*	*'Thinking about it' method (Fisher)*
Operational Standard	An argument is premiss sufficient if it is truth-table valid	An argument is premiss sufficient if it commits none of the fallacies on the A-list	An argument is premiss sufficient if, given the standards of the field to which the argument belongs, it is not possible that the premisses are true and the conclusions is false
Concepts	Truth functions Truth-table validity	Identifying conditions of the fallacies on a list Syllogistic validity	Argument field Assertibility question
Techniques	Constructing truth-tables Computing value of compound sentences Reading the results	Careful reading of argument Comparing argument with each of the fallacies on the list	Finding field-relative standard Performing thought experiment
Comment	Mechanical	Requires interpretation	Requires imagination

Table 2. Comparing the Contents of Methods

(c) *Comparing the Functional Adequacy of the Methods*

Let us now turn to the basis for comparing the functional adequacy of methods. Writing about argument cogency (her term for 'argument goodness') Trudy Govier makes the following observations:

> An account of argument cogency is a *reliable* one if it can be used by different people to get the same result. Or, if there are variations in result, these are readily explicable in terms of pertinent background beliefs about the warrantedness of the premises. And it is *efficient* if it can be applied in a fairly uncumbersome way. (Govier 1999: 108-9)

I want to adapt these remarks, giving them a slightly different twist, so they can be oriented toward the comparison of the ade-

quacy of methods of illative evaluation. In addition to the two aspects mentioned by Govier, reliability and efficiency, I will add a third about the scope of methods.

(i) Reliability

There are really two aspects of reliability. The one is given by Govier: a method of testing for premiss sufficiency is reliable to the extent that "it can be used by different people to get the same result". Govier's suggestion is that if a group of assessors were to disagree about an argument's cogency this would be explainable by the group-members having differing beliefs about the argument's premisses. But beliefs about premisses is a premissary issue, not an illative one. Could not the assessors disagree about the illative strength of the argument even though they were in agreement about the premisses? And, if so, might there not be some method to help them overcome their disagreement?

Considering the kind of project imagined above which involves working with a group of student assessors, we should say a bit more about the make-up of the group. We stipulate that it is a group made of either senior undergraduate students or MA level students in the humanities or sciences; the group is an even mixture of men and women; the members are open minded and willing to revise their views following discussions, but they are not easily swayed. Importantly, no member of the group has undue influence over the opinions of the other members; there is no leader pressuring others to agree with him or her. The group of student argument assessors is competent in the language of the object arguments and they have neither learning disabilities nor idiosyncracies that would keep them from correctly applying the methods they are taught. Given this characterization of the argument assessors we can put the reliability aspect in more definite terms. Assume that the several members of a group, *G*, have been well trained in how to use a method and that they are serious about argument evaluation, then,

> A method, *M*, used by a group of student assessors, *G*, to test a set of NLA's, *A*, for premiss sufficiency, is reliable *to the extent* that members of *G* using *M* correctly will agree in their illative evaluations of the members of *A*.

We may refer to this as the *subjective reliability* of an illative method. Subjective reliability will be a matter of degree: some methods may have a high level of subjective reliability, other methods a lower level.

The other way in which methods are reliable has to do with the results that they produce. It is possible that a method has a high degree of subjective reliability when rightly used – that assessors using the method tend to agree in their judgments – and yet that it sometimes or even frequently results in mistaken judgments, or even that it consistently misjudges certain kinds of arguments. Polling methods that fare better at predicting election winners are more reliable methods than those that aren't right as often. Similarly, of two methods of illative evaluation of NLA's, the one that results in false positives or false negatives less frequently than another method is, other things being equal, the more reliable method. This we may call the *objective reliability* of a method. Both subjective and objective reliability are a matter of degree and illative methods will be comparable, vis-à-vis each other for both kinds of reliability. (If the arguments that are 'out there' are such that they should not all be evaluated by the same standard of premiss sufficiency, then it will be difficult for any single-standard method to be objectively reliable.)

(ii) Efficiency

An account of argument cogency is efficient to the extent that "it can be applied in a fairly uncumbersome way", says Govier. Being cumbersome seems to be something we might also say about the employment of a method. Let us say that a method is *learner-efficient* to the extent that its content — its operational standard, concepts and techniques — can be learned fairly easily by our

group of argument assessors. Once learned, however, the method may not be easy to apply. Thus, not only is there a question of *learner-efficiency*, there is also a question of *user-efficiency*. That a method should be easy to learn and easy to use stems in part from the desideratum that all those with an interest in argument evaluation (which is, or should be, nearly everybody) should be able to use it. So, what is wanted is a method that is both learner- and user-efficient. However, one method might be easy to learn but hard to use, and another method, complex and technical, hard to learn, yet once learned, quite user-efficient. (Methods that are very difficult to learn and to use have a greater start-up cost than other methods, and that might be a reason for funded research not to prefer them.)

(iii) Scope

The more kinds of arguments a method can be used to evaluate, the greater is its scope, and the greater its scope the more useful the method is. Methods of truth-functional logic cannot deal with relational arguments and for that reason we consider them, *qua* illative methods, to have narrower scope than methods that can deal with relational arguments as well. Deductive logic, in general, cannot deal with inductive arguments, and so it has narrower scope than a method that can handle both deductive and inductive arguments. In general, methods built on short inventories of fallacies or schemes will have narrower scope than those built on longer lists. Like reliability and efficiency, the scope of an illative method will be comparable to that of other methods. When an illative method is applied to arguments that lie outside its scope, objective reliability suffers.

(iv) Assessing the Adequacy of Different Methods

Our knowledge of how functionally adequate — efficient and reliable — methods of illative evaluation are must await empirical investigation. Still, we can make some tentative guesses at

how things *might* work out. Formal logic has been criticized for being hard to learn which means it has low learner-efficiency and we can predict that its user-efficiency will vary with the complexity of the arguments being evaluated. We should expect a high level of subjective reliability among assessors who have learned the method; however, formal logic is criticized for not being applicable to the main body of NLA's we meet in popular discourse because they aren't 'deductive arguments'; this implies formal logic has restricted scope, and that as we try to apply it to the arguments to which it is not a natural fit, the objective reliability of the method decreases.

The method of 'thinking about it' is advertised as being learner and user-efficient. True, it is not a hard method to learn, and Fisher thinks we can begin to use it even if we don't really have a lot of familiarity with the subject matter. Still, it is harder to apply the method than it is to learn (understand) it. It is noteworthy that the method has no limitation in terms of scope: in principle it can be applied to any argument. However, this method's subjective and objective reliability will depend on the field-relevant knowledge possessed by the assessors. What is needed for subjective reliability is that the assessors *agree* on the field-relative standards but, despite our requirement that the they have about the same level of education, it is to be expected that agreement will often be hard to come by, especially as the subject matter lies outside the common knowledge of the assessors. For objective reliability what is needed is that the assessors *have* the correct field-relative standards, and that they can use their imaginations well. Objective reliability will then depend on how good the fit is between the knowledge of the assessors and the subject matter of the arguments that will be examined.

The method of argument schemes, although it is not formal or mathematical, does, nevertheless, take considerable effort to learn. This is because, if it is to have broad application, it must include many schemes (perhaps as many as 60) and their associ-

	Formal Logic	*'Thinking about it'*	*Argumentation Schemes*
Learner efficiency	LOW: difficult b/c of abstract nature; requires math-like skills	HIGH: not concept heavy and hardly any technical concepts	LOW to MEDIUM: many schemes; even more associated questions; Qstns contain difficult concepts
User efficiency	This will DEPEND on the complexity of the argument	MEDIUM: b/c it requires some knowledge of field relative standards	MEDIUM to HIGH: many arguments and schemes fit easily together
Subjective reliability	HIGH among those who have learned the method	DEPENDS on extend of shared field-relative knowledge of assessors; and parity of imaginative powers	MEDIUM to HIGH: b/c the questions will direct the assessors to consider the same issues
Objective reliability	LOW: b/c of limited scope	DEPENDS on assessors identifying the correct field-relative standards; and powers of imagination	MEDUIM: b/c of scope restrictions
Scope	NARROW: b/c works only for arguments suited to be measured by deductive standard	WIDE: can be applied to all kinds of arguments	MEDIUM: b/c restricted to presumptive reasoning (leaving out deductive and inductive); varies directly with the number of schemes in use

Table 3. Comparing the Adequacy of Methods

ated questions. So, we should judge it to have rather low learner-efficiency. Again, with a long list of schemes, the method may be cumbersome to employ, and hence its user-efficiency is hampered. The method may fare better in terms of subjective reliability because all the assessors will have to deal with the same critical questions, which will channel their attention in the same

direction which should facilitate agreement. The degree of objective reliability will be a function of how well the inventory of schemes matches up with the arguments that are 'out there'; we should expect that the more comprehensive the list, the greater the objective reliability. (So, objective reliability is inversely related to efficiency.) The presentation of the schemes method currently being promoted by Walton is, however, restricted to those arguments that are presumptively valid, leaving out arguments to be measured by the deductive and inductive standards, and this amounts to a scope limitation.

Let me repeat: these comparisons of functional adequacy are conjectures. They should be compared with other people's insights and experience, and they are revisable or dismissable in light of our empirical findings. Table 3 summarizes my conjectures.

4. CONCLUDING OBSERVATIONS

Some have suggested that the term 'informal logic' is an oxymoron, like 'business ethics'; it cannot both be logic and informal, they say. I disagree with this. But I also disagree with those who think that informal logic should be a kind of argument evaluation or argumentation theory that includes judgments about premiss acceptability as well as other dialectical and rhetorical considerations. Logic is about making illative judgments, and these can be made with the aid of logical forms, or without them. Insofar as that they can be made without them, there is informal logic.

What started this inquiry was the question whether it would be advantageous to train a group of logiciners (logical novices), who were to be put to work evaluating natural language arguments, formal or informal methods of illative evaluation. Not enough has been found out for us to answer that question yet, for although it is true that formal logic has some shortcomings as a method of evaluating NLA's, so too do each of the informal

methods, and what is wanted is a judgment about what is the best overall method. Nevertheless, a framework has been proposed that, in conjunction with empirical enquiry, can be used to eventually give us a basis for answering that question.

This enquiry brings with it some externalities. We have come to see that it is possible to recast some of the work that has been done in informal logic as *methods* of informal illative evaluation. There are three benefits to this observation. One of them is that it demarcates an area of investigation distinct from dialectical theory, rhetorical theory and epistemological theory. A second and related benefit is that informal illative evaluation is identified as an area of research. Projects can be designed to mark and define the concepts and techniques needed for each of the methods, and to formulate the needed operational standards and, in general, to improve the functional adequacy of the methods. Our increased concentration in this area will be a benefit to our students who want to learn to make justifiable illative judgments. The final boon, and not an insignificant one, is that we can now propose a new definition of 'informal logic'. It is the set of methods of non-formal illative evaluation.

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CHAPTER 6.

DUETS, CARTOONS, AND TRAGEDIES: STRUGGLES WITH THE FALLACY OF COMPOSITION

TRUDY GOVIER

Abstract: We apply to groups the intentional language of emotions, attitudes, and beliefs. Such language is paradigmatically individual in application and yet we apply it to groups of all sizes – small, medium, large and very large – and of varying degrees and kinds of organization. I consider a number of themes related to this compositional phenomenon. I consider several responses that would purport to eliminate it, then move on to set it in the context of theory of argument. I argue that there really is a problem here: that the Fallacy of Composition is genuinely a fallacy, and an important one – but that the gap underlying this fallacy can be plausibly bridged in some cases.

1. INTRODUCTION

A fundamental problem arises concerning much of our language about groups. The problem is this: we apply to *groups* the intentional language of emotions, attitudes, and beliefs. Such language is paradigmatically individual in application and yet we apply it to groups of all sizes – small, medium, large and very large –

and of varying degrees and kinds of organization. In important contexts, we refer to groups not only as doing things and being accountable for what they do, but as having attitudes and intentions related to their actions. Groups may be said not only to undertake actions but to be resentful, hateful, generous, compassionate, accepting, suspicious or trusting. They may be said to hold beliefs and make value judgments, and reach decisions on the basis of these. Corporate boards and parliaments, for example, are organized groups empowered to act for still larger groups. They make decisions and act – and when they do so, it is on the basis of beliefs and attitudes which underpin their intentions and actions. Suppose, for instance, that a corporate board reaches a decision to spend millions on exploratory drilling in some area of the Arctic. Why? Its decision is made intelligible on the grounds that it knows the price of oil to be high and rising, and has evidence implying that the area in question contains oil. Or a parliamentary body might reach a decision to send peacekeeping troops to a particular country, on the basis of beliefs about the risks and needs of the people in that country, and the feasibility of its troops making a constructive difference in that context.

For those who contest the observation that intentional language is commonly applied to groups, I suggest a reading of journals and magazines containing commentary about economic and political affairs. You will find many attributions of actions to groups and you will find that these actions are rendered intelligible in much the way we make individual actions intelligible, namely by attributing beliefs, attitudes, and values to groups. My particular interest in this area stems from work on challenges of political reconciliation, and from seeing how questions about compositional attributions arise in that context. However, as the following examples will show, compositional attributions are by no means restricted to that sort of context.

For convenience, let us call the application of intentional language to groups the *compositional phenomenon*. The compositional phenomenon strikes many people as highly problematical. Many have raised difficulties about it, saying that it cannot possibly make sense for groups to think, feel, believe, and decide. Why not? Because groups are not *conscious*; there is no group mind. Some go even further, contending that groups cannot do anything, *qua* groups, and cannot properly be held accountable for their actions. This claim strikes me as implausible to the point of perversity, given such obvious phenomena as wars, elections and corporate activity; I will not explore it here. I will assume that groups, small or large, organized or not, can do things. In fact there are some things that can only be done by groups – performing choral works, reaching a jury decision, winning a soccer game, and passing laws in parliament being obvious examples.

In discussions of group conflict and its resolution, the compositional phenomenon is quite conspicuous. We find, for example, allusions to distrust, trust, apology, forgiveness, and reconciliation as phenomena in politics in the relations between groups (Govier, 1997). Does such discourse make sense? Can we engage in it without systematically committing mistakes of logic and metaphysics? These questions will be the focus of this presentation. What I have in mind here is the Fallacy of Composition, in which we mistakenly infer conclusions about wholes or groups from premises about parts or individuals.

In this essay, I consider a number of themes related to the compositional phenomenon. First, I consider several responses that would purport to eliminate it. I then move on to set it in the context of the theory of argument. The view I will take is that there really is a problem here, the Fallacy of Composition is genuinely a fallacy, and an important one – but that the gap underlying this fallacy can be plausibly bridged in some cases.

2. SOME PRELIMINARY METAPHYSICS

As discussed here, the problem of compositional attributions begins from the supposition that, with respect to intentional language, *group* attributions are problematical whereas *individual* attributions are not. This casting of the problem will seem correct to many. Nevertheless, there are several ways of resisting the dichotomous contrast between individual and group that constructs this problem. First, the individual can be regarded as a kind of plurality or collectivity. In the *Republic*, Plato envisaged a tripartite soul and a state based on this model. Hume too famously compared the self to a commonwealth. Seeking to understand personal identity, Hume argued that we attribute it on the basis of relations of resemblance and causation between those ideas and impressions which are distinct perceptions of the mind. Stating that impressions cause ideas, which then cause further impressions, Hume said,

> In this respect, I cannot compare the soul more properly to anything than to a republic or commonwealth, in which the several members are united by the reciprocal ties of government and subordination, and give rise to other persons, who propagate the same republic in the incessant changes of its parts. And as the same individual republic may not only change its members, but also its laws and constitution; in like manner, the same person may vary his character and disposition, as well as his impressions and ideas, without losing his identity. Whatever changes he endures, his several parts are still connected by the relation of causation. (Hume, 1975, chap. 35)

Hume offered this comparison not as an argument from analogy, but rather as an explanatory illustration of his theory about causal relations among the distinct perceptions that constitute a human mind.

Hume, then, endorsed an account in which individual selves were compositional. As illustrated in the comparison between the self and the commonwealth, Hume argued that individuals

are composite. The implication here seems to be that there is no categorical difference between the individual self and some composite entity such as a republic or commonwealth. If we were to endorse such an account, we might conclude that the dichotomy between *group* and *individual* levels of analysis be resisted and there would be no special problem about attributing to groups the same kind of properties attributed to individuals.

A differently oriented approach can provide different grounds for the same conclusion. Often emotions and attitudes that are attributed to individuals presuppose interactions with other persons, or are themselves the product of cultural patterns and responses. An individual who is suspicious of persons in another ethnic group may hold these attitudes because of beliefs and feelings acquired from traditions in the culture. To some extent, people believe, feel, and think as they do because of enculturation (Govier, 1997). Along the same lines, we speak of collective memory; for example, the collective memory of the Serbs includes long struggles against the Turks. An individual Serb who has been taught his history will know and use elements of this national narrative which appears and is taught as collective. Thinking along these lines, one might argue that we do not need to take an individualistic approach and try to account for group attitudes by arguing *up* to macro from micro. One could appeal to the cognitive importance of collective education and teaching, and insist that explanation goes in the very opposite direction, *downward* from macro to micro. But within such an account, one that would put group cognitions first, it would be essential to acknowledge that there are variations in individual responses to cultural traditions. While one person may inherit racial prejudice from his culture, another may find it repugnant and be motivated to struggle against it (Cohen, 2001; Moody-Adams, 1997).

These broadly metaphysical considerations argue against any dichotomous construction of the individual and the collective. But they cannot fully address the concerns of those who find

compositional attributions problematic. As we will see, they fail to address specific gaps that arise when evidence about *individual persons* is cited as support for conclusions about *groups of such persons*. Many arguments for compositional attributions are weak, falling into the well-known trap of the Fallacy of Composition.

3. ON A PRAGMATIC LEVEL: THREE DISPUTED RESPONSES – AND A FURTHER PROPOSAL

Apart from these broadly oriented metaphysical arguments about individuals and collectives, there are three further reactions to the compositional phenomenon as it is commonly constructed. These are:

(i) *The Forbidding Response*

On the forbidding view, all intentional language, as applied to groups, is based on error; compositional attributions should be banned because intentional language applies paradigmatically to individuals. It should not be extended to groups, because groups are not conscious and are thus not the sorts of entities that can have beliefs, attitudes, and feelings.

(ii) *The Legitimating Response*

On this view, intentional language as applied to groups must be legitimate because it passes the only realistic and sensible test of legitimacy – namely actual use. Along the lines of ordinary language philosophy and the later Wittgensteinian philosophy, which stated that ordinary language is all right as it is, one might simply resist any systematic criticism of standard practice (Wittgenstein, 1963). After all, we regularly employ compositional attributions when they interpret and respond to actions and events; given that they do so, compositional attributions are functional. To seek to reform ordinary language on philosophical grounds would be misguided and futile.

(iii) *The Discriminatory Response*

On this view, there are indeed contexts in which intentional language applies to groups. We know from experience of war and intense conflict that nations and groups are often suspicious of each other and harbour feelings of resentment and hostility, based on felt grievances about wrongs of the past. That groups and nations have often had relationships characterizable in these ways are established facts of history. Such considerations are part of standard lore in the so-called realist school of international relations. Distrust and fear are frequently said to characterize relations between nation states. On the Discriminatory account, such negative attributions are allowed but if we attribute such traits as compassion, generosity, forgiveness, and trust to groups, that goes too far in the direction of idealism, being too emotional and value-laden to be realistic. Positive intentional attributions must be resisted or systematically reinterpreted as manifestations of self-interest. On the Discriminatory account, it is insisted that ethically positive traits are purely individual.

I submit that all three of these responses are open to criticism. An objection to the forbidding response is that it is dogmatic, inflexible, and unrealistic given standard practice. An objection to the legitimating response is that its confidence in ordinary language goes too far in avoiding explanation and justificatory argument. An objection to the discriminatory response is that it is biased toward the negative. This response is grounded more in a Hobbesian attitude to the social world than in a sound theory of logic and language. Consistency indicates that if we can make sense of a nation distrusting, we can make sense of a nation trusting; if we can make logical and epistemic sense of a group resenting, we can make sense of a group forgiving.

In this paper, I develop a fourth approach, along the following lines.

(iv) *Compositional Construction*, or *Gap-filling*

On this view, compositional attributions pose questions, especially when claims about group actions and attitudes are based on evidence about individuals. Real issues arise. The challenge is to acknowledge the gap and the problem, and find ways in which the gap can be bridged.

4. THE FALLACY OF COMPOSITION: EXAMPLES AND COMMENTS

To relate this problem more specifically to issues about argument and argumentation, I move to consider the Fallacy of Composition. I might add here that this fallacy has been strikingly memorialized in a sculpture by that name at the University of Groningen. This sculpture, a lighted structure, by Trudi van Berg and Jos Steenmeijer, occupies most of a wall on the building for the Faculty of Economics. (A photograph of the structure 'The fallacy of composition' may be found by searching under that title in Google images: www.rug.nl.)

As is well-known, the Fallacy of Composition is committed when there is reasoning from premises about *parts* to a conclusion about a *whole*. There are many interesting instances of this fallacy, and many important questions, that arise in material and physical contexts. Here, I consider primarily social phenomena, given my interest in compositional attributions to groups of people. In the social context, instances of this fallacy typically involve premises about individuals and conclusions about some group of which those individuals are members. There are, of course, many examples of such flawed arguments. I will mention several instances here.

The Duet: John is a terrific tenor and Susan is a brilliant soprano. So a duet by John and Susan will be superb.

The Cartoons: A Danish newspaper, under a particular editor, publishes some cartoons that are found to be offensive by some Muslims. Through this action, *Denmark* has offended *Muslims*.

The Tragedy of the Commons: If one farmer grazes his cattle on the commons, that will be beneficial for him; therefore if all the farmers graze their cattle on the commons, that will be beneficial for all.

The Dinner Party: No one would set out dinner for her family and exclude one member from the table, refusing for no good reason to allow the ostracized person to eat. You can see from this that it is wrong for some human beings to have inadequate food while many others enjoy good meals. Therefore the world community should accept responsibility for world hunger.

The Utilitarian: Each person desires his own happiness, and each person's happiness is in that way a good to that person. Therefore the general happiness is a good to the aggregate of persons.

In the Fallacy of Composition, the basic mistake is not merely quantitative. It arises from the fact that there are often significant structural differences between the micro and macro level. We go astray if we reason so as to fail to consider those differences. In the social context, which is our concern here, there are significant differences between individuals as such and groups comprised of these individuals in relationship with each other. Individuals in groups stand in relationships to each other and *interact* – sometimes cooperatively, sometimes conflictually, sometimes when occupying institutional roles, sometimes according to various habits and expectations (May, 1987). The nature and quality of the interactions between individuals in a group affects that group – even when it is very small, as in the case of the duet. If we reason that (simply) because John and Susan are both good singers as *individuals*, they will be good as a *duet*, we have ignored the fact that to present a successful duet, these two have to harmonize and work together. We have made a mistake, ignoring complications and complexities which may arise from their need to work together. The individual abilities

of these two do not guarantee that they can successfully combine their talents.

In terms of the theory of argument, it is interesting to note that the Fallacy of Composition can appear in arguments of different types. If an argument is taken to be *deductive*, and the premises are about individuals while the conclusion is about a group, clearly that argument will be deductively invalid in the straightforward sense that it will be possible for the premises to be true while the conclusion is false. We may locate the Fallacy of Composition within this gap. If an argument is taken to be an *analogical* argument in which the primary subject is a macro phenomenon, while the analogue is described at the micro level, the analogy will be inadequate because there are relevant differences between the analogue and the primary subject. We consider the Fallacy of Composition in considering the nature and relevance of these differences. If an argument from individual to group is taken as *inductive generalization*, it can be criticized as hasty; the individual cases do not give sufficient evidence about the group as a whole. If it is regarded as an *inference-to-the-best-explanation*, there will be doubts about whether a compositional attribution to a group does, indeed, provide the best explanation of the possession of characteristics by an individual or individuals, given that individuals within the group may differ from each other and can exert a certain degree of autonomy. Concerning the gap constitutive of the Fallacy of Composition, there are two crucial factors to be considered.

i. The problem of *less*. The individuals, considered simply as individuals, are less than the group considered as such, because they do not stand in relationships to each other, do not interact, cannot be said either to cooperate or to be in conflict, and are not organized institutionally.

ii. The problem of *more*. The individuals, considered as such, are more than groups as such, since individuals have

> something every group lacks, namely *consciousness*. An individual can literally, by himself or herself, think, reflect, plan, choose, feel, amend her feelings and so on. No group has consciousness in the literal sense in which an individual has consciousness.

In pursuing the gap-filling approach, I will return to these basic problems of *less* and *more*. But first it will be useful to consider some approaches that will be resisted here.

5. REDUCING COMPOSITION TO SOMETHING ELSE?

In a version of the legitimating response to our problem, the very notion of a Fallacy of Composition may be contested. For example, one might say that there are recognized figures of speech in which one element serves to represent the whole – as when we say "all hands on deck" or "give us this day our daily bread". The figure of speech here is that of synecdoche. And in these familiar expressions, it is quite clear what is being said. The *hand* represents the person of a crew member and the *bread* represents the nutritional needs of people. Surely these things are understood and only the most pedantic person would object to these ways of talking. Synecdoche, one might say, has been around for a while and is an unobjectionable device.

Within political discourse, consider this statement: "Berlin opposes Washington on Iraq." In this locution, we find synecdoche insofar as the capital cities are named to represent the people of nation states. Pedantically we can spell it out: to say that Berlin opposes Washington on some matter is to say that Germans, as represented by their government in Berlin, disagree with Americans, as represented by their government in Washington, on policies regarding Iraq. One might insist that what is said is surely understood and perfectly legitimate; there is no problem here, we know what is meant, and synecdoche is an established mode of speech. But wait a minute: unlike that of the hands on

deck, this claim about Washington and Berlin involves at least one *compositional attribution*. There does seem to be some amount of philosophical mystery in the matter. What does it mean for a nation or collectivity (Germany as represented by Berlin, or Germans) to *disagree* with another nation or collectivity (the United States as represented by Washington, or Americans)? How are we to understand such claims? What sorts of evidence would support them? This is the compositional problem. The fact that we understand synecdoche in some other contexts does not make the compositional problem disappear in this sort of context.

It is sometimes said that the Fallacy of Composition has to be judged case by case and is in this respect a "material" fallacy and not a formal one. (In this context, "formal" and "general" should not be confused. My treatment claims to be general, but not formal) (Govier, 1987, 1999). I leave the social sphere to find a simple example here. Consider, for instance, the case of a uniformly brown cookie; say it is a peanut butter cookie and its ingredients have been well mixed by the cook so that all its visible parts are brown. If we were to reason that because all the visible parts of the cookie are brown, the cookie itself is brown, we would reach a true conclusion. Yes indeed. However this result does not mean our argument from parts to the whole avoids errors in reasoning. We got to the true conclusion by luck alone. It does not follow from the fact that we sometimes get lucky and arrive at a true conclusion that the Fallacy of Composition is material and has to be understood on a case-by-case basis. There is still something wrong with the argumentation scheme in this case because of the structural factor; there is a problem with any general scheme reasoning from parts to whole with no gap-bridging device. That we are lucky in some cases, because in those cases the shift from micro to macro happens in this instance not to be negatively relevant to the conclusion, does not show that the general scheme is rationally defensible.

Perhaps what is going on in compositional attributions is akin to, or an instance of, stereotyping. We too easily form a "them", where instead distinctions and divisions are needed. In some cases, our simplistically formed category of "them" serves to buttress the polarization or even the demonization of an "out-group" as contrasted with an "in-group." The basic mistake here is that a group is cast according to the attributes of some few individuals within it. Although some generalizations about groups may hold true, statistically, there are individuals within a group who do not fit the stereotype. And furthermore even a description that applies to a majority of individuals within a group may not apply to the group considered as a collective.

The notion of stereotyping seems to fit the case of the Danish cartoons, a case which will receive special attention here because of its considerable political importance. Initially it was one editor who chose to commission and publish the contested depictions of Mohammed. This man, Flemming Rose, commissioned the drawings for a children's book, and did that for reasons of his own. Rose suspected that Danes were self-censoring in their comments on Islam and Islamism because they were afraid of intense reactions, including physical violence, by radical Islamists. He wanted to find out whether people would be bold enough to make some drawings and send them in. Rose said, "I commissioned the cartoons in response to several incidents of self-censorship in Europe caused by widening fears and feelings of intimidation in dealing with issues related to Islam" (Rose, 2006). Flemming Rose was one individual in one particular situation, with his own quite specific goals and concerns. In the initial situation, there was little reason to deem him typical of Danes generally; nor was Rose in any way authorized to represent Danes as a collectivity. In their response to the distribution of the cartoons, some Muslims in some countries rioted, burned embassies, and advocated boycotts of Danish products on the grounds that the cartoons were blasphemous and offensive. Now

it is by no means clear that Flemming Rose offended Muslims in general, which was the interpretation of those inciting the riots and boycotts. But even if we say that he did, a vast leap is made if attitudes attributed to Rose are attributed to *Danes more generally*. Flemming Rose is not all Danes or most Danes; still less so did he represent the state of Denmark. (As embassies and products of Denmark were attacked, Danes began to rally to support Flemming Rose. At that point it could be more plausibly argued that "Denmark" supported his actions; this scenario seems characteristic of the polarization underlying serious group conflict.)

One of the strongest objections in the case was to a particular cartoon depicting Mohammed wearing a turban with a bomb in it. If Mohammed is represented as a terrorist and is the prophet of this religion, then, one might say, that the person who drew this particular cartoon was guilty of stereotyping because in his representation of the bomb in the turban, he implied that all Muslims are violent terrorists. About this suggestion, Rose commented,

> Angry voices claim the cartoon is saying that the prophet is a terrorist or that every Muslim is a terrorist. I read it differently: Some individuals have taken the religion of Islam hostage by committing terrorist acts in the name of the prophet. They are the ones who have given the religion a bad name. (Rose, 2006)

It did not escape the attention of commentators that violent reactions to the stereotyping of one's group as violent only serve to confirm the very stereotype that one protests (Fatah, 2006). But then this whole matter is not, fundamentally, one where we would expect logic to reign supreme. Some of these reflections suggest an inductive interpretation of the Fallacy of Composition, according to which we would assimilate it to another fallacy, that of Hasty Generalization. Leaving the cartoons and conflicts surrounding them, I turn here to a dispute regarding the South African Truth and Reconciliation Commission. Many of the TRC's early defenders – including Archbishop Desmond

Tutu himself – emphasized stories of individual forgiveness and reconciliation, and then went on to speak of national reconciliation between black and white South Africans (Tutu, 1999). The logical gap is apparent here. But what is its nature, exactly? Is the problem simply that there were not enough individual stories… the sampling of cases was not large enough, and possibly not representative, so that there is a problem of hasty generalization? To generalize to "most" or "all," we need more of the some – and that is the problem? I do not think that is quite the problem here. Getting more of the some would not suffice, because it would not address the issue of level shift, from micro to macro, from relationships between individuals to relationships between large groups. For a group to forgive another group, or to reconcile with it, group processes are required. If we are to say that there is some kind of reconciliation between groups that have previously been opposed, then we have to be able to speak of the attitudes of these groups (either aggregatively or collectively) and we have to characterize them as shifting in ways that are reconciliatory. Compositional problems arise here as they do not if our concern is straightforwardly a matter of Hasty Generalization.

It is sometimes suggested that the Fallacy of Composition can be understood as involving Equivocation. On this account, there is a shift of *meaning* when we move from micro to macro level. If we use the same terminology in both contexts, we ignore this shift, and reason on the basis of an equivocation (van Eemeren & Grootendorst, 1992). For example, individuals may remember things, may experience traumas, and may work through those traumas in a quest for healing. People speak, as well, of the need on the part of nations and groups to collectively *remember* aspects of the past and *work through* traumas that have been experienced by the nation, and heal. But what does such language mean in the context of a collectivity? There has to be a shift in meaning, and when we make compositional attribution, we ignore that fact. On

this interpretation the Fallacy of Composition might seem to be reducible to another fallacy, that of Equivocation.

As with the brown cookie, there are instances in which an answer to these questions seems easy to come by. Consider, for instance, the case of acknowledgement. Many discussions of post-conflict processes call for acknowledgement, by nations and groups, of wrongs committed by agents acting on their instruction and behalf.

And nations and groups really *can* acknowledge; it is easy to see what this means. A nation can, for example, establish memorial days, commission sculptures, build and maintain museums, issue official statements of apology and recognition, and establish institutions for funding projects. It is thereby acknowledging various historical facts, and committing itself to value judgments about them. So far as policy and expressive artifacts are concerned, collectivities are likely to have greater resources and more power than individuals. Individuals can acknowledge too. They typically do so by making statements of admission expressive of their beliefs and attitudes, and in the case of wrongdoing, those admissions allow that the acts were wrong, were done culpably, and should not be repeated. Groups are not disadvantaged compared to individuals when it comes to acknowledgement; in fact, given their greater resources, they may be more able to acknowledge and memorialize than are individuals.

But the fact that in this particular case and some others compositional attributions seem unproblematical only suggests a more general solution; it does not in itself provide one. General questions about the legitimacy of the shift have not disappeared. What would it mean for a *nation* to remember? To *forgive*? To show concern and generosity? To *deal with its past*? To *reconcile*? To say that there may be equivocation, that there is an alteration in meaning when we proceed from micro to macro, remains true for many cases. But these observations about equivocation do not fully handle the problem. What is the shift? What sorts of

evidence (if any) can justify compositional attributions? The gap remains and must be bridged. How do we do it?

6. WAYS TO BRIDGE THE GAP

There are human actions that are not the actions of individuals. These actions include such things as the singing of choral works, the waging of wars, and the conducting of national electoral campaigns. These are actions and they are human actions. It is people, human beings, who do these things. And people do not and in many cases cannot do them as individuals. So *how* do human beings do these things? How do we manage to sing the choral movement of Beethoven's Ninth Symphony? Conduct an election? Or dispatch troops to fight in a distant country? The answer is obvious: we do these things in organized groups, in which there are procedures and practices.

Suppose that the organizational structure is tight enough that a large group has a smaller sub-group authorized by its rules to deliberate and act in a range of cases. Let us call this sub-group the executive. Suppose further that the executive conducts deliberations in which people speak and reason together and reach decisions on the basis of its proceedings. In these deliberations, individuals put forward ideas and arguments and other individuals respond to them. Assuming even a modicum of democratic process in the case, the reasoning and decisions of the *group* are not necessarily those of any *individual* within it. There will be exchanges of information and judgment, argument, dialogue, and dialectical developments. The process in which various people make and respond to claims and arguments engages a number of people, and their arguments and responses affect each other. The decision may be said to *emerge* from the deliberations of the group, and may be deemed to be a joint decision (Gilbert, 1987).

Suppose, for example, that the executive of a political action group decides not to send messages out to members using the national postal system. It reaches this decision after deliberations

involving considerations about possible delays and losses that its members claim to have occurred within that system. Its decision with regard to this matter indicates an attitude that may be attributed to the executive. Its attitude is one of distrust in the postal system. If the executive decision is known to the larger group and not opposed by them, thereby being tacitly accepted, we can attribute the attitude to the larger group. To consider another illustration, suppose the executive of a judges' organization meets to consider criticisms of a number of judicial decisions on matters pertaining to gender and its deliberations cumulate in an executive decision to organize workshops to educate judges on the matter. Let us suppose that the executive comes up with a policy and recommendation for action. Given this decision by the executive, certain beliefs and attitudes can be attributed to it. For example, if the executive is recommending educational workshops for judges, on gender themes, it must believe that judges need more information and training about gender and legal process, and that these workshops could provide them. Given its authorized role, the beliefs and attitudes attributed to the smaller group may also be attributed to the larger group, presuming that most do not object when given information about this initiative. By their failure to object, they may be said to indicate tacit consent to these policies and to the beliefs and attitudes indicated by them.

Relationships and processes affect results. I am proposing that in such cases the gap between *individual* attitudes and those of the *group* may be bridged by the facts of group process. What A,B,C,D, and E come up with after meeting together emerges from their discussion and – because it emerges in this way – is distinguishable from what any one of them would have come up with individually. There is something distinctive about the process in which the decision has been reached, because it has involved these individuals in *relationship* to each other (Gilbert, 1987). The decision or action that results from the deliberations

of the executive is a group product, attributable to the executive because it is a product of the interactions of its members, and attributable to the larger group if they tacitly consent. Because the decision or action can be attributed to this group, the intentional attitudes and beliefs implied can also be attributed to it.

The two members of a duet can speak directly to each other, but large groups cannot deliberate face-to-face. *Canada* cannot have a discussion except insofar as some representative persons have discussions in some contexts, and these discussions are publicized and become public. An obvious possibility is that of an explicit and authorized political process. If the context is that of the House of Commons in Ottawa, these participants are representative of the Canadian public because they have been elected in a process that is broadly accepted as legitimate. Given *representativeness* and *tacit consent*, policies adopted in the House of Commons can be regarded as those of Canada. Insofar as these policies are understood and stand unopposed, they can be attributed to Canada as a collectivity. The collectivity has engaged in deliberations and actions through its representatives.

A complication arises at this point. Where there is no group process, the problem of compositional attributions cannot be solved in this way (May, 1987). What about more loosely organized groups or groups that are scarcely organized at all? It would seem that unorganized groups can act – as they do in various forms of street demonstration and protest. A recent example is that of extensive protests in Paris, with regard to the proposed law on youth employment. In some cases of street protest, people come together without there being a clear organizational structure constituting them as a collectivity. We may consider cases in which there is nothing like a designated executive enjoying powers granted by a collectivity in which persons are members or not. Suppose, for example, that 200,000 people have gathered in the center of Paris to express their discontent with a proposed law, and many of them are carrying signs and shouting slogans

against that law. Given that participation in the protest is voluntary, given the context and the reasonable supposition that the meaning of signs and slogans is understood, it makes sense to attribute to these persons attitudes of opposition to the proposed law. (Indeed, the attribution of such attitudes is already implied when we describe a crowd as *protesting* the proposed law.)

But suppose now that one hundred or so of these people begin to engage in property violence. Let us say that they throw stones and smash the windows on cars and shops. And suppose that such persons are a minority. Should we say that the protesting youth are engaging in property violence? That they are threatening, destructive? My account here would have the implication that these further attributions cannot be justified unless there is further evidence, according to which we would have grounds for attributing these attitudes to most of the individuals present or to the group as a whole. How do those present respond to the violence? Do they indicate support by cheering and joining in? Do they indicate opposition by shouting out against the violence or trying to prevent it? Or by leaving the scene? Do they indicate ambivalence and embarrassment by standing awkwardly by? If there is no predominant pattern of response in such a case, given that there is no representative executive to speak for the group, we cannot attribute either approval or disapproval. Clearly, my account of gap-bridging presupposes that there is organization within the group. When representativeness and tacit consent are less clear, it is difficult to justify attributions to the group as a whole or even to a majority of its members.

7. CONCLUSION

I have argued here that there is an important sense in which compositional attributions are problematic. When premises are about individuals and conclusions are about groups, there is a gap in the argument. The existence and understanding of this gap underpin the tradition of the Fallacy of Composition. I have

maintained here that this fallacy is genuine and important, and I believe there is much to learn by logically probing claims about "the Danes," "the West," "Muslims," and so on. Stereotypes, hasty generalizations, and unclear language often underlie simplistic polarization, at a cost both to accurate understanding and to decent relationships. For all the qualifications we may make about the individual/group dichotomy and the clarity of some concepts, there is a problem of compositional attributions. But I am arguing against any notion that all such attributions should be resisted. On the contrary, I have claimed that some of them are unobjectionable because they can be warranted by a line of argument in which the gap is bridged. This warranting is most straightforward when groups are organized.

The gap defining the Fallacy of Composition can be bridged insofar as group structures and relationships provide contexts for people to think together and act on the basis of their joint deliberations. We can understand how the deliberations and actions of an interactive group provide grounds for attributing to it attitudes and beliefs: the individuals are not considered purely individualistically when they think and act together; thus they stand in relationships and constitute a group. Thus the problem of less is overcome: this was the problem that individuals as such have less than groups because they do not exhibit relationships. By these same mechanisms, the problem of more is overcome: this was the problem that individuals as such have *more* than groups in the sense that they have consciousness. We can attribute intentional attitudes to the group on the basis of interactions between its members, and thereby bridge this gap. Then, in virtue of *representativeness* and *tacit consent*, we can see how those attitudes and beliefs can also be said to characterize a larger group. Putting together emergence, representativeness, and tacit consent, we are able to bridge the gap constitutive of the Fallacy of Composition as it applies to groups and individuals.

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CHAPTER 7.

THE DIALECTICAL TIER REVISITED

RALPH H. JOHNSON

Abstract: Since I originally proposed that arguments require a dialectical tier, many commentators have weighed in with objections and challenges. Now, here, in this auspicious setting, it does seem propitious, even incumbent upon me, to say something about how I now view that proposal, perhaps taking this opportunity to repent of my sins. For Govier has said that the requirement of the dialectical tier, as I have stated it, leads to an infinite regress–"a staircase that mounts forever" (233) which would not be a "Stairway to Heaven" but rather a descent into Hell.

INTRODUCTION

Since I originally proposed that arguments require a dialectical tier, many commentators have weighed in with objections and challenges. Originally Govier (1997/98;1999), then Leff (1999/2000), Hitchcock (2000/2002), Tindale (2000/2002), Groarke (2000/2002), Hansen (2000/2002), van Rees (2001) and Wyatt (2001) – to mention just those who have gone on record with objections to that proposal.

Now, here, in this auspicious setting, it does seem propitious, even incumbent upon me, to say something about how I now

view that proposal, perhaps taking this opportunity to repent of my sins. For Govier has said that the requirement of the dialectical tier, as I have stated it, leads to an infinite regress – "a staircase that mounts forever" (233) which would not be a "Stairway to Heaven" but rather a descent into Hell.

I intend to take this occasion to respond to some of these objections and criticisms, as well as to share some thoughts they have set in motion. I will begin by revisiting the proposal, briefly, particularly with respect to its purpose. Since the division of labour in argumentation theory into logical, dialectical and rhetorical dimensions seems to have gained a certain level of acceptance among argumentation theorists, I have decided to use that division to structure most of my response. Accordingly, I will first look at an objection that is *logical* in character (that of Govier), then one that is *rhetorical* (that of Leff); and finally one that is *dialectical* (that of van Rees). After indicating how I propose to respond to these three objections, I want to a look at what difference the proposal makes and the broader issues it raises for argumentation theory.

RATIONALE FOR THE PROPOSAL

The rationale for the proposal had its origins in our efforts (more than 30 years ago) to teach logic to undergraduates in a university setting. [By "our" here I mean Johnson and Blair and other informal logicians.] We began with the tradition in which we had been raised which I have baptized FDL (Formal Deductive Logic). According to that account, a good argument is a sound argument: an argument that is valid and all of whose premises are true. In this tradition, we find argument typically defined as: "a sequence of propositions one of which follows from the others." We were not alone in experiencing difficulties teaching this sort of approach to logic to our students in the late 60s who demanded relevance and who wanted logic to help them appraise

the arguments they came across in their attempts to deal with the issues of the day.

It seemed to us that extant logical theory did not provide the sort of theory that would underwrite such efforts. We were struck by a number of *gaps* between that theory and argumentative practice. In real life arguments, have various purposes; but no mention of purpose in FDL. In real life arguments, we often have to go with premises that are not known to be true (Hamblin 1970); no provision for that in FDL. In real life, good arguments often fall short of validity; no provision for that in FDL. In real life, there are good arguments for and good arguments against a particular proposition or proposal (Hamblin); no provision for that in FDL. In real life, good arguments typically confront objections and other dialectical material; but no mention of that in FDL.

In making such observations, we were simply noticing the sorts of problems that had been discussed in the work of Toulmin (1958), Perelman (1958/1969) and Hamblin (1970). We found allies in our attempt to achieve reforms in logical theory and practice in the work of Kahane (1971) and Scriven (1976), and throughout the 80s in various papers (see Johnson and Blair, 1983), we attempted to develop a better theory we termed "informal logic." We were assisted in that effort by two developments.

First, in the early 80s we made a connection between our project and the critical thinking movement in North America – an attempt to install the critical thinking skills in a more prominent place in higher education. That brought into clear focus for us the pivotal role of argument in the teaching of critical thinking.

In the middle 80s, we became ever more aware of the many different initiatives outside of logic, among them the pragma-dialectical approach to argumentation, and the broad international and multidisciplinary community working on argumentation theory. How this latter awareness affected us may perhaps be seen in our 1987 paper "Argumentation as Dialecti-

cal" (Blair and Johnson, 1987: 41-56; reprinted in 1996: 87-102) where the seeds of the proposal regarding the dialectical tier may be found (100-101). (I don't propose here to discuss the genesis of the idea.)

However, even with the attempts at reform we were making, it seemed to me that the very idea of argument found in our theory (one we had downloaded from FDL) remained, to my way of thinking, too mathematicized, too enervated, and that notion set me on the path of fortification which I announced in my 1990 ISSA paper and which I then attempted to provide in *Manifest Rationality.* I explained there that one important motivation for my attempt at reconceptualization was my belief that argument as a vehicle for rational persuasion has much to recommend itself to a world in which there are such deep divisions about vital issues, but in which force and violence are seen as increasingly unattractive options. I expressed my fear that the human community would not be much moved to turn to this important resource as long as logical theorizing remained fettered to an approach to argument in which the ideal remained that of sound argument – a view not attractive in a world of uncertainty and competing allegiances, where proof and refutation are not to be thought of except perhaps among dogmatists. In such a world, we need a theory of argument that gives proper credit to arguments which, if not sound, are yet good, or good enough, and to arguments in which the arguer acknowledges and comes to terms with what I call dialectical obligations.

Part of that rethinking took the form of proposing that dealing with one's dialectical obligations is an essential component of the very idea of argument, robustly considered. Arguments in the paradigmatic sense require a dialectical tier in which the arguer discharges his or her dialectical obligations: i.e., anticipates objections, deals with alternative positions, etc. That proposal had the following two presuppositions. First, the focus is on the use of argument to achieve rational persuasion. Argument

has many others uses, as Blair, Goodwin, Walton, and Wenzel and many others have reminded me. Second, the focus in the first instance is on argument as it expresses itself in texts (such as found in newspaper editorials, journal articles, books, etc.), as distinguished from an oral argument between two participants, which is what dialogue logics (such as those of Barth & Krabbe, 1882, and Walton & Krabbe, 1995) and the pragma-dialectical approach take as their focal point. (This is roughly the distinction between product-driven and process-driven theories.)

In summary, then, the proposal regarding the dialectical tier originated in reflection on the limitations of *the logical approach* to argument, and at the same time a desire to bring the conception of argument in line with best practices and fortify it.

The justification for the proposal emerges from reflection on the requirements of rational persuasion. If in order to persuade you must provide evidence and reasons, and if such persuasion takes place in the context of controversy, then it seems clear that to do the job you must also deal with dialectical matters. The same justification that requires the illative core also requires the dialectical tier; the demands that generate the illative core also generate the dialectical tier.

If you were to ask me for examples of arguments that satisfy this proposal, that have a dialectical tier, I would mention Aquinas's arguments for the existence of God in the *Summa Theologiae,* Mill's defense of freedom in expression in *On Liberty* (1859/1967), Martin Luther King's *Letter from a Birmingham Jail* (1964), and Stanley Fish's defense of affirmative action in *The Trouble with Principle* (1999). Many other examples could be cited from both popular and academic fora. (Of course, not all arguments take this form, which is one of the many problems that have been raised concerning the proposal.)

In summary, then, the proposal regarding the dialectical tier originated in our attempt to move beyond the traditional logical perspective on argument and bring the conception more into

line with best practices. The dialectical tier was never the end, just the means to an end. What end? To the end of calling to consciousness an aspect of the practice of argument that in my judgement had been overlooked in theorizing (though not in the practice nor even the teaching), viz., that the arguer has some obligation to deal with objections, etc. The proposal might also be seen as a counterpoise to the tendency to broaden the range of argument. Groarke (1996) has argued forcefully that paintings and images can be included in the spectrum of argument, and Gilbert (1997) has argued that emotional and visceral modes of communication should also be included. If we are going to adjust our theories and approaches to include such specimens (which my proposal makes provision for), then it seems to me imperative – as a matter of balance – that we should also adjust in the other direction by also emphasizing the more developed forms of argument – those with a dialectical tier.

SOME OBJECTIONS AND MY RESPONSE

I turn now to some of the objections that have been raised to my proposal.

(i) Response to Govier's Objection

Govier argues that the requirement that every argument have a dialectical tier leads to an infinite regress. She put the matter this way (1999: 232-33):

> The regress problem seems to arise for Johnson's account because of his claim that *every argument is incomplete without a dialectical tier*. In my terminology, this means that every arguer has a dialectical obligation to buttress his or her main argument with supplementary arguments responding to alternative positions and objections. Supplementary arguments are also arguments. Thus they too would appear to require supplementary arguments addressing alternatives and objections. Those supplementary-to-the-supplementary arguments, being again arguments, will require the same. And this line

> of reasoning can clearly be continued. Thus Johnson's view seems to imply an infinite regress.
>
> This regress would appear to be intolerable. Surely it is not plausible to say that an arguer has an obligation to put forward an *infinite* number of arguments in order to build a good case for a single conclusion! On this interpretation, the dialectical tier would not be a tier; it would be a staircase that mounts forever. A theory demanding such an explosion is not a realistic or coherent one.

The regress objection can I think be met by a three-prong strategy. First, by pointing out that Govier overlooks a qualification; that at least in MR, the proposal was not that *every* argument requires a dialectical tier but rather that *the paradigm case* of argument should display this structure. [I admit that I am to blame for this confusion because the text is, if not inconsistent, at least confusing on this point.] My proposal allows that not all arguments will require a dialectical tier; but wants to call to the attention of logical theory the sort that we want our theory to cover. Second, by pointing out the parallel between the illative core and the dialectical tier. That is, the same line of reasoning that prevents an infinite regress in the illative core can also be deployed to prevent the exfoliation of the dialectical tier. Third, by specifying the contents of the dialectical tier more carefully, and this takes us into the broader issue of *dialectical adequacy*. The intuition here is that an argument is dialectically adequate just in case the argument contains an adequate treatment of the arguer's dialectical obligations. [That means allowing that there may be arguments where the arguer does not have dialectical obligations.] This question breaks down into two relevant sub-questions.

> Q1: How are those dialectical obligations to be identified and specified?

What sorts of dialectical material are there? Typically, one thinks of objections and criticisms as the same, but might there not be a point in distinguishing them? Govier argues, rightly I think,

that an objection is different than an alternative position (1999: 227-232.) But that presupposes an answer to the question: "What exactly is an objection?" Strange to say, this clearly important question has not received much attention in the secondary literature of the theory of argument! Such questions are in need of further exploration, whether or not one subscribes to the dialectical tier.

> Q2: What is required for an argument to discharge these obligations?

In other words, what are the criteria that the argument must satisfy in responding to objections and other forms of dialectical material?

The objections raised by Leff and van Rees provide an opportunity to engage with these crucial questions and thereby respond further to Govier's objection.

(ii) Response to Leff's Objection

In his keynote address to OSSA in 1999, Leff sought to carve out a place for what he calls dialectic, which he positions between logic (and its abstractness) and rhetoric (and its concrete ways). I cannot here follow the interesting path that Leff takes in his argument to revive dialectic. Rather I shall limit myself to his response to my proposal of a dialectical tier (1999: 5-9).

Leff says that the "concept is elegant" but notes that there are problems with it. Leff complains that the idea "lacks situational ballast" (7). He says: "Johnson wants to construct an autonomous dialectical system that can encompass all instances of argument, and to achieve this end he must know the criteria for dialectical adequacy in advance of any particular case of dialectical argument" (7). Leff then floats the attractive thesis that the reason I have problems answering the question "Which objections?" is that this cannot be done in advance. One has to look at the situation, the details, which provide the ballast.

Now there is something obviously right-minded about Leff's point. How one deals with obligations will differ according to the audience one is dealing with, the setting of the response, etc. But it seems equally clear to me that there is more to the story, as I shall shortly indicate. Leff is certainly correct in pointing out that I seek to develop criteria for dialectical adequacy in advance of any argument, just as I (and others) have sought to develop criteria for adequacy of the illative core in advance of any particular argument.

The broader issue Leff is raising here is *that of how standards or criteria for the evaluation of arguments are to be developed.* That's a complicated and important issue, and yet another example of an issue that has not, it seems to me, thus far attracted sufficient attention from argumentation theorists. Now I do not believe that such criteria must be dictated *a priori* from an Olympian or heavenly standpoint, as Moses received the ten commandments from Yahweh. I find myself inclined to adopt the sort of approach that Dewey outlines whereby normative standards are extracted from the practice by judicious reflection and then dip back into the practice.

There is, I suspect, another aspect to Leff's complaint about lack of ballast; i.e., the proposal has not been anchored in sufficient detail. Here it seems to me that Leff and I agree that our theorizing must be informed by and responsive not just to practice, but *best practices.* And therein lies the rub. For this right-minded suggestion raises the question *of how we will identify those best practices*, which, we may expect, will involve identifying specific exemplars of good arguments. But that in turn means that we must bring to bear some implicit or intuitive notion of what counts as a good argument, to that degree the empirical turn to context presupposes some degree of conceptual elaboration! Prior cognition (and theory) guide us, *faute de mieux*, in what we see and what we take into account, as Peirce (1878/1982) well

knew. Thus it is not the case that "it all depends" on context and situation, for it also "somewhat depends" on prior theorizing.

In the search for ballast, while acknowledging the need for a variety of cases drawn from different disciplines and settings, I would argue for a special place for philosophical arguments. Philosophy has had long experience with the practice of argumentation; and though its sins are many (i.e., its overcommitment to deductivist and essentialist views, its abstractness, its tendency to eschew detail and context), yet its virtues are many also, particularly if one looks at philosophical arguments through the lens of informal rather than formal logic. Look at Mill's argument for freedom of expression in *On Liberty.* You will find Mill engaged in anticipating and responding to objections, and it seems to me that worthwhile leads about the issue of dialectical adequacy can be found here.

To conclude, I am grateful to Leff for this criticism and the problems it brings to the fore.

(iii) Response to van Rees's Objections

I turn now to some of the challenges raised by van Rees in her wide-ranging review of my book. In this paper, I can only deal with her "reservations" about the dialectical tier and only with some of those. Van Rees also builds on Govier's regress criticism, as well as Leff's criticism of abstraction. She writes: "In a truly pragmatic conception of dialectic, what the arguer needs are nothing more (but nothing less) than the actual or anticipated objections of the opponent that he tries to convince" (2001: 234). Precisely; those actual and anticipated objections form part of the content of the dialectical tier (the remainder being the response to them).

What works very well for the setting of a critical discussion (what I call process-driven theories) is not so helpful when one is constructing an argument for what Govier calls "a Noninteractive audience" (1999: 183-201). Such an audience poses its own

special problems that cannot be solved by models, like pragma-dialectics, developed for two or more participants who are face-to-face with one another. Both Blair (1998) and Govier (1999) have argued, and I think effectively, that such a model cannot be transported to other settings. Govier says: "Dialogue is a wonderful thing, and greatly to be recommended, but dialogue requires real as opposed to hypothetical interaction. I want to say, in the manner of Wittgenstein, 'A picture held us captive.' When no one else is there, we are not interacting with another person" (198). In my terms, this means that the process-driven approach will not provide all the answers for an argument as the product-driven approach. And vice-versa. Both types of theory are necessary, and their respective contributions have yet to be fully discussed.

Van Rees also takes me to task for not providing criteria for dialectical adequacy. "What," she asks, "are the criteria for dialectical adequacy?" (van Rees 2001: 233). I acknowledged that there were no such criteria in MR and indeed expressed some wonderment at how this could be so – 2000 years into the theory of argument. [Here we have yet another striking indication of the gap between theory and practice.]

Time for some ballast. Let us turn to Mill's *On Liberty*, Chapter II: "Of the Liberty of Thought and Discussion." Without attempting to recap his entire argument, Mill is here defending the view that the government should not impose any constraint on the expression of opinion. The argument has two branches and is, from my standpoint, dialectical all the way down. Branch One proceeds on the supposition that we can never be sure that the opinion we are endeavouring to suppress is false. His argument against this invokes the premise that all silencing of discussion is an assumption of infallibility. Having presented his defense of this claim (in what I could call the illative core of the argument), Mill now steps back in order to anticipate an objection (1859/1974: 19). "The objection likely to be made to this argu-

ment would probably take some such form as the following. There is no greater assumption of infallibility in forbidding the propagation of error than in any other thing that is done by public authority on its own judgement and responsibility." The objection here is an objection to one of the premises of Branch One. Mill develops this objection at length and having done that, makes his response: "I answer that it is assuming very much more." He is not (obviously) responding to any particular person, it seems to me; rather he is responding to what he can imagine someone might put by way of a challenge. In thus anticipating and responding, Mill has gone some distance toward satisfying his dialectical responsibilities.

An important but hitherto unasked question is: Does Mill's argument achieve dialectical adequacy? To get a handle on this, I suggest we ask: How might Mill have gone wrong here in this part of his argument? I believe there are at least three ways. He might have failed to give a faithful articulation of the objection; he may have overstated it or understated it. Or, he might have not given a good response to it. There is a third way he might fail to achieve dialectical adequacy: he might have failed to deal with an objection that he should have dealt with.

In line with these conjectures, I now offer the following proposal regarding dialectical adequacy. The arguer achieves dialectical adequacy in her argument provided that:

a. the arguer deals fairly, *accurately* with each objection;

The typical complaint that points to a dialectical failure of this sort is: "You have misrepresented the position you are criticizing." (Straw person)

b. the arguer's response to the objection is *adequate;*

The typical complaint that points to a failure of this sort is: "But you did not say how you would deal with the strongest objection; that objection still stands."

c. the arguer deals with the *appropriate* objections.

The typical complaint that points to a dialectical failure of this sort is: "But you have not dealt with the most pressing (important/significant) objection."

I propose then that the criteria for the dialectical tier are appropriateness, accuracy and adequacy. *Accuracy* here means that the arguer engages with the real position and not some distortion of it; i.e., the arguer must avoid the fallacy of straw person. It seems likely that *adequacy* can be handled by the criteria for the illative core; that is, the arguer's response to the objection will be adequate just in case the argument given (if one is given) satisfies the criteria of relevance, sufficiency and acceptability. But when it comes to the issue of which are the *appropriate* objections, it seems to me we are in uncharted territory. I think Govier is headed in the right direction in invoking *salience* (1999, 201) but that concept itself needs unpacking.

I have framed this new proposal (as I did its predecessor) in deontic language: "the arguer *must* deal with his or her *dialectical obligations or responsibilities*." But to return to our theological analogy, all this talk of obligations sounds so very Calvinist (or Roman Catholic). Perhaps I need to adjust my theorizing to take advantage of New Age theologies that would urge us to think: "The cup is not half empty; it is half full." Such a voice would say here: "What you call obligations can equally well be viewed as opportunities and challenges." Viewed this way, the question changes: no longer is it a matter of which objections one must respond to but rather which challenges one chooses to respond to, which objects capture one's interest. Now the whole matter of *interest* and choice (van Rees, 2001: 232) emerge as central. Instead of thinking of the arguer as *obliged* to respond, it may be

preferable to look at dialectical material as presenting a range of possible points for further development, understanding that which of these the arguer chooses will depend legitimately upon not only one's obligations but also one's interests.

Indeed, it seems evident to me that their own interests have to a non-negligible degree led my respondents. Thus Govier looks at the proposal from the perspective of a logician; Leff looks at those aspects which would perhaps be of interest to a rhetorician; van Rees scrutinizes those aspects of my position which, as it were, leap out from the viewpoint of pragma-dialectics. It seems both natural and inevitable that in responding to someone's argument/position, each of us will be led by our own interests. If the critic/objector can legitimately use interest to structure his or her response, it seems that the same principle might apply to the arguer in deciding what objections to respond to.

In the final analysis, a doctrine of dialectical adequacy will require attention to both obligation and interest. But how to integrate these competing tendencies, I do not know.

THE IMPLICATIONS OF THE PROPOSAL

At this point I can anticipate an objection in the form of a question: What difference does it make whether we build the dialectical tier into our conceptualization of argument? The one who asks probably has in mind William James's statement which roughly paraphrased is this: "A difference which makes no difference is no difference."

Let me briefly indicate the differences my proposal makes in three areas: theory, practice, and pedagogy.

My proposal has fewer implications for *the practice* of argumentation than it does for the theory or for the pedagogy. The reason for this strange situation is that the dialectical tier has always been strongly represented in the practice of argumentation. The problem is that it has not been included in the theory;

and because textbooks tend to follow theory (Massey, 1981), it has not been made much of an appearance in logic pedagogy.

There is perhaps no better illustration of this than Solomon's 1989 *Introduction to Philosophy* text. When he is providing directions to the student about how to construct an argument, he makes a special point of telling them that they should anticipate objections. But later when he is giving the standard FDL story about what counts as a good argument, his theory makes no provision for how well the arguer does in this assigned task of anticipating objections.

So the implications for *pedagogy* are these: that when we give examples of argument to our students, we should present as examples arguments in which the arguer at least recognizes the dialectical situation, and we should be teaching them as well what they must do to carry this part off well. If this means that we retire or move to the background the infamous Socrates example, I, for one, would not object.

At the level of *theory* I have indicated a number of tasks that remain to be accomplished. What is dialectical adequacy? What are the arguer's dialectical obligations (if any)? What is an objection, and how does it differ from other forms of dialectical material? What is required to deal with an objection properly? What other forms of dialectical material are there? How are the criteria for the dialectical tier to be developed? What is the role of best practices, and how shall we identify them? What is the role of interest in dialectical issues? How did logical theory manage to overlook the dialectical tier? What are the respective strengths and weaknesses of product driven vs. process driven theories?

That this series of questions has emerged in this review may perhaps be taken as some indication of the fertility of the proposal.

CONCLUSION

The proposal regarding a dialectical tier comes out of the tradition of informal logic and brings, I hope, something new and important to the table. Even if one does not accept the proposal yet the issue its raises, the questions that surround it may be enough to redeem it. For, as I said earlier, the proposal was not itself the end but rather a means of calling attention to overlooked issues and questions. I hope I may have succeeded in persuading that the proposal is not without merit. And if not, then possibly I have illustrated that the issues that it raises are very much worth continued attention. Perhaps, then, the proper theological destination for my proposal will turn out to be neither Heaven nor Hell, but rather Limbo, where according to Roman Catholic theology the as-yet unredeemed souls await their eternal destiny.

At this point in the service, one expects a blessing. As we go forth this morning to begin three days of intense discussion about argumentation, we might well remember what Carnap said in *Empiricism, Semantics, and Ontology*.

> Let us grant to those who work in any special field of investigation the freedom to use any form of expression which seems useful to them; the work in the field will sooner or later lead them to the elimination of those forms which have no useful function. Let us be cautious in making assertions and critical in examining them, but tolerant in permitting linguistic forms.

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CHAPTER 8.

HOW THE CONTEXT OF DIALOGUE OF AN ARGUMENT INFLUENCES ITS EVALUATION

DOUGLAS WALTON

Abstract: A common theme of the Canadian approach to informal logic is to take as its central tasks the identification, analysis and evaluation of real arguments found in natural language discourse. Along with this came the recognition of taking factors of the context of dialogue in the given case, such as burdens and standards of proof, into account by ascending to the so-called dialectical tier. This paper surveys how the resulting typology of dialogues has had applications in many fields. It is shown that distinctions between the various kinds of dialogue can be clarified and formulated more precisely by showing how each of them relies on different approaches to the burden of proof.

The understanding of argumentation as dialectical in nature was central to the founding of informal logic as a tool for evaluating arguments in natural language discourse by transcending the traditional ideal of a good argument being one that is deductively valid and has true premises (Blair and Johnson, 1987, 41). The meaning of the term 'dialectical' that they use, said to borrow heavily from Aristotle's account of dialectical argumentation, sees argument as a process in which two parties participate, one

having the role of questioner and the other having the role of answerer of these questions (45). Moreover, they also characterized argumentation as a purposive activity in which each of the participants has a goal guiding his or her moves in the dialogue (46). Johnson (2003) acknowledged the importance of this notion of dialectical argumentation further when he focused on the use of argument to achieve rational persuasion by introducing what he called a dialectical tier postulating that the arguers engaging in a dialogue have dialectical obligations and responsibilities.

Adoption of this kind of dialectical viewpoint in recent logic, even though it was very much a minority view at the time, was pioneered by Hamblin (1970) who built formal dialectical systems that borrowed from Aristotle's account of dialectical argumentation, and rejected the view that the traditional idea of a deductively valid argument with true premises could cope with problems of evaluating real arguments. However, Hamblin (1971) did not explicitly classify such formal dialogues as having the purpose of rational persuasion, but portrayed them as having an information-seeking goal. Hamblin made no attempt to systematically classify different types of dialogue representing goal-directed frameworks in which argumentation takes place. This task was subsequently carried out by Walton and Krabbe (1995). This work has had many citations[1], as its dialogue typology has had applications in many different fields, including artificial intelligence, law, medicine, discourse analysis, linguistics (especially pragmatics) and education (Rapanta et al., 2013). The purpose of this paper is to survey many of these applications to see how they fit with informal logic.

Section 1 introduces the reader who is not familiar with the typology of the different types of dialogue in argumentation to explain the basic concepts in this area and the motivations for applying formal models of dialogue to study examples and characteristics of natural language arguments. The dialogue typology

1. There have been 1,701 citations according to Google, as of September 13, 2017.

of Walton and Krabbe (1995) is explained, and it is mentioned how one new type, discovery dialogue, has been added in. The basic ideas behind persuasion dialogue, inquiry dialogue, deliberation dialogue, and the notion of the dialectical shift from one type of dialogue to another, are introduced. Section 2 introduces the reader to the basic characteristics of persuasion dialogue, presenting a precise definition of persuasion dialogue and a simple example of it. Section 3 also briefly explains how legal argumentation of the kind found in the common law trial setting has been shown to be a species of persuasion dialogue by introducing the important notions of burden of persuasion and burden of proof. Beginning with an example of deliberation in a real doctor-patient consultation in the field of medicine, section 3 outlines the basic concepts and characteristics of deliberation dialogue, drawing on the recent literature on deliberation in artificial intelligence, where formal models of this type of dialogue have been built. Section 4 offers advice on the commonly encountered problem of how to tell whether an example of real argumentation within the context should be classified as that of a persuasion dialogue or deliberation dialogue. Sections 5, 6, and 7 briefly outline the main characteristics of the inquiry, the discovery and the information-seeking types of dialogue. Very brief outlines of the characteristics of the negotiation dialogue and the eristic type of dialogue are presented in sections 8 and 9. Section 10 provides some conclusions.

2. TYPES OF DIALOGUE AND DIALECTICAL SHIFTS

The six basic types of dialogue previously recognized in the argumentation literature (Walton and Krabbe, 1995) are persuasion, inquiry, negotiation dialogue, information-seeking dialogue, deliberation, and eristic dialogue. Discovery dialogue (McBurney and Parsons, 2001) has been added in the revised list of the properties of the basic types of dialogue in Table 1. These dialogues are technical artifacts called normative models,

meaning that they do not necessarily correspond exactly to real instances of persuasion or negotiation, and so forth, that may occur in a real conversational exchange. Each model of dialogue is defined by its initial situation, the participants' individual goals, and the aim of the dialogue as a whole.

TYPE OF DIALOGUE	INITIAL SITUATION	PARTICIPANT'S GOALS	GOAL OF DIALOGUE
Persuasion	Conflict of Opinions	Persuade Other Party	Resolve or Clarify Issue
Inquiry	Need to Have Proof	Find and Verify Evidence	Prove (Disprove) Hypothesis
Discovery	Need to Find an Explanation of Facts	Find and Defend a Suitable Hypothesis	Choose Best Hypothesis for Testing
Negotiation	Conflict of Interests	Get What You Most Want	Reasonable Settlement Both Can Live With
Information-Seeking	Need Information	Acquire or Give Information	Exchange Information
Deliberation	Dilemma or Practical Choice	Co-ordinate Goals and Actions	Decide Best Available Course of Action
Eristic	Personal Conflict	Verbally Hit out at Opponent	Reveal Deeper Basis of Conflict

Table 1: Seven Basic Types of Dialogue

A dialogue is formally defined as an ordered 3-tuple $\{O, A, C\}$ where O is the opening stage, A is the argumentation stage, and C is the closing stage (Gordon and Walton, 2009, 5). Dialogue rules (protocols) define what types of moves are allowed by the parties during the argumentation stage (Walton and Krabbe, 1995). At the opening stage, the participants agree to take part in some type of dialogue that has a collective goal. Each party has an individual goal and the dialogue itself has a collective goal. The initial situation is framed at the opening stage, and the dialogue

moves through the opening stage toward the closing stage. The type of dialogue, the goal of the dialogue, the initial situation, the participants, and the participant's goals are all set at the opening stage. In some instances, a burden of proof, called a global burden of proof, is set at the opening stage, applies through the whole argumentation stage, and determines which side was successful or not at the closing stage. In some instances, another kind of burden of proof, called a local burden of proof, applies to some speech acts made in moves during the argumentation stage (Walton, 2014).

Persuasion dialogue is adversarial in that the goal of each party is to win over the other side by finding arguments that defeat its thesis or casts it into doubt. Each party has a commitment set (Hamblin, 1970), and to win, a party must present a chain of argumentation that proves its thesis using only premises that are commitments of the other party. One very well known type of dialogue that can be classified as a type of persuasion dialogue is the critical discussion (van Eemeren and Grootendorst, 1992). The goal of a critical discussion is to resolve a conflict of opinions by rational argumentation. The critical discussion has procedural rules, but is not a formal model. However, the term 'persuasion dialogue' has now become a technical term of argumentation technology in artificial intelligence and there are formal models representing species of persuasion dialogue (Prakken, 2006).

Inquiry is quite different from persuasion dialogue because it is cooperative in nature, as opposed to persuasion dialogue, which is highly adversarial. The goal of the inquiry, in its paradigm form, is to prove that a statement designated at the opening stage as the *probandum* is true or false, or if neither of these findings can be proved, to prove that there is insufficient evidence to prove that the *probandum* is true or false (Walton, 1998, chapter 3). The aim of this type of inquiry is to draw conclusions only from premises that can be firmly accepted as true or false, to pre-

vent the need in the future to have to go back and reopen the inquiry once it has been closed. The most important characteristic of this paradigm of the inquiry as a type of dialogue is the property of cumulativeness (Walton, 1998, 70). To say a dialogue is *cumulative* means that once a statement has been accepted as true at any point in the argumentation stage of the inquiry, that statement must remain true at every point in the inquiry through the argumentation stage until the closing stage is reached. However, this paradigm of inquiry represents only one end of a spectrum where a high standard of proof is appropriate. In other inquiry settings, where there are conflicts of opinion and greater uncertainty, cumulativeness fails, but cooperativeness is a characteristic of inquiry. The model of inquiry dialogue built by Black and Hunter (2009) is meant to represent the cooperative setting of medical domains. Black and Hunter (2009, 174) model two subtypes of inquiry dialogue called in argument inquiry dialogues and warrant inquiry dialogues. The former allow two agents to share knowledge to jointly construct arguments, whereas the latter allow agents to share knowledge to construct dialectical trees that have an argument at each node in which a child node is a counterargument to its parent.

Inquiry dialogue can be classified as a truth-directed type of dialogue, as opposed to deliberation dialogue, which is not aimed at finding the truth about that matter being discussed, but at arriving at a decision on what to do, where there is a need to take action. While persuasion dialogue is highly adversarial, deliberation is a collaborative type of dialogue in which parties collectively steer actions towards a common goal by agreeing on a proposal that can solve a problem affecting all of the parties concerned, taking all their interests into account. To determine in a particular case whether an argument in a text of discourse can better be seen as part of a persuasion dialogue or a deliberation type of dialogue, one has to arrive at a determination of what the goals of the dialogue and the goals of the participants are sup-

posed to be. Argumentation in deliberation is primarily a matter of identifying proposals and arguments supporting them and finding critiques of other proposals (Walton et al., 2009). Deliberation dialogue is different from negotiation dialogue, because the negotiation deals with competing interests, whereas deliberation requires a sacrifice of one's interests.

Deliberation is a collaborative type of dialogue in which parties collectively steer group actions towards a common goal by agreeing on a proposal that can solve a problem affecting all of the parties concerned while taking their interests into account. A key property of deliberation dialogue is that a proposal that is optimal for the group may not be optimal for any individual participant (McBurney et al., 2007, 98). Another property is that a participant in deliberation must be willing to share both her preferences and information with the other participants. This property does not hold in persuasion dialogue, where a participant presents only information that is useful to prove her thesis or to disprove the thesis of the opponent. In the formal model of deliberation of McBurney et al. (2007, 100), a deliberation dialogue consists of eight stages: open, inform, propose, consider, revise, recommend, confirm and close. Proposals for action that indicate possible action-options relevant to the governing question are put forward during the propose stage. Commenting on the proposals from various perspectives takes place during the consider stage. At the recommend stage a proposal for action can be recommended for acceptance or non-acceptance by each participant (Walton et al., 2010).

A dialectical shift is said to occur in cases where, during a sequence of argumentation, the participants begin to engage in a different type of dialogue from the one they were initially engaged in (Walton and Krabbe, 1995). In the following classic case (Parsons and Jennings, 1997, 267) often cited as an example, two agents are engaged in deliberation dialogue on how to hang a picture. Engaging in practical reasoning they come to the con-

clusion they need a hammer, and a nail, because they have figured out that the best way to hang the picture is on a nail, and the best way to put a nail in the wall is by means of a hammer. One knows where a hammer can be found, and the other has a pretty good idea of where to get a nail. At that point, the two begin to negotiate on who will get the hammer and who will go in search of a nail. In this kind of case, we say that the one dialogue is said to be embedded in the other (Walton and Krabbe, 1995), meaning that the second dialogue fits into the first and helps it along toward achieving its collective goal. In this instance, the shift to the negotiation dialogue is helpful in moving the deliberation dialogue along towards its goal of deciding the best way to hang the picture. For after all, if somebody has to get the hammer and nail, and they can't find anyone who is willing to do these things, they will have to rethink their deliberation on how best to hang the picture. Maybe they will need to phone a handyman, for example. This would mean another shift to an information-seeking dialogue, and involvement of a third party as a source of the information. This example of an embedding contrasts with an example of an illicit dialectical shift when the advent of the second type of dialogue interferes with the progress of the first. For example, let's consider a case in which a union-management negotiation deteriorates into an eristic dialogue in which each side bitterly attacks the other in an antagonistic manner. This kind of shift is not an embedding, because quarreling is not only unhelpful to the conduct of the negotiation, but is antithetical to it, and may very well even block it altogether, by leading to a strike for example.

3. PERSUASION DIALOGUE

Here is a simple example of a persuasion dialogue adapted from an example of Prakken, 2006 (166), presented in the format of Table 2. There are two parties, Olga and Paul, who take turns making moves. Each move contains a speech act, such as asking

a question or making an assertion. A so-called *adjacency pair* is a pair of speech acts one following the other. The Z column numbers the adjacency pairs in Table 2. According to Schegloff and Sacks (1973), adjacency pairs are sequences of two utterances that are (1) adjacent, (2) produced by different speakers, (3) ordered as a first part and a second part, and (4) typed, so that a particular first part requires a particular second part (or range of second parts) (Levinson, 1983, 303). For example, a why-question (of a certain type) demands an answer that offers an argument supporting a statement that is in question or has been claimed by the other party.

Z	Olga	Paul
1	Why is your car safe?	Since it has an airbag.
2	That is true, but this does not make your car safe.	Why does that not make my car safe?
3	Since the newspapers recently reported on airbags expanding without cause.	OK, but newspaper reports are unreliable sources of technological information.
4	Still your car is not safe, because its maximum speed is very high.	But it says in Consumer's Reports, a reliable source, that this type of car is safe.
5	Even so, if a car has a maximum speed that is very high, we cannot say that it is safe.	In some cases, having rapid acceleration enables a driver to avoid an accident.

Table 2: Argumentation Stage in the Airbag Example

The central characteristic of a persuasion dialogue is that each party has the goal of persuading the other party that their thesis is true where, at the opening stage of dialogue, there is disagreement about whether some designated proposition is true (acceptable, based on the evidence) or not. Each side tries to rationally persuade the other to reverse its original opinion using arguments with premises the other party already accepts or can be gotten to accept by further arguments. Rational persuasion, in

this sense can be defined using the following four-part précising definition: *a rationally persuades b* to accept claim *C* iff (1) *b* does not accept *C*, (2) *a* presents an argument A_i with premises P_1, P_2, …, P_n such that (3) *b* accepts all of P_1, P_2, …, P_n, and (4) A_i is valid, according to the criteria for validity of arguments set in place at the opening stage. In any instance of dialogue where all four requirements are met by *a*'s argumentation, *b* is rationally obliged to accept *C*, unless *b* can present further arguments against *C*. Whether or not *b* is allowed to do this depends on whether the closing stage of the dialogue has been reached.

For those familiar with argumentation theory, the notion of the persuasion dialogue is reminiscent of the type of dialogue called the critical discussion defined by a set of rules in the pragma-dialectical model. In all three versions of their set of rules for the critical discussion van Eemeren and Grootendorst set down a particular rule that governs burden of proof. In the 1992 version (van Eemeren and Grootendorst, 1992, 208), the rule governing burden of proof is simple. It only requires that "a party that advances the standpoint is obliged to defend it if the other party asks him to do so". For example, rule 8a of the formal dialogue system PPD (Walton and Krabbe, 1995, 136) says, "If one party challenges some assertion of the other party, the second party is to present, in the next move, at least one argument for that assertion". Hahn and Oaksford (2007, 47) have questioned whether van Eemeren and Grootendorst need to have rule 3 requiring burden of proof in a critical discussion. They think it makes sense to have a burden of proof for a participant's ultimate thesis set forth at the opening stage of the critical discussion, but they question why it is useful for each individual claim in the argumentative exchange to have an associated burden of proof. They concede that although there is a risk of non-persuasion in not responding to a challenge by putting forward an argument to defend one's claim, this risk is a relatively small factor in the outcome of the dialogue and "is entirely external

to the dialogue and not a burden of proof in any conventional sense" (Hahn and Oaksford, 2007, 47). They have a point. It is worth asking what function the requirement of burden of proof has in a persuasion dialogue.

The addition of a third party audience to the persuasion dialogue affects brings out the utility of this function. If a party in a persuasion dialogue puts forward an argument, and then fails to defend it when challenged to do so, this failure will make his side appear weak to the audience who is evaluating the argumentation on both sides. They will ask why he put forward this particular claim if he can't defend it, and he may easily lose by default. This can come about because the audience has the role of being a neutral third party in the dialogue, and is not merely one of the contestants who is trying to get the best of the opposed party. It helps the audience to judge which side had the better argument if each side responds to challenges by putting forward arguments to support its claims. Law is an area where there is such a third party trier (a judge or jury) in addition to the opposed advocates on each side.

In legal argumentation, burden of proof rests on the notion that there are different standards of proof (Gordon and Walton, 2009; Walton, 2014, 57-61). The standard required in most civil cases is called that of the preponderance of evidence, sometimes also called the balance of probabilities (Gordon and Walton, 2009). According to this standard, a proposition is acceptable if it is more likely to be true than not true. There is also a standard of proof called clear and convincing evidence, which is taken to be higher than a preponderance of evidence standard and is only met if the proposition is not only substantially more probable but also there is a firm belief that it is true. According to the beyond reasonable doubt standard, applicable in criminal cases, there can be no reasonable doubt that a proposition is true given the evidence supporting it, and the lack of evidence against it. In gen-

eral a burden of proof relates to the level of certainty required in order to prove a proposition that is in doubt.

In legal argumentation of the kind found in a common law trial setting (a species of persuasion dialogue), there is a burden of persuasion set at the opening stage of a dialogue, and a burden of production of evidence is set during the argumentation stage (Gordon and Walton, 2009). But there is also a tactical burden of proof that plays an important role in the formal system for modeling burden of proof of Prakken and Sartor (2009, 228). On their account, the burden of persuasion specifies which party has to prove some proposition that represents the ultimate *probandum* in the case, and also specifies what proof standard has to be met. The judge is supposed to instruct the jury on what proof standard has to be met and which side estimated at the beginning of the trial process. Whether this burden has been met or not is determined at the end of the trial. The burden of persuasion remains the same throughout the trial, once it has been set. It never shifts from the one side to the other during the whole proceedings (Prakken and Sartor, 2007). The burden of production specifies which party has to offer evidence on some specific issue that arises during a particular point during the argumentation in the trial itself as it proceeds. The burden of production may in many instances only have to meet a low proof standard. If the evidence offered does not meet the standard, the issue can be decided as a matter of law against the burden party, or decided in the final stage by the trier (Prakken and Sartor, 2006). Both the burden of persuasion and the burden of production are assigned by law. The tactical burden of proof, on the other hand is decided by the party putting forward an argument at some stage during the proceedings. The arguer must judge the risk of ultimately losing on the particular issue being discussed at that point if he fails to put forward further evidence concerning that issue (Prakken and Sartor, 2007). The tactical burden is not ruled on or moderated by the judge. It pertains only to the two parties con-

testing on each side, enabling them to plan their argumentation strategies.

This research on burden of proof in artificial intelligence and law (Prakken and Sartor, 2006, 2007, 2009; Gordon and Walton, 2009) rests on the assumption that legal argumentation of the kind that takes place in a common law court setting fits the context of a persuasion dialogue.

4. DELIBERATION DIALOGUE

Lamiani et al. (2017) applied the formal model of deliberation dialogue of Walton, Toniolo and Norman (2014) to real doctor-patient consultations in the field of hemophilia, a rare inherited bleeding disorder that requires patients to comply with burdensome treatments. It was concluded by their study of 30 consultations that the deliberation model can be applied to empirical data showing how to identify and remedy physician-patient deliberation interactions that are suboptimal. A particularly interesting finding (Lamiani et al., 2017, 691) was that the topic can shift during a deliberation dialogue as each problem that arises needs to be solved, during a visit. Studying transcripts of these consultations between physician and patient, they found that there could be more than one deliberation dialogue. This finding confirms the basic feature of deliberation dialogue postulated in the model, namely that the topic of the deliberation can shift during the argumentation stage. Thus a contrast can be drawn in this respect between deliberation dialogue and persuasion dialogue. In the latter, the topic is fixed at the opening stage and remains fixed at the closing stage. In this instance the application of the theoretical model to examples of real clinical dialogues confirmed a characteristic postulated in the theoretical model.

In the following example, (Lamiani et al., 2017, 693), the patient shares his arguments explaining why he does not want to start the cure proposed by the physician. Nevertheless at the end of the dialogue agreement is reached as the patient explicitly

expresses his commitment to the physician's proposal for treatment (at the closing stage). The dialogue has been quoted but some details have been simplified and shortened.

Opening Stage

MD: Why did they write 'previous viral hepatitis'? Do you still have hepatitis?
Patient: Yes.
MD: So you didn't undergo treatment in the meantime?
Patient: No, no, no! I'm not doing any treatment…
Patient: Are there people who are already doing this therapy?
MD: Well, everybody! Basically all of our patients are doing it! So absolutely you should also do it! Do you want to?
Patient: No
MD: Why?

Argumentation Stage

Patient: Because I feel good the way I am now.
MD: Yes, I know you feel good. However, the hepatitis virus is silent for 30 years and when it wakes up then there is nothing more you can do!
Patient: Why, can this virus go away?
MD: There is an 80% probability of success!
Patient: Yes I know, because I am a bit special.
MD: Explain to me. Let's talk about it!
Patient: I have always been against all sorts of drugs and I have never taken medicine all my life, not even for flu. And you had talked to me about the interferon also three years ago.
MD: And will keep on doing it! We absolutely recommend you to do the therapy. I repeat, to start does not mean that if the side effects are too heavy we tie you to a chair and make you go on. We decide together. If we give it a try,

there are too many side effects and we stop. It's not a problem. The virus doesn't become more resistant

Closing Stage

Patient: Yes, okay
MD: Very well, so I'm writing that for us it will be useful to do it. And if you want to do it here it's okay
Patient: Yes I'd better do it when I do the other treatment.

The findings showed that 80% of the sample of consultations contained at least one deliberation dialogue, suggesting that deliberation is common in clinical practice and chronic care. In the study, the model of deliberation was taken as an ideal model of optimal deliberation so that the study of empirical examples could be used to identify misalignments with the model, or cases where there were suboptimal realizations of the ideal model. The intent of applying the model to real consultations was to offer practical suggestions to improve collaborative physician-patient communication in hemophilia care. Note that in the case outlined above all three stages were present, but in some cases regarded as suboptimal, either the opening stage or the closing stage was missing.

The types of dialogue that have been centrally highlighted in the past in the argumentation literature, such as the critical discussion, concern claims that are put forward in the form of a proposition that is held to be true or false. But other types of dialogue, such as deliberation and negotiation, do not have the central aim of proving that a particular proposition is true or false.

There is no global burden of proof in a deliberation dialogue, because no thesis to be proved or disproved is set into place for each side at the opening stage (Walton, 2010). Deliberation is not an adversarial type of dialogue, and at the opening stage all options are left open concerning proposals that might be brought forward to answer the governing question. At the opening stage,

the governing question cites a problem that needs to be solved cooperatively by the group conducting the deliberations, a problem that concerns choice of actions by the group. The goal of the dialogue is not to prove or disprove anything, but to arrive at a decision on which is the best course of action to take. Hence the expression 'burden of proof' is not generally appropriate for this type of dialogue.

During a later stage, proposals for action are put forward, and what takes place during the argumentation stage is a discussion that examines the arguments both for and against each proposal, in order to arrive at a decision on which proposal is best. Something like the standard of proof called the preponderance of evidence in law is operative during this stage. The outcome in a deliberation dialogue should be to select the best proposal, even if that proposal is only marginally better than others that have been offered. A party who offers a proposal is generally advocating it as the best course of action to take, even though in some instances a proposal may merely be put forward hypothetically as something to consider but not necessarily something to adopt as the best course of action. In such instances it is reasonable to allow one party in a deliberation dialogue to ask another party to justify the proposal that the second party has put forward, so that the reasons behind it can be examined and possibly criticized. Hence there is a place in deliberation dialogue for something comparable to burden of proof. It could be called a burden of defending or justifying a proposal. What needs to be observed is that this burden only comes into play during the argumentation stage where proposals are being put forward, questioned and defended. In contrast with the situation in persuasion dialogue, none of these proposals is formulated and set into place at the opening stage as something that has to be proved or cast into doubt by one of the designated parties in the dialogue. In this regard, persuasion dialogue and deliberation are different in their structures. Since persuasion dialogue (the critical dis-

cussion type of dialogue) has been most discussed in the argumentation literature, it seems natural to think that there must be something comparable to burden of proof that is also operative in deliberation dialogue. But this expectation is misleading.

In deliberation dialogue, there is no burden of persuasion set at the opening stage, because the proposals will only be formulated as recommendations for particular courses of actions at the later argumentation stage. A deliberation dialogue arises from the need for action, as expressed in a governing question formulated at the opening stage, like 'Where shall we go for dinner tonight?', and proposals for action arise only at a later stage in the dialogue (McBurney et al, 2007, 99). There is no burden of proof set for any of the parties in a deliberation at the opening stage. However, at the later argumentation stage, once a proposal has been put forward by a particular party, it will be reasonably assumed by the other participants that this party will be prepared to defend his proposal by using arguments, for example like the argument that his proposal does not have negative consequences, or the argument that his proposal will fulfill some goal that is taken to be important for the group. How burden of proof figures during the argumentation stage can be seen by examining some of the permissible locutions (speech acts allowed as moves). One of these is the *ask-justify* locution (McBurney et al., 2007, 103), quoted below. The locution **ask_ justify** (*Pj* , *Pi* , *type*, *t*) is a request by participant *Pj* of participant *Pi* , seeking justification from *Pi* for the assertion that sentence *t* is a valid instance of type *type*. Following this, *Pi* must either retract the sentence *t* or shift into an embedded persuasion dialogue in which *Pi* seeks to persuade *Pj* that sentence *t* is such a valid instance

What we see here is that one participant in a deliberation dialogue can ask another participant to justify a proposition that the second party has become committed to through some previous move of a type like an assertion or proposal. As long as the proposition is in the second party's commitment set, the first

party has a right to ask him to justify it or retract it. But notice that when the second party offers such a justification attempt, the dialogue shifts into an embedded persuasion dialogue in which the second party tries to persuade the first party to become committed to this proposition by using a valid argument. So what we see here is that burden of proof is involved during specific groups of moves at the argumentation stage, but when the attempt is made by the respondent to fulfill the request for justification, there is a shift to persuasion dialogue. By this means the notion of burden of proof appropriate for the persuasion dialogue can be used to evaluate the argument offered.

A key factor that is vitally important for persuasion dialogue is that the participants agree on the issue to be discussed at the opening stage. Each party must have a thesis to be proved. This setting of the issue is vitally important for preventing the discussion from wandering off, or by shifting the burden of proof back and forth and never concluding. In deliberation dialogue however, the proposals are not formulated until a later stage. It makes no sense to attempt to fix the proposals at the opening stage, because they need to arise out of the brainstorming discussions that take place after the opening stage. Burden of proof only arises during the argumentation stage in relation to specific kinds of moves made during that stage, and when it does arrive there is a shift to persuasion dialogue which allows the appropriate notion of burden of proof to be brought in from the persuasion dialogue.

For these reasons the speech act protocols for deliberation dialogue need to be configured so that one agent can ask another about the plans and goals of the second agent, and the second agent can offer an explanation about its own plans and goals (Walton, Toniolo and Norman, 2016). In general, an agent in a deliberation dialogue often needs to be able to explain its plans and goals, as well as its knowledge of the current circumstances of the case, to another agent who questions a proposal that has

been put forward by the first agent. Thus there is a kind of burden on the first agent in such a case to offer explanations and clarifications that the other agents in the deliberation dialogue can understand. If one agent is a problem because he does not understand some aspect of another agent's proposal, the proposer needs to explain his plan in a way that responds to the questioner's problem. The need to respond in this way, however, is better described not as a burden of proof but as a burden of responding constructively (Walton, Toniolo and Norman, 2016, 12).

5. DECIDING BETWEEN PERSUASION AND DELIBERATION

It is a fundamental but common problem in trying to apply a formal dialogue model to examples of real argumentation that there is disagreement in many instances about whether a given argument should be classified as taking place in the context of a persuasion dialogue or that of a deliberation dialogue. To see the problem consider some examples. The pervasiveness of the problem can be indicated by listing the topics of some recently featured debates in Debatepedia.

- Should there be a ban on sales of violent video games to minors?
- Should colleges ban fraternities?
- Should public schools be allowed to teach creationism alongside evolution?
- Should governments legalize all drugs?

A student encountering these debates armed with the distinction between persuasion dialogue and deliberation would at least initially be tempted to classify them as instances of deliberation dialogue, because in each instance, the topic of the debate concerns

an issue of a choice of actions or policies. Deliberation dialogue is about a decision to decide between different courses of action, or whether to take action or not, on a situation requiring some sort of choice. However, it needs to be noticed in each instance that the debaters discussing the issue are not in a position to make the decision whether to move ahead with the course of action or not, or to choose which action of the opposed pair they will carry out. For example, the debaters concerned with the second issue on the list are not in a position to ban fraternities in all colleges or decide not to. This observation might prompt the student to reconsider, and classify the examples as persuasion dialogues.

But on the other hand there is a problem with that, because a persuasion dialogue is about a conflict of opinions where each opinion is a statement that is true or false. And very often the criterion used to distinguish between persuasion dialogues and deliberation dialogues is that the latter are about actions whereas the former are about whether a particular factual proposition is true or false.

The solution to the problem is to recognize that there can be persuasion over action, so just because in a given instance argumentation is about a course of action, is does not follow that the context has to be that of a deliberation dialogue. This lesson can be brought out even more forcefully by considering a simple example (Atkinson et al, 2013) of a group of academics at the end of a day of conferencing who need to make a decision on where to go for dinner. Some of them make proposals about certain restaurants they have some experience with, while others of them give reasons to support a claim to the effect that one or the other of the restaurants being considered would be less than ideal. For example, one of the participants might argue that a particular restaurant proposed by one of the others does not have vegetarian food. Or another participant might argue that his time is limited and one of the restaurants recommended by another

person is too far away, and would therefore take too much time to get to and back from.

A complicating factor revealed by the study of this example is that there are frequently shifts from the one type of dialogue to the other. For example if one participant argues that this restaurant is too far away while the other argues it is really not too far away, they might shift to a persuasion dialogue on this issue by presenting what purport to be facts about how long it would take to get to this restaurant and back given the kinds of transportation available in the city. This kind of shift is typical, because intelligent deliberation needs to be based on the participants' knowledge of the circumstances of the case. Once there has been a shift to arguing about the factual issues of this kind of the dialogue may have shifted from deliberation to a persuasion dialogue or an information seeking dialogue. In other instances a deliberation dialogue may shift to a negotiation, as shown in the example of the hammer and the nail in section 1.

Still other dialogues are not mainly about argumentation. Some are about the giving and receiving of explanations. In this kind of dialogue, there is no burden of proof, because the central aim is not to prove something but to explain something that the questioner claims to fail to understand. However, in this type of dialogue when a questioner asks for an explanation, there is an obligation on the part of the other party to provide one, assuming he is in a position to do that. So generally, in all types of dialogue of the kind that provide normative structures for rational communication, there are obligations to respond in a certain way to a request made in a prior move by the other party. These obligations are quite general, but the notion of burden of proof is more restricted, and only applies where a response to an expression of doubt by one party as to whether some proposition is true or not needs to be made by offering an attempt to prove that the proposition is true or false. For obvious reasons, this type of dialogue exchange is centrally important in science and philoso-

phy, but the problem is that the vocabulary used to describe its operation has a tendency to be carried over into other types of dialogue where the central purpose is not to prove or disprove something.

6. INQUIRY

The type of dialogue where use of the expression 'burden of proof' is most clearly appropriate is the inquiry. The aim of the inquiry is to collect sufficient evidence to either definitively prove the proposition at issue, or to show that it can not be proved, despite the exhaustive effort made to collect all the evidence that was available. The central aim of the inquiry is proof, where this term is taken to imply that a high standard of proof has been met. The negative aim of the inquiry is to avoid later retraction of the proposition that has been proved. And so the very highest standard of proof is appropriate. The inquiry is therefore the model of dialogue in which the expression 'burden of proof' has a paradigm status.

The goal of an inquiry is to produce solid inferences to prove or disprove some claim at issue using clear concepts and clearly articulating the burden of proof at the opening stage. As a consequence, the evidential standard for the inquiry type of dialogue needs to be high (Upshur and Colak, 2003, 291). In medical contexts this kind of argumentation requires evidence from studies, such as randomized trials, based on a collective research effort where criteria are stipulated in advance to determine the acceptability of the evidence (Upshur and Colak, 2003, 292). Hence there is a need to ensure that all the relevant evidence has been taken into account before closing off the inquiry and reaching a conclusion.

The inquiry as a type of dialogue is somewhat similar to the type of reasoning that Aristotle called a demonstration. On his account (1984, *Posterior Analytics,* 71b26), the premises of a demonstration are themselves indemonstrable, as the grounds of

the conclusion, and must be better known than the conclusion and prior to it. He added (1984, *Posterior Analytics,* 72b25) that circular argumentation is excluded from a demonstration. He argued that since demonstration must be based on premises prior to and better known than the conclusion to be proved, and since the same things cannot simultaneously be both prior and posterior to one another, circular demonstration is not possible (at least in the unqualified sense of the term 'demonstration').

In contrast, persuasion dialogues, as well as deliberation dialogues and discovery dialogues, have to allow for retractions. It is part of the rationality of argumentation in a persuasion dialogue that if one party proves that the other party has accepted a statement that is demonstrably false, the other party has to immediately retract commitment to that statement. It does not follow that persuasion dialogue has to allow for retractions in all circumstances, but the default position is that it is presumed that retraction should generally be allowed, except in certain situations. In contrast, in the inquiry, the default position is to eliminate the possibility of retraction of commitments as much as possible, except in certain situations.

Cumulativeness appears to be such a strict model of argumentation that many equate it with the Enlightenment ideal of foundationalism of the kind attacked by Toulmin (1959). To represent any real instance of an inquiry, it is useful to explore inquiry dialogue systems that are not fully cumulative. Black and Hunter (2007) have built a system of argument inquiry dialogues meant to be used in the medical domain to deal with the typical kind of situation in medical knowledge consisting of a database that is incomplete, inconsistent and operates under conditions of uncertainty. The kind of inquiry dialogue they model is represented by a situation in which many different health care professionals rule in the care of the patient, who must cooperate by sharing their specialized knowledge in order to provide the best care for the patient. To provide a standard for soundness and

completeness of this type of dialogue, Black and Hunter (2007, 2) compare the outcome of one of their actual dialogues with the outcome that would be arrived at by a single agent that has as its beliefs the union of the belief sets of both the agents participating in the dialogue. Their model assumes a form of cumulativeness in which an agent's belief set does not change during a dialogue, but they add that they would like to further explore inquiry dialogues to model the situation in which an agent has a reason for removing a belief from its beliefs set it had asserted earlier in the dialogue (Black and Hunter, 2007, 6). To model real instances of argumentation inquiry dialogue, it would seem that ways of relaxing the strict requirement of cumulativeness need to be considered.

One difference between burden of proof in inquiry and persuasion dialogues is that the standard of proof generally needs to be set much higher in the inquiry type of dialogue. A similarity between the two types of dialogue is that the burden of proof, including the standard of proof, is set at the opening stage.

Global burden of proof in a dialogue is defined as a set {*P*, *T*, *S*} where *P* is a set of participants, *T* is an ultimate *probandum*, a proposition to be proved or cast into doubt by a designated participant, and *S* is the standard of proof required to make a proof successful. If there is no thesis to be proved or cast into doubt in a dialogue, there is no burden of proof in that dialogue, except where it may enter by a dialectical shift. The local burden of proof defines what requirement of proof has to be fulfilled for a speech act, or move like making a claim, during the argumentation stage. The global burden of proof is set at the opening stage, but during the argumentation stage, as particular arguments are put forward and replied to, there is a local burden of proof for each argument that can change. This local burden of proof can shift from one side to the other during the argumentation stage as arguments are put forward and critically questioned. Once the argumentation has reached the closing stage, the outcome is

determined by judging whether one side or the other has met its global burden of proof, according the requirements set at the opening stage.

It seems fair to conclude that although the bulk of the literature on burden of proof so far is on persuasion dialogue, it should also be important to investigate burden of proof in inquiry dialogue where it is a central concept. Burden of proof is only significant in deliberation dialogue when there has been a shift to a persuasion dialogue. Burden of proof is important in information-seeking dialogues when arguments need to be brought forward to get permission to receive the information, or when the reliability of the information is a concern. Burden of proof is especially important in the study of scientific argumentation because of the characteristic shift in scientific research from the discovery stage to the inquiry stage.

7. DISCOVERY DIALOGUE

Discovery dialogue was first recognized as a distinct type of dialogue different from the any of the six basic types of dialogue by McBurney and Parsons (2001). On their account (McBurney and Parsons, 2001, 4), discovery dialogue and inquiry dialogue are distinctively different in a fundamental way. In an inquiry dialogue, the proposition that is to be proved true is designated prior to the course of the argumentation in the dialogue, whereas in a discovery dialogue the question of the truth to be determined only emerges during the course of the dialogue itself. According to their model of discovery dialogue, participants began by discussing the purpose of the dialogue, and then during the later stages they use data items, inference mechanisms, and consequences to present arguments to each other. Two other tools they use are called criteria and tests. Criteria, like novelty, importance, cost, benefits, and so forth, are used to compare one data item or consequence with another. The test is a procedure

to ascertain the truth or falsity of some proposition, generally undertaken outside the discovery dialogue.

The discovery dialogue moves through ten stages (McBurney and Parsons, 2001, 5) called open dialogue, discuss purpose, share knowledge, discuss mechanisms, infer consequences, discuss criteria, assess consequences, discuss tests, propose conclusions, and close dialogue. The names for these stages give the reader some idea of what happens at each stage as the dialogue proceeds by having the participants open the discussion, discuss the purpose of the dialogue, share knowledge by presenting data items to each other, discuss the mechanisms to be used, like the rules of inference, build arguments by inferring consequences from data items, discuss criteria for assessment of consequences presented, assess the consequences in light of the criteria previously presented, discuss the need for undertaking tests of proposed consequences, pose one or more conclusions for possible acceptance, close the dialogue. The stages of the discovery dialogue may be undertaken in any order and may be repeated (2001, 6). They add that agreement is not necessary in a discovery dialogue, unless the participants want to have it.

McBurney and Parsons also present a formal system for discovery dialogue in which its basic components are defined. A wide range of speech acts (permitted locutions) that constitute moves in a discovery dialogue include the following: propose, assert, query, show argument, assess, recommend, accept, and retract. There is a commitment store that exists for each participant in the dialogue containing only the propositions which the participant has publicly accepted. All commitments of any participant can be viewed by all participants. They intend their model to be applicable to the problem of identifying risks and opportunities in a situation where knowledge is not shared by multiple agents.

To be able to identify when a dialectical shift from a discovery dialogue to an inquiry dialogue has occurred in a particular case,

we first of all have to investigate how the one type of dialogue is different from the other. Most importantly, there are basic differences in how burden of proof, including the standard of proof, operates. In an inquiry dialogue the global burden of proof, that is operative during the whole argumentation stage, is set at the opening stage. In a discovery dialogue no global burden of proof is set at the opening stage that operates over both subsequent stages of the dialogue. McBurney and Parsons (2001, 418) express this difference by writing that in inquiry dialogue, the participants "collaborate to ascertain the truth of some question", while in discovery dialogue, we want to discover something not previously known, and "the question whose truth is to be ascertained may only emerge in the course of the dialogue itself". This difference is highly significant, as it affects how each of the two types of dialogue is fundamentally structured.

In an inquiry dialogue, the global burden of proof is set at the opening stage and is then applied at the closing stage to determine whether the inquiry has been successful or not. This feature is comparable to a persuasion dialogue, where the burden of persuasion is set at the opening stage (Prakken and Sartor, 2007). At the opening stage of the inquiry dialogue, a particular statement has to be specified, so that the object of the inquiry as a whole is to prove or disprove this statement. In a persuasion dialogue, this burden of proof can be imposed on one side, or imposed equally on both sides (Prakken and Sartor, 2006). However, in an inquiry dialogue there can be no asymmetry between the sides. All participants collaborate together to bring forward evidence that can be amassed to prove or disprove the statement at issue. Discovery dialogue is quite different in this respect. There is no statement set at the beginning in such a manner that the goal of the whole dialogue is to prove or disprove this statement. The basic reason has been made clear by McBurney and Parsons. What is to be discovered is not known at the opening stage of the discovery dialogue. The aim of the discovery dialogue is to try to find

something, and until that thing is found, it is not known what it is, and hence it cannot be set as something to be proved or disproved at the opening stage as the goal of the dialogue.

8. INFORMATION-SEEKING DIALOGUE

Information-seeking dialogue is common in healthcare in communicative settings such as physician-patient conversations, relations between physicians, such as between a specialist and a generalist physician, student-teacher interactions, expert consultations and communications with administrators (Upshur and Colak, 2003, page 293). This kind of dialogue is asymmetrical because it is assumed at the opening stage that one party has some information that the other party does not possess. Hence the main characteristic of this type of dialogue is that it is not necessarily truth-seeking. For example the goal may be to have a reasonable enough exchange of information to support a decision. Based on their observations, Upshur and Colak (2003, 293) propose that the evidential standard and information-seeking dialogue is highly contextual and variable. Narrative evidence may be more significant than quantitative evidence.

An important subtype of information-seeking dialogue that has been studied in the argumentation literature is called examination dialogue. Van Laar and Krabbe (2010) classify examination dialogue as a mixture of persuasion dialogue and inquiry. Dunne et al. (2005) take the approach however that examination dialogue should count as a main type of dialogue such as information-seeking and persuasion. Walton (2008) takes examination dialogue to be a species of information-seeking dialogue in which the goal is to acquire some information possessed by the answerer but not by the questioner. The means is to extract this information from the answerer by asking a series of questions. But there is also a secondary aim. This is the testing of the reliability of the information extracted from the respondent (Walton, 2006), for example by testing the answerer's current statement

against his previous ones, or against facts generally known in the case. In the model of examination dialogue of Dunne et al. (2005) the questioner wins if he pins down an inconsistency in the answerer's collective set of responses to questions. This brings in an argumentative element that goes beyond the mere extraction of statements from the possessor of the information, suggesting that it has a testing function as well.

Bolton (1999, 80) used the term peirastic (peirastike), as found in Aristotle, to refer to an art of testing claims to knowledge by critically probing into the answerer's set of replies. This critical testing procedure can require the use of different kinds of arguments, such as argument from commitment, especially argument from inconsistent commitments, and certain kinds of ad hominem arguments. These observations suggest the view of Walton (2006) that examination dialogue should be classified as a hybrid type of dialogue blending information-seeking dialogue with persuasion dialogue. These matters have not been very widely studied yet, and could use further research, for example on their applications to legal cross-examination dialogues.

There seems to be little to say about burden of proof in information-seeking dialogues at first sight, but there are at least two ways in which burden of proof might enter into this type of dialogue. Information-seeking dialogue is not exclusively taken up with the putting forward of ask and tell questions, or with the kind of searching for information one might do when using Google. One reason is that there is a concern not only with obtaining raw information, but with determining the quality of this information by judging its reliability. Judgments of reliability of collected information would seem to involve standards of proof, and therefore also may involve burdens of proof. Another reason is that in many instances of information-seeking dialogue, the requesting agent needed to provide the responding agent with an argument in order to obtain access to the infor-

mation requested. As noted in Doutre et al. (2006), such dialogues may be viewed as consisting only of ask and tell locutions if this argument component of them is not considered. But if this argument component is considered as part of the information-seeking dialogue, then burden of proof is involved. This might suggest that when agents argue about receiving permission to get information during an information-seeking dialogue, there has been a shift to some other type of dialogue such as a persuasion dialogue.

9. NEGOTIATION DIALOGUE

Since negotiation is really rooted in interests rather than in the pursuit of truth, consideration of the truth or falsity of a statement is subordinate to the exchange or purchase of items of exchange value, such as money (Upshur and Colak, 2003, 292). More important here is the reasonableness or fairness of the bargain. Thus the evidential standard is variable, and the dispute may be resolved reasonably without recourse to empirical evidence (Upshur and Colak, 2003, 291). However, in negotiation dialogue there are typically intervals where there is a shift to another type of dialogue where burden of proof is important. For example a contractor and a homeowner may be negotiating a price for installing a new basement in the house, and at some point in the dialogue it may become important for the contractor to try to convince the homeowner that the building code for walls in basements in that area specifies certain requirements that have to be met, for example discerning the thickness of the walls. In such a case, the notion of burden of proof may not play any direct role in the negotiation argumentation itself, but when there is a shift from it to a persuasion dialogue where the contractor tries to convince the homeowner the walls of a certain minimum thickness are mandatory, burden of proof may be an important factor in evaluating his arguments.

10. ERISTIC DIALOGUE

An eristic dialogue (Walton, 1998, 181) is a combative verbal exchange in which the two participants bring forward their strongest arguments to attack the opponent by any means that might allow them to win the dispute. This type of dialogue was well known to the ancient philosophers, and was known as eristic by them, the expression driving from the noun *eris* meaning strife or quarrel. Schiappa (1999) suggested that the Greek word for eristic dialogue originated in Plato's writings. Eristic dialogue requires some minimum degree of cooperation, because each of the participants takes a turn in the exchange. However, the rules are very minimal and a central type of argumentation frequently used is the *ad hominem* attack, where each party tries to attack the other personally by arguing that he or she has some personal characteristic indicating untrustworthiness. Because it is characterized by personal attack, the quarrel is typically an emotional type of exchange which seems to break out suddenly and be very intense. Such quarrels are typically sparked by an underlying disagreement or grudge between the two parties that suddenly breaks out into explicit argumentation. Eristic dialogue is not entirely negative, because it often has a cathartic effect as its benefit, allowing underlying antagonisms to be brought to the surface and acknowledged by both parties.

However, eristic dialogues can be dangerous when there has been a shift between another type of dialogue, such as a persuasion dialogue, to the eristic format. Aristotle, in *On Sophistical Refutations* (170 1b5-172 b8) is careful to draw a distinction between dialectical argumentation and eristic argumentation. He identifies eristic argumentation as representing a merely apparent kind of reasoning that appears to be genuine dialectical argumentation but is merely contentious, and is associated with fallacies and sophistical rhetorical tactics. A well-known example in ancient philosophy was the Platonic dialogue called the *Euthydemus*, in which two clever Sophists use all kinds of verbal tricks

and fallacious moves. Aristotle writes in *On Sophistical Refutations* (171 b24-31) that eristic reasoning is an unfair kind of fighting in arguments in which those who are bent on victory at all costs do not hesitate to use any kind of argument that works in the exchange for them. He also links this kind of argumentation to the use of fallacies or sophistical arguments by remarking that the dialogue is eristic if the semblance of victory is the aim, whereas it can be classified as sophistical if a semblance of wisdom is the aim.

As noted by Dufour (2014, 7) there are some differences in how eristic dialogue has been defined in the literature. Walton and Krabbe (1995, 76) define eristic dialogue as a specific kind of dialogue that includes a number of subtypes, one of which is the quarrel while another is the eristic discussion. The eristic discussion is defined by Walton and Krabbe (1995, 76) as a type of dialogue where the participants engage in verbal sparring to show who is the more clever in constructing persuasive but often tricky arguments that devastate the opposition. In the account of Walton (1998, 181), eristic dialogue is defined as a combative verbal exchange in which the two parties are allowed to bring out their strongest arguments to attack, and even to defeat and humiliate the other. Van Laar (2010, 390) defines the eristic discussion as a kind of game that has the aim of determining which of the two parties is the most capable, smart and artful in devising and presenting arguments and criticisms.

These differences on how to precisely define eristic dialogue remain to be resolved, but generally we can say that there is a broad distinction between the simple verbal quarrel, of the kind we are all highly familiar with in everyday conversational argumentation, and the more refined meaning of the sophistical dialogue where two participants engage in verbal sparring to show which of them is the more clever by using persuasive and often tricky arguments to win the exchange by impressing the audience with their argumentation skills.

11. CONCLUSIONS

An important lesson brought out in this paper is that distinctions between the various kinds of dialogue can be clarified and formulated more precisely by showing how each of them relies on different approaches to the burden of proof. A key factor in persuasion dialogue is that the participants agree on the issue to be discussed at the opening stage. Each party must have a thesis to be proved. This setting of the issue is vitally important for preventing the discussion from wandering off, or by shifting the burden of proof back and forth and never concluding. This burden of persuasion comes into play at the local level during the argumentation stage where each party takes turn making its moves. In deliberation dialogue however, the proposals are not formulated until a later stage. It makes no sense to attempt to fix the proposals at the opening stage, because they need to arise out of the brainstorming discussions that take place after the opening stage. Hence in a deliberation dialogue, burden of proof only comes into play during the argumentation stage, and then only in a limited way. In the deliberation itself, there is only a burden of responding constructively by answering a request for justification with a range of replies that moves the dialogue forward. This burden can be fulfilled, for example, by offering an explanation or an argument. For these reasons, in this chapter it is concluded that there is no burden of proof in a deliberation dialogue.

Burden of proof has recently come to be a topic of interest in argumentation systems for artificial intelligence (Prakken and Sartor, 2006, 2007, 2009; Gordon and Walton, 2007, 2009), but so far the main work on the subject seems to be in that type of dialogue which has most intensively been investigated generally, namely persuasion dialogue. The most significant exception is probably deliberation dialogue, where some recent work has begun to tentatively investigate burden of proof in that setting. This paper has surveyed work on burden of proof in the literature on artificial intelligence and argumentation, and offered

some thoughts on how this work might be extended to the other types of dialogue recognized by Walton and Krabbe (1995) that so far do not appear to have been much investigated in this regard.

Upshur and Colak (2003) studied how research evidence, values and professional experience function in carrying probative weight in evidence-based decision-making in medical contexts. On their account, the usefulness of the new dialectic is that by directing attention to the type of dialogue in question, it establishes how the need for evidence is relative to a particular context of application. A consequence of this approach is that there is no invariant hierarchy of evidence that can be applied to every medical context of argumentation (Upshur and Colak, 2003, 294). This aspect of the work surveyed in this paper has shown how standards of proof represent a key tool for understanding how the context of an argument influences its evaluation in the field of medicine (Upshur and Colak, 2003, 90).

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CHAPTER 9.

INQUIRY: A DIALECTICAL APPROACH TO TEACHING CRITICAL THINKING

SHARON BAILIN AND MARK BATTERSBY

Abstract: We argue that the central goal of critical thinking is the making of reasoned judgments. Arriving at reasoned judgments in most cases is a dialectical process involving the comparative weighing of a variety of contending positions and arguments. Recognizing this dialectical dimension means that critical thinking pedagogy should focus on the kind of comparative evaluation which we make in actual contexts of disagreement and debate.

The ultimate goal of this paper is to argue for a particular approach to critical thinking pedagogy. Our argument is aimed particularly at those courses taught at the post-secondary level which currently tend to focus on analyzing and evaluating individual arguments in the name of critical thinking instruction.

We shall argue that the underlying concern of critical thinking is the making of reasoned judgments. Arriving at reasoned judgments in actual cases is a dialectical process involving the comparative weighing of a variety of contending positions and arguments. Thus taking seriously the dialectical dimension implies having as a central focus for both theory and pedagogy

the kind of comparative evaluation which we make in actual contexts of disagreement and debate.

In order to make this case, we draw upon arguments concerning the nature of argumentation. Thus a note about how we view the relationship between critical thinking and argumentation is in order. Although we agree with theorists who argue that the two are not synonymous and that critical thinking may include aspects that do not focus on arguments (e.g. Govier 1989), nonetheless, we believe that argumentation constitutes a significant aspect of critical thinking. This is especially the case as we view argumentation quite broadly and would argue that much discipline-specific reasoning, including inference to the best explanation or the justification of interpretations of an artwork, constitute examples of argumentation (Bailin & Battersby forthcoming). Because of the centrality of argumentation in critical thinking, we shall draw implications from the dialectical nature of argumentation for critical thinking pedagogy.

2. ARGUMENTATION AS DIALECTICAL

Our discussion will take as its point of departure three points made by Ralph Johnson:

1. the theory of argumentation should develop out of an understanding of the practice of argumentation;
2. an important feature of the practice of argumentation is that it is dialectical;
3. the pedagogy of argumentation should include this dialectical dimension.

We shall begin by registering our agreement with Johnson's first point that "the normative dimension of the theory of argument […] must develop out of a proper understanding of the practice

of argumentation"[1] (Johnson 2000, p. 6). It was a very similar view, that argumentation theory and pedagogy should be more faithful to how arguments are actually conducted, that motivated the Informal Logic movement, and it is a view with which we concur. We also concur with Johnson's view that the aspect of the practice of argumentation which is missing from the theory is its dialectical dimension.

It is important to clarify that Johnson uses the term 'dialectical' to refer to a feature of the practice of argumentation and not to an approach to argumentation theory, as for example the Pragma-Dialectical approach. It is, in Finocchiaro's terms, dialectical as distinguished from monological and not dialectical as distinguished from rhetorical or logical. We shall also use 'dialectical' to refer to a feature of the practice of argumentation.

What might be meant by claiming that argumentation is dialectical? In their 1987 paper, "Argument as Dialectical," Blair and Johnson offer the following characterization of the dialectical features of argumentation, a characterization which seems to have been followed in subsequent work.

1. An argument as a product can only be understood against the background of the process of argumentation.
2. The process of argumentation presupposes at least two roles: questioner and answerer, although the roles may be exchanged at various stages of the process.
3. The process of argumentation is initiated by some question, doubt or challenge to a proposition.
4. Argumentation is a purposive activity (Blair & Johnson 1987, pp. 45-46).

1. "By 'the practice of argumentation,' I mean to refer to the social and cultural activity of constructing, presenting, interpreting, analyzing, criticizing and revising arguments" (Johnson 2007, p. 8).

They summarize as follows: To say that argumentation is dialectical, then, is to identify it as a human practice, an exchange between two or more individuals in which the process of interaction shapes the product" (Blair & Johnson 1987, p. 46).[2]

In our view, these points capture some central aspects of the dialectical dimension of argumentation. To say that argumentation is dialectical means that it takes place in the context of some controversy or debate. This implies 1) that it is initiated by some question, doubt, challenge, and 2) that there is a diversity of views on the issue, arguments both for and against (if the controversy is genuine, then it is likely that there will be at least some plausible arguments on both sides).[3] The dialectical aspect also means that there is an interaction between the arguers and between the arguments involving criticism, objections, responses, and, frequently, revisions to initial positions.

One implication of this view is that we seldom make and assess individual arguments in isolation. Rather, we make them in the context of a dialectic, of a historical and ongoing process of debate and critique, of competing views and the give-and-take among them. Thus an individual argumentative exchange must be viewed in the context of this dialectic (Bailin 1992, p. 64). The following reference by Blair and Johnson to Aristotelian dialectic captures the essence of this perspective.

> In Aristotelian dialectic, an interlocutor's contribution has to be seen against the background of the questions already asked and the answers already given. In understanding argumentation, this feature points in the direction of background beliefs shared, or debated, by the community of informed people for whom the key

2. Johnson continues to make a similar point in more recent work: "An exchange is dialectical when, as a result of the intervention of the Other, one's own logos (discourse, reasoning, or thinking) has the potential of being affected in some way" (Johnson 2000, p. 161).

3. Johnson makes a similar point: typically "there are good arguments for and good arguments against a particular proposition or proposal" (Johnson 2003, p. 42).

propositions of the argument arouse interest and attention. (Blair & Johnson 1987, p. 45)

3. REASONED JUDGMENT VS. RATIONAL PERSUASION

An implication of the recognition that argumentation is dialectical is that, in order to understand the nature of argumentation and its evaluation, one needs to focus on the whole process of argumentation. This involves a focus on the comparative evaluation of competing views rather than simply on the evaluation of particular arguments.

Argumentation is a purposive activity, as Blair and Johnson have pointed out. We engage in argumentation to some end, but what that end is has been the subject of some debate. Johnson holds that there are different goals of argumentation: rational persuasion, inquiry, decision-making and justification. For him rational persuasion is primary, with other goals being generated from it. We agree that arguers may have different purposes or intentions in arguing such as the ones he lists. Nonetheless, because of the rational and dialectical character of argumentation, we would argue that the primary goal should be seen as arriving at a reasoned judgment, a process we deem inquiry.[4] Whatever the original intentions of the arguer, because of the normative constraints on arguers to be open-minded, to put their arguments to the test of reason, and to be willing to concede to the most defensible position, the normative structure of the practice necessitates inquiry at some level or stage (Bailin 1992). We might think about this issue in terms of MacIntyre's notion of the point of a practice, which does not necessarily or always coincide with the psychological purposes of particular practitioners engaging in the practice (MacIntyre 1984). Yet, through participating in the practice and abiding by its normative con-

4. By inquiry, we mean critical inquiry, i.e., the process of arriving at a reasoned judgment, and not simply the gathering of information.

straints, one can learn to appreciate its underlying structure and share in its constitutive purposes.

In order to probe this point further, let us look at what Johnson has to say about his rationale for taking rational persuasion as primary.

> I cannot argue it here but I believe this purpose [rational persuasion] is the fundamental one and others (like justification, inquiry, reinforcement) can be generated from it. My strategy would be to mount an argument that parallels Wittgenstein's argument that first we learn to talk to others, then to ourselves. We justify to others, then to self. (Johnson 2007, p. 3, note 10)

We would, however, hesitate to equate justifying to others with rational persuasion. If you make an argument to someone, but the interlocutor presents you with sound criticisms and a more cogent alternative argument, then you ought to change your mind. If one views the purpose of argumentation as rational persuasion, and you fail to persuade, then the argumentation has failed. This seems an unpalatable conclusion. If the outcome of the exchange has been to reach a reasoned judgment, then we would want to say that the argumentation has succeeded. It seems to us that the 'rational' in 'rational persuasion' is central and points to an underlying strata of inquiry.

It is not our intention to imply that the purposes or intentions of the arguer are irrelevant to the process of argument. These purposes may frame how we go about the inquiry and where we put our emphasis. When I sit down to make my case in an op-ed piece, I am doing something which is different in certain ways than when I am discussing an issue with a colleague. In the latter case, I am trying to decide what to believe, and in the former I am trying to (rationally) persuade someone. The rational persuasion must, however, be preceded by inquiry in order to be rational—it involves, in effect, a presentation of the results of inquiry. And even when presenting my case, I have an obligation to be open to the objections, criticisms, and argument on

the other side that may be offered in response. Thus I am still, in some sense, engaged in an inquiry process. We shall argue in due course that taking reasoned judgment as primary is also beneficial from a pedagogical perspective.

4. REASONED JUDGMENT AND COMPARATIVE EVALUATION

Thus we are arguing that we should view as the central goal of argumentation the making of reasoned judgments. This process of arriving at a reasoned judgment is what we refer to as inquiry. By a reasoned judgment we mean not simply a judgment for which one has reasons, but a judgment for which one has good reasons, reasons which meet relevant standards. Hitchcock's revision of Johnson's notion of argumentation in terms of argumentative discussion has considerable overlap with our notion of inquiry.

> An argumentative discussion is a sociocultural activity of constructing, presenting, interpreting, criticizing, and revising arguments for the purpose of reaching a shared rationally supported position on some issue. (Hitchcock 2002, p. 291)

An important difference is that Hitchcock frames his definition in terms of the purpose of the participants whereas we frame ours in terms of the point of the practice (a move which Hitchcock explicitly rejects). Nonetheless, his notion of the purpose as reaching a shared rationally supported position on some issue comes close to our notion of arriving at a reasoned judgment. In addition, his list of examples of the practice of argumentative discussion (288) would all qualify as well as examples of the practice of inquiry.

Given that argumentation is dialectical, the process of arriving at a reasoned judgment on an issue necessarily involves the comparative evaluation of contending positions and arguments. Kuhn makes the point thus:

> Only if knowledge is seen as the product of a continuing process of examination, comparison, evaluation, and judgment of different, sometimes competing, explanations and perspectives does argument become the foundation upon which knowledge rests. (Kuhn 1991, 201f., cited in Govier 1999, p. 212)

Such an evaluation requires knowledge of the details of the current debate, or what Johnson refers to as the dialectical environment. He defines the dialectical environment as "the dialectical material (objections, criticisms, alternative positions, etc.) that congregates around an issue" and goes on to describe what would be involved in mapping the dialectical environment surrounding an issue.

> A mapping of the dialectical environment surrounding this issue [same sex marriage] would require us to lay out the various positions, the objections and criticisms of those positions, the responses to them. (Johnson 2007, p. 10)

It also requires one to address alternative positions. Johnson views this process of mapping as necessary in order to be in a position to address objections to one's argument, but we view it as much more fundamental. If argumentation is dialectical and coming to a reasoned judgment on an issue involves a comparative evaluation of contending positions, then having knowledge of the dialectic is central to the enterprise of arriving at a reasoned judgment.[5]

An example of the importance of knowledge of the dialectical context can be found in the role of identifying alternative arguments. A number of authors have adduced evidence demonstrating how significant errors of reasoning can be attributed to a lack of understanding of other positions (Kuhn 1991) and the failure to pursue alternative lines of reasoning (Finocchiaro 1994).

5. For a discussion of the difference between alternative positions, objections, criticisms, and counter-arguments, see Govier 1999, pp. 223—232.

In addition to the current debate around an issue, another aspect of the dialogical context is the history of the debate. If an issue is controversial, it is likely that the debate will have gone on over a period of time. Knowledge of the history of the argumentation which has led to the current debate, of "the questions already asked and the answers already given," can be helpful and is in some cases essential, to understanding the issue and the various positions which are contesting for acceptance. It is, for example, only possible to understand the ascendancy of certain scientific theories by understanding the nature of the problem which they were addressing and seeing what other theories they defeated and why. Only in this way we will understand why the dominant theory is seen as the best explanation and what issues still remain contested. Similarly, we can really only understand contemporary political debates by knowing something about the historical situation and the historical disagreements in which the contemporary debate has its roots. And knowing the history of a debate is important in order to determine where the burden of proof lies (looking at the history of the capital punishment debate, for example, will reveal that the deterrence argument has largely been discredited and that, as a consequence, any deterrence-based arguments would now assume the burden of proof).

5. THE ROLE OF ARGUMENT ASSESSMENT

We have argued that coming to a reasoned judgment involves a comparative evaluation of competing cases. But what is the role of the analysis and evaluation of individual arguments in this enterprise? Certainly the evaluation of individual arguments has an important role to play as arguments are the building blocks of cases or positions. Thus an initial assessment of individual arguments is a necessary part of the process of arriving at a reasoned judgment. It is, however, not sufficient. A complete assessment usually requires a comparative assessment of the strengths and weaknesses of the cases in which the arguments are embedded.

We would, however, also question the extent to which one can actually evaluate individual arguments apart from the context in which the arguments are situated.[6] One may be able to make an initial, prima facie assessment of whether a particular argument is fallacious, but often, in order to know how good an argument really is, one has to evaluate it in its dialectical context. Judging how strongly a particular set of premises supports a conclusion frequently requires more information than that supplied in the particular argument. One might, for example, construct what seems like a strong argument for euthanasia on the basis of individual human rights, but this argument may not be strong enough to prevail against arguments regarding the possible abuses of legalization.

Moreover, this type of comparative contextual evaluation will call on criteria from the particular area as well as traditional argument evaluation criteria.[7] Thus, for example, evaluating a causal claim in social science may require criteria for evaluating statistical arguments; and evaluating a claim about the merit of a particular painting will call on criteria of artistic value.

6. LIMITATIONS OF THE DIALECTICAL TIER

As a way to recognize the dialectical dimension of argumentation, Johnson makes the move of adding a dialectical tier to the requirements for an adequate argument. In so doing, he maintains the focus on individual arguments but adds a requirement which enlarges the scope of what constitutes an argument. This move to have the dialectical dimension of argumentation reflected in the theory of argument is an extremely promising and important development. We would argue, however, that this

6. We discuss the role of other types of contexts (social, political, historical, disciplinary, and personal perspectival) in argument evaluation in Battersby & Bailin 2009.

7. In their 1987 paper, Blair and Johnson state that "single arguments are normally parts of a larger process and need to be interpreted and evaluated in that context" (Blair & Johnson 1987, p. 46).

approach does not go far enough in recognizing the implications of the dialectic dimension of argumentation. Taking rational persuasion as primary dictates a focus on particular arguments and how to improve them in order to achieve this goal. Dealing with criticisms, objections, and alternative arguments is a way to strengthen (or possibly amend) one's original argument(s). We would argue, however, that truly recognizing the dialectical dimension means more than simply discharging one's dialectical obligation to address criticisms and objections to particular arguments. Rather, taking seriously the dialectical dimension means focusing not on particular arguments, but instead on the debate and an evaluation of competing cases in order to make a reasoned judgment on an issue.

Johnson has the insight that argumentation is dialectical and that current theory and pedagogy does not take this into account. His solution is to augment the notion of what constitutes an argument and build more into the requirements for argument adequacy. Thus a knowledge of the dialectical environment is necessary in order to anticipate and deal with criticisms, objections etc. and to improve one's argument. He describes ways to go about anticipating objections as follows.

> Perhaps even more effective is the step of immersing oneself in the issue and the various positions that have been developed. That means becoming familiar with the dialectical environment of the argument […] The better one knows the dialectical environment […], the more successful one can be in anticipating various objections. Because one then knows what sorts of objections are around, what sorts of objections others have raised. One will be familiar with the alternative positions and possibly be able to immerse oneself in them in order to see how someone who holds that view might object. One can then make use of one's knowledge of similar argumentative situations to extrapolate to the current one […] Typically some of this thinking occurs in the construction of the argument—so it is likely the dialectical environment will influence the arguer in the very formation of the argument. (Johnson 2007, p. 4)

This process of becoming familiar with the dialectical environment around an issue (becoming knowledgeable about the various positions, objections, and alternative positions) sounds very similar to how we would describe a major component of the process of inquiry. For Johnson, this process in undertaken as a way to anticipate objections and thereby support one's argument. However, if one then evaluates these various positions, arguments, objections, etc. in a rational and fair-minded way, with the intent of identifying the most reasonable position, then one is really engaging in the inquiry process.

One criticism which has been leveled against Johnson's inclusion of the requirement of a dialectical tier is that this move would lead to an infinite regress in that supplementary arguments may themselves require further support, and so on (Govier 1999, p. 218). We would argue, however, that such a result is only problematic if one tries to build a dialectical tier into the requirements for an individual argument. Otherwise it can be seen as a realistic reflection of the dialectical character of argumentation, as Govier points out:

> From a practical point of view, the fact that supplementary arguments may be questioned and may themselves require further support is only realistic, and quite plausible when we reflect on the history of actual controversies about important matters. Far from showing that there is a problematic infinite regress in the account, it could be alleged that this indefiniteness simply points to a feature of real debate, one that is mirrored in the intellectual and dialectical structure of the issues themselves. (Govier 1999, p. 236)

7. IMPLICATIONS FOR PEDAGOGY

The third point of Johnson's which we highlighted at the beginning, and with which we whole-heartedly agree, is that the pedagogy of argumentation should reflect how arguments are actually conducted and thus should include the dialectical dimension.

> If my view is correct, then it follows that a critical thinker must possess as part of his or her argumentative skills what I called dialectical skills: being familiar with the standard objections to his position and responding to them, facing off against alternatives. (Johnson 2007, p. 1)[8]

He believes, moreover, that these dialectical skills are absent from most texts and tests of critical thinking, which tend to presuppose a traditional account of argument. We concur with this diagnosis. In order to fill this lacuna, we would argue for an approach to critical thinking pedagogy focusing on inquiry.

8. TEACHING CRITICAL THINKING AS INQUIRY

What might such an approach look like and include? 1) It would have as its goal the making of reasoned judgments; and 2) it would emphasize the comparative evaluation of contending positions and arguments in actual contexts of disagreement and debate. The following are the aspects which we have included in the inquiry approach which we have developed:

1. the nature and structure of arguments, the prima facie identification of fallacies, and the use and evaluation of central argument types such as analogical and causal reasoning;
2. identifying and clarifying issues, as well as determining the kinds of claims or judgments that are involved in different kinds of inquiry;
3. understanding the dialectical environment, including the current debate and history of the debate;
4. understanding the various aspects of context which may

8. The dialectical skills which Johnson outlines include the following: dealing with objections and alternative positions (including seeking out criticism); knowing what would count against one's position as well as for it - knowing weaknesses in one's own position; changing one's mind when appropriate; taking time to reflect rather than rushing to judgments (Johnson 2007, p. 7).

be relevant, including the social, political, historical, disciplinary, and personal perspectival contexts (Battersby & Bailin 2009);

5. making a reasoned judgment, including the comparative weighing of arguments, the evaluation of alternative positions, synthesizing the strengths of various views, and proportioning judgment to the weight of evidence;
6. making one's own case, including constructing arguments, creating analogies, generating alternative explanations, and anticipating objections.

In addition to addressing inquiry in general, we also look at inquiry in specific areas, including the physical sciences, the social sciences, the arts, the humanities and interdisciplinary contexts. Considerable emphasis is placed throughout on the cultivation of the appropriate habits of mind in inquiry and dialogue.

We see a number of benefits in this type of approach. First, in focusing on argumentation as it is actually conducted, the approach should furnish students with some of the knowledge and skills necessary for making reasoned judgments in real contexts.

There are also dispositional benefits to an inquiry based approach. Inquiry is an active process. Students go beyond evaluating the arguments that may come their way or be put in their path to actively seek information and arguments in order to resolve an issue or puzzlement. Habits of mind such as intellectual curiosity, truth-seeking, self awareness, and intellectual perseverance may be fostered in the process.

An inquiry approach is also preferable to an approach based on rational persuasion because of the orientation to argumentation which it promotes. One of the challenges in teaching critical thinking is: "to counter students' tendencies to avoid challenge to their own beliefs, to ignore contrary evidence, to straw-person

the beliefs of others, to refuse to concede points, to start with conclusions and then look for arguments to support them, to want to win at all costs" (Bailin 1992). Thinking about argumentation in terms of rational persuasion may have the result of reinforcing students' tendencies to try to find support for and persuade others of positions they already hold (even though this is avowedly not the intention), and it may not provide sufficient conceptual antidote to closed-mindedness and a desire to win. Adding a dialectical tier is a move in the right direction in that it imposes a requirement to look beyond one's own arguments, as Govier points out:

> Thinking of argument as having a second dialectical tier links the practice of arguing with an open and flexible form of thinking in which we come to consider how other people think as well as how we ourselves think, and we attempt explicitly to consider and address alternatives to our own beliefs about the world. (Govier 1999, p. 207)

Nonetheless, the focus on rational persuasion limits the extent to which such open and flexible thinking is likely to be encouraged. Lawyers do, after all, anticipate objections to their own arguments, but they do so in the service of the effectiveness of the case they are making for their client. It is unlikely that in so doing, they are seriously considering changing their commitment to their client's position. We would argue that an open-minded, fair-minded, and flexible attitude is much more likely to be encouraged by an approach which puts less emphasis on the persuasive function of argumentation (rational though it may be); which focuses on the evaluation of competing cases rather than on the evaluation of individual arguments; and which has as its explicit goal arriving at a reasoned judgment.

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CHAPTER 10.

ARGUMENTATION AND THE FORCE OF REASONS

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Abstract: Argumentation involves offering and/or exchanging reasons – either reasons for adopting various attitudes towards specific propositional contents or else reasons for acting in various ways. This paper develops the idea that the force of reasons is through and through a normative force because what good reasons accomplish is precisely to give one a certain sort of entitlement to do what they are reasons for. The paper attempts to shed light on what it is to have a reason, how the sort of entitlement arising from reasons differs from other species of entitlement and how the norms by which such entitlement is assessed obtain their status as norms.

The theme of the 2009 OSSA conference is Argument Cultures – something which may be taken to mean the various *cultures of theorizing* about arguments and argumentation. With respect to these varying cultures, Tindale (1999, pp. 3-4) has identified three "perspectives" on what argument or arguing entails – the logical, the dialectical and the rhetorical. Of course, within each of these there are a variety of ways in which the perspectives can unfold or develop. Formal and informal logic represent quite different species of "logical" perspective on argument, and them-

selves divide into varieties of sub-species. The formal dialectic of Hamblin (1970, esp. chapter 8) or of Barth and Krabbe (1982), the "controversy-oriented approach to the theory of knowledge" in Rescher (1977), the pragmatic-dialectic approach of the Amsterdam school, and the somewhat different dialogue approach that Walton takes (see for instance Walton and Krabbe 1995) are among the quite different species of dialectical approach. And finally, you will find just some of often quite different approaches that may be classed as rhetorical in Aristotle, Cicero, Perelman, Wenzel, Tindale himself, as well as in the design theoretic approach to normative pragmatics inspired by the work of Scott Jacobs and Fred Kauffeld and described by Goodwin (2002).

However, across this broad spectrum of "cultures of theorizing" there appears to be general agreement that arguing involves offering and/or exchanging *reasons*. My aim in what follows is to outline a general account of reasons – of what it is to have them and of what is required to offer or present them. My intent is to outline a way of thinking about reasons that is neutral with respect to the "perspectives" on argumentation and the "cultures" associated with them, but which can, perhaps, throw at least some light on why there can be such different approaches to practices which turn on the presentation and exchanging of reasons.

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Philosophical discussions of reasons have tended to focus either on reasons for action or on reasons for belief. But it is a mistake to limit our purview to one or another of these two, or only to these two. To start with, there are reasons for cognitive attitudes other than belief – reasons for doubting, reasons for expecting that something will turn out to be the case, reasons for presuming, and so on. Moreover, there are reasons for adopting or holding conscious attitudes other than cognitive attitudes

– for example, reasons for wanting this or that to be the case, reasons for choosing one or another course of action (i.e. forming an intention to engage in that course of action), reasons for fearing, reasons for hoping, reasons for preferring one thing over another, and so on. One way to capture the broad array of reasons that we need to take account of is to say that we are (or ought to be) concerned with reasons for *doing*, where 'doing' is used in the very broadest of senses and is not limited to "actions" that are overt and/or deliberate – a sense of 'doing' in which it applies not only to actions, but to holding almost any sort of conscious attitude as well. In what follows, my discussion will highlight conscious *propositional* attitudes, both as states that can provide us with reasons for doing things, as well as states for which there can be reasons.[1] I should add that the account which follows recognizes three principal categories of conscious propositional attitude – cognitive, conative and evaluative. This classification reflects Rescher's recognition (Rescher 1988, p. 3ff.) of three types of rationality: cognitive rationality (whose "product" is factual contentions or beliefs), practical rationality (whose "product" is action recommendations or injunctions), and evaluative rationality (whose product is evaluation or appraisal).[2]

1. In my view, there are in fact conscious attitudes other than propositional attitudes for which we can have reasons – reasons for liking someone, reasons for distrusting someone, and so on – see Pinto 2001, chapter 2 ("Generalizing the notion of argument"), esp. pp. 17-19. For purposes of this paper I will simply ignore conscious attitudes toward non-propositional objects and the reasons we may have for adopting them.

2. Davidson (1963/2001) offers an account of the primary reason of an action as consisting of a belief and a pro-attitude. Some instances of 'pro-attitudes' would fall under my category of conative attitudes, others would fall under my category of evaluative attitudes. One reason I find it useful to distinguish between these two sorts of pro-attitude is the fact that I think that typically our reasons for adopting conative attitudes – commitments to bring about certain goals or intentions to act in a certain way – lie in evaluative attitudes. For example, among my reasons for deciding (i.e. forming the intention) to go for a swim today will be the fact that I

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Let me mention two advantages of broadening our account of reasons along the lines I propose.

a. Since one species of cognitive attitude consists of a *range* of *doxastic* or belief-like attitudes – suspecting that something is the case, being inclined to believe it, expecting it will turn out to be the case, presuming it to be the case, as well as straightforwardly or fully believing it to be the case – this proposal opens up the possibility of adopting a *qualitative* version of evidence proportionalism,[3] a view according to which the *type* of doxastic attitude we adopt must be appropriate in the light of the reasons available to us – a variety of evidence proportionalism that has no need to *quantify* degrees of belief or to *quantify* degrees of support.[4]

value physical exercise and that I prefer swimming to most other sorts of physical exercise.

3. Feldman and Conee (1985, p. 15) appear to advance a qualitative version of evidence proportionalism in their formulation of the principle they call EJ: "Doxastic attitude D toward proposition p is epistemically justified for S at t if and only if having D toward p fits the evidence S has at t." However, the only doxastic attitudes they explicitly mention are belief, suspension of belief and disbelief. In note 1, they say "EJ is compatible with the existence of varying strengths of belief and disbelief. If there is such variation, then the greater the preponderance of evidence, the stronger the doxastic attitude that fits the evidence." Recognizing varying "degrees of belief" need not commit one to a quantitative version of proportionalism – everything depends on how the "varying strengths" are characterized. Counterparts of the three doxastic attitudes explicitly mentioned by Feldman and Conee can also be found in the three types of "standpoint" that may be taken toward a "view" that are recognized by van Emeren and Grootendorst (1992, pp. 15-16).

4. Though there are obvious ways to quantify (assign a real or cardinal number to) the degree of support that a reason affords its conclusion for some types of reasons (e.g., those reasons which exhibit the pattern which Pollock (1995) calls "statistical syllogism"), how to extend quantification of degree of support to many other types of reason is not obvious. One way of doing so is proposed by Pollock (1995, p. 93-94) – it involves the supposition that we can in effect intuitively (my word, not Pollock's) equate the degree of support offered by any sort of argument with the degree of

b. The proposal enables us to unpack the idea of being or having a reason in such a way that we can say, along with Rescher (1988, p. 4):

> Rationality… pivots on the deployment of 'good reasons': I am being rational if my doings are governed by suitably good reasons – if I proceed in cognitive, practical and evaluative contexts on the basis of cogent reasons for what I do.

The approach to reasons outlined here provides a way of extending the reach of reasons to the broad range of contexts that Rescher has in mind and gives us a way of formulating questions about the interplay among reasons operative in these different contexts.

2. THE FORCE OF REASONS AS A *NORMATIVE* FORCE

Let me begin by recalling what Davidson and Dennett said quite some time ago about *explaining an action* by citing an agent's reasons for taking that action.

Davidson (1962/2001, p. 3) calls explanations in terms of reasons "rationalizations," and says that a reason "rationalizes an action only if it leads us to see something the agent saw, or thought he saw, in his action – some feature, consequence, or aspect of the action the agent wanted, desired, prized, held dear, thought dutiful, beneficial, obligatory or agreeable." He goes on to say his account of the primary reasons for an action requires that "that the agent have certain beliefs and attitudes in the light of which the action is *reasonable*" (p. 9, italics mine).[5]

support offered by a related argument having the form of statistical syllogism (I omit the details). Pollock himself notes (p. 94) that there are possible objections to the universal application of this strategy. I myself am inclined to think that any method of assigning a number to the support that "He promised to do X" gives to "He ought to do X" will produce results that are quite artificial.

5. It is perhaps worth noting that when 'Actions, Reasons and Causes" was reprinted in Davidson 2001, Davidson wrote (p. xvi): "Actions, Reasons, and Causes" was a reaction against a widely accepted doctrine that the explanation of an intentional action

Dennett (1978, p 236) calls explanations in terms of reasons "intentional explanations" and says that "they explain by *giving a rationale* for the *explicandum*. Intentional explanations explain a bit of behavior, an action, or a stretch of inaction, by making it reasonable in the light of certain beliefs, intentions, desires ascribed to the agent." Dennett (1978, p. 388) explicitly identifies reasons for action with the beliefs, desires, etc., in light of which actions become reasonable: "We typically render actions intelligible by citing their reasons, the beliefs and desires of the agent that render the actions at least marginally reasonable under the circumstances."

In these passages Davidson and Dennett are talking about reasons for *action*, not reasons for belief. But I submit that the common element in what Davidson and Dennett say about reasons for action also applies to a person's reasons for believing or accepting a proposition. For example, if I say: "Sarah believes that her father won't go to work tomorrow because she thinks tomorrow is a holiday." I explain Sarah's belief by "giving a rationale", that is by making the belief to be explained appear reasonable by citing another belief in light of which it is reasonable "from the believer's point of view." In what follows I shall assume, therefore, that reasons for belief, like reasons for action, also explain by "giving a rationale" for the belief to be explained, and therefore explain by making the *explicandum* reasonable in the light of other things that person believes or accepts.

in terms of its motives or reasons could not relate reasons and actions as cause and effect. A principal argument was that causal relations are essentially nomological and based on induction while our knowledge that an agent has acted on certain reasons is not usually dependent on induction or knowledge of serious laws. The argument had found influential if brief expression in Wittgenstein's Blue and Brown Books, which were widely circulated from the middle thirties onward (though published only in 1958). In Essay 1 I accept the view that teleological explanation of action differs from explanation in the natural sciences in that laws are not essentially involved in the former but hold that both sorts of explanation can, and often must, invoke causal connections."

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Now to say that what *makes* something a reason for an action or belief is the fact that it renders the action or belief *reasonable* does not look like a very promising strategy. For it is hard to see how we can make sense of something's being *reasonable* without appealing to a prior notion of reasons for it.

Davidson (1963/2001, p. 9) had observed that the reasons for an action "justify" it.[6] And we might be tempted to make sense of what reasons are by saying that the beliefs, desires, etc., which render doing something (at least provisionally) reasonable do so because they "justify" it. But to proceed in *that* way is, I think, to get things backwards. The careful examination and criticism of the use of the expression "epistemic justification" recently offered by William Alston (2005, chapter 1) should make it clear that if we want to appeal to a notion of "justification" we must, at the very least, first pin down what we take such justification to consist in.

Robert Brandom (1994, p. 56) takes still another approach when, commenting on "intentional explanations," he observes that "attributing suitably related beliefs and desires is attributing a certain sort of *reason* for action" but that it "is not yet to say that the one who has such a reason *will* act according to it…." Brandom says (1994, p.56).

What follows immediately from the attribution of intentional states that amount to a reason for action is just that (ceteris paribus) the individual who has that reason *ought* to act in a cer-

6. He wrote (p. 4) that "corresponding to the belief and attitude of a primary reason for an action, we can always construct (with a little ingenuity) the premises of a syllogism from which it follows that the action has some (as Anscombe puts it) "desirability characteristic". Thus there is a certain irreducible – though somewhat anaemic – sense in which rationalization justifies: from the agent's point of view there was, when he acted, something to be said for the action." Davidson goes on, in part III of that paper, to say that the fact that the reasons for an action justify it does not preclude their also being its causes – which was, of course, the central point that he was making in the paper.

tain way. This 'ought' is a *rational* ought — someone with those beliefs and those desires is rationally obliged or committed to act in a certain way.

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Despite the fact that the term "ought" seems to work well with some examples, I doubt that in general the reasons I have for performing an action "oblige me" to perform it. When it comes to actions, there are typically many ways to skin a cat and often any one of them will do. Even with respect to cognitive attitudes (beliefs, for example), to say that a person is *obliged* to believe everything she has reasons for believing – perhaps everything that "follows from" what she believes – seems like overkill.[7] But there is something right in Brandom's approach: to ascribe to someone a reason for doing something is not to say the he or she *will* do it, but is rather to ascribe some kind of normative status to doing it. In the preliminary account of reasons that follows, I will characterize the *normative* status which reasons confer on doing what they are reasons for with the deliberately vague normative expression 'it is OK to do it' – where for starters to say that something is OK is to say that it *merits or deserves approval*. Only at the end of this paper will I try to bring into clearer focus what the particular "species" of being OK I'm talking about amounts to.

7. To be fair to Brandom, he distinguishes between acknowledged commitments and consequential commitments (those commitments we have as a consequence of acknowledged commitments), which correspond roughly to two senses of belief. He says (1994, p. 195), "In one sense, one believes just what one takes oneself to believe, what one is prepared to avow or assert. In another sense, one believes, willy-nilly, the consequences of what one believes." And he suggests further (p. 196) that because of this ambiguity, "An unambiguous technical term 'doxastic commitment' is introduced, which comprises both commitments one is prepared to avow and commitments that follow from those one acknowledges."

3. WHAT IT IS FOR ONE THING TO BE OR PROVIDE A REASON FOR ANOTHER

Consider first the following suggestion about what it is for the proposition that R to be a reason for holding that Q

> (1) R is a reason for holding that Q if and only if its being OK to hold that R would make it OK to hold that Q.[89]

In other words, the *force* of a reason for holding that Q lies in its power to *make it OK* to hold that Q.

Even though I think there is something importantly right about this first suggestion, there are two considerations each of which points to a need to revise the idea it expresses:

a. it makes no provision for defeasible reasons, and

b. it makes no provision for the idea that what provides a reason may be the confluence of a belief and a desire or pro-attitude – or more generally the confluence of several propositional attitudes.

8. Why not, instead of invoking the idea of "making it OK to hold that Q," adopt something like the following formulation? (1a) R is a reason for holding Q if and only if whenever it's OK to hold that R it is also OK to hold that Q. (1a) won't do, for the following reason. There may be propositions or propositional contents which it is always and everywhere OK to hold (e.g., something like "self-evident truths" or things which it is OK to hold even in the absence of reasons, such as so-called "self-justifying" propositions). And if there are such – call one of them R! – then (1a) would commit us to the problematic idea that any proposition or propositional content is a reason for holding R!. This, of course, is an analogue of the principle that a necessary proposition is entailed by any proposition. (In my view, that principle is correct – and in my scheme of things provides additional grounds for concluding that R's being a reason for holding that Q is not to be equated with R's entailing Q.)

9. Notice that if we were to assume that it is OK to hold that P if and only if it is true that P, (1) would come close to an account of what it is to be a reason that deductivists might be comfortable with, namely: (1b) R is a reason for holding that Q if and only if its being true that R would make it true that Q.

Consideration (a)

To suppose that R is a *defeasible* reason for holding that Q is to suppose that the force of R to make it OK to hold that Q can be "defeated"—can be undermined or overridden[10] by — considerations that are *consistent* with the reason R. If and when such "defeating" considerations *come to light*,[11] holding that R no longer makes it OK to hold that Q. Moreover, since a defeater may come to be available to one person but not come to be available to another, it will often turn out that a reason which makes it OK for one person to hold that Q does *not* make it OK for another person to hold that Q. In order to take defeasible reasons into account, then, we must replace (1) with something like:

> (2) R is a reason for holding Q if and only if, in the absence of considerations available to a person S that would undermine or override the force of R, its being OK for S to hold that R would make it OK for S to hold that Q

10. With Pollock, I recognize two types of defeaters – Pollock (1970, 1995) calls them undercutting defeaters and rebutting defeaters, I call them undermining and overriding. See also Raz (1978, pp. 12-13). In my account, where R is a defeasible reason for Q, D is a overriding defeater which cancels the force of R if and only if (i) D is consistent with R and (ii) the conjunction of R and D is a reason for holding not-Q. D is an undermining defeater if and only if (i) D is consistent with R and (ii) the conjunction of D and R is not a reason for holding Q and is not a reason for holding not-Q.
11. The power of certain considerations to undermine or override the force of a reason R cannot be simply a matter of the fact that the states of affairs with which those considerations are concerned are possible or even that they in fact obtain. This is most apparent in cases where those considerations override R by indicating that Q is false. (i) If R is a defeasible reason for holding that Q, then it is possible that not-Q; so that if the mere possibility of something were enough to override the force of R, the force of a defeasible reason would always be overridden. And (ii) if the mere fact that something incompatible with Q actually obtains overrides the force of R with respect to Q, then the mere fact that Q is false will override the force of R – with the result that it wouldn't be possible to have defeasible reasons for conclusions which are in fact false. For these reasons, overriding considerations must be considerations which have "come to light" – considerations of which we are in some way aware, or perhaps of which we ought to be aware.

In this paper I will not attempt to spell out the conditions under which a defeating consideration is "available" to a person S, nor the conditions under which a consideration D undermines or overrides the force of a reason.[12] In the literature that deals with defeaters there are contentious issues surrounding both of these questions that will have to be sorted out on another occasion.[13] Note that as soon as we recognize that its being OK to hold that Q is relative to persons, we must abandon any attempt to equate its being OK to hold that Q with its being *true* that Q, since its being true that Q is *not* relative to persons.[14]

12. A complicating factor arises when we recognize that a (potential) defeater can itself be defeated. Strictly speaking, a consideration D available to S, which potentially overrides the force of a reason R, may itself be undermined or overridden by other considerations available to S. I would want to say that in such a case D itself would not count as a consideration that actually undermines the force of R. Things get more complicated still when we recognize a consideration D1, which potentially defeats D, may itself be defeated –perhaps thereby "restoring" the status of D as an actual defeater of the force of R. I want to thank Scott Aikin of Western Kentucky University for reminding me of the bearing which such considerations have on how we must apply concept of "a consideration available to a person S that would undermine or override the force of R." See also Pollock (1995, chapter 3, section 6, especially 6.1 on p. 110) for one way of dealing with these complications in a context somewhat different from the context I am operating in.

13. For an overview of the issues to be faced in working out details of defeasible reasoning and about what is to be counted as a defeater, see Pollock (1995, esp. Chapters 2 and 3) and Koons (2009). Pollock (1995, chapter 3) offers a somewhat detailed overview of his account of defeasible reasoning in general and of defeaters in particular – worked out in the context of what he calls (p. 52) "epistemology from the design stance" (i.e., "epistemological questions that bear on the design of a rational agent"). That Pollock is forced in chapter 3 to take a series of positions which are open to debate as evidence of the extent to which contentious issues surround questions about the proper characterization of defeaters. From my perspective, a serious drawback of Pollock's approach is that it requires quantification of the degree of support supplied by any prima facie reason to what it is a reason for (see note 4 above for my reservations about Pollock's approach to quantifying degrees of support).

14. Recognizing that its being OK to hold that P is relative to persons does not require us to make the relationship in virtue of which something is a reason for something else relative to persons. For we can insist on the following principle. *If the fact that it's OK for a particular person S to hold that R makes it OK, in the absence of undermining*

Consideration (b)

In order to accommodate Davidson's idea that a reason for *action* consists of a belief and a pro-attitude, we can view (2) as a consequence of a still more general principle which provides for cases in which the *confluence* of someone's holding *several* propositional attitudes is what provides that person with a reason for doing something. We may take that more general principle to constitute a definition of what it is for something to *provide a reason* for something else. Here is a preliminary, if slightly complicated, version of that more general principle:

> (3) Holding one or more cognitive, conative or evaluative attitudes toward various propositional contents provides a reason for doing X if and only if, in the absence of considerations available to a person S that would undermine or override their force, its being OK for S to hold all of those attitudes *would make it OK* for S to do X

In this context, it is assumed (i) that doing X is either performing an action or is holding a cognitive, conative or evaluative attitude toward a specific propositional content, and (ii) that the attitudes in question may or may not be qualitatively different types of attitude.

For example, suppose Sam *believes* that Jones has been murdered and also *believes* that among Jones' acquaintances Smith had the strongest motive for murdering him. Its being OK for Sam to have those two beliefs taken together *would*, in the absence of a defeater, *make it OK* for Sam to *suspect* that Smith

or overriding considerations, for that person to hold Q, then anyone's being entitled to hold that R makes it OK, in the absence of undermining or overriding considerations, for him or her to hold that Q. Whether the relationship in virtue of which something is a reason for something else holds over time is a more complicated matter. For example, it is plausible to suppose that at an earlier point in time the fact that Mr. Smith was both male and married was a reason for being sure that Mr. Smith had a wife. But in our time, when same sex marriages are not uncommon, it would seem no longer to be a reason for being sure that Mr. Smith has a wife (though it is still a reason for being sure that Mr. Smith has a spouse).

murdered Jones – though they would not *make it OK* for Sam to be *certain* that Smith murdered Jones.

Notice that in (3) I have shifted focus slightly – instead of saying of a *proposition* or *statement* that it is a reason, I am saying that holding one or more attitudes toward various propositional contents *provides someone with a reason* for doing something.[15]

On the basis of this account,

- Part 4 will formulate criteria for determining when a person has a reason – and has a good reason – for doing something,
- Part 5 will deal with how the attitudes which provide reasons are put into words
- And Part 6 will deal with how reasons come to be embedded in explanations, justifications and arguments.

15. Pryor (2007, pp. 217-218) recognizes three distinct "ontologies" of reasons – that reasons are facts, that reasons are propositions and that reasons are attitudes or "states" such as beliefs and desires. He calls the third sort of ontology 'statism' and his paper is devoted to deconstructing certain arguments that can be advanced against statism and in favor of the view that reasons are propositions. Pollock (1995, p. 55) also explicitly endorses the view that what function as reasons are mental states rather than propositions. Though my sympathies are with those who endorse "statism"– I am personally prepared to identify reasons with conscious attitudes rather than with propositions - I don't want to make the story I'm telling here to hinge on "ontological" issues about reasons. Accordingly, I have phrased (3) in terms of "providing a reason", thereby hoping to sidestep the ontological issues. I'm quite prepared to admit that where it is clear that we are talking about beliefs providing reasons for other beliefs, it is natural and useful to identify the reasons simply by referring to the propositional contents of those beliefs. I am also prepared to admit that facts, unknown to a person S, can be called reasons for that person to act in a certain way. About cases where facts not known to an agent are called reasons for that agent to act in one or another way I would say: (i) in such cases there is a reason for S to act in such and such a way because a certain fact obtains, but S doesn't have a reason to act in that way merely because that fact obtains and (ii) a fact can be called a reason for a person S to act in a certain way if and only if it is the case that if S were to be aware of that fact then S would have a reason to act in that way. In other words, I would construe the sense in which facts can "be" reasons as derivative from the sense in which conscious states and attitudes are or provide reasons.

4. HAVING A REASON

Given the idea encapsulated in (3), we may formulate a criterion for determining when someone *has a reason* for doing something as follows.

> (4) *If* (a) there is a set of one or more propositional attitudes of appropriate types which together provide a reason for doing X and (b) a person S holds each of those attitudes then S **has a reason** for doing X

If the reason which a person has is defeasible,[16] we may want to say that she has a *prima facie* reason for doing what she has a reason for doing.

How should we describe cases in which a person does X as a result of conscious attitudes which don't *in fact* "support" doing X? I suspect that most will want to describe them as cases in which a person has a *defective* reason. However, a few have given accounts of argument which seem to imply that such cases are best described as cases in which a person doesn't actually have a reason for what he does – see for example Blair (2004, p. 143) and Goldman's (1999, p. 131) account of what an argument is.[17]

For the purposes of this paper, I shall adopt the second way of speaking, and will describe such cases as cases in which agents *think* they have a reason for doing X, but in fact lack a "genuine reason" for doing so. As far as I can see, adopting this way of speaking involves only a decision about linguistic usage and does

16. I.e., if there are conceivable considerations which, if they came to light, would undermine or override the force of what would otherwise make it OK to do something.

17. "A set of statements or propositions schematized as 'R1..., Rn, therefore P" constitute what logicians and philosophers call an argument. It contains one or more premises and a conclusion, where the premises jointly supply evidential support (not necessarily conclusive) for the conclusion." From the preceding paragraph it's clear that Goldman intends this definition of argument to apply to the verbal expression of a person's reasons for his or her beliefs.

not have substantive philosophical import. In line with (4), we can formulate a criterion for having a *good* prima facie reason:

> (5) *If* (a) there is a set of one or more propositional attitudes of appropriate types which taken together provide a reason for doing X, (b) a person S holds each of those attitudes and (c) it is OK for S to hold each of those attitudes *then* S has **a good prima facie reason** for doing X.

Notice that even though S has a good prima facie reason for doing X, it may not be OK for S to do X if considerations available to S undermine or override the force of that reason. Accordingly, with these criteria in mind we need to say what it is for a person to have *a good reason all things considered*.

> (6) A person S has **a good reason all things considered** for doing X if and only if (a) S has a good prima facie reason for doing X and (b) no considerations available to S undermine or override the force which that reason provides for doing X.

Let me stress again that to say it is OK for a person to do something is to make a *normative* claim. There is no guarantee that the person in question will do what he or she has a good reason all things considered to do. However, we might want to borrow a phrase from Siegel (1988, p. 2) and say that a person who is "appropriately moved by reasons" is likely to do what he or she has a good reason all things considered to do.

5. PUTTING REASONS INTO WORDS

When we *offer* our reasons for what we did or are about to do, or offer Sarah a reason for *her* to do something (e.g., to believe something), we put our reasons into words, typically in the form of declarative sentences.[18] Indeed, Brandom (1994, p. 158) has

18. Typically, but not always. David Godden and Jean Goodwin have each called my attention to cases in which a question or an imperative can be used to call a hearer's attention to a reason for doing something. In one of Goodwin's examples – "Look at your watch. It's time to go home" – the speaker doesn't state a reason, but directs the

claimed that "to offer a reason is always to make an assertion." How can we square the idea that reasons are typically put into words by uttering declarative sentences with the idea that what provides us with a reason is holding one or more cognitive, conative and/or evaluative *attitudes*?

These two ideas are compatible because when I make an assertion, either I *describe* myself as holding an attitude (saying, for example, 'I want to see my sister this afternoon') or else I *represent* myself as holding one or another attitude toward a propositional content. If I say without qualification, 'John is standing over there' I represent myself as believing that John is over there – as is apparent from the pragmatic inconsistency of 'p, but I don't believe that p'. If I say, 'Presumably, that's John standing over there', I represent myself as *presuming* that John is over there. 'Presumably' is just one of a class of "epistemic modals" which can be taken as indicators of the sort of cognitive attitude a speaker is adopting or thinks it is appropriate to adopt toward a propositional content.

It is perhaps worth noting that if I say, "I am driving downtown because I want to see my sister this afternoon," what defeats the reason I've put forward typically are *not* considerations that undermine or override the force of my *belief* that I want to see my sister, but are rather considerations that undermine or override the force of my *wanting* to see my sister as a reason for driving downtown. What I am offering as a reason for driving downtown is not the *belief* that I have a certain want but rather that very want itself.

It is important to note another aspect of what happens when I make an assertion – namely that in asserting that P I typically *invite* those I'm addressing to adopt the attitude that I represent myself as adopting– and in many cases I can be viewed as *licens-*

hearer to do something as a result of which the hearer will uncover a reason for supposing that it's time to go home. Ditto for "What time is it? Perhaps we should head home." Rhetorical questions represent still another sort of case in which a sentence having the form of a question may be used to convey a reason.

ing them to adopt that attitude.[19] In saying to Sarah, "Presumably, Sam is no longer married" I invite *Sarah* to presume that Sam is no longer married and perhaps license her to so presume. And if the presumption that Sam is no longer married provides a *reason* for presuming that Sam is either widowed or divorced, then I will have offered Sarah a reason for so presuming. It is because of considerations like these that Brandom (1994, p. 168) is on the right track when he says, "*assertions* are fundamentally fodder for *inferences*. Uttering a sentence with assertional force or significance is putting it forward as a potential reason."[20]

6. WHAT CAN BE ACCOMPLISHED BY PUTTING REASONS INTO WORDS

When a speaker puts reasons into words, he or she is often presenting those reasons *as* reasons for doing one or another *specific* thing. Those reasons may be presented as reasons for the *speaker* to do this or that. Or else they may be presented as reasons for one or more *hearers* to do this or that – for example, as reasons for hearers to believe a conclusion.

> (a) Consider first those cases in which a person gives her reasons for what *she* is doing or has done.

Sally may *offer* R as a reason for her to believe that Q, or to suspect that Q, *whether or not it is OK for her to hold that R*. And others *may take her to have offered* R as a reason for believing that Q even if they have no idea whether it's OK for her to hold that R

19. I.e., in those cases in which the speaker can be viewed as "taking responsibility" for the soundness of what she has put forward for acceptance by the hearer. I'm indebted to Jean Goodwin for this point.

20. The passage continues, "Asserting is giving reasons – not necessarily reasons addressed to some particular question or issue, or to a particular individual, but making claims whose availability as reasons for others is essential to their assertional force. Assertions are essentially fit to be reasons. The function of assertion is making sentences available for use as premises in inferences."

– indeed even if they think it's *not* OK for her to hold that R. In order for others to take Sally to have offered a reason for holding that Q, all that is necessary is for them to think that *if* it should be OK for Sally to hold that R, then in the absence of a defeater its being OK for her to do so *would* make it OK for her to hold that Q.

What a speaker accomplishes *by* articulating her reasons for what *she* has done or is about to do depends on what has prompted her to articulate those reasons. For example, where it is clear that a speaker gives reasons in response to or in anticipation of a question like '*Why* did you do that?' a hearer who takes what she said to provide a reason for doing what she did will take her to be *explaining* what she did. Whether a hearer will take such an explanation to be a *good explanation* will depend largely on whether the hearer thinks the speaker in fact acted *because* she held the attitudes which she invoked as providing a reason. The goodness or success of someone's *explanation* for what she did does not seem to depend on whether the reasons proffered are good reasons (in the sense of 'good reason' defined above).

On the other hand, where it is clear that the speaker's reasons are given in response to or in anticipation of someone *criticizing* or *condemning* him for what he did, a hearer who takes what was said to be a reason for the speaker to have done what he did will normally take him to be *attempting to justify* what he did. If Sam has been *criticized* or *condemned* for doing such-and-such, he can respond to the criticism by saying, "I did (or am doing) such-and-such because I thought (or think) that R" – e.g. "I think that tomorrow is Friday because I know that today is Thursday" or "I refused to talk to him because I'd heard that he called me a thief."

> PJ1 Where it is clear that people *state their reasons* for doing something *in response to or anticipation of criticism or condem-*

> *nation* of what they did, they can be viewed as attempting to *justify what they did*.[21]

Attempted justifications differ from explanations in that justifications aren't judged *successful* unless the reasons put forward are *good* reasons – e.g., unless the attitudes cited as providing a reason are attitudes the agent was entitled to have at the time he or she acted.

> PJ2 Where people state their reasons for doing something in an attempt to justify their doing it, and it is or can be made clear that they were entitled to the attitudes which provided them with those reasons, they have presented a prima facie justification of what they did.

Of course, a prima facie justification can be undermined or overridden by other considerations. Where we think that the *speaker* was aware or ought to have been aware of those considerations, it is unproblematic to say simply that the speaker's attempt to justify what she did fails. But suppose *we* are aware of considerations that defeat the prima facie justification, but don't think the speaker was or ought to have been aware of them. It isn't com-

21. Interestingly enough, this account of justifying is consistent with Brandom's account of the role of justification in the "game of giving and asking for reasons."According to Brandom (1994, p. 173) those who produce assertions not only "authorize" further assertions by themselves and their audience (see note 20 above), but they also undertake "a specific task responsibility, namely the responsibility to show that they are entitled to the commitment expressed by their assertions, should that entitlement be brought into question." This is a matter, of course, of showing or demonstrating that it is OK for them– the speakers –to be committed to what they've asserted: where what they've asserted is that P, it is a matter of showing it is OK for them to believe that P. "This," Brandom says, "is the responsibility to do something, and it may be fulfilled for instance by issuing other assertions that justify the original claim." But as is made clear in the pages that follow, which describe the default and challenge structure of entitlement (pp. 176-78), the need to produce a justification arises only "when a challenger is entitled to the challenge" (p. 178). For more about Brandom's account of the default and challenge structure of entitlement and its implications, see point (3) in note 25 below.

pletely clear to me what we should say in such a case – perhaps we should say only that the speaker has shown she had a *good excuse* for doing what she did.

Finally, I should make it clear that these remarks concern only *sufficient* conditions for determining when giving a reason should count as an explanation or as a justification. Clearly the conditions I've pointed out are not *necessary* conditions. For example, I can explain or attempt to justify what *somebody else* did, not just what I did. And though I personally am sceptical about the *wisdom* of using the word 'justification' in connection with reason-giving not offered in reply to or anticipation of condemnation or challenge, such usage is commonplace among philosophers and even among argumentation theorists. I harbour no totalitarian desire to legislate how others may use that word.

> (b) Consider the next cases in which a speaker intends to offer one or more hearers a reason for *them* to do some specific thing.

That, it seems to me, is what is typically going on when a speaker says something of the form 'R, so Q', saying, perhaps,

> 'Today is Thursday, so there are two more days between today and Sunday.'
>
> or
>
> 'The movie we want to see starts in half an hour, so let's leave now.'

Hearers will construe what the speaker has said as an *argument* just when (i) within the transaction in which they are involved, what the speaker has given a reason *for* is something about which *there is disagreement or doubt* and (ii) the hearers take what comes before the 'so' to be a reason for what comes after it. Moreover,

a speaker can be seen to be making or presenting an argument without uttering an "indicator" word such as 'so' or 'therefore' or 'because.' For example, in a context in which a question has implicitly or explicitly been raised about whether it is the case that Q, those who take R to be a reason for supposing that Q are likely to construe a speaker's assertion that R to be an attempt to present an argument for supposing that Q.

It is important to note that in the sorts of cases just described, construing the speaker to have presented an argument for Q does not require attributing to the speaker any *specific* purpose beyond that of presenting a reason for doing some specific thing – for example, there is no need to suppose that the speaker is trying to persuade someone of Q[22] or trying to resolve a difference of opinion (see Pinto 2003 and Goodwin 2007).

Where, as in the examples above, R *in fact* provides a reason for doing what a speaker presents it as a reason for doing, anyone who says to another 'R, so Q' will in fact have *offered* that other person a reason – perhaps for believing that Q, or for acting in a certain way. But how we describe the "transaction" between the speaker and hearer depends on what we think the *hearer* makes of what the speaker said.

If we think the hearer has come to accept that R *as a result of* what the speaker said, it is unproblematic to say that the speaker has *given* the hearer a reason for believing that Q or for leaving now, and we should be prepared to say that the hearer now has a reason (at least a prima facie reason) for doing so (though not necessarily a *good* prima facie reason). If the hearer had already

22. The view I put forward in Pinto 2001 (chapter 4) that arguments are invitations to inference traded on the idea that we call something an argument just when the arguer is trying to get a hearer to accept a conclusion by presenting him with a reason for adopting that conclusion. Though I still think that view of argument correct insofar as it pictures arguers offering others reasons for them to do this or that, I now think that view was too narrow in assuming that arguments are always attempts at persuasion – i.e. that arguers are always trying to get hearers to accept an argument's "conclusion". See Pinto 2003.

accepted R, but only now comes to see that R is a reason, e.g., for believing that Q, we might want to say that the speaker has made the hearer realize that she has a reason for believing that Q. If the hearer doesn't accept R (doesn't take the speaker up on her offer), it becomes problematic to say that the speaker has *given* him a reason to believe that Q or to leave now – since, for all we know, having refused to accept R, the speaker may have *no* reason for doing what the speaker presented him with a reason for doing. If the hearer doesn't accept R, a discussion may ensue about whether the hearer *should* accept R – a discussion in which the speaker and hearer may begin by trading reasons for and against accepting R.

Even if the hearer accepts R, he may or may not *take* R to be a reason for doing X (e.g., believing that Q or leaving now for the movie). For example, the hearer may have counted up the days incorrectly, and think that if today is Thursday then there are *three* more days between today and Sunday, or the hearer may think it doesn't matter whether one gets to a movie before it begins. If the hearer doesn't take R to be a reason for doing X, he won't think that the speaker has presented him with a reason for doing it, and a discussion *may* ensue about whether R is in fact a reason for doing it.

Furthermore, the hearer may accept R and take R to be a reason for doing X, but may be aware of considerations which undermine or override the force of R as a reason for doing it. In this event, the hearer may concede R and concede that R is a prima facie reason for doing X, but in light of the undermining or overriding considerations may not take it to be a reason *all things considered* for doing X.

The hearer may or may not explain his refusal to accept R as an all things considered reason by explicitly stating those undermining or overriding considerations. If he does so, a discussion may ensue about (i) whether the considerations to which the hearer calls attention really do undermine or override the force

of R or (ii) whether it is OK to give standing to those considerations.

Alternatively, it may not dawn on the hearer that he is aware of considerations which undermine or override the force of R. In that event the hearer may take R to be an all-things-considered reason for doing X, even though it is some kind of mistake for him to do so.

Finally, if it is OK for you to accept that R merely on my say-so, then in saying 'R, so Q' I have given you – put you in the position of having – a *good* prima facie reason for accepting R. And if no considerations are available to you which undermine or override the force of R, I have given you a good reason all things considered and thereby made it OK for you to believe that Q. In Pinto (2003, p. 1) I wrote that the first or primary effect[23] of presenting an argument "consists in making it *manifest* to participants in a communicative context (i) *that* there is a reason for doing something and (ii) *what* one such reason is." In keeping with that idea, we could say that normally someone who presents an argument aims *at the very least* to make it manifest to those addressed that it is, or may be, OK for them to do what that argument presents them with a reason for doing.

7. TAKING SOMETHING TO BE A REASON

Participants in a conversation could not view what transpires in that conversation *as explanations* or *justifications* or *arguments* unless, correctly or incorrectly, they *took* certain statements or attitudes to be or to provide reasons for doing one or another specific thing.

23. In that paper I recognized secondary and tertiary effects that might or might not flow from an argument's primary effect – and which a speaker may or may not be aiming at in presenting her argument. For example, making it manifest to Sam that there is a reason for him to call Sarah might result in Sam's forming an intention to call her (a secondary effect of the argument presented). And Sam's intention to call Sarah might result in his actually calling her (a tertiary effect of the argument presented).

Moreover, the *standards* or *norms* in light of which an individual or community assesses whether it is OK for someone to do something are *implicit* in what they take to be reasons for doing it – implicit because one can *take* something to be a reason without *saying* that it is a reason. Those norms become *explicit* when such takings are challenged, and discussion ensues about whether what has been taken to be a reason *ought* to be taken to be reason for this or that. When such discussion transpires, a space opens up in which the difference between our *taking* something to be or provide a reason and its *actually being* or providing a reason makes its presence felt.

A hearer who questions whether something is or provides a reason may or may not *explain why* she doesn't accept it as being or providing a reason. Let me offer two examples in which the hearer offers an explicit reason for calling into question whether what the speaker has proffered as a reason for doing something is a *genuine* reason for doing it.

> *Example 1.* The speaker says, "There was heavy rain half an hour ago, so the streets must be wet," and hearer responds by saying, "But it doesn't usually take more than a few minutes for the streets to dry after a rain shower." The hearer has made it clear that she doesn't take what speaker presented as a reason to be a genuine reason, and does so by offering a reason for not accepting the proffered "premiss" as a reason for believing that the streets are wet.
>
> Notice that the speaker can dispute the rejoinder, perhaps citing studies in which measurements have been taken of the mean times it takes for streets to dry after various sorts of rain storms.
>
> *Example 2.* The speaker says, "Sarah accepted our invitation to the dinner we're having tonight, so presumably we'll see her tonight." The hearer says, "Don't presume that. People frequently accept invitations and then don't show up."
>
> Here again speaker can dispute the rejoinder – perhaps by pointing out for starters that presuming something will happen is not the same as counting on it to happen. Notice that at the heart of such

> a dispute would be the question of what *sort* of reason or evidence makes it sensible to *presume* that something will occur.

In short, such challenges and the discussions they give rise to can be *rational* in the sense that challengers or discussants can support what they say *about* reasons with *reasons* and, with luck, can reach agreement *based on the reasons they exchange*. What is explored in such discussions is what Toulmin calls the backing from which "warrants" get their force; and Weinstein (2006) would surely point out that full exploration of such backing is often a complex undertaking indeed.

In example 1 the issue of whether the "premiss" advanced provides a *reason* for believing or expecting a particular outcome turns largely on factual matters open to empirical investigation. But that is not the whole story. The issue of whether that premiss provides a *reason* – whether its being OK to accept the premiss *makes it OK* to believe or expect a certain outcome – is a *normative* issue whose resolution may depend crucially on factual matters, but which cannot depend *only* or *wholly* on factual matters. In my view, Toulmin (2003/1958, p. 98) gets it basically right when, distinguishing between a warrant and its backing (which in the example he was discussing had consisted of facts about British statutory law which lay down requirements for being a British citizen), he said:

> Though the facts about the statute may provide all the backing required by this warrant, the explicit statement of the warrant itself is more than a repetition of these facts: it is a general *moral* of a practical character, about the ways in which we can safely argue in view of these facts.

Example 2 brings this point more out clearly, I think. The frequency with which those who accept invitations actually turn up certainly has a *bearing* on whether somebody's having accepted an invitation makes it OK to *presume* that they will turn up. But whether or not frequency in a given range makes it OK to so

presume depends just as crucially on the *practical* implications of presuming – on what further things its being OK to presume that P makes it OK for us to do.[24]

In Pinto 2006 (p. 268) I suggested that cognitive attitudes such as believing, expecting, presuming, and so on, can be type-identified by reference to their functional role in our cognitive lives. I went on (pp.304-306) to suggest something that amounts to this: whether evidence of a certain sort warrants a given cognitive attitude toward a specific type of propositional attitude depends on whether the practice of adopting such an attitude toward such propositional contents on the basis of such evidence would serve the role that the practice plays in our cognitive lives. In Pinto 2007 I tried to show how a functional analysis of the cognitive attitude of expecting could help us make sense of an idea drawn from Sellars, as modified by an observation made by Carnap –namely, that to ascribe non-metric probability to a proposition is to say that it is reasonable all things considered to expect that that proposition will turn out to be true.

I am currently inclined to think that deciding whether to recognize the validity of a warrant – deciding whether a given "body of evidence" licenses the adoption of a given doxastic attitude toward a given propositional content – depends less on the purposes served by the inferences endorsed by the warrant and more on the role which the licensed doxastic attitude plays in our conscious lives. I see the "epistemic modals" with which we qualify our assertions or claims as indicating the doxastic attitudes we take or ought to take toward the propositional content of what we say, and I maintain in Pinto (2007, p. 4), "it is not difficult to see how [the practical] implications [of epistemic modals] are readily construed as epistemically normative considerations." However, what I'm saying in this paper doesn't depend on

24. In two recent papers I've tried to shed light on what makes a warrant valid or OK, trying to show this depends crucially on what it is that various doxastic attitudes commit us to and on the purposes for which we reason.

accepting the details of any particular story about the grounds on which we adopt a warrant – i.e. the grounds on which we ought to decide whether this is a reason for that.

Two important conclusions should be drawn from these considerations:

a. The mere fact that something is *taken* to be a reason does not mean that it *is* a reason – a person or, for that matter, an entire community can be *wrong* with respect to what is a reason for what.

b. Although matters of fact typically have a crucial bearing on what is a reason for what, the question of whether something is or provides a reason for something else is always a normative question and cannot be settled by facts alone.

8. WHAT KIND OF NORMATIVITY IS THIS?

As a matter of fact, in the course of this exposition I have been putting flesh on the skeletal idea from which I started – the idea of its being OK for someone to do something. In the story I've told I've explicitly restricted the intended application of 'it's OK for S to do X' to only two categories of doing: to *actions* performed by specific individuals and to holding *cognitive, conative and evaluative attitudes* having specific propositional contents. Moreover, I have explicitly restricted the grounds for its application to criteria of a certain type – criteria which turn on there being an appropriate relationship of the doing being evaluated to *cognitive, conative and/or evaluative attitudes toward propositional contents* held by the individuals whose doing is being evaluated. Finally, I have portrayed the appropriateness of such relationships as something to be settled by rational discussion of a certain sort – discussion in which factual and normative considerations are brought to bear on the question of whether its

being OK to do one sort of thing makes it OK to do another sort of thing.

I submit that in light of these restrictions what is picked out by the intended application of 'It's OK for S to do X' constitutes a recognizable *species* of meriting approval.

Notice that it follows from (3) and (6) that

(7) If S has a good reason all things considered to do X, then it is OK for S to do it.

However, the converse of (7), namely

(8) It is OK for S to do X only if S has a good reason all things considered to do it.

is problematic, since nothing in the account I've offered so far makes any obvious provision for avoiding an infinite regress of reasons that might be required if (8) were to be accepted.[25] I currently lean toward enhancing the account offered here so as to

25. The problem of avoiding an infinite regress of reasons is a problem any epistemology must face. A variety of such strategies is available in the literature. (1) One strategy is to recognize what Pryor (2005) calls "immediate justification" – see note 26 below for the details. (2) Another quite intriguing attempt to avoid the problem can be found in Jonathan Adler's account of "tacit confirmation" in Chapter 6 of *Belief's Own Evidence* (Adler 2002) – an account which Adler thinks enables him to avoid falling back on either a foundationalist or a coherentist epistemology. (3) Still another approach can be found in Brandom (1994, pp. 176-178), who claims (p. 177) that "the social practices that govern the giving and asking for reasons... need not be – and the ones that actually confer content on our utterances are not – such that the default entitlement status of a claim or assertional commitment is to be guilty till proven innocent." Brandon goes on to say, "If many claims are treated as innocent until proven guilty – taken to be entitled commitments until and unless someone is in a position to raise a legitimate question about them – the global threat of regress dissolves." He calls this "a default and challenge structure of entitlement." (4) A fourth strategy is to maintain that being in a doxastic state which is the result of a "reliable belief forming mechanism" is justified. As a matter of fact, Brandom (1994, pp. 213-229) adopts a complicated variant of this strategy with respect to perceptual reports. However, in Brandom's account the ascription of entitlement to reliable perceptual reports is based on reasons which those who ascribe such entitlement have.

permit us to recognize regress stoppers – so that, for example, things like perceptual *experiences* could be said to provide good prima facie reasons for adopting certain cognitive attitudes[26] or the *fact* of having enjoyed one sort of thing more than another could provide a good prima facie reason for preferring things of the first sort to things of the second.[27] But I will leave the

26. See Pollock (1995, pp. 52-55, especially principle 2.2 on p. 55), who argues that it is perceptual experience itself (in his terminology, "having an image"), and not beliefs about perceptual experience, which constitute the prima facie reasons for many of our beliefs about our immediate environment. And see also the careful and insightful discussion of "immediate" or "non-inferential" justification in Pryor (2005). Pryor works with a notion of justification (explained in Part I of draft 9), and is concerned basically only with the justification of beliefs. Despite these restrictions, what he has to say can be made relevant to the themes in this paper. Pryor says, "When your justification to believe P does not come from your justification to believe other propositions, I'll call it immediate" (p. 3 of draft 9). In his view, "the best argument [for immediate justification] comes from considering examples" (p .6 of draft 9). Part IV of the draft contains an extensive discussion of whether experiences - and he points out on p. 11, that "unlike beliefs, experiences aren't the sort of thing which could be, nor do they need to be, justified" – can be thought to justify beliefs. The basic thrust of the case he makes in Parts IV and V is to undermine what he takes to be the principal arguments against the supposition that experiences can justify beliefs.

27. In his account of the logical structure of practical rationality, Pollock (1995, pp. 12-32) accords crucial roles to situation-likings and feature-likings. He says (p. 12), for example, "Situation-likings provide the ultimate starting point for rational deliberation. These are not representational states – the agent need not be thinking about the way things are. Situation-liking is a feeling rather than a propositional attitude." He ties feature-likings to our ability to "react conatively to imagined situations" and says, "As such, our reaction to these imagined situations constitutes a conative response to situation types rather than situation tokens, although it is not clear that these two kinds of likings should be regarded as genuinely different kinds of mental states" (p.20). Pollock's use of the word "conative" is, I think, different from mine – I would see what he is calling 'likings' as mental occurrences that can give rise to and justify evaluative attitudes. For me, conative attitudes arise only when, on the basis of evaluative attitudes, we adopt something as a goal and adopt plans to achieve such goals. Pollock himself recognizes something like this distinction when he says (p. 23), "Goals are chosen on the basis of their expected likabilities...." Though there are many features of Pollock's account of practical reasoning I don't agree with, his idea that situation-likings and feature-likings are not propositional attitudes, but are capable of grounding evaluative propositional attitudes strikes me as a very promis-

attempt at such enhancements for another occasion. Enhancing the account of reasons so that (8) becomes acceptable would permit us to equate its being OK to do X with having a good reason all things considered to do it. Of course, taking that equation to be a definition would be viciously circular – since what it is to be a reason has been explained in terms of its being OK to do X. But there would be no need to take the equation as a definition.[28]

Notice also that apart from one complication,[29] if we could accept (8) we might be able to equate this *species* of its being OK for someone to do something with its being *reasonable* for him or her to do it.

9. CONCLUSION

Does this account of reasons shed any light on why there are different "cultures of theorizing" about argumentation – theorizing about practices which turn on the presentation and exchange of reasons? In particular, does it help to understand the existence of the triad Tindale calls attention to – the logical, dialectical and rhetorical perspectives? I think that to some extent we can see each of these three perspectives arising out of an emphasis on

ing idea. For useful summaries and assessments of Pollock's account of practical reasoning, see Hitchcock (2002) and Girle et al. (2003).

28. In "The Folly of Trying to Define Truth", Davidson (1996/2005, esp. pp. 20-21 and 36-37) claims – correctly I think – that when it comes to the very fundamental notions in terms of which we understand ourselves, definition is out of the question. Each of them is too basic to be defined in terms of anything more basic, but none of them is intelligible except by reference to the others – the best we can hope for is to illuminate the ways in which they are related to each other.

29. I'm inclined to think we ought to require that an additional condition be met before we deem it reasonable for a person to adopt an attitude A toward the idea that P. A person may have good, undefeated reasons for adopting an attitude A only because that person failed to make inquiries she or he should have made – inquiries that would have or could have brought to light considerations which undermine or override his or her reasons for adopting A. For purposes of this paper, I have not attempted to recognize this as a requirement for its being OK to do X. And without such a requirement it's probably not defensible to equate 'reasonable for S to do X' with 'OK for S to do X'.

one or another aspect of what I've tried to describe in this general account of having and giving reasons.

1. The varieties of logical perspective tend to emphasize questions about what is a reason for what. Of course, when an informal logician like Ralph Johnson (2000) insists that arguments (or at least good arguments) must have a dialectical tier as well as an illative core, the concept of what is involved in presenting an argument becomes more complex than the account that was offered in Part 6 above.
2. The value of making dialogue the preferred context for studying argumentation – which might be seen as lying at the heart of dialectical perspectives – is, to my mind, most clearly seen when we recognize the important effect that undermining and overriding considerations have on the force of reasons. For it is discussions between and among two or more participants that provide contexts in which such considerations most readily come to light (as is evidenced in Rescher 1977, especially chapter 1).
3. The value of emphasizing the effect of argument on an audience – which if we follow Tindale 1999 is at the heart of rhetorical perspectives – though not immediately obvious on an account like mine which insists that the force of reasons is a normative force, is nevertheless quite real, and for the following reason. If an argument fails to persuade an audience, the fault may lie in the audience's failure to accept what they see it is reasonable for them to accept, or it may lie in the arguer's failure to make it manifest to the audience that it is reasonable for them to accept what the arguer wants them to accept. Adopting a rhetorical perspective requires getting clear about what it will take to get an audience in a proper frame of mind to accept what they'll be shown it is reasonable to accept,[30] as well as get-

ting clear about what it will take to make it manifest to the audience that it is reasonable to accept what the arguer wants them to accept.[31]

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30. See for example the Jacobs (1999, p. 400): "...argumentation theory should be concerned with the way in which argumentative messages enhance or diminish the conditions for their own reception. Argumentative messages may be designed either to open up or to close down the free and fair exchange of information. Argumentative messages may be designed either to encourage or to discourage critical scrutiny of the justification for alternative positions. I think one of the real insights of normative pragmatics is that argumentation is self-regulating and self-sustaining in just this way."

31. See for example Pinto (2003, section 9): "Someone who presents an argument can fail to achieve [its] primary effect if his presentation is unclear, muddled, cryptic, insufficiently articulated, and so on. In such cases, the reason he is attempting to float will not be manifest (i.e., 'readily perceived by the eye or the understanding')." See O'Keefe (2002a, chapter 9; 2002b, esp. pp 76-77; and 2003) for summaries of what empirical research has shown to be the difference that clear and precise expression makes to the persuasive effect of arguments.

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CHAPTER 11.

AGGRESSION, POLITENESS, AND ABSTRACT ADVERSARIES

CATHERINE HUNDLEBY

Abstract: Trudy Govier argues in *The Philosophy of Argument* that adversariality in argumentation can be kept to a necessary minimum. On her account, politeness can limit the ancillary adversariality of hostile culture but a degree of logical opposition will remain part of argumentation, and perhaps all reasoning. Argumentation cannot be purified by politeness in the way she hopes, nor does reasoning even in the discursive context of argumentation demand opposition. Such hopes assume an idealized politeness free from gender, and reasoners with inhuman or at least highly privileged capabilities and no need to learn from others or share understanding.

Trudy Govier's 1999 book *The Philosophy of Argument* provides an extensive response to the feminist critiques of adversarial assumptions about argumentation. Govier defends an adversarial orientation of argumentation both for its cognitive necessity and role in critical thinking and for its political fruitfulness. Govier's exposition of how adversariality or opposing positions in argumentation support the value of controversy demands

feminist attention, because controversy is part and parcel of feminism.

Govier introduces a fruitful distinction of "minimal adversariality" constituted by taking up an opposing position from "ancillary adversariality," the culture of aggression and hostility often associated with argumentation. She shares a distaste for that culture with other feminists and other argumentation theorists, but she values minimally adversarial discourse because controversy depends on it.

I will explain Govier's position that politeness provides a hedge against the discursive hostility and aggressive emotionality that constitute ancillary adversariality but argue that politeness cannot suffice. It reflects and thus reinforces gendered (and perhaps other unjustified forms of) social dominance. While we — all people and perhaps especially feminists — need a theory of argumentation that can address controversy and lead us through hostile entanglements, we must not obscure the possibility and fruitfulness of alternate modes of argumentation and reasoning. We may exchange reasons without opposing each other's ideas — never mind opposing each other personally. Adversariality is not necessary or even ideal for argumentation, despite its value for democratic politics and critical thinking. It only seems ideal if we neglect the gendered realities of discourse and the limitations of human cognition.

2. ANCILLARY ADVERSARIALITY AND RATIONAL PERSUASION

Govier recognizes that many of the demands emerging from the feminist critique of masculine standards in philosophy and argumentation accord with the direction taken by the informal logic movement. Both orientations suggest that education in logic and critical thinking "should not: be primarily in formal logic; model all arguments as deductive; cavalierly apply generalizations to particular cases; dichotomize reason and emotion; or ignore

relationships" (p. 52). She argues that the proper operation of reason in argumentation suffers from aggressive emotions and the culture of "ancillary adversariality" that feminists maintain have masculine associations making them more accessible to men and more accepted from men. Adversarial and aggressive metaphors can foster interpersonal aggression, encouraging people to slide into arguing against each other when they disagree rather than just questioning each other's ideas. Adversarial structures in law, politics, and debate, and the personal stake we often have in our own views (p. 50) heighten the likelihood that opposing opinions will slip into aggressive modes that interfere with rational exchange.

Both feminists and informal logicians develop non-adversarial metaphors for argumentation: "build a case, explore a topic, or think through a problem" (p. 9). Yet, many philosophers — and other reasoners as this is part of the common culture of argumentation — still use metaphors of cutting, capture, trouncing, skewering, and other violent and militaristic language to describe successes and failures in argumentation. In response to feminist and other critiques, those who actually work on the topics of argumentative strength and weakness tend to eschew such language, because of the ideological baggage it brings with it, especially the militaristic and eristic (aiming to win) metaphors.

Govier holds out hope that the void left from removing interpersonal aggression, the harsh language, fraught emotion, "strident repetition[,] and loud voices," can fill with respect through people engaging each other as rational agents by appealing to reason and evidence. She argues that persuasion can be a deeply respectful enterprise when the means are rational.

> The other person is addressed as a rational being, as a person with beliefs and values of his own, as one who thinks and is capable of changing his beliefs on the basis of reasons and evidence. To present someone with an argument is to attend to his or her mind and thinking processes and to do so in a non-manipulative way. It is to honestly acknowledge differences of opinion and belief, not to skirt

> over them, hide them, or seek to avoid them…to show respect for [arguers] as autonomous thoughtful people. (p. 8)

Govier contrasts rational persuasion more generally with the coercive means having residual presence in "slogans, loaded terminology, or visual imagery" (from the elipsis in previous quotation). The common language of argumentation reflects assumptions that may run deep in our models and norms of argument, but that are outmoded. Conflict, contest, or battle need not result from disagreement; metaphors of defense and victory may be "dead"[1] (p. 54).

Language does often change its meaning and metaphors lose certain resonances; for instance, the misogynist history behind "rule of thumb" does not taint that very useful expression. Yet, the adversarial language of argumentation expresses models and norms that remain *lively* because of the way militarism and emotional aggression define masculinity in many cultures — especially the dominant culture of Euro-American, white, able-bodied, heteromasculinity, and the conflation of aggression and domination with both masculinity and success (Moulton 1983).

3. AGGRESSION, POLITENESS AND GENDER

Govier argues that "adversariality is not necessarily confrontational" which is to say that it can be "kept to a logical, and polite minimum," to bare opposition and respectful objection (which describes epistemological opposition) (p. 55). Politeness provides background conditions for argumentation practices also in Douglas Walton's theory of presumptive argumentation, as a source for argumentation schemes that guide reasoning based on specific types of presumptions (1996, pp. xi, 39, 42). Walton (2007, p. 77) takes politeness to be codified by Paul Grice's conversational maxims that encourage conversation to be collaborative rather

1. I suspect intentional irony here from Govier.

than adversarial (Walton 2007, p. xvii). Recent research on politeness, however, reveals that it will not suffice as a hedge against aggressive behaviour. Some people's aggression, especially men's, operates as part of polite discourse, endorsing specific forms of rough-housing, both verbal and physical. (I speak of "women" and "men" as a shorthand to refer to people of any age gendered feminine and masculine.)[2] Politeness institutionalizes rather than moderates certain aggressive tendencies in argumentation, creating gendered power strata in discourse, and preventing metaphors of war and aggression from losing their confrontational implications.

The demands of politeness separate men and women in almost all cultures. In the dominant white able-bodied middle-class heterosexual, Euro-American culture that tends to override other attendant identities and cultures, norms of politeness tend to be more severe and restrictive for women, requiring greater passivity and conformity. And yet women appear immature, irrational, or unserious to the extent that they are "small, timid in manner, have high voices, speak with qualifications and tonalities of uncertainty, dress in a feminine style connoting prettiness, a desire to please, non-seriousness, etc." (Govier, p. 31). Discursively, women's politeness strategies in Euro-American cultures include various markers of subordinate status that at the same time function to elicit cooperation, including tag questions such as "don't you think?", diminutives ("tiny bit"), and euphemisms (Burrow, p. 247). Such demands undermine women's ability to engage others independently, to be assertive, and hence their ability to operate as arguers and be accepted as reasoners.

Transgressing feminine modes can be liberating and exhilirating, making the assertiveness of argumentation and even its

2. New research suggests that the stereotypes that guide our discursive interactions may racialize people in the same terms that define gender, at least in the U.S.A. (Galinsky, A., Hall, E., and Cudd, A. (forthcoming 2013) in Psychological Science). The intersectionality (how different forms of oppression impact on each other) of psychological bias and stereotypes remains mostly neglected and in need of work.

tendency toward aggression both exciting and deeply empowering for many women (Burrow, p. 242). Perhaps most radically transgressive, then, are fallacy labels because wielding them provides an authority to say "no" and to silence that women and others who are socially marginalized rarely have (Hundleby 2010). However, transgressing gender norms is tough going, and women arguers regularly do not gain the same uptake as men when they adopt behaviour associated with masculinity. When women defy gendered standards of feminine, polite passivity, they initially tend to be viewed as merely *requesting* an active, authoritative role —especially in expert discourse. If not *prima facie* excluded, women are denied the responses that men receive, and *pro tanto*, seem to be speaking out of turn or continuously entreating to argue (Kukla). The presumptive exclusion of women from argumentation becomes clear as dialogues play out, despite specific individuals' conscious good intentions to respect and include each other.[3] For instance, regardless of discussants' perceptions and good will, women are interrupted much more often than men—even by other women, and their suggestions ignored unless repeated by a man. The effective entreaty for permission to speak, manifest for instance in expectations that women and people of colour will smile, undermines their full participation in argumentation.

The regular phenomenon of men aggressively asserting their authority over women in matters where the particular woman has objective expertise, or in regard to women's issues, has recently gained the humorous nickname "mansplaining" (Rothman). The term emerged from a series of articles beginning with Rebecca Solnit's "Men Who Explain Things," which includes the following anecdote.

3. Kukla's attention to the material context of social effect makes her approach of dysfunctional speech acts better able to account for the possibile self-deception of the audience than approaches that adhere to J.L. Austin's attention to the intentions of the audience.

> I was in Berlin giving a talk when a writer friend invited me to a dinner that included a male translator and *three women a little younger than me who would remain deferential and mostly silent* throughout the meal. Perhaps the translator was peeved that I insisted on playing a *modest role* in the conversation, but when I said something about how Women Strike for Peace, the extraordinary, little-known antinuclear and antiwar group founded in 1961, helped bring down the communist-hunting House Committee on Un-American Activities, Mr. Very Important II *sneered* at me. The House committee, he insisted, no longer existed in the early 1960s and, anyway, no women's group played such a role in its downfall. His *scorn* was so withering, his confidence so *aggressive*, that arguing with him seemed a scary exercise in futility and an invitation to more *insult*. I had written a book that drew from primary documents and interviews about Women Strike for Peace. (p. 2, emphasis added)

Mansplaining, while about the gendering of expertise and general discourse and authority more than politeness specifically, sometimes illustrates how women's polite assertions receive aggressive responses from men that women cannot effectively return.

Mere participation by women counts as unacceptably aggressive and rude. "Giving good arguments, speaking with confidence, and otherwise behaving in ways that would count as "playing well" if we were already recognized as playing can come off as arrogant and off-putting" (Kukla, p. 11). Such discursive failures of agency that track and reinforce social disadvantage amount to "discursive injustice," according to Rebecca Kukla. A loss of control over our speech acts arises from the inability to mobilize social conventions, such as those of adversarial argumentation, and can result from norms of politeness that deny women — and other subordinates — polite adversarial roles. Should they explicitly assert a place in argument then the dilemma becomes manifest, as women become perceived as harsh, bitchy, defensive, "dragon-ladies", Sylvia Burrow explains (p. 255). The word "strident" almost exclusively applies to

women. In sum, they appear *aggressive*, *inappropriate*, and *impolite* for behaviour that would be perfectly polite for men, especially among other men. On the other hand, women who decline to defend their reasoning risk appearing (to themselves as well as others) inadequate to the task, reinforcing the perception that they are not competent arguers. The gendered flow of polite discourse can prevent women from acting as fully fledged arguers *whether or not they intend* to embody stereotypes of white, able-bodied, middle-class, heterosexual, Euro-American femininity, and leaves women in a double-bind (Frye).

What constitutes politeness in argumentation reflects the dominant culture's masculine homosociality: the not-specifically-sexual bonding between men that may involve seeking, or enjoyment of, or preference for the company of other men. Insofar as men control all sorts of power and resources, including intellectual stimulation and with the notable exception of paternity, men can receive most of what they need or even want from each other (Lipman-Blumen, p. 16). Less substantial benefits accrue from women's homosociality. However, both men and women may find it easier to operate in same-sex groups in which others' behaviours are more predictable and less complicated by heteronormative tensions between the genders — e.g., how to draw the line between friendliness and inappropriate flirtation. Women's derivative status in social discourse impedes their social interaction with men especially in competitive contexts that resonate with male homosociality as in the case of much argumentation and perhaps especially in the discipline of philosophy (Rooney 2010).

Therefore, the assumption by Govier and Walton that politeness can eliminate unnecessary aggressiveness does not stand up to scrutiny. The gendered quality of politeness disadvantages and even disqualifies some arguers via differentially gendered measures of aggression. What counts as an adversarial or aggressive violation of etiquette depends a good deal on the arguer's

perceived gender. Norms of politeness may even demand men's aggression and adversariality, for instance in a playful exchange of insults, or a hearty slap on the back. Adversarial discursive modes will in turn exclude certain people whose social roles do not permit polite rough-play, and women's efforts to engage in argumentation will go unrecognized or seem disproportionately rude. Grice's conversational maxims may not be specific enough to alleviate the gendering of politeness because of the open-endedness of their terms, e.g., "adequate evidence," "prolixity," and "informative as is required." Formal systems of discursive etiquette such as *Robert's Rules,* even when adversarial hold out more promise because they supersede informal systems of politeness and have greater specificity than Grice's maxims. Likewise, some women find the adversarial culture of philosophy liberating to the extent that it authorizes their transgressions of the usual politeness norms.

The exclusiveness of polite aggression may reflect general social privilege (of the archetypal white, able-bodied, middle-class, heterosexual, Euro-American man) or be more specific to masculinity as a form of domination (Burrow). Either way, it sanctions aggressive behaviour, including adversarial discourse and argumentation, from those otherwise currently advantaged, condoning their dominance through aggression. Excluding from acceptable aggression women and others who violate the social categories that define politeness helps to perpetuate existing social divisions and maintain a power structure defined by aggression (Moulton). Women may avoid taking feminist positions or identifying as "feminist" in mind of being perceived as angry or unpleasant and so remain or become further disenfranchised. Likewise people in the working class avoid behaviour that is "asking for trouble." Gays, lesbians, and people of colour may decline their rights for fear that acquiring any attention may entail violence and persecution; the disabled may sim-

ply not wish to waste their time given the likelihood of being ignored.

4. CONTROVERSY, COERCION AND RATIONALITY

Even in wealthy countries benefitting from centuries of feminism, merely participating in discourse may be controversial for women:

> Most women fight wars on two fronts, one for whatever the putative topic is and one simply for the right to speak, to have ideas, to be acknowledged to be in possession of facts and truths, to have value, to be a human being. (Solnit, p. 3)

Controversy clings to women who aspire to status of human beings or rational agents even more in other cultures and for women living under intersecting forms of oppression, such as race, class, and ability. Aggression and opposition toward existing situations, individual practices, institutional policies and structures, etc., construct feminist identity and epistemology in specific ways (de Lauretis; Collins, pp. 8ff; Sandoval; Hundleby 1997). The controversies surrounding and within feminism thus might benefit from better understanding of adversarial argumentation. Adversarial structures of *controversy* may allow space for the development of non-coercive standards for persuasion that involve a negotiable rationality.

Feminism is intrinsically controversial, drawing attention to problems with institutions, including frameworks for thought and action, and working for change in the surrounding culture. Feminist political progress demands adversarial engagement that politeness restricts from some of those, notably women, whose interests demand change. Articulating feminist adversarial orientations thus can be aided by argumentation theory. Feminism and other liberatory projects need an effective account of controversy and tools for addressing it because their nature involves

controversy: *fighting* for women's rights, for fairness and equality; *demanding change*.

Feminism produces a wealth of internal disputes and controversies too, such as over the significance of pornography and regarding the value of feminine qualities associated with mothering. Opposition comes as part of the package of working for change. While feminists pioneered explicitly collaborative research methods, they also came quickly to recognize that criticism must be involved at various stages as understanding develops. More than sharing experience was required by the innovative consciousness-raising groups of the 1960s and '70s, who stressed the affirmation of lived experience and provide the historical and practical basis for much feminist methodology. The development of such concepts as "sexual harassment" and "marital rape" required criticism and challenges to personal experiences—including self-blame and resignation, in order to shed light on the larger political significance of those experiences (Wylie).

Govier's concern with controversy dovetails with political philosopher Chantal Mouffe's argument that democratic engagement depends on adversarial or agonistic processes:

> Mobilization requires politicization, but politicization cannot exist without the production of a conflictual representation of the world, with opposed camps with which people can identify, thereby allowing for passions to be mobilized politically within the spectrum of the democratic process. (Mouffe 2005, pp. 24-25)

Mouffe argues that the intrinsic adversariality of politics demands agonistic structures be built into political systems.[4] Resistance to the fundamental human need to define ourselves and identify in terms of friends and enemies makes our political

4. Argumentation theorists may find rich resources in the related literature on feminism and citizenship. For instance a special issue of *The Feminist Review* addresses "Citizenship: Pushing the Boundaries" (Eds. Helen Crowley, Gail Lewis, Pnina Werbner and Nira Yuval-Davis, 57, Autumn 1997).

structures dys-functional. Although social identity does not concern Govier, who defends an *individualist* adversariality, holding between particular persons and between their ideas, she offers Mouffe and feminists a model of how agonistic reasoning can be rational.

Adversariality may entail winners and losers. Thus eristic discourse can reinforce existing (just or unjust) power relationships and undermine cooperative and egalitarian modes of arguing, especially when some participants have extra experience and license with aggressive techniques. Those with the power tend to have greater resources, anyway, even when in the wrong. Eristics may also suppose a radical opposition between truth and falsity (Cohen), leaving no room for constructive uncertainties or sensitivity to new evidence, and so subvert epistemic goals (Rooney 2010). One possible value remains in that eristic exhibitions, such as formal debates, can serve the purpose of allowing the audience to make up their minds even when the arguers have no intention of altering their own views (Kock 2009).

In practical contexts, we must choose our argumentative goals with care, avoiding the temptations of coercive force. Some argumentation theorists maintain that any persuasion, even *rational* persuasion, can be coercive and so not an adequate standard or goal for argumentation. Govier counters that an arguer does not pin the audience up against a wall, in even a figurative sense (p. 50). Rational argumentation employs "considerations … supplying evidence or grounds that make a claim seem more believable because of a cogent connection between that claim and the claims cited as its support" (p. 45). That the audience might accept the line of reasoning receives motivation from hope, not aggression (p. 50).

The believability or persuasiveness thus depends on cogency; and in turn "cogency" receives recursive support from "rationality":

> An argument is cogent when its premises are rationally acceptable and relevant to its conclusion and when, considered together, they provide good or sufficient grounds for that conclusion. (Govier, p. 46)

Cogency leans on rationality (of the premises), the persuasive force that helps define it; yet it also demands relevance, and good or sufficient grounds holding between the premises and the conclusion. Thus, leaving aside what may be the independent criteria for evaluating grounds (and perhaps relevance), one finds at least one element in cogent argumentation for which further reasons can be sought: the rationality of premises (and perhaps their relevance).

The rational element of a cogent argument may be fleshed out through sub-arguments or replying to possible objections, a dimension of argumentation that Ralph Johnson describes as the "dialectical tier" (Govier, p. 46). *Rationality* remains subject to judgment, and so I suggest *still may be coercive should the processes of negotiation supporting that judgment involve coercion*. The possibility that a *judgment* could be coerced may sound odd to those unfamiliar with feminist epistemology. Reasoning has complexities that include historical patriarchal baggage (Lloyd; Rooney 1991, 1994) and unconscious social bias that recent psychology reveals to hold sway especially when evaluative terms are not clearly defined. These are not conscious views about domination, or even about ancillary cultural adversariality, but nonetheless these assumptions can powerfully distort decision-making. Participating in the adversarial discourse of Johnson's dialectical tier may for many women demand contravening the tacit gender hierarchy (and perhaps other hierarchies), and risk complete exclusion. As we have seen above, politeness will not help.

Admittedly, the room Govier allows to contest and constructively decide what counts as rationality may prevent the concept of rationality from being another tool (along with politeness) that primarily serves existing structures of rhetorical power. *Ratio-*

nality itself can be controversial.[5] Govier's attention to controversy provides the political edge to her philosophy of argument: she insists on controversy's desirability, and its dependence on adversarial relationships. Controversies depend on there being more than one view, each being held in rejection of the others and sustained by arguing against those who hold the other views; they are oppositional in requiring one person to disbelieve another's claim. Such "minimal adversariality" she argues is necessary for practical politics under democracy, which demands more than tolerant regard. People who hold differing views engage and attempt to persuade each other and their representatives on matters of policy and governance.

Govier's account of controversy helps to show the broad value of feminist discourse. Adversarial argument feeds democratic politics, and may be rational at the core and non-coercive: "the existence of controversy is a healthy thing in many contexts, and if controversy implies a degree of adversariality, then perhaps some modest adversariality is acceptable in the interests of critical thinking and lively debate" (p. 51).

5. THE NEED FOR MINIMAL ADVERSARIALITY?

Sliding into adversariality can be difficult to avoid in a culture that prioritizes masculinity and aggressiveness, and conflates the two; the importance of adversariality to democratic politics complicates this still further. Yet for Govier, adversariality has significance beyond its function as a social means to benefit controversy and agonistic politics; it has a fundamental role in human reasoning and philosophical methods. Govier's view that

5. Govier's separate discussion of how rationality operates in critical thinking appeals to judgment in a way that seems to lack normative force, as Harvey Siegel argues (2004, Rationality and judgment. *Metaphilosophy* 35(5): 597-613). His account of rational thought as coherence with rules, including unrecognized rules, while intended to account for individual thought, might also define rational persuasion better than Johnson's adversarial dialectical tier. However, exploring that option is beyond the scope of this paper.

reasoning requires internal debate has initial plausibility. We certainly do argue in our heads. "A person may critically reflect on and appraise her own thinking, thus embracing an internalized adversariality which is not negative" (p. 10). Yet thought and argumentation do not depend on recognizing the opposite perspective held by even an imaginary adversary.

Govier provides two different explanations of minimal adversariality. On the one hand it involves opposition to other views, a specific psychological attitude that emerges in what she calls "Deep Adversariality."

1. I hold X.
2. I think that X is correct. (Follows from 1.)
3. I think that non-X is not correct. (Follows from 2.)
4. I think that those who hold not-X are wrong, or are making a mistake. (Follows from 3.)
5. Should I need to argue for X, I will thereby be arguing against not-X (?)
6. Those who hold not-X, are, with regard to the correctness of X and my argument for X, my opponents. (?) (Govier, p. 244)

Most of these steps seem questionable. Govier acknowledges there may be some doubt starting with (5) and Phyllis Rooney (2010) argues that it is wholly unnecessary. My central concerns are with how this process is supposed to get off the ground, in steps (1) – (3) which *may be necessary for critical thinking in some sense, but not for thinking itself,* as Govier would have us believe.

The epistemological leap to (2) demands a self-reflection not part of the original doxastic attitude in (1). We believe all sorts of things at any given time without consciously recognizing them as beliefs, never mind evaluating them. Such awareness may be forced by argumentation but that is part of the value that argu-

mentation can add to thought: dialectical exchange encourages self-reflection that we otherwise may not have.

The more serious problem with Deep Adverariality lies in the minimally adversarial move from step (2) in which a reasoner epistemologically evaluates a thought to an epistemological evaluation of that contradictory belief in step (3). Again, this demands a cognitive self-awareness that has little psychological plausibility, but this time reasoners are supposed to render judgment on propositions that play no part in our own belief system. This move, however logically sensible, seems on any regular basis to be beyond our finite cognitive capacities. It describes "critical thinking" that provides the important *exception* to the rule of unreflective thinking.

Govier's other argument for the necessity of minimal adversariality has more modest terms, occurring when one "openly acknowledges the actuality or possibility of *disagreement* or *doubt*" (p. 47). Recognizing the "possibility of disagreement or doubt" may be part of reasoning — accompanying anything more solid than a faint glimmer of thought — but need not entail entertaining contradictory propositions as she argues. Disagreement or doubt may merely involve contrary possibilities, for instance. Say that I think it's cold outside and you think it's beautiful out, and perhaps we are both right. Or we might both be wrong, or only one of us may be right. Any of these sorts of logical relationships might undergird my doubt or the disagreement may be irresolvably incoherent, say if we understand terms in different ways. Doubt and even disgreement need not involve considering contradictions and can take the forms of open-mindedness and exploration, compiling data, or casting about for further information. Those who do not agree and who are thus subject to persuasion may be undecided, tentative, or even have suspended their belief or disbelief. So may anyone be when entering into discussion and attempting rational persuasion. The possibility of disagreement or doubt intrinsic to argumentation need not

entail belief in the wrongness of the contradictory of one's position.

Disagreement and doubt may not depend on wrongness or contradictories at all, and yet still be the basis for openness to rational persuasion, and so foundational to argument. We may pitch in together to develop shared understanding or anticipate how things pan out under specific circumstances. These modes of thinking provide the grist for the mill of critical thinking and testing. Although scientific testing may depend on abductive reasoning, comparing opposing lines of thought, not all reasoning demands competitive inference to the best explanation and its logic of competition. The lines of thought have to come from somewhere. Even in science, an explanatorily adequate or merely interesting account of the evidence may be our only goal. Consider how people, including scientists, sometimes begin their interjections with "so…," suggesting a collaborative rather than an adversarial intention.

I may aim to persuade you because you are not yet convinced — of the value of dogs for household safety, for instance. Likewise, we argue without disputing a claim when we receive education. The explanation to a student of what makes water expand when it freezes *persuades* that student rationally that the ice-cube tray may overflow. Instructors even play at not knowing in order to elicit student collaboration in learning, a technique famously described as the Socratic method. In many other cases it is true that none of the arguers has sorted out our beliefs on the topic and we may explore the information together, pooling it.

These examples all support Rooney's suggestion that we may "argue with" people without arguing against them (2010), and feminists have developed a range of practices for reasoning collaboratively. The collaborative exchanges of reasons that I have argued may be means for rational persuasion play central roles too in science and other arenas that depend on the division of epistemic labour. A physicist may build equipment for a chem-

istry experiment, and a statistician do the calculations. Each contributes to the development of an argument about some phenomenon in chemistry and may have to persuade the others by way of argument that the techniques applied will do the job. However, there is no opposition to the techniques or claims of expertise, only inadequate understanding that can be overcome by sharing some of the expert or testimonial evidence. These non-adversarial practices deserve to count as forms of argument, and argumentation theorists such as Govier seem to deny them that status only because they presume that argumentation must be adversarial.

6. IDEALIZED ARGUMENTS AND ABSTRACT ADVERSARIES

The problems I've identified with Govier's account of adversarial argumentation seem to lie in its *idealization*, a tendency in philosophy that Charles Mills (2005) argues undermines a theory's effectiveness. Despite the intention of Govier and others to account for real reasoning practices, idealization or ideal theory persists in informal logic. While all philosophy may be normative and ideal in a generic sense, the type of abstraction and its degree may impede philosophers' ability to address concrete problems. Misguided abstraction can make our ideals too idealized or idealized in the wrong ways. Failing to account for how gendered communication practices including politeness affect norms of argumentation and for human logical frailty makes Govier's picture of the argumentative adversary problematically abstract and idealized.

Philosophers must abstract away from concrete situations—whether epistemic, ethical, or argumentative—in order to develop ideals in the broad philosophical sense of norms. "Abstraction is something of a relative and situated notion, as when we abstract from some of the contextual specifics or saliencies of a given situation and not others" (Rooney 2010, p. 215).

So we must take care not to abstract away from what we recognize to be problems demanding attention. A pitted or cracked surface—due to natural variation or normal wear and tear, cannot be modelled well by a frictionless plane, though that model may account quite well for a teflon-coated plane suspended in a vacuum (Mills, p. 167). Likewise, adversarial logic may suffice to characterize controversies but be wholly inadequate for other types of argumentation, and even aggravate their difficulties.

Opposition has limited benefit as an orientation for rational persuasion. The oppositional mode appears universally productive only because the adversaries we have in mind are abstract: subject to identical norms of politeness and with no limits on time or cognitive capacity, such that they can appreciate and account for the logical implications of their beliefs. Idealized social ontology, idealized capacities, and silence on oppression are among the characteristic aspects of idealized theory, suggested by Mills. These three can be found in Govier's argument that we can and should keep adversariality to a necessary minimum.

The idealized social ontology of liberal atomic individuals in contemporary moral and political theories, Mills argues, abstracts away from the realities of "structural domination, exploitation, coercion, and oppression" (p. 168). Those concrete forces create hierarchical roles and identities, such as the gendered quality of politeness that Govier neglects. Likewise, every major approach to argumentation theory ignores the role of the arguers themselves, allowing the agents of argument to recede into the theoretical background, explains Dale Hample (2007). Argumentation theorists generally idealize social ontology by assuming the text of an argument fully represents "whatever we need to know about arguers' motivations, assumptions, knowledge, reasoning, and feelings" (p. 166).

Govier assumes idealized capacities by suggesting that reasoners must (and so can) hold multiple reflective views on their

own understandings: the steps proceeding from (1) to (3) in her proposal for Deep Adversariality. While those steps sometimes might be possible for a reasoner with a good deal of leisure, they cannot be standard for cognizers with limited time, or lacking the opportunity for reflection, never mind training in logic or reasoning. Such privileges cannot operate as the base line for reasoning.

She passes up opportunities to address oppression, gesturing toward it only by mentioning the difficulties of feminine discourse in the way Mills describes as typical for idealizing philosophers (pp. 168-169). Govier's neglect of the deep social patterns prevents her from recognizing how oppression pervades social institutions from formal organizations such as schools and the law to informal institutions such as politeness, marriage, and even the discipline of philosophy. Oppression shapes the people in those institutions and influences their argumentation practices, and the reception of their arguments. Even without ancillary adversariality, and imagining that politeness were effective, adversarial practices typical of the discipline of philosophy and perceived as "free and open" perpetuate both implicit and explicit social biases, including those that follow lines of gender, class, and race. Thus "epistemic injustice is likely to be exacerbated in skepticism-informed argumentative exchanges where minority members, whose experiences and claims are likely to be given less credibility, are thereby assigned greater burdens of proof" (Rooney 2012, p. 319).

Govier stops short of idealizing the cognitive sphere, the fourth marker of idealization suggested by Mills (p.169), insofar as her attention to ancillary adversariality and distinction of it from minimal adversariality points to the complexity of argumentation's social context. At the same time, the complications of ancillary adversariality and the inadequacy of politeness indicate that arguers may resist the norm of rational persuasion that she defends. She thus does not ignore exceptions, and so seems

to avoid the fifth marker of idealization (Mills, p.181). Govier's work outside of argumentation theory on political reparations further indicates an intention for theory to account for existing problems.

Yet the exceptions to the norm of rational persuasion may be fostered by social roles such as masculine gender that allow for polite aggression and heighten the burden of proof for those on the social margins, factors not addressed by Govier. The distinction of politeness from adversarial rudeness itself idealizes the difference between argument and quarrel, ignoring the multiple connections providing various forces that cause arguments to degrade into quarrel.

Govier's abstract arguer has qualities distinctively resonant with white middle-class able-bodied heteromasculinity. Not only do we associate adversariality with such men to the effect that women (at least) receive disproportionately negative sanction for oppositional behaviour or even uttering contrary opinions. By excluding or extracting out collaborative contexts from our model of argumentation we assume that no argumentation goes on during learning, one of the most lively and commonplace arenas for sharing reasons with others and inviting inferences from each other, and one typically governed by women. So the abstract arguer marginalizes both women and children, or imposes upon them an adversarial model that neglects the contexts and forms that their reasoning often takes.

7. CONCLUSION

Adversarial modes of reasoning have neither foundational nor overriding value as means for rational persuasion. Other forms of social engagement and shared reasoning practices deserve recognition as forms of argumentation, from the most established views shared through persuasive teaching to the most daring explorations achieved through the division of cognitive labour in science. These involve rational persuasion among peo-

ple who may disagree or doubt a proposition under consideration, but who need not have contradictory opinions. I suspect we'll be hard pressed to find a good discursive definition of argument that requires adversariality without being *ad hoc*, and that would make circular any argument for the necessity of adversariality.

Despite the problems with Govier's position that politeness can reduce adversariality to a necessary minimum, her account of the value of adversarial reasoning at the social level retains a vital significance for feminism and social progress. Feminists and other arguers need tools for working through situations of minimal adversariality, for keeping the minimum from becoming aggravated and blooming into a culture of hostility, and perhaps for recognizing when argument will not suffice as a means for addressing conflict. Whether we need to institutionalize adversarial practices as Mouffe argues, progress of one kind or another depends on change and requires some opposition to the current state of affairs and the reasoning that supports it. Govier's distinction between minimal and ancillary adversariality opens up space for discussing the different forms and levels of adversariality. Developing this further could help us figure out how to minimize harmful adversariality and when the minimal adversariality constituted by different opinions is productive, politically and epistemologically.

Mills advises, "the best way to bring about the ideal is by recognizing the nonideal, and…by assuming the ideal or near-ideal, one is only guaranteeing the perpetuation of the nonideal" (2005, p. 182). We must know how aggression works and how it takes hold in order to minimize it and allow rationality to play its intended role. Empirical studies of aggression tend to conflate argumentation with aggressive communication (Rancer and Avtgis) and yet research also shows that training in argumentation decreases verbal aggression such as swearing (Hamilton and Tafoya). The empirical understanding concerning aggression

may be irreducibly complex, as Helen Longino argues, but argumentation theorists will get better answers to our questions about aggressive arguers if we consider the available evidence.

Rationality remains an ideal or paradigm for reasoning, and when we make it open to negotiation, as does Govier, we may help to avoid the regressive pitfalls of ideal theory. However, much remains to be said about the constitution of that rationality, or how it can be negotiated in argumentation, and how it might be controversial and in some sense adversarial without playing into existing masculine norms of adversariality. Govier expects politeness to do too much work, to cleanse argumentation of the aggression implicit to masculine strategies for politeness in the dominant culture. While feminists and all fair-minded people need adversarial strategies for argumentation, we must not assume that rationality can provide a transparent neutrality to guide adversarial processes any more than we can assume that of politeness. It remains to be seen whether rationality might provide the means for argumentative persuasion that enables respect and acknowledges difference in the way Govier maintains. Rationality might ground a more inclusive account of argument, and do the work that politeness cannot. We also might be able to transform our norms of politeness, by adopting specialized rules for particular contexts, to make them better support rationality and the adversarial discourse that reasoners sometimes need.

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CHAPTER 12.

MULTI-MODAL 2010: MULTI-MODAL ARGUMENTATION 20 YEARS LATER

MICHAEL A. GILBERT

Abstract: My essay, "Multi-Modal Argumentation" was published in the journal, *Philosophy of the Social Sciences*, in 1994 (Gilbert 1994). This information appeared again in my book, *Coalescent Argumentation* in 1997 (Gilbert 1997). In the ensuing 16 years, there have been many changes in Argumentation Theory, and I would like to take this opportunity to examine my now teen-aged theory in light of the developments in our discipline. I will begin by reminding you of the essential aspects of my theory, make some general comments, and then review the several modes individually.

The theory of multi-modal argumentation holds that communication in general, and argumentation specifically, never occurs in one single mode. By a 'mode' I mean, fuzzily, a means or way of communicating, a form of expression, or a style of imparting information. Modes, then, are systems of messaging using culturally dependent signs, signals and methods intended to pass information from one subject to another. I never suggested that messages were exclusively in one mode or another, but rather that they were all mixed and could only be examined separately

for the purposes of argumentative investigation. Moreover, I never argued for the correctness of the four modes I chose, and allowed that other models might select three or five or other numbers of modes.

The four modes I did identify were the Logical, the Emotional, the Visceral, and the Kisceral. The logical mode appears in virtually every argument in one way or another. It is the mode that assists us in moving from a message to a conclusion in a reasoned and patterned way. Some arguments are more logically derived than others, especially those that Perelman has called quasi-logical. Moreover, premises within a logical argument will not, ipso facto, be themselves highly logical. The second mode is the emotional mode, and here I have written that the key is that the emotions being expressed in or by an argument are more important that the words being used for that expression. Thus we often disregard the words someone utters because we are confident that the message is expressed in the emotional package in which the words are located.

The third mode is the visceral, and covers all aspects of a message or an argument that are physical or environmental. Here the idea of environment is being used widely to include political and social aspects of a context such as power relations, physical configurations, and such like. Visceral events can themselves be premises in an argument and I have used a double square bracket to indicate them. E.g., [[Robert touches Marcia's hand]]. This is important because an action can change the significance of the words in a message, and, therefore, is part of the message. The final mode I identified involved the area of communication that is intuitive, mystical, religious, or revelatory. I call this mode the kisceral deriving from the Japanese word 'ki' meaning energy. This is a mode that is often disdained by rationalists, though they have difficulties dismissing it due to its widespread use (Gilbert 2010). It's fairly clear, for example, that more of the human population believes in the existence of invisible entities than does not,

and even scholars who are otherwise highly rationalistic believe in various sorts of deities.

My reasons for introducing the complication of multi-modalaties into Argumentation Theory has to do with my respect for its importance. I believe that Argumentation Theory is a vital discipline that can be used to understand and hone the tools people draw on to communicate with each other, embrace agreement and avoid violence. In order to do this it seems to me that we need to examine those sorts of arguments that ordinary arguers actually use. We cannot simply look at those argument forms we believe arguers ought to use, but rather those which they do use. It is this belief that leads me to make so much trouble about the forms of argument we study and to insist that we must go to the arguer rather than have the arguer come to us. The issue, as I saw it, was that Argumentation Theory was focusing on the easy parts, the CRCs that were analyzable and that could be broken into easily digested bits and be categorized and sorted without too much dissension. Yet our own lived experience of arguing with colleagues, friends and family, demonstrates that arguing is not a linear process with clearly defined edges and readily identifiable components. Our lived experience entails, if anything, the exact opposite conclusion: real, everyday, marketplace argumentation is frequently chaotic, rambling, emotional, and rife with explicit and implicit references to, and reliance on, the context, social milieu, personalities, and personal history of the argument and the arguers.

This is the point made by Willard in 1989, based on his work going back to the 1970s (Willard 1989). He claimed that arguers use all tools at their disposal to persuade a dispute partner, and also that all communications taking place in an argument are part of it. In my work, I took these ideas to the extreme, and included as parts of an argument the physical setting, mannerisms used, and a multitude of other factors not normally included in the analysis of an argument. I hope that now the purpose

and importance of a multi-modal approach becomes clearer: In order to investigate the role that all these aspects and factors play in a complex communication it is necessary to examine them using more than the tools logic and even informal logic makes available. We need to analyze them according to their purpose, intended and actual, and their results, intended and actual. This demands a very wide breadth. That is where the multi-modal approach comes in. A multi-modal analysis allows us to examine a situation from a variety of perspectives with each one adding more information and insights.

The tools, multi-modal aside, that currently exist are very valuable and very important. The ability to diagram an argument, investigate it for fallacies, apply a Pragma-Dialectic analysis, are all vital tools for the argumentation analyst. Nonetheless, my sense that the richness of communication was being missed by not applying these tools within the various modes, by not applying them in a finer way, led me to believe that a great deal of importance was lost to the analyst. By using these tools within the individual modes, and by tailoring them to the use and value of the individual modes a great deal more can be captured.

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I want to emphasize several points that, while mentioned in my work, should be stressed. The first involves the difficulty of separating the modes, and, more importantly, placing communications in modes. By this I mean to refer to the process of determining that some communication, action, message, or argument, occurs in, say, the visceral mode rather than the emotional mode. The fact is, that while there are paradigms of each mode, separability, and its analogue categorizability, are never definite. Consider, for example, a grimace. A grimace can be used to demonstrate disapproval, pain, discomfort, or other emotions. In itself, it is a visceral action, a physical movement of the lips and

face. In context it might indicate something emotional, as when one grimaces at the thought of going to the dentist or taking an exam. We cannot know, and need not know, if a grimace is primarily a visceral or emotional object, except when we are actually analyzing the role one particular grimace-token plays in a particular argumentative interaction.

In this regard, it might have been better to have referred to the modes as "aspects" as this might have emphasized the ability of an occurrence to play many roles, and to be viewed in different ways. The modes do not indicate real different things, but rather ways of analyzing or dissecting things according to certain interesting conceptions. A grimace, as it occurs in an encounter, simply is what it is. The phenomenological experience of a grimace provides us with cues that can be played out in different ways depending largely on the balance of the context. We know from Wittgenstein and Grice, to name but two philosophers, that we cannot determine meaning outside of context. The phrase, "That's just great!" can indicate joy or bedevilment, just like, ¡Perfecto, es todo necesitamos ahora!" Interestingly, an English speaker might well understand the import of the Spanish declaration simply by virtue of the context, grimace, and tone. The modes, rather than being tools for categorizing, are tools for understanding the meanings of a communication.

Whenever we do philosophy, communication theory or any sort of abstract analysis, we necessarily take things apart, break them up into bite-size analyzable bits. It is imperative, however, that we not mistake the analysis, the model for the reality. We need to look at the reality as if it were made up of bits and pieces, but we must not forget that it is a heuristic and that the reality is itself dense and complete. If, to use an analogy, we mix several colours together in a glass bowl, we end up with a new colour. We know what colours we put in, but the result is still one colour, and it is not possible to subsequently separate them out. The modes are like the colours: we know that they are all in there, and

we can discuss their impact on the whole, but in doing so we are using constructs and not reality. It is this that I would emphasize more and, perhaps, the term 'aspects' would add to that emphasis.

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I would like to turn now to the various modes and discuss them in light of the further work I have done, and some of the comments that have been made. Of course, the pre-eminent mode, the grandmother, la abuela, is the logical mode. In fact, some rationalists believe that all communication is really logical communication in other guises. That is not to say that every communication is straightforwardly logical, but rather that the way in which we make sense of it is logical. So we translate, if you will, in lightning speed so that it just seems that the reasoning is non-logical when in reality it is very logical. Fricker (1995, 183) responds to this sort of approach when she is talking about intuition. Can we really imagine, she asks, that the many things we do automatically or quickly like hitting a tennis ball or recognizing a face are really long drawn out processes done quickly? That hardly makes sense. Damasio (1994, 171) calls this the High Reason view and argues that it simply can't work: the available alternatives when we make choices are overwhelmingly vast, and it would take forever to sort through them no matter how quickly we did it.

I do not want to spend a great deal of time here simply arguing that the non-logical modes exist. I concede that we can just about always create a story about a non-logical communication that provides it a logical gloss, but I do not see what that proves. We can give a mechanistic interpretation of, say, love and the sacrifices one makes for it, but such explanations are inevitably unsatisfactory. They fail to explain why some people fall in love and others do not. They fail to explain altruism, why Jane might love

Jack but not his twin brother Alan, and other lovely anomalies. Moreover, there is a difference between the cause of something and the experience of it. Knowing that when I burn my hand I am just exciting a bunch of nerves to an extremely high level of activity, does not make the pain any less.

I was very careful, back when I first introduced the idea of modes, to choose the term 'logical' rather than the term 'rational.' This was done to emphasize that there is nothing irrational about the non-logical modes, but rather, as I put it then, logic is imperialistic and likes to seem in charge of everything, but that's just highlighting, if you will, its aggressive underpinnings. So, in my world, saying of a communication that it is not logical is not to denigrate it, but, rather, to point out that different tools need to be used. Among the tools I have examined most closely are those pertaining to the emotional mode.

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There is a good case for saying that (virtually) every argument contains at least a minimal emotional component for the simple reason that one is moved from inertia to make an argument. The stimulus that moves one from inertia is some degree of emotional reaction, some sense of disagreement, some feeling that something is wrong and that one cares enough to act. This does not mean that every argument is, at heart, an emotional argument. Rather, it means that emotion and whatever logical sense goes into an argument are inseparable. Even though the communication might be quite logical, an emotional argument may still be present provided the emotions expressed in the argument are more important than the words and signals used to express them (Gilbert 1995, 8). In other words, the message is in the emotions and not in the discursive component. A simple example is when, as above, the grimace contradicts the statement. Someone

grimacing and saying they are not in pain will not be believed whereas someone smiling and not exhibiting stress will be.

All this I take to be non-controversial, and I believe that anyone involved in any form of communication studies, let alone Argumentation Theory, would not demur from such an inane conclusion. What is puzzling is that given this obviousness so little attention has been paid to arguments involving these forms by the major theories. I have provided specific maps for investigating emotional arguments in both the Informal Logic approach and the Pragma-Dialectic theory, (Gilbert 2004, 2005) but neither has moved to embrace these views and attempt to incorporate emotion into argument analysis. Moreover, these major theories have not embraced any alternative way of including the analysis of emotion in argument. I believe this demonstrates, more than anything else, that there still exists a strong prejudice within Argumentation Theory against emotion as an argument forming apparatus (Vide Godden 2003).

There have been, to be clear, a number of scholars who have been examining the relationship between emotion and argument. These include, aside from myself, Walton, Ben-Ze'ev, Plantin, Tindale, Burleson, Palnalp, Wohlrapp and Carozza (Ben-Ze'ev 1995; Burleson and Planalp 2000; Plantin 1999; Walton 1992; Wohlrapp 2006; Carozza 2007). Nonetheless, emotion is still an aside, as opposed to a factor that must be considered in all circumstances. One reason for this is the mistaken belief that discursive communication is considerably more precise and manageable than emotional communication. I have argued against this (Gilbert 2002) but the prejudice is deeply rooted even though the truth is that we trust emotional communications more than their linguistic components. Everyone who is married knows that when the spouse says, "Do whatever you want; I don't care," it is the emotion and not the words that contain the real message.

There is a reason for the avoidance of emotional messages that goes to the heart of the issue: the fear of psychologism. As I use the term here, I refer to the ascription to a subject of a position, belief or attitude based on non-discursive information communicated by the emotion present in a message. Such an ascription is a direct violation of the Pragma-Dialectic rule III: Rule III: "An attack on a standpoint must relate to the standpoint that has really been advanced by the protagonist" (Eemeren and Grootendorst 1987, 286). So, assuming that an interlocutor has expressed an emotional statement that she has not explicitly uttered, it may violate this rule. On the other hand, the very next rule, IV, states: "A person can be held to the premisses he leaves implicit" (op cit 287). It is possible that one could play with this tension provided one can determine safe rules for identifying those situations when an emotional message can be considered implicit. I have attempted such an analysis (Gilbert 2002), but it has yet to be embraced within Pragma-Dialectics.

Informal Logic similarly has a prejudice against the unexpressed except insofar as it might be seen to apply to virtually deductively entailed enthymematic consequences. Here the penalty is most likely a charge of Hasty Conclusion or possibly Ignoratio Elenchi. In any case, Informal Logic has a decided antipathy toward including emotional message components as integrated parts of argument. This is not to say that emotional components are ruled out of court, but rather that they must be expressed quite explicitly in ways that emotions are rarely presented. This is clearly demonstrated when arguments are diagrammed: there is simply no place to put the emotional interpretation of a message that may, in fact, straightforwardly contradict its discursive statement. In fact, the ideal communication for Informal Logic is one that Barbara O'Keefe (1988) describes as utilizing the Expressive Method Design Logic, the least flexible of the three she describes. In short, even though I have been spending most of my energy on the question of the

role of emotion in argumentation, there is still a lot of headway that needs to be made.

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The visceral mode covers a wide range of communicative factors that, like emotion, are often considered peripheral or irrelevant. Certainly the visceral mode includes what is generally considered non-verbal communication, but also further areas that go beyond that category. To begin with, I would place some non-verbal communications in the emotional category rather than the visceral because their emotional content simply outweighs their physicality. That is, the fact of the action or message's being attached or connected to the body or context is not as important as the emotional content it carries. This is analogous to discursive versus emotional content: where when the latter outweighs the former, the message is considered emotional. Secondly, there are visceral aspects of a communication which I believe to be very important that would only be considered non-verbal communication at a stretch. These include power relations, argument style, social and cultural considerations such as class and gender, as well as other factors that influence an argument or can be used in an argument that would not traditionally be considered non-verbal communication.

The standard approaches place a huge emphasis on the discursive, often to the point where if something is not discursive it is, for all practical purposes, ruled out of court. How, I wonder, can one remove the physical setting of an argument from the process of the argument? How can we ignore the role, for example, of uniforms? Of a judge's robes? Or even the male professor's ubiquitous tweed jacket? Oh, the traditionalist answers, but it is a fallacy to take those things into account when evaluating an argument. But it is impossible not to take them into account when having an argument (Gilbert 2002). To mention but one

area in which such visceral considerations play an important role, consider gender in this argument. Edeslky and Tannen (1993), for example, show that men take more speaking turns than women in mixed gender meetings, and go so far as to suggest that the traditional yakky female is likely one who talks as much as a man. Gender makes an enormous difference in the process of an argument no matter how much we think it ought not (Gilbert 1994), and I cannot shake the feeling that it is important that we pay attention to what is before we focus only on what ought be.

Authority and categorization, whether by race, gender, culture, or any other means play an overwhelming role in the process of argumentation and we ignore it at our peril. The dearth of women in philosophy, for example, is laid by some (Rooney 2010) at the feet of the style of argumentation used in philosophy, and especially its reliance on the argument-as-war metaphor. What does it mean, then, to state that such factors are irrelevant to the analysis of an argument? It means that we are removing the argument from its context, examining it en abstracto, as a CRC, a claim-reason-complex, something that exists independent of its users, its hearers, its senders, or persons, and, I believe, there is no such thing. Having said that, let me give an appreciation to every model that is a tool in the Argumentation Theorist's toolbox. There is nothing wrong with taking a piece of an argument and using it to demonstrate the kind of connectivity that occurs in argumentation, or to show that different parts of an argument support each other in identifiable ways. Whether the process is one involving formal logic, informal logic, an argument map, or a Pragma-Dialectic speech act analysis, it is very valuable – so long as the analysis is not confused with the argument.

What I am doing by including the visceral mode as a form that must be investigated is making room for all the factors mentioned above as well as many others to be examined. Once we understand a mode, how it works, what its dynamics are, how it

can be used both properly and improperly, then we might be able to create some valuable normative correlates that will be useful. And this is why Argumentation Theory must be a discipline in its own right, rather than an area cobbled together from bits and pieces of other, more established areas. A ship builder will employ carpenters, electricians, all sorts of engineers, glaziers, and so on, but it is the art of creating a ship that must hold it all together so that the finished project is functional, beautiful, practical and buildable.

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Recently I have been thinking about the role of kisceral arguments (Gilbert 2010). The kisceral mode includes argument forms and data that are involved with intuition, the mystical, hunches, the religious, mysterious, and generally, non-sensory knowledge and forms of persuasion. As I regularly point out, more of the human population believes in the existence of invisible being such as gods, ghosts, spirits and so on than does not. Moreover, many of these people believe they have communion with such entities and/or insight into their nature and being. As puzzling as I find this, it is nonetheless the case, and even many highly educated persons maintain such beliefs. One need only look at the scholarly journals that abound in theology and religious studies to see the truth of this. The difficulty with the kisceral mode is two fold. The first issue reflects the strong sense of certainty, of surety, that many people have concerning some non-sensory belief, while the second centres on the inability of such beliefs to be subject to falsification. These two problems are closely related and intertwined.

Surety is at the core of intuition insofar as it puts these beliefs and arguments apart from other, more empirical beliefs. In fact, we often feel more strongly and believe more fervently in a select number of our non-sensory beliefs than we do in our collection

of facts. I believe with a great deal of certainty, for example, that if one were to write out an integer with as many places as hairs on the head of this audience, there would still be one higher. I can't prove this, yet I believe it with certainty. This is truly bizarre: here I am a highly rational person holding firmly to an unfalsifiable belief that claims that there exists an infinity of invisible objects. It gets worse. Not only do I hold such beliefs, but I also hold that many others who hold different falsifiable beliefs with just as much evidence as I have, and believe them just as fervently as I believe my beliefs, are wrong.

My friend Kathy believes that everything that happens to you happens because you want it to happen. You may not know that you want it to happen, but you must because otherwise it wouldn't happen. This includes everything from winning the lottery to having cancer. The analyticity and circularity of her position does not faze her in the least, anymore than the definitional quality of there being no highest integer perturbs me. Yet it strikes me that she is wrong and is not justified in holding her belief while I do have such justification. Here we might say: my belief is fact, yours is theory, and hers is mysticism. This translates somewhat less amusingly to, Mi opinión refleja los hechos, la tuya es mera teoría, la de ella es un caso de misticismo. In other words, I know what I am talking about but she doesn't. Nonetheless, both beliefs are unfalsifiable and both are held with a great deal of certainty, perhaps hers more than mine, but mine is pretty solid as well.

When philosophers talk about kisceral arguments they typically worry about such things as axioms and foundational normative principles (DePaul and Ramsey 1997). One ultimate difficulty for those who would like to dismiss intuitional arguments, is that the grounds for doing so typically rely on intuition (Sosa 2006). One way of thinking about kisceral arguments is to consider the Discovery/Justification distinction. We tell our introductory students that the process of discovery is different

than the presentation of justification. Yet in many kisceral arguments this is not the case; in those cases the experience of discovery is the same as the justification. The mystic whose acolyte proceeds along certain specified steps may be following the only form of justification available, just as the Intuitionist mathematicians saw the process of proof creation, the actual construction of a mathematical object, as essential to its justification. Are there facts we cannot comprehend if we do not have certain experiences? Can a male never understand a mother's love because he has never experienced pregnancy? Am I an atheist because I have never had a revelation or a mystical experience? In most cases I reject these ideas for what I consider are good reasons. I believe, for example, that there is likely no major difference between the love of an adoptive mother compared to a biological one, and once exceptions begin to accrue, it's only a matter of time before they become overwhelming.

The problem is that my belief, even if supported by evidence from social psychology, ultimately rests on an intuition as well. This means that the role of Argumentation Theory is to find the means for separating and evaluating different beliefs according to criteria that can be accepted by the partners, and agreed upon as legitimate grounds for distinguishing between acceptable and unacceptable beliefs. This, of course, has both object level and meta level applications. The object level may have identifiable rules and procedures as Western philosophy does with logic and its less formal siblings, or if not carefully laid there are likely precedents and traditions. On the meta level matters are more complex because it is there that we will find differences in basic means of establishing beliefs and truths. A Papal edict, for example, does not carry weight with a non-Catholic, while for a member of the faith it is a sign of absolute truth. In these cases kisceral arguments carry great weight, and the question of whether or not we can separate those we like and those we do not becomes much more tenuous. Still, the job is there to be done.

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It will have been noticed in my presentation that I have not distinguished between arguments as objects and arguments as processes, or, to use D. O'Keefe's (1977) language, argument1 and argument2. I have avoided this distinction because, on the one hand, the multi-modal framework cuts across them, and on the other, the distinction itself is not terribly useful aside from providing some paradigmatic exemplars. The real problem with the argument1 and argument2 distinction lies in the complexity and necessity of context in understanding arguments. The identification and isolation of a typical argument1 requires that we understand enough of the context to be able to remove it and inspect it, and yet, unless we are examining something created for a Critical Thinking class, it is impossible to understand it in isolation from that context. Moreover, if we allow that anything that influences an argument is part of it, then the context is part of it and, thereby, an argument2. We end up with a sort of Heisenberg Principle of Argumentation: to remove a part of an argument from its context is to thereby, ipso facto, change it. This is not to say that we cannot study something in isolation, but rather that when we do so we are missing a great deal of important information.

I believe it is obvious that the notion of context is important, and many authors and theories pay lip service to this. Examples are often preceded by short paragraphs that describe the general background, for example, of a letter to the editor. But this is nothing. Compare this to the analysis that might accompany the discovery of an anthropological relic where the surrounding area, adjacent soil, general location, historical knowledge of the area, flora and fauna will all be examined to learn more about the object. Context can demonstrate a great deal as when we examine a political situation and the arguments presented for it.

Duran's 2006 analysis of the Chilean press (Duran 2006), takes enormous amounts of local, social and historical information into account. Moreover, a rich account naturally examines the several modes as a means to understanding an object and its processes. If our archeological find was a tool, was it decorated? Did it appear cared for? Important to its owner? Part of a set? These are emotional questions. Was it made from local materials? What tools were used to make this one? These are visceral questions. Did it have a spiritual aspect? Were there designs appealing to gods or demons? These are kisceral aspects. Just as with other endeavours, understanding arguments requires a knowledge of the context, and the ways in which the message was communicated, intended and used. This, in turn, can be ably assisted by a multi-modal analysis.

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I have, in the preceding, tried to present both an amplification and defence of multi-modal argumentation. I believe, as do some others, that it can be a useful and powerful tool for investigating the structure, meaning, and reliability of arguments. We must never forget, in examining the models that make theorizing possible, that the models are but mere shadows of the reality.

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CHAPTER 13.

DEPICTING VISUAL ARGUMENTS: AN "ART" APPROACH

LEO GROARKE

Abstract: Twenty years after the publication of the first papers on visual argument, this essay provides an account of visual argument which reflects what we have learned from the subsequent discussion. It proposes an approach to the analysis of visual arguments that identifies their key components and depicts their structure. The same methodology can more broadly be applied (to purely verbal or other kinds of multimodal arguments), providing a systematic way to analyze all instances of argument. I propose it as one part of an "**ART**" approach to argument which acknowledges visual arguments and provides us with a way to represent their contents and test their strength.

Twenty years after the publication of the first papers on visual argument (Groarke 1996; Blair 1996), this paper presents a state-of-the-art account of visual argument and its place within informal logic and argumentation theory. It reflects what we can learn from the discussions of visual argument that have occurred over the intervening years. I will call the informal logic I develop **ART** for mnemonic reasons that emphasize its three constituent parts – parts I will label **A**, **R**, and **T**. **A** is an account of arguing which

is designed to ACKNOWLEDGE visual and other non-verbal (multimodal) argument components. **R** is a method that can be used to REPRESENT the components and the structure of visual arguments. **T** is a set of tools that can be used to TEST visual arguments in a way that determines whether they are weak or strong.

Though the ultimate goal of informal logic and argumentation theory is argument assessment (**T** in my theoretical tripod), I will leave this aspect of **ART** for discussion elsewhere. In this essay, I will provide an acount of argument that acknowledges visual arguments (**A**), though my primary focus will be the development of the second component of **ART**, i.e. the development of a method of representation (**R**) which can be used to represent the content and structure of a visual argument. The method I propose builds upon well established ways of analyzing and diagraming verbal arguments and extends them in way that can be applied to visual arguments (and other modes of arguing). It aims at ease of application at the same time that it dramatically expands our ability to analyze and represent the arguments that occur in real life arguing.

2. SOME PRELIMINARIES

I understand an argument as an attempt to justify a *conclusion* (a point of view) with *premises* that give us reasons to believe it is plausible, likely, true, acceptable, certain, etc. So understood, arguments are instances of reasoning that arguers use to support a point of view (which may be the view that some other view is mistaken). They may do so by citing physical evidence in its favour (as in "There are fresh footprints in the snow, so someone walked here recently.") or some thought or idea that supports it (as in "They are too angry to listen right now, so we shouldn't waste our time trying to talk to them."). As rhetoric and dialectics emphasize, instances of argument play a central role in attempts to convince an audience or interlocutor of some point of view,

but I take their core function to be more fundamental: to establish and provide support for what we can justifiably believe.

A visual argument is an argument with premises and/or a conclusion which are in some important way visual and not verbal. In visual arguments, what matters is not (or not merely) what is said in words, but what we *see* when we look at their non-verbal visual components. The latter may be gestures, photographs, illustrations, video, maps, graphs, cartoons, sculpture, architecture, pictorial signs, or other visual phenomenon. In most cases, visual arguments have verbal as well as visual components. In many cases, the interplay between them is a key element of an argument.

Some commentators (Fleming 1996; Johnson 2005; Patterson 2010) have rejected the idea that there can be visual arguments. I will say something about their views shortly. At the start of an essay on the current state of our understanding of visual arguments, it is more important to say that their doubts have not stopped the emergence of a growing literature focused on visual arguments and their analysis. This literature has been chronicled, added to, and discussed in Kjeldsen 2015; and in three special issues of *Argumentation & Advocacy* which were published in 1996 (Birdsell & Groarke 1996), 2007 (Birdsell & Groarke 2007), and 2016 (Groarke, Palczewski, & Godden, 2016). More recently, the discussion of visual argument has expanded to include accounts of "multimodal" arguments which incorporate not only pictures and other visuals, but gestures, sounds, smells and other kinds of experiences (see, e.g., Kišiček 2014; Groarke 2015; Van den Hoven & Kišiček 2015; Groarke and Kišiček 2016; and Tseronis and Forceville 2017). Other important works in argumentation theory (notably, the account of modes in Gilbert 1997 and Van den Hoven 2016) have made important contributions to the discussion. Tseronis and Forceville 2017 provide a helpful introduction to the study of multimodal arguing.

In this essay I will not discuss the critique of visual arguments found in Fleming 1996 (the reader can find a detailed response in Groarke, Palczewski, & Godden 2016). One finds a more recent rejection of visual argument in Patterson 2010. I cannot discuss his views in detail here, but I will note some keys ways in which they differ from the view elaborated here.

One problem with Patterson's arguments is his focus on "purely visual arguments." As he puts it at one point, his thesis is that "it is a mistake to think that there are purely visual arguments, in the sense of illative moves from premises to conclusions that are conveyed by images alone, without the support or framing of words" (Patterson 2010, p. 115). Here it will suffice to note that I have not defined visual arguments as arguments that are "purely visual" ("conveyed by images alone, without the support or framing of words"). The definition I assume only requires that they have important (non-verbal) visual content. This content usually is combined with words, all the more so when one considers the broader context which provides "support" or "framing" for a particular instance of argument. In real life arguing, arguers typically mix words and visuals and whatever other modes of expression (non-verbal sounds, music, etc.) which can be used to make a compelling case for a conclusion they propose. I can find no author who has studied and defended visual arguments who has defined them in the rarefied way that Patterson has suggested.

One might still ask whether Patterson's doubts about purely visual arguments can be applied to visual arguments in some more general way. The crux of these doubts is the notion that pictures cannot have the meanings that arguments require because they lack the conventions we associate with words. As he writes:

> The ways in which we might interpret a sentence are bounded by the sentence's being embedded in the rule-governed, communal activity of language. The conditions under which a sentence,

> uttered by a speaker, will be intelligible to an audience of the same linguistic community restrict the possible meanings of the sentence. Importantly, these conditions restrict not just the meanings that the audience is likely to 'take away' from the speaker's utterance, but the meanings that the speaker may coherently intend by what he says…. Whereas rules and communal criteria of meaning keep us from falling into humpty-dumptyism with language, there are no such checks on picturing. (Patterson 2010, pp. 111-112)

In this essay it must suffice to say that one of the first lessons one learns in art history and other disciplines that study visuals is that arguers use visuals in ways that follow commonly accepted conventions, parameters and constraints (see, to take one example, Kostelnick and Hassett 2003). A skull represents death; a flag represents a nation; a company is known by its logo or coat of arms; in a photographic essay, images are understood as literal representations of reality; in political cartoons, they are typically understood as caricatures, metaphors or allusions to canonical stories; a halo represents a saint; the colour red may mean stop (or the red ink of a deficit) while the colour green signifies go (or the environment); the different kinds of lines in a blueprint or on a map are understood in a particular way; and so on and so forth.

Patterson appeals to the later Wittgenstein in defense of his own views. In response to his interpretation I would argue that Wittgenstein can be more plausibly interpreted in the opposite way, Nyíri suggests that he embraces pictures in an attempt "to overcome the barriers of verbal language by working towards a philosophy of pictures" (Nyíri 2001 p. 4). In keeping with this, Wittgenstein's account of meaning in the *Investigations* (1953) is founded on an account of language games which is designed to expand his earlier account of language and does so in a way that includes many activities in which communication relies on visuals as well as (or instead of) words (see, e.g., 1.16, 1.23, 1.86, 1.140, 1.291, 48, 70, 108, 108, 166, 169, 216, 280, 398, 432-434, 454, 520, 522, 526; 539, 548, 563; 2.iii, 2.xi 2.xii).

In a practical account of visual argument that aims to analyze real life instances of arguing, questions about the interpretation of visual arguments can be answered by applying the pragma-dialectical principles of communication to instances of visual argument (see Groarke 2002). They suggest that we should interpret visual arguments in a way that:

i. assumes that the visual components used by a visual arguer are part of an understandable act of arguing;

ii. interprets key visual components of an argument in a way that makes sense of the major elements they incorporate – visual, verbal, or otherwise (and are in keeping with the conventions that apply in the case at hand); and

iii. favours an interpretation that makes sense within the context and the discourse in which the argument is embedded.

This does not mean that the interpretation of visual arguments is always easy or definitive. Like verbal claims, visual acts of communication may be unclear, vague or ambiguous (or guilty of fallacies like equivocation). In particular instances of arguing, it is enough to say that these three principles of interpretation raise the key questions that need to be asked when we attempt to interpret the visuals, words, sentences and other components that make up an act of arguing.

No general account of interpretation will solve all the problems of interpretation that arise in the study of visual or verbal arguments, but the **ART** approach to visual arguments is expressly designed in a way that reduces the role that the verbal interpretation of visuals needs to play in argument analysis. It does so by emphasizing a visual account of the visual rather than verbal interpretations of their visual content (something that was more frequently emphasized in early attempts to analyze visual arguments – see, for example, Groarke 1996).

3. ACKNOWLEDGING VISUAL ARGUMENTS

In many ways, the growth of visual (and multimodal) argument has been driven, not by contributions to the theory of argument, but by a desire to explain the reality that visuals are important components of many real life acts of arguing. Words provide us with one important way to provide reasons for accepting a conclusion, but they are not the only way to do so. Real life arguers often use visuals for the simple reason that they can be an effective way to express a standpoint or present reasons in its favour. If we want a comprehensive theory of argument that accounts for real life arguing, the use of visuals in these two roles implies that our theory must account for visual arguments in one way or another, and cannot be bound by the traditional assumption that arguments are composed of sentences (or of propositional analogues which are defined and understood in terms of them).

Outside of argumentation theory, visual arguing has a long history. Gestures (pointing, hand signs, facial expressions, etc.) can be used to create very basic arguments without the use of language and probably preceeded it. In the history of art, painting is often used to tell stories in a way that favours some conclusion. In modern times, the use of visual argument increased significantly because technological advances made it easier to create and reproduce images. Most notably, the invention of the printed book allowed the widespread printing and circulation of illustrations as well as text. In the 17th century the work of Athanasius Kircher, one of the intellectual giants of his time (see Findlen 2004), is notable for its frequent use of illustrations. They include illustrations in support of mundane scientific projects – showing how hot and cold springs originate, depicting different planetary systems, illustrating the way that various machines work, etc. – as well as more eccentric images that are said to depict what Noah's ark must have looked like (said to be proven by reference to testimony in the Bible), the shape of the lost island of Atlantis (derived from ancient accounts), and

an illustration which is said to prove that the Tower of Babel could not have reached the moon. Works of this sort include many attempts to support visual conclusions or provide visual evidence for a conclusion that is expressed verbally or visually.

The rise of visuals as we know them gains more momentum from the invention and evolution of photography. A famous example that illustrates its implications in the world of argument is associated with the racist murder of Emmitt Till in the United States in 1955. Till was a 14 year old black boy who was kidnapped, beaten, tortured and then murdered because he whistled at a white woman. Sturken and Cartwright (2009, p. 11) describe what happened in the aftermath.

> Till's mother, recognizing the power of visual evidence, insisted on holding an open-casket funeral. She allowed his corpse to be photographed so that everyone could see the gruesome evidence of violence exacted upon her son. The highly publicized funeral, which brought 50,000 mourners, and the graphic photograph of Till's brutalized body [with his eyes gouged out], which was published in *Jet Magazine*, were major catalysts of the nascent civil rights movement…. In this image, the power of the photograph to provide evidence of violence and injustice is coupled with its power to shock and horrify.

In making her decision to 'go visual,' holding an open-casket funeral and widely disseminating photographs of Emmitt Till's mutilated body, Till's mother and her supporters provided visual evidence that gave others a reason to believe that Till was grossly mistreated. The photographs they arranged still circulate widely on the internet, and are still employed in arguments in support of the conclusion that America has issues of racism that need to be addressed.

The use of photography – still photography, documentary film, video and, most recently, virtual reality – now plays a central role in social and political discussion, debate and argument. Visual argument also plays an important role in scientific argu-

ment and discovery. Dove 2011 provides an example in his account of the use of visual reasons for conclusions about the Ivory-Billed Woodpecker. Recent claims that it is not extinct are rooted in controversial video footage which is said to record an existing Ivory-bill in the southern United States. Whatever one decides about the footage and the debate, the controversy emphasizes the importance of visual evidence in ornithology. Donahue 2017 summarizes the views of four key authorities (Jackson, Collins, Fitzpatrick, Gallagher) as follows.

> The bottom line [according to Jackson] … is there's no way to know what Collins saw from that video. Which raises an important question: What exactly would be considered enough evidence to prove the bird's existence? Fitzpatrick, an Ivory-bill chaser himself, says that … "a clear, unambiguous photo of an Ivory-bill is what everyone expects for full, conclusive proof." … Tim Gallagher, who led the search for the Ivory-bill in Cuba last year, agrees that the bar is high….

Collins has argued that the debate should, in lieu of clear visual evidence, consider a "move away from an image-only definition of evidence," but not because he rejects such evidence (which he himself employs). His suggestion is that ornithologists should consider other kinds of evidence as well, but not in a way that would undermine photographic images as necessary evidence in a convincing argument that some species of bird currently exists.

The importance of visual evidence and visual reasoning in real life arguing continues to increase in the wake of the development and spread of digital technology which has made visual arguing ubiquitous. In a way that was not imaginable in earlier epochs, almost anyone can record and distribute what they see (and, remotely, what they don't see directly) in some form of photography. In recent weeks, the local news where I live has been preoccupied with an altercation between a truck driver and cyclist which was recorded by a witness on their phone. The release of the video (still available at <https://www.youtube.com/

watch?v=lCuh8Dr0npE>) has precipitated widespread condemnation of the trucker's actions and an intervention by the police, who have charged him with assault with a weapon. In the news, in conversation, and in court, the videotape functions as the prime reason for concluding that the trucker is guilty of assault.

Most uses of photographs in arguing are instances of "demonstrative" visuals – visuals which attempt to depict the physical world and replicate its key properties (shape, colour, relative size, etc.). Shelley 1996, 2001 distinguishes between demonstrative and "rhetorical" visuals which support particular standpoints, not by being literal depictions of the world, but by functioning as

Figure 1: Cartoon on Hamas (Bob Englehart)

symbols, metaphors and/or allusions that give reasons for some moral judgment. Political cartooning, no longer confined to print newspapers, is one argumentation genre which exploits the effectiveness of visuals of this sort. *Figure 1* provides a ready

example, criticizing the Palestinian group Hamas by suggesting that its bombing of Israel is foolish and counterproductive. It does so by depicting the bombing metaphorically, as an attempt to penetrate an impentrable Israeli iron dome that results, not in the bombing of Israel, but of Palestinian families and citizens.

4. KC TABLES AND DIAGRAMS

Acknowledging visual argument is an important first step toward an inclusive theory of argument, but a fully developed theory must be built on systematic ways of analysing and assessing visual arguments. **ART**'s second element addresses the first of these requirements by proposing a way of analysing visual arguments which is an extension of well-established ways of representing verbal arguments. The resulting approach can be used to analyse any argument, whether it is verbal, visual, or multimodal in some other way.

An **ART** analysis of an argument consists of two parts:

- a "Key Component" (KC) table which identifies the argument's premises and conclusions; and
- an argument diagram that depicts its structure.

In the case of simple arguments, there may be no need to conduct this kind of analysis, though it can still serve as a helpful way to clearly specify the content and structure of an argument. In the case of long and complex extended arguments, the most practical way to apply the **ART** method may be by distinguishing various subarguments and applying the method to each of them.

Real life instances of argument are often unclear in a variety of ways. In the process of constructing KC tables and diagrams, arguments can be clarified by discarding unnecessary, irrelevant or redundant digressions; by better stating claims that are poorly expressed; by recognizing implicit premises and conclusions; and by restating or explaining rhetorical questions, allusions and

other stylistic elements. In situations in which an argument can be interpreted in a variety of ways, alternative interpretations will correspond to different tables and diagrams.

The components of the **ART** approach can be illustrated with simple examples of purely verbal argument. My first example, adapted from a discussion of the work of the medieval logician William of Sherwood in Kretzmann 1966, can be analysed as in

Key Components	***Role***	***Explanation***
Sherwood "uses two examples which feature Paris – one mentions the River Seine, the other the university."	Premise (***e***)	Verbal claim
"[A]ll the philosophers influenced by him or his writings were in Paris at some time during a span of years when he could have been lecturing there."	Premise (***a***)	Verbal claim
"There is good reason to believe that William was a master at the University of Paris."	Conclusion (***m***)	Verbal claim

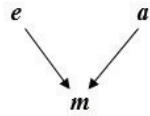

Figure 2: KC table and Diagram for Kretzmann's Argument

Figure 2. In this case the components of the argument are clear and straightforward, so there is little to explain in the column of the KC table which I have labelled "Explanation." I have simply noted that the premises are expressed as verbal claims. The diagram for the argument is, like the KC table, straightforward. Its two arrows connect two reasons for agreeing with Kretzmann's conclusion. One of them cites the examples William of Sherwood uses in his writings; the other the philosophers he influenced.

Our first application of the **ART** method is unremarkable, but it usefully illustrates the basic format of the **ART** approach to

argument analysis. In the case of other arguments, there are other aspects of argument that must sometimes be recognized, as they are in standard argument diagrams. One of them is the distinction between "linked" and "convergent" premises: between premises which provide separate strands of evidence that converge on a proposed conclusion (as in our first example) and premises that are "linked" (or "dependent"), providing a reason to believe the proposed conclusion only when they are combined with (i.e. linked to) one another.

Figure 3 contains a KC table and a diagram for an argument with linked premises taken from a game of "Detective" ("The murderer was someone very strong, for they threw the chair in the room at the victim and it was a heavy armchair."). KC tables

Key Components	***Role***	***Explanation***
"[T]hey threw the chair in the room at the victim."	Premise (***t***)	Verbal claim
"[It] was a heavy armchair."	Premise (***h***)	Verbal claim
"The murderer was someone very strong."	Conclusion (***s***)	Verbal claim

Figure 3: KC Table and Diagram for a "Detective" Argument

follow standard diagramming conventions in the case of linked premises, using a plus sign (+) to connect them. In this case, the premises (***t*** and ***h***) are linked because the claims that the chair in the room was a heavy armchair (***h***) and that the murderer threw it at the victim (***t***) provide evidence for the claim that the murderer was someone very strong (***s***) only when we combine them.

Implicit premises and conclusions are another aspect of argument we need to recognize when we construct KC tables and their associated diagrams. In real life discourse, many claims or

standpoints are left unsaid because they are obvious or obviously implied. In analysing the content and the structure of arguments (and ultimately their strength) these implicit components may need to be recognized. When someone says: "The murderer was very strong, so George cannot be the murderer." they assume and imply that George is someone who is not very strong. Because this is a key component of the reasoning which must be considered when it is assessed as weak or strong, it needs to be

Key Components	***Role***	***Explanation***
"The murderer was very strong."	Premise (***s***)	Verbal claim
[George is not very strong.]	Premise [***g***]	Verbal claim
"George cannot be the murderer."	Conclusion (***n***)	Verbal claim

Figure 4: An Argument with an Implicit Premise

recognized in an analysis of the argument. *Figure* 4 shows how this can be done in a KC table and diagram (by using square brackets to indicate the implicit nature of this argument component and by noting this when one explains it). Like other enthymemes, this example is one which shows that arguments may depend on more than what is explicitly said in words, and that this can be recognized and accommodated when one constructs a KC table and diagram.

5. REPRESENTING VISUAL ARGUMENTS IN ART

We can apply the **ART** approach to argument analysis by recognizing visual elements as premises in KC diagrams. Consider a situation in which my wife suggests that we should go to see Neuschwanstein Castle (the famous Bavarian castle built by King

Ludwig II) on a trip to Germany. When I question her suggestion, she tries to convince me that it is something worth seeing by showing me the photograph in *Figure* 5. In doing so she provides me with a reason for concluding that we should visit Neuschwanstein, though she does so visually – appropriately so given that the issue at question is what we should go to *see*.

Figure 5: Neuschwanstein Castle at Dusk

We can describe the argument by saying that my wife has provided me with a visual premise (a visual reason) in support of her contention that "We should go to see Neuschwanstein Castle." As *Figure* 6 demonstrates, we can analyze this simple visual argument using the **ART** method by including its visual premise in a KC table and diagram.

The analysis in *Figure* 6 recognizes that the argument it summarizes is a case of reasoning and inference that might in many ways be compared to (or contrasted with) others. It outlines the content and the structure of the argument in a way that remains

true to its visual character. This is an essential element of the argument. Arguments about the castle which are wholly verbal can describe what it looks like, possibly in poignant ways. But they cannot provide the detail we see in the photograph and do not *show* us what the castle looks like. Unlike the words in a description, the photograph allows us to *see* the castle in the way photographed.

This does not mean that the photograph and the visual argument it informs cannot be criticized. Like other arguments, visual arguments may be weak or strong. The reason it is important to analyze them is because this is the way to prepare them for assessment. Like verbal premises, a visual premise may be rejected. In the current case, someone might claim the photograph was 'doctored' in some way, taken on a rare evening, or from a vantage point that makes it a poor indication of what one is likely to see when one visits Neuschwanstein. Even if one accepts the photograph as a reliable account of what is likely to see there, one might reject the proposed conclusion by arguing

Key Components	***Role***	***Explanation***
	Premise (***p***)	Visual (photograph of Neuschwanstein at dusk)
"We should visit Neuschwanstein."	Conclusion (***v***)	Verbal claim

Figure 6: KC Table and Diagram for the Neuschwanstein Argument

that it doesn't follow (because there are other sites to visit that are, for example, more spectacular or more historically interesting).

Real life arguing proceeds dialectically, in ways that frequently mix verbal and visual modes of arguing. I may respond to my wife's entreaty to go and see Neuschwanstein by saying that the photograph in question shows that it is beautiful to see in the summer, but we are visiting Germany in January. She may respond by producing a photograph of the castle in the winter, in an attempt to prove to me that it is something worth seeing then.

My wife might bolster her argument in other ways as well. When I ask her to give me a reason why we should go to Neuschwanstein she may show me the photograph of the mural in *Figure* 7 and say "You love exquisite murals. So we should go see Neuschwanstein." In this case, the premises of her argument provide (i) visual evidence for the suggestion that there is an exquisite mural at Neuschwanstein and (ii) verbal testimony for the claim that I love exquisite murals. Linked together, the visual and verbal premise support the conclusion that we should visit, in the way represented in the KC table and diagram in *Figure* 8.

In a very general way, constructing KC tables and diagrams does for visual arguments what traditional standardization and diagramming (what is usefully called the "dressing" of arguments) does for verbal arguments. In both cases, one analyzes an argument by identifying and extracting its premises and conclusions, and by representing them and its inferences in a diagram which illustrates its structure. In the process, we 'zero in' on what is essential to the argument, adding implicit elements that need to be recognized at the same time that we eliminate explicit elements which are not directly relevant.

Figure 7: Neuschwanstein Mural (St. George Slaying the Dragon)

Key Components	*Role*	*Explanation*
	Premise (*g*)	Visual (photograph of the St. George mural)
"You love exquisite murals."	Premise (*l*)	Verbal claim
"We should go see Neuschwanstein."	Conclusion (*s*)	Verbal claim

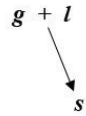

Figure 8: KC Table and Diagram for the Mural Argument

One last Neuschwanstein example can illustrate **ART** analysis. Suppose that someone argues that one special feature of the castle's art is a concerted attempt to incorporate visual references to it in the works that it contains. If someone sceptically presents the St. George mural as a counterexample, we might rebut their claim by pointing to the swan on St. George's helmet (a clear reference to Neuschwanstein – the "New Swan" castle, named after a character in Wagner) and to the silhoutte of the castle on the mountainin the background. In this situation, it is not the context of the mural or its central elements that matter, but specific details that provide visual reasons for believing the proposed conclusion. Considered from this point of view, the image is like a paragraph (not a sentence) insofar as it may be its component parts, not its whole, that is central to an argument. In this case, we can dress the argument as in *Figure* 9.

The **ART** way of representing visual arguments has many advantages. It allows us to depict their structure in a systematic way that shows it comparable to the structure of verbal argu-

ments, but does so in a way that recognizes their visual content. The **ART** approach allows us to use the same method of analysis for verbal and for visual arguments – and, in principle, for other kinds of multimodal argument. In the latter case, the Key Component boxes in a KC table can include verbal statements, visuals, or other multimodal carriers of meaning (e.g. a guttural sound, a bar of music, an experience of some sort, and so on). The result is a standard method that can be used in preparing any argument for assessment – and in this way further the discussion and the dialectical exchange in which it is embedded.

Key Components	***Role***	***Explanation***
	Premise (***s***)	Visual (detail from the photograph of the St. George mural)
"Neuschwanstein" means "New Swan Castle."	Premise (***n***)	Verbal claim
	Premise (***c***)	Visual (detail from the photograph of the St. George mural)
The castle in the upper left hand corner of the photograph looks to be Neuschwanstein.	Premise (***m***)	Verbal claim
"The St. George mural incorporates visual references to Neuschwanstein."	Conclusion (***s***)	Verbal claim

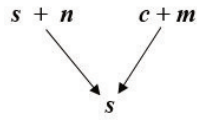

Figure 9: KC Table and Diagram for the Mural Argument

6. THREE EXAMPLES

One feature of visual arguing which is difficult to overstate is the extent to which it encompasses different forms of visual argument. The following three examples illustrate some of this diversity.

Tailgating

Figure 10 is a photograph of a Colorado state billboard designed by an advertising agency (Amélie). It was used in a campaign which aimed to reduce the number of cars tailgating trucks on public highways. The central image on the billboard provides automobile drivers with a reason why they should not tailgate – because it could precipitate the kind of accident graphically

Figure 10: Tailgating Billboard

depicted on the billboard. A second visual element combines the insignia of the police force that patrols the highways (the Colorado State Patrol) with the verbal imperative "GIVE TRUCKS

ROOM. IT'S THE LAW" making this a warning from the police (as a signature on a formal letter ordering one to do something authorizes what the letter says). So understood, we can dress the argument the billboard conveys by constructing the KC table and diagram in *Figure* 11.

Key Components	***Role***	***Explanation***
	Premise (***a***)	Visual (3 dimensional, showing a typical accident caused by tailgating)
	Premise (***l***)	Verbal/Visual (statements accompanied by the insignia of the Colorado police)
"TAILGATING ISN'T WORTH IT."	Conclusion (***t***)	Verbal claim

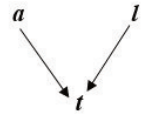

Figure 11: KC Table and Diagram for the Tailgating Billboard

Our tailgating example highlights a visual argument which has convergent premises. In other cases, visual premises are linked to other premises that may be verbal or visual (or both). We have already seen one example of this kind of argument in our discussion of the Neuschwanstein mural. *Figure* 12 is the basis of another. It is a NASA photomontage which compares two photographs taken by the Mars Phoenix Lander. One shows a dig made by the rover on sol (Martian day) 20, the other shows the same dig four sols later. The details (outlined in yellow) at the top of the montage are enlargements of the lower left corner of the two larger photographs.

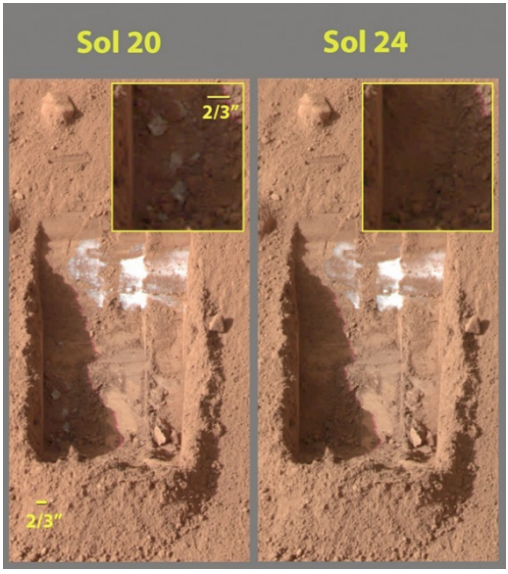

Figure 12: NASA Mars Photomontage

When one looks at the two photographs carefully, one sees an important difference. In the first photograph (most prominently, in the lower left corner of the dig and in the enlarged details) one sees white crystal patches which are no longer evident in the second photograph. As the following tweet reported at the time, NASA scientists took this difference as a reason to conclude that there is water (in the form of ice) on Mars.

> There is water ice on Mars within reach of the Mars Phoenix Lander, NASA scientists announced Thursday. Photographic evidence settles the debate over the nature of the white material seen in photographs sent back by the craft. As seen in [the photographs]…, chunks of the ice sublimed (changed directly from solid to gas) over the course of four days, after the lander's digging exposed them. 'It must be ice,' said the Phoenix Lander's lead investigator, Peter Smith. 'These little clumps [we see] completely disappearing over the course of a few days, that is perfect evidence that it's ice.' (Madrigal 2008)

This is an argument that corresponds to the first diagram in *Figure* 13. I have added a second diagram and a further premise to the KC table (***b***) as a way to dress a later elaboration of this argument that added a verbal claim that ruled out the possibility that the white crystals were some other substance that evaporated when exposed to the sun (this premise was backed by other arguments which I have not represented). The two diagrams outline visual arguments that highlight visual premises which are linked to other (visual and verbal) premises.

Key Components	***Role***	***Explanation***
	Premise (***1***)	Visual (view of the Phoenix dig on sol 20)
	Premise (***2***)	Visual (view of the Phoenix dig 4 sols later)
The best explanation is that the white crystals are water ice.	Premise (***b***)	Verbal (explanation)
There is water on Mars.	Conclusion (***w***)	Verbal claim

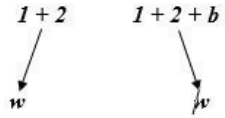

Figure 13: KC Table and Diagrams for two Mars Arguments

A Placard at an Abortion Rally

Like many verbal arguments, visual arguments frequently function as enthymemes. In such cases a visual argument has an implicit premise or conclusion which is implied but not stated (visually or verbally). The visual symbol pictured in *Figure* 14 has become a standard meme used in the debate about abortion. It is

Figure 14: Pro-choice Abortion Symbol

Key Components	***Role***	***Explanation***
	Premise (***s***)	Visual (a visual negation, the sign stating that 'coat hanger' abortions are unacceptable)
[Legalizing abortion will prevent coat hanger abortions.]	Premise [***p***]	Implicit
Abortion should be legal.	Conclusion (***l***)	Verbal claim

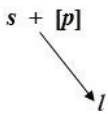

Figure 15: KC Table and Diagram for the Abortion Sign

often placed on placards at demonstrations supporting legalized abortion. Participating in such a demonstration is itself a speech act that declares that one believes (and, quite literally, 'stands up' for the view) that abortion should be legal.

When a demonstrator at such a demonstration holds up a placard with the coat hanger symbol it needs, like any visual symbol, to be understood and interpreted in a way that is consistent with the context and the visual conventions that govern its visual elements. In this case, this is not difficult to do. The red circle with a diagonal is straightforward, functioning as a visual sign for negation. In the context of an abortion rally, the coat hanger which it negates is readily interpreted as an allusion to the crude and dangerous 'coat hanger' abortions that fueled a widespread call for legalized abortion. Carrying the sign is a way to make an argument which provides a reason for believing the holder's view that abortion should be legal (for legalized abortion is a safe alternative to coat hanger abortions). The argument's components and structure are outlined in *Figure* 15.

7. COMPLEX VISUAL ARGUMENTS

So far, I have tried to show how the **ART** approach to argument analysis identifies the key components and the structure of visual arguments which are "simple" insofar as they consist of premises which support one conclusion. "Extended" visual arguments, like extended verbal arguments, incorporate layers of inferences and subconclusions that ultimately lead to some main conclusion. In some cases, such arguments incorporate very long and complex chains of reasoning. A book or a documentary film defending some point of view may offer an extended argument which combines hundreds of premises and/or conclusions (visual, verbal, or multimodal).

In many circumstances, the best way to deal with extended arguments is by breaking them into their constituent subarguments and analyzing each. But there are many extended argu-

ments that can usefully be analyzed as one argument which incorporates subarguments that support it. The following two examples illustrate the point that this is often possible with visual examples of extended argument.

Fast Food Advertising

Variations of the poster in *Figure 16* can be found on hundreds of websites on the internet. Sometimes it is featured with the title "Fast Food Advertising vs. Reality." It aims to discount fast food advertising by pairing photographs of fast food items as they appear in advertisements for these items with photographs of these same items purchased at actual restaurants. In each case, the comparison suggests that fast food advertisements are misleading, and fail to accurately picture the food that fast food brands sell at their actual restaurants. The result is an extended visual argument that is made up of a series of subarguments that support the implicit conclusion that Fast Food advertisements misrepresent the food they advertise.

When we construct a KC table and diagram for this extended argument we need to recognize four subarguments, each of them tied to one of the four fast food items featured: Mcdonald's Big Mac; Burger King Whopper; Mcdonald's Angus Deluxe TP; and the Taco Bell Crunchy Taco. In each case, the subargument contrasts two visual premises, one which replicates the image of the item one finds in fast food advertising, and one which is a photograph of an example of the item which was purchased at an actual restaurant. The result is four comparisons which suggest that the purchased items fail to match what is advertised in fast food advertising. Each of these four conclusions support the further conclusion that fast food advertising fails to represent reality.

Figure 16: Fast Food Advertising vs. Reality

Key Components	***Role***	***Explanation***
	Premise (***bm1***)	Verbal/Visual: the Big Mac in advertisements
	Premise (***bm2***)	Verbal/Visual: an actual Big Mac
[McDonald's misrepresents Big Macs.]	Conclusion [***c1***]	Implicit
	Premise (***w1***)	Verbal/Visual: a Burger King Whopper in advertisements
	Premise (***w2***)	Verbal/Visual: an actual Whopper
[Burger King misrepresents Whoppers.]	Conclusion [***c2***]	Implicit
	Premise (***a1***)	Verbal/Visual: the Angus Deluxe in advertisements
	Premise (***a2***)	Verbal/Visual: an actual Angus Deluxe
[McDonald's misrepresents the Angus.]	Conclusion [***c3***]	Implicit
	Premise (***t1***)	Verbal/Visual: the Crunchy Taco in advertisements
	Premise (***t2***)	Verbal/Visual: an actual Crunchy Taco
[Taco Bell misrepresents Crunchy Tacos.]	Conclusion [***c4***]	Implicit
Fast food ads misrepresent reality.	Conclusion (***m***)	From the title

Figure 17: KC Table for Fast Food Argument

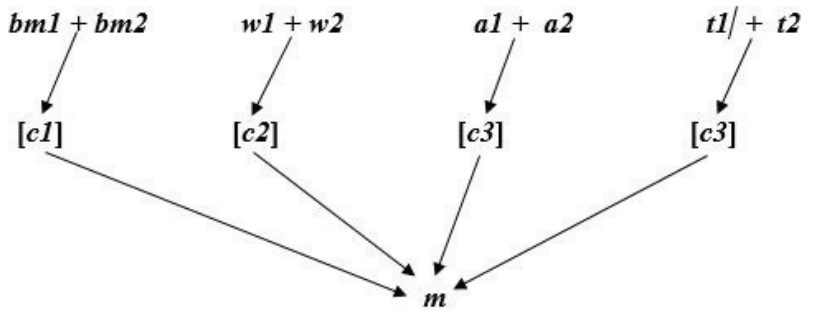

Figure 18: Diagram for Fast Food Argument

A KC table identifying the key components of this extended argument is found in *Figure* 17. *Figure* 18 is a diagram that maps the structure of the entire argument. This dressing of the argument usefully demonstrates how the poster functions as an extended argument which is made up of a series of inferences that culminate in the final conclusion. This mapping of the argument is a useful guide when we assess it, for this needs to be done by evaluating its various components as reliable or unreliable and each of the inferences that support its conclusion as weak or strong. In the first case we must ask whether its key photographs are reliable reproductions of an advertising image or a purchased item. In the second case we must ask whether the conclusion follows from the subconclusions. Doing so systematically raises the questions that need to be answered in a full evaluation of the argument.

In the present context, the important point is that one misunderstands the poster if one treats it in the way that argumentation theorists have traditionally treated visuals – as a visual curiosity or an act of persuasion rather than argument. And that one fails to fully engage it if one treats it in the way that most viewers still do – i.e. as something which does not need to be subjected to a detailed, systematic critical analysis.

Obama Pinocchio

Figure 19: Obama Pinocchio

The Michael Ramirez Obama caricature in *Figure* 19 presents the former President as Pinocchio. The Pinocchio story is a common theme in editorial cartoons (see Groarke 2017) which frequently compare some political situation to the plot of some canonical story (The Trojan Horse, David and Goliath, Alice in Wonderland, etc.). In the case of Pinocchio, the key visual motif is an elongated nose which grows, like Pinocchio's nose in the original story, every time its owner lies.

In the cartoon in *Figure 19*, the cartoonist's ultimate standpoint is best expressed in the caricature that is presented as a detail in *Figure* 20.

Figure 20: Obama Pinocchio Standpoint

There is no exact way to replicate this standpoint verbally, for the visual ridicules Obama in a way that is difficult to capture in words. Putting this aside, the standpoint can be roughly paraphrased as the claim that Obama is, like Pinocchio, a (ridiculously) inveterate liar who cannot be trusted. Taken as a whole, the cartoon is best understood as an extended argument which provides a series of reasons that purport to show that Obama is a liar like Pinocchio. Each reason can be understood as a subargument which extends the force of the claim that Obama is a liar by building on the previous claims to this effect (something indicated by extending Obama's nose further. *Figure* 21 analyzes the first of these subarguments.

Key Components	*Role*	*Explanation*
"[Obama says] the private sector is doing fine."	Premise (p^1)	Verbal claim
[It is a lie to say that the private sector is doing fine.]	Premise [ip^1]	Implicit
	Conclusion (c^1)	Visual (the extended nose indicating that Obama is a liar)

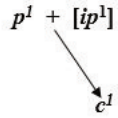

Figure 21: KC Table and Diagram for the First Subargument in "Obama Pinocchio"

Within this essay, space constraints do not allow me to construct a full KC table or diagram here, but it is easy to summarize what it would look like. For Ramirez's extended argument contains thirteen subarguments which support the claim that Obama is a liar (and, ultimately, an outrageous liar). Each subargument pairs a claim that Obama has made with the implicit claim that it is a lie, inferring (as the cartoonist's own arrows indicate) that Obama is a liar (and more and more so as the chain progresses). We can separate the different components of the argument by labelling each of the explicit verbal premises as $\boldsymbol{p^1}$, $\boldsymbol{p^2}$… $\boldsymbol{p^{13}}$, and each of the corresponding implicit premises (claiming that the verbal premise is a lie) as $\boldsymbol{ip^1}$, $\boldsymbol{ip^2}$… $\boldsymbol{ip^{13}}$; by representing the different subconclusions (that Obama is a liar) as $\boldsymbol{c^1}$, $\boldsymbol{c^2 \ldots c^{12}}$; and by representing the main conclusion (which is

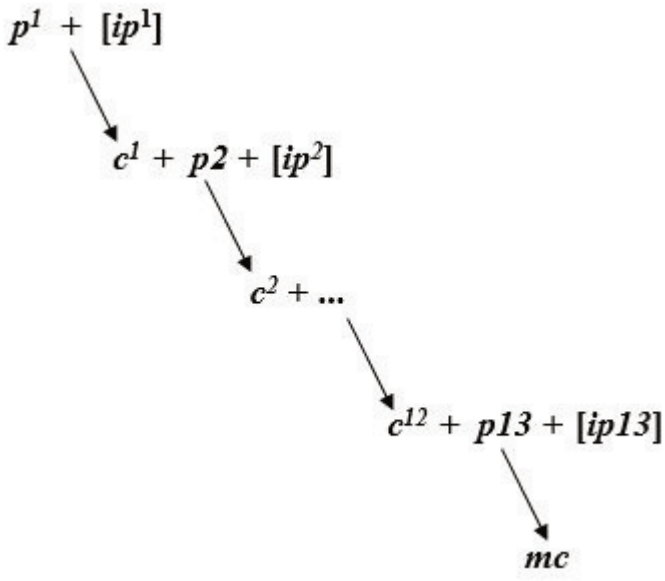

Figure 22: KC Table and Diagram for Obama Pinocchio

expressed in the visual caricature) as ***mc***. We can then depict the argument as an argument of the form diagrammed in *Figure* 22. Once again, our dressing recognizes the content and the structure of an extended argument and can serve as a first step toward a proper evaluation of it as an argument which successfully (or unsuccessfully) establishes its conclusion.

8. QUOTATION, DESCRIPTION, AND OSTENSION

One element of an **ART** analysis is a KC table which identifies the key components of an argument. When they can be expressed in purely verbal ways, a KC table identifies them by quoting them, or by paraphrasing their content. In the examples I have already analyzed, visual components are identified by visually reproducing them – as thumbnails in KC tables. I call this process "visual

quotation" because it aims to reproduce an original (or some detail of an original) it refers to.

In many ways, visual quotation is the best way to identify visual premises and conclusions in an argument. A verbal description can be helpful (typically, by highlighting some aspect of it), but *looking* at a visual is an essential element of a visual argument. *Reading* a description of it is a fundamentally different act. Attempts to analyze visual arguments by translating them into words are, in view of this, inevitably approximate, incomplete, and often open to dispute. Competing descriptions of a visual are always possible.

This makes visual quotation the preferred way to identify visual argument components, but there are practical circumstances in which it is impossible – because one does not have the technology or the time it takes to create a visual quotation. In circumstances of this sort, an alternative way to create KC tables and diagrams is by specifying the visual elements of an argument by "ostension." Ostension does not aim to replace seeing with a verbal description but instead attempts to direct our seeing in some way – physically, by pointing, or by words that direct us to something that can be identified and seen.

Figure 23: Smokefree Advertisement

In cases in which we do not have a practical way to incorporate visual images in a KC table, ostension can serve as an alternative way to isolate an argument's visual components. I have demonstrated this method of constructing a KC table by analysing a National Health Service anti-smoking advertisement in *Figure 23* and *Figure 24*.

Key Components	***Role***	***Explanation***
"The average smoker needs over 5000 cigarettes a year."	Premise (***n***)	Verbal
The photograph of a smoker hooked with a fish hook.	Premise (***f***)	Visual (visually comparing a hooked smoker to a hooked fish)
Smokers should "get unhooked" and call the number listed or visit the getunhooked website.	Conclusion (***mc***)	Verbal claim

Figure 24: A KC Table Using Ostension to Indicate Visual Components

As Marraud 2016 has usefully pointed out, real life arguers often use ostension as a way to incorporate visual components in their arguments. I might answer the suggestion that one should never paint a house pink by saying: "A pink house can be beautiful – look at the famous house called 'The Pink Lady' – across the street from the Carson Mansion in Eureka, California." This is an argument insofar as it supports the conclusion that a pink house can be beautiful by citing as evidence a particular house that is alleged to demonstrate that this is so. The argument is conveyed in words, but the verbal part of the argument is incomplete and the argument is ultimately visual, for the words themselves do

not contain the evidence, but merely serve as a way to direct us to it: as a way to ostensively demarcate visual evidence.

The same argument could in a variety of ways be reconstituted in a way that incorporates visual evidence: by going to the house and looking at it, by using photographs like the one in *Figure 25*, and so on. In such a case, visual quotation is the preferred way to present the evidence, for it is the ultimate basis for the proposed conclusion, but there will be many situations in which one does not have the means to make it available. In such circumstances, ostension may be the best available alternative. In real life arguing, the answer to the question whether we should

Figure 25: The Pink Lady

represent visual argument components by visual quotation or ostension is a practical one which must be answered by determining what is expedient, feasible and effective.

9. CONCLUSION

In this essay I have demonstrated a way of analyzing visual arguments which creates a KC table that identifies the key components of an argument and an associated diagram which depicts its structure. This **ART** approach provides a method of analysis

that can be applied to all arguments: to verbal arguments, to visual arguments, and to other kinds of multimodal arguments. In the case of visual arguments, I have argued that the best way to identify visual components of an argument is through visual quotation, though ostension can serve as a second best alternative. Both ways of identifying visual components allow us to systematically construct standard argument diagrams that outline the structure of visual arguments.

In his rejection of visual argument, Johnson 2005 has written that: "The … problem for a theory of visual argument is to deal with the related issue of how to 'convert' the visuals, which are the components of a visual argument, into reasons which can function as premises that are supposed to lead to a conclusion, so that the machinery of informal logic can be applied to the resulting argument." The method I have proposed shows that it is a mistake to think that we need to "convert" the components of a visual argument into verbal reasons that can function as premises or conclusions. No conversion is required. All that is needed is some way of identifying and recognizing visual elements and the way in which they are used within an argument. The examples we have already noted show that they are tied to the same kinds of structures (the inference patterns depicted in argument diagrams) that characterize verbal arguments.

Considered from this point of view, one of the advantages of **ART** analysis is its use of visual quotation and ostension, which identify and recognize visuals as visuals. The issue Johnson raises is not inherent in visual arguments themselves, but in traditional approaches to argument, which define the key components of an argument verbally (as sentences or the propositions that sentences refer to). If one takes this for granted, then the only way to make room for visual argument components is by translating them into verbal analogues that can play the role of premise or conclusion. The way to overcome the challenge is not by finding a way to convert them into something they are not, but by giv-

ing up on this assumption and adopting a more expansive view of argument, inference, and communication.

I will end this essay by noting that the kind of analysis **ART** proposes can be carried out informally, without the formal construction of KC tables and argument diagrams. One might produce a documentary film interpreting Bosch's three panel painting, *The Last Judgment*, as an argument supporting the conclusion that we should live a pious life. In principle, this could be done formally, by creating a series of KC tables and diagrams. But a formal analysis of this sort is not the best way to develop one's argument if one is producing a film for an audience of art lovers who are innocent of informal logic or argumentation theory. In such circumstances, the important point is that one can still apply the basic principles that inform **ART** by identifying key visual components and showing how they work together to create an argument.

Of course, the ultimate reason why we need to acknowledge visual arguments and analyze them is because this is the way to prepare them for assessment. So that we can assess them in the ways that we assess other arguments – by deeming their premises reliable or untrustworthy; by asking whether they provide compelling support for the conclusion; and so on. An account of how to do so is the aim of the third element of the **ART** approach to informal logic (**T**). But that is a topic for another essay.

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Mural (St. George Slaying the Dragon). Image from Wikimedia Commons, by Schoenitzer, available under the GNU Free Documentation License, Version 1.2. <https://commons.wikimedia.org/wiki/File:NeuschwansteinCastle-interior17.jpg>. *Figure 10*: Tailgating Billboard. Public Domain Image (Colorado State, Colorado State Patrol). *Figure 12*: Mars Photomontage. Public Domain Image (NASA). *Figure 14*: Pro-choice Abortion Symbol. (Photoshopped Image). *Figure 16*: Fast Food Advertising vs. Reality. Public Domain Image. *Figure 19*: Obama Pinocchio. Michael Ramirez editorial cartoon (Reprinted by permission of Michael Ramirez and Creators Syndicate, Inc.). *Figure 23*: Smokefree Advertisement. Public Domain Image (National Health Service, United Kingdom). *Figure 25*: The Pink Lady. Wikimedia Commons image, by Eurekamike, available under the terms of the GNU Free Documentation License. <https://commons.wikimedia.org/wiki/File:Pink_lady_in_eureka.jpg>.

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CHAPTER 14.

INFORMAL LOGIC AND THE NATURE OF ARGUMENT

CHRISTOPHER W. TINDALE

Abstract: In this paper, I review the advances informal logic has made in reframing "argument" in ways that fit its everyday uses. This contrasts it sharply with more traditional formal models of argument. But there is still, I argue, a "static" conception behind the way many informal logicians talk about arguments. That is, they view arguments as products torn from the processes of argumentation, sitting lifeless on the page awaiting evaluation. By contrast, I suggest we draw on Aristotle in developing a more dynamic rhetorical model of argument, one that involves both internal and external movement. Such a model better prepares informal logic to deal with things like narratives and visual arguments.

It might seem that by now we would have plain and non-controversial responses to the simple question of what an argument involves. But this is not the case. The development of argumentation theory in recent decades, and some of its subsidiary movements like informal logic, has certainly led to a focus on the nature of argument and attempts to settle on a central conception. But so far, those efforts have not been fully successful. As I will argue here, while there have been tremendous advances in

our conception of "argument" and what this entails, there is still a retention of many of the traditional aspects, not all of which are healthy.[1]

If we turn to the textbooks (always a popular move in this kind of inquiry) and look at how "argument" is used and illustrated, then we may be surprised by the results.

We find examples like "New York is in New York, therefore New York is in New York." Such "entailments" are popular in certain kinds of texts. They purport to show what must be the case if something else is the case (See Tindale 1999: 31-2). But how useful is this information? In evaluating arguments, we expect premises to act as *reasons* that increase our acceptance of some further statement, reinforce our holding of it, or persuade us to accept it for the first time. But that New York is in New York could hardly be judged as a reason on these terms. Even as an inference, the repetition of one statement is alarmingly uninformative, and the "therefore" accomplishes nothing. Consider some further examples.

There is the ubiquitous one that all students of logic meet, intended to demonstrate one of the valid figures of the Aristotelian syllogism: "All humans are mortal, Socrates is human. Therefore, Socrates is mortal." If we accept the premises, then we must accept the conclusion, since it is contained within them. But the lessons from this are few and hardly begin to help the student address "real life" arguments.

Then there is the case of Irving Copi, whose textbooks are among the most widely used in North America (or were), having introduced generations of students (and professors) to the subject of logic. In the 4th edition of his *Introduction to Logic* (1972) we find:

1. See, also, David Hitchcock (2006) for a detailed discussion of various definitions of "argument" offered by some leading informal logicians, like Douglas Walton, Ralph Johnson, and J. Anthony Blair, and other theorists associated with informal logic (like Charles Hamblin). Hitchcock's own definition of argument is "a set of one or more interlinked premiss-illative-conclusion sequences" (19).

All that is predetermined is necessary.

Every event is predetermined.

Therefore every event is necessary (7).

This has been preceded by the following explanations: "*Inference* is a process by which one proposition is reached and affirmed on the basis of one or more other propositions accepted as the starting point of the process" (5); and "corresponding to every possible inference is an *argument*, and it is with these arguments that logic is chiefly concerned" (6-7). Here, argument and inference are synonymous, which explains why some of the uninteresting entailments are deemed to work as arguments. But what might most strike us is that over twenty years later, in the third edition of a similar text now called *Informal Logic* (1996) Copi, with his co-author Keith Burgess-Jackson, while giving a different initial example, gives the same explanation: "*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 (2); and "Corresponding to every possible inference is an *argument* and it is with these arguments that logic is chiefly concerned" (3).

There is certainly a relationship to be noted between arguments and inferences. Robert Pinto (2001), for example, has called arguments "invitations to inference" (37). But as J. Anthony Blair (2012) has pointed out, while it is often possible to shift without any harm from talking of inferences to talking of arguments, "the two should not be conflated." As he explains matters, inferring is one type of reasoning ("making a judgment that one proposition is implied by another or other" 141), and this is clearly basic to the use of arguments in argumentation. But argumentation is not required for inferring, and its use of arguments involves much more. A person who reasons infers or draws inferences. When they then turn to communicate their

reasoning to others, 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, because the audience is different and requires different strategies. Inference is at the root here, but the communicative act of arguing has become more complex and involves many more considerations. The two cannot be conflated in the simple way that Copi proposes.

What is problematic about the traditional examples I have provided? What do they assume about arguments? The main concern is that the conception of "argument" is a static one. By this I mean that it exemplifies the idea of a product alone, without any relation to the argumentative situation that gave rise to it. It appears "finished"; nothing more needs to be said; it is not part of any ongoing exchange of views (it is not dialectical). It can be evaluated without any concern about the intent behind it, the goals that prompted it, or the audience for which it is intended (it is not rhetorical).

On these terms, the view of "argument" is one that it is solely logical. But even here it reflects what might be called an "impoverished" logic, because we learn so little from it. It teaches us about validity, and that is important (it is less obvious that it teaches us much about soundness). So, there is a place for such traditional examples. But they are not sufficient to explain, reflect and teach how arguments operate in the social world, in everyday life, and so the conception of "argument" that underlies them is similarly restricted in value.

2. THE INFORMAL "TURN" IN ARGUMENT STUDIES

The position of concern that I have identified is the position of some of the major critics of "traditional argument". I will mention just two of them and the points for which they argue. They are both related to the informal logic movement: Stephen Toulmin and Ralph Johnson.

Toulmin's *The Uses of Argument* (1958) is a seminal text in the field. He strove to convince the community of philosophers that a traditional model of argument was not sufficient to explain the nature of argumentation across different fields. Toulmin rejects the traditional belief that formal validity (focusing on structure, not content) is the paradigm for assessing arguments. One of his concerns is the simplicity of the traditional model: "It is one thing to choose as one's first object of theoretical study the type of argument open to analysis in the simplest terms. It would be quite another to treat this type of argument as a paradigm and to demand that arguments in other fields should conform to its standards regardless" (133). Hence, the traditional standard of argument analysis is no longer sufficient. His own model (which I do not have space to detail here) addresses a number of problems. For example, he argues that traditional arguments (syllogisms) have an over-looked internal complexity. They fail to distinguish the force of universal premises as warrants and the backing on which they depend. We see this traced through one of his most famous examples—the Petersen is a Swede example (101-02), where a major premise "Scarcely any Swedes are Roman Catholics" can be unpacked as either, "A Swede can be taken almost certainly not to be a Roman Catholic" (= Warrant). Or "The proportion of Roman Catholic Swedes is less than 2%" (= Backing for the Warrant). Also, he addresses existential implications. That is, does a universal premise "All A's are B's" (or "No A's are B's") imply that any A's exist? Since the form of the statement does not help us, Toulmin's model shifts attention to the practical use of the statement (107).

In arguing all of this, Toulmin was cautious in his strategy. While his thesis is a damning one for formal logicians, he discloses it gradually and is clearly conscious of his audience. He leads the reader through an inquiry, exploring a problem, reaching a conclusion. All of which simulates the philosopher's methodology. After each inquiry (what is field-invariant, and

what field variant? How does the analytic differ from the substantial?) he turns to his audience of philosophers and logicians and poses questions for them. His conclusions are often couched in the least offensive manner possible: "If the purpose of an argument is to establish conclusions about which we are not entirely confident by relating them back to other information about which we have greater assurance, it begins to be a little doubtful whether any genuine, practical argument could *ever* be properly analytic" (Toulmin 1958: 117). The enormity of what is suggested here is mitigated by the qualified way in which it is stated.

Ralph Johnson's motivation for challenging the tradition of logic and arguments (he calls this the tradition of formal deductive logic, or FDL) is similar to my own. He cites examples like the following as cases where a sense of "argument" has lost its moorings:

> The sky is blue.
>
> Grass is green.
>
> Therefore, tigers are carnivorous.
> (Lambert and Ulrich 1980: 19; cited in Johnson 2014: 74)[2]

Johnson blames the textbook tradition for this state of affairs and not individual logicians, like Frege or Russell. On Johnson's terms, it is not sufficient that there be reasons leading to a conclusion in order for there to be an argument. "That which is argued about must be controversial, contentious, really in doubt; and for this to occur, there must be contrary views" (75).[3] This points to a strong dialectical vein in Johnson's informal logic, one that comes to the fore in his (2000) book. It leads him to

2. The original publication of Johnson's text was in 1996. I cite the WSIA publication of 2014, since this is readily available on the Internet. Readers should be aware of the chronology involved: the 1996/2014 work precedes his major book of 2000.

3. Another of Johnson's concerns with FDL—one we have already noted—is that "argument" is often taken as synonymous with "inference."

call for the "naturalization of logic" as "the next important task confronting us. Central to this development will be the reconceptualization of argument so that its dialectical nature is fully appreciated. In this process, logicians have something to learn from other disciplines, among them rhetoric" (2014:81).

This reconceptualization of argument is taken up in Johnson's central work, *Manifest Rationality* (2000). There, he defines "argument" as:

> An argument is 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 (168).

This is an innovative conception of our central concept and there is much that could be said about it.[4] But the key thing of interest to me here is the dual nature of the definition, offering both a "traditional" core (called the illative core) of statements and a "new" dialectical tier. It is this tier that deserves attention because it begins to push in the direction of a more rhetorical conception of argument (without quite reaching it).

It is in turning to the dialectical tier that Johnson clarifies what he looks for in naturalized arguments that take account of alternatives. While "many arguments consist of the first tier only" (in which case it is a misnomer to call them arguments or, at least, complete arguments), the best practitioners "always take account of the standard objections" (2000:166). It is this taking account that constitutes the dialectical tier. More precisely, it is the addressing of alternative positions and standard objections. There are two things to address here: (i) the relationship between the illative and dialectical tiers with respect to the product of the

4. In fact, I analyze the definition in detail in (Tindale 2002).

argument itself, and (ii) the relationship between the arguer and Other(s) implied by the dialectical tier.

Taking account of and anticipating objections is not controversial, even if it has not been a feature of the tradition. But taking this feature and making it an essential component of what *an argument is*, such that if it is absent then the discourse in question is not to be identified as an argument, is a controversial proposal. We should consider whether this dialectical tier is a part of the product or whether it is something that arises afterwards, as participants reflect on the initial argument or an evaluator begins to work on it.

Since what separates rhetoric from argumentation in Johnson's view is the requirement of manifest rationality, then the proposal has negative consequences for understanding argumentation rhetorically. At several points, Johnson discusses the distinctions between rhetoric and informal logic, and the conception of rhetoric implicated in these discussions is not as modern as his conception of argument. One noteworthy difference between rhetoric and informal logic is the difference in purpose. He holds rhetoric to aim at effectiveness rather than truth and completeness. This means that it neglects to recognize the necessity of a dialectical tier. If there is an objection to the argument of which the arguer is aware, then from the point of view of rhetoric he or she has no obligation to deal with it; the argument will be effective (or not) without it. Informal logic, on the other hand, has rationality as a goal in itself. The character of manifest rationality, omitted from the definition of argument, turns out to completely underlie it.

Trudy Govier (1998) has provided a detailed critical analysis of the dialectical tier. Among her concerns is the apparent insistence on completeness and the associated vagueness of knowing when all the objections have been met. As it happens, both of these concerns can be addressed if we observe that, *implicitly*, Johnson's definition of "argument" assumes the underlying

importance of context. In moving beyond the traditional core, he starts to consider aspects of the argumentative situation, or context, and this context should tell us what the objections are that need to be addressed (rather than allowing an infinite number of potential objections). But we need to adopt a rhetorical perspective in order to see this.

Moreover, the inclusion of the dialectical tier within the concept of argument creates an internal tension between the product an argument is and the process it captures. Again, Johnson's project itself does suggest a way to resolve this tension, if we continue to judge it rhetorically. Anticipating the Other's objections, as required by the dialectical tier, informs and *forms* the arguer's own utterances and *in this sense* the dialectical "tier" cannot be divorced from the structure. Understood this way, the line between the two tiers begins to dissolve.

Johnson acknowledges that the arguer is only half the story and that the process is incomplete without the Other, giving us a dynamic relationship of back-and-forth responses. He writes:

> Genuine dialogue requires not merely the presence of the Other, or speech between the two, but the real possibility that the logos of the Other will influence one's own logos. An exchange is dialectical when, as a result of the intervention of the Other, one's own logos (discourse, reasoning, or thinking) has the potential of being affected in some way. Specifically, the arguer agrees to let the feedback from the Other affect the product (161).

This is quite dynamic, and it has echoes of the kind of dialogism that we find in Mikhail Bakhtin's work (Tindale 2004). Bakhtin (1981) invokes the dynamic *internal* nature of discourse, including argumentation. On these terms, dialogism challenges the notion of the separated, self-reliant thinker/speaker who composes a discourse in isolation and then brings it into a dialogue (or argument) with another. As we will see below, recent work by the philosopher Robert Brandom (1994) confirms this valuing of the dialogical over the, singular, monological. All of this suggests

that the dialectical tier is not something that is formed after the illative core is fixed; it precedes the development of that "core," and this in turn begins to collapse any real distinction between what is core and what is not.

In the passage just cited, Johnson, moves toward this position through the remarks made about the logos of the Other influencing the arguer. But he then falls back onto a more traditional separation of opposing discourses when he makes the reference to feedback. What works well, though, and is entirely consistent with Johnson's position, is a Bakhtinian gathering of that opposition within the argumentative discourse itself. But such emendations require a deeper, more natural rhetoric of argument.

3. INFORMAL LOGIC'S RESPONSE TO THE TRADITION

An early statement from Ralph Johnson and J. Anthony Blair defined informal logic as "a branch of logic whose task is to develop non-formal standards, criteria, procedures for the analysis, interpretation, evaluation, criticism and construction of argumentation" (1987). More recently, Blair has settled on "the study of the norms for reasonable non-deductive inference patterns, as well as the norms for premise acceptability" (2012: 47). This is a generally acceptable definition.

In accordance with their definition of informal logic, we find Johnson and Blair tackling much more complex types of argument. In the opening discussion of their first edition (1977), they give four examples. One comes from a letter to a newspaper advice columnist (Ann Landers); the second from a speech given by the president of the Police Association of Ontario. A third is an excerpt for a newspaper editorial. And the fourth is from a letter to a different newspaper. All of these arguments are relatively lengthy (relative to the traditional examples), the shortest being seven lines in length. And they all involve arguments embedded in natural language, requiring the student to extract the argument from the discourse and identify its component

parts. Johnson and Blair point out a further thing they all have in common: "they attempt to persuade us of something by citing reasons intended to support that claim and prove its truth" (3). This is what "is meant in logic by the term **argument**."

In a similar vein, informal logician Trudy Govier in her textbook (4th e. 1997) begins with an everyday, common example: "Eating more than one egg a day is dangerous because eggs contain cholesterol and cholesterol can cause strokes and heart attacks" (1). In defining "argument" as "a set of claims that a person puts forward in an attempt to show that some further claim is rationally acceptable" (2), Govier fits easily into the informal logic cohort that improves upon the traditional examples by drawing on the everyday. And as the above debate over Johnson's dialectical tier indicates, she is a strong proponent of this "core" definition.

The definition of informal logic drawn from Blair and Johnson is still very much a logical one. They would judge informal logic to be just that—a logic. By contrast, another informal logician, Douglas Walton, sees informal logic to be essentially dialectical.[5] This is not the place to explore this disagreement. For current purposes, it simply means that for Walton an argument will be something that arises in a dialogue. This reality affects the way arguments are evaluated. But structurally, they looked much like what we have seen above. Here is one of his examples, lifted from a dialogue between two people (Bob and Helen) who disagree as to whether the practice of tipping for service in restaurants is a good thing. This is Bob's argument:

> Premise: University education is a good thing.
>
> Premise: A lot of students depend on tips to help pay their tuition costs.

5. Johnson would insist on this in spite of the very dialectical nature of his account, witnessed in the importance of the dialectical tier.

> Premise: Discontinuing tipping would mean that fewer students could afford a university education.
>
> Conclusion: Therefore, tipping is a good practice that should be continued (Walton 2006: 5).

In agreement with what we have seen in the traditional model, an "argument" for Walton is simply "made up of statements called premises and conclusions" (6). And this understanding informs the various argumentation schemes characterizing his subsequent work in informal logic (Walton, Reed & Macagno 2008).

There are clear advances in the way "argument" is being understood by this admittedly small, but representative, sample of informal logicians. Born from a need to make the logic class more relevant for their students, informal logicians strive to treat "real" arguments in their natural environments. Rather than the made-up and contrived examples of the older textbooks, the examples are taken from common everyday sources and illustrate how people actually employ arguments in their argumentation. There is also an appreciation of arguing as an activity (Hitchcock 2006 sees it as a speech act), witnessed in the dialectical thrust of Walton's dialogues and Johnson's dialectical tier. Arguments are not just things produced in the world; they are produced by people, and those people are important to understanding them. Stripping arguments from their natural environments and analyzing them in the classroom lost that dimension of understanding. So, there are suggestions of a more dynamic sense of argument here. But they are only suggestions.

This is a place to pause and look at a piece of everyday reasoning and consider how it might be evaluated using traditional and informal notions of "argument".

This piece comes from a speech delivered by president Donald Trump to an audience of Middle East leaders May 21, 2017. At this point, he is rallying his audience against the threat of terror.

> If we do not act against this organized terror, then we know what will happen. Terrorism's devastation of life will continue to spread. Peaceful societies will become engulfed by violence. And the futures of many generations will be sadly squandered.
>
> If we do not stand in uniform condemnation of this killing—then not only will we be judged by our people, not only will we be judged by history, but we will be judged by God.[6]

Informal logicians would recognize and structure this argument as a Slippery Slope, and it can be expressed in terms of the scheme for that argument, in which a proposed event is claimed to set off a causal chain leading to an undesirable outcome.[7]

> *Premise 1*: If we do not act against this organized terror, then terrorism's devastation of life will continue to spread.
>
> *Premise 2*: Peaceful societies will become engulfed by violence.
>
> *Premise 3*: The futures of many generations will be sadly squandered.
>
> *Premise 4*: If we do not stand in uniform condemnation of this killing—then not only will we be judged by our people, not only will we be judged by history, but we will be judged by God.
>
> *Hidden Premise*: We do not want such judgment [this outcome is undesirable]
>
> *Hidden Conclusion*: We must act against this organized terror.

The argument as standardized fits the scheme for the Slippery Slope and could be evaluated according to the critical questions for that scheme, which would include an understanding of the critical questions for causal arguments. How likely is each causal

6. <http://thehill.com/blogs/pundits-blog/the-administration/334454-full-speech-president-donald-trump-address-in-saud>
7. I pass over discussion of whether the Slippery Slope is to be judged as a fallacy, as some informal logicians might have been inclined to do. There has been a shift away from a primary fallacy-approach to one that explores argumentation schemes (Walton, et al, 2008).

link? And is the alleged outcome really undesirable? While the first question may allow us to stay with the propositions alone, testing the strength of their relationships, the second sends us outside to the audience for whom the outcome is or is not undesirable. So, there is improvement here on a "traditional" argument analysis that focused only on the product without consideration for its context. We cannot evaluate the argument's overall strength without considering the audience? But is that sufficient to decide the "validity" or cogency of the argument? We will return to this example later.

4. THE GHOST OF THE TRADITIONAL MODEL AND THE NEED FOR RHETORIC

Informal logicians themselves are aware that the transition from earlier conceptions of argument has not been complete or without problems. Johnson (2014), for example, notes that the "informal logic textbooks offer the reader an anemic conception of argument, one which does not differ markedly from that which appears (when it does appear) in other standard introductory logic textbooks, such as Copi; nor indeed from those in the FDL tradition" (79).

The focus, then, is still primarily on the product, and the concept is still largely a static one. What matters are the propositions in the form of premises and conclusions. There are reasons to be concerned about this. Many theorists are now discussing the nature and evaluation of visual arguments and narrative arguments (Olmos 2017). But how can the visual, for example, be an argument on the traditional model or even the informal logic model? Both "reduce" arguments to propositions. This raises the question of whether propositions are all there are to arguments. Is the propositional the "paradigm" case that anything (visual, narrative, and so forth) that purports to be an argument must reflect in some way? Consider, for example, concerns regarding the possibility of narrative arguments. Govier and Ayers (2012)

emphasize those "core" features that any argument must possess, including, as we would expect, a claim and supporting reasons. It would then seem that anything would be an argument only insofar as it exhibits such properties. Of course, to speak of "core" features also assumes some non-core features, and these they provide in a footnote: emotional indicators, counter-considerations, and also jokes or illustrative anecdotes (2102: 166n.9). In fact, a fuller exploration of that footnote, were we to have space for it, might well find a case for understanding some narratives as arguments (Tindale 2017). But as long as the core criterion dominates, then the analyst can demand of the text, "what are the premises?" and in the absence of a suitable response, reject the candidate as an argument. In a sense, the problem is similar to the treatment of images as arguments. All this invites a typically philosophical investigation of the core versus the non-core, which would see the one perhaps displaced by the other. But we do not have to go so far; we can simply question the prejudicial nature of such a division that appears to exclude *in advance* anything that does not fit a definition of argument that reaches back through the informal logic accounts into the traditional models that informal logic had professed to replace.

Again, what much informal logic most lacks, on Johnson's terms, is that appreciation of alternative arguments that involves a wider dialectical grasp of the possibilities in an argumentative situation. And with this comes a growing appreciation of a role for rhetoric (Johnson 2014:81). Another way to capture what is at stake here is to note that logicians of all stripes have failed to make the distinction that Daniel O'Keefe (1977) noted between argument$_1$ and argument$_2$. Argument$_1$ is "something one person makes"; while argument$_2$ is "something two or more persons have (or engage in)" (1977:122). What O'Keefe captures in the second sense is the "personalizing" nature of argument. They are human products, and they need to be recognized as such not just in how they are evaluated, but also in how they are conceived

and structured. A recent text from an informal logician focuses almost entirely on argument$_2$ (Gilbert 2014). In agreement with the position being argued here, Gilbert holds that all perspectives on argument (and argumentation) depend on rhetoric (24). It is because of this that it is important to establish rhetoric's relation to informal logic.

Like other theories of argument and argumentation, informal logic was developed without any positive engagement with the traditions of rhetoric. Thus, bringing rhetoric into informal logic (or vice versa) is a difficult project because informal logic is already established. Consequently, it may seem as if the subsequent addition of rhetorical features amount to no more than an add-on, or afterthought. We can only speculate on what informal logic would look like if rhetoric had been included from the beginning.

In a posthumous paper, philosopher and argumentation theorist Chaim Perelman makes an interesting observation: "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" (1989: 247).[8] Perelman failed to elaborate on the remark and provide names with which he associates the negative attitude. While rhetoric and philosophy had long since lost the positive connections they held for Aristotle and those who followed him, we cannot simply infer from this that rhetoric has been viewed distrustfully simply because it has been judged irrelevant to the truth-seeking goals of philosophers.

It is possible that Perelman has in mind remarks like this from Copi (1982: 88) who speaks of rhetoric being "of course…wholly worthless in resolving a question of fact;" and the more damning

8. Chaim Perelman and Lucie Olbrechts-Tyteca offer the same explanation for choosing to call their approach rhetorical rather than dialectical (1969: 5; 54).

statement in his *Informal Logic*: "In political campaigns today almost every rhetorical trick is played to make the worse seem the better cause" (Copi 1986: 97). Yet elsewhere in his standard text, Copi speaks positively about rhetoric, and the 1986 book that seems to associate it with the tricks of eristics did not appear until after Perelman's death.

An alternative possibility is that the source of Perelman's concern was the work of informal logicians like Johnson and Blair, with whom Perelman was familiar.[9] A rhetorician giving a cursory read to the first edition of *Logical Self-Defense* (1977) may well be arrested by a section titled "Eliminating Rhetoric" (107) that offered advice on extracting the argument from the rhetoric and diluting the persuasive force of some characterizations that are built into the language.[10] These selective "glimpses" may well capture the general appreciation of rhetoric (or lack of appreciation) in the late 1970s and early 1980s (when Perelman would have made his judgment). But it also seems reasonable to suggest that this attitude was grounded more in ignorance than ill will. That is, philosophically trained informal logicians were likely unaware that rhetoric could have anything other than a pejorative sense. Recent decades have seen members of the rhetoric and speech communication communities enter into fruitful discussions with those from the informal logic community, discussions that have encouraged a more accurate appreciation of the wider senses "rhetoric" can have, including the positive. Thus, later work by informal logicians has tended to reflect this greater

9. He had declined an invitation to join the editorial board of *Informal Logic* because he judged it to have a purely pedagogical focus, perhaps basing his judgment on the earlier *Informal Logic Newsletter*.

10. While in the Proceedings to the First International Symposium on Informal Logic, Johnson and Blair identify *The New Rhetoric* as one of only three monographs of significance to informal logic, still the program set out there distinguishes informal logic and rhetoric as separate disciplines whose relationship is unclear (Johnson and Blair 1980: 26).

awareness and sensitivity.[11] A case in point is the Johnson and Blair text, which by the third edition (1993) asserts: "In our opinion, rhetoric as a discipline has important insights about argumentation which logicians need to embrace…In our experience, logicians tend to underestimate the importance of audience and context to the comprehension and evaluation of argumentation" (142-3).

It is difficult, then, to see the pejorative sense of rhetoric promoted in the work of serious informal logicians. If anything, there is a tendency toward neglect rather than dismissal. Still, not every informal logician agrees with Johnson and Blair on what rhetorical features it might be important to consider. Trudy Govier (1999), for example, challenges the idea that audience is worth including. She judges that it is not useful to appeal to audience to resolve issues such as the acceptability of premises, and so falls back on other more standard informal logic criteria like whether premises are common knowledge, or knowable *a priori*, or defended elsewhere, or on reliable testimony or authority (199). What is still lacking in mainstream informal logic, then, is a full engagement with positive rhetoric, and that might begin with the explicit recognition of a more dynamic conception of "argument."

5. A DYNAMIC MODEL

The exercises of the logic book in the classroom may have encouraged us to think otherwise, but if any semblance of a real argument appears in the classroom it is only to the degree that it simulates or reflects actual argumentative practice as this is found in the social world. In a fundamental way, the practice of arguing (which gives us the argument specimens of the text books) involves the giving and receiving of reasons. In a dialogical exchange (recall Bakhtin above), those reasons are character-

11. See, for example, the article by Groarke (2011) in the Stanford Encyclopedia of Philosophy <http://plato.stanford.edu/entries/logic-informal/#Rhe>.

ized by considerations of both parties. Robert Brandom (1994) contrasts what he calls dialogical reasoning with monological reasoning. The monological focuses on the commitments of one individual, expressed in premises and conclusions. But dialogical reasoning involves assessments of what follows from different social perspectives and different background commitments (1994: 497). It is Brandom's contention that the monological is "parasitic on and intelligible *only* in terms of the conceptual contents conferred by dialogical reasoning" (497). For now, it suffices to appreciate the social character of the processes involved and the ways in which Brandom's analyses are given from the perspective of the social. What it amounts to, I believe, is saying that "argument" has to be understood in relation to "arguing." Or, in other terms, that argument$_2$ is not so much different from argument$_1$, it is integrally related to it in the sense of deciding what it will be. In further terms still, this confirms the need to close the gap between the two tiers of Johnson's definition.

One of the core ideas in Brandom's pragmatic model is the commitment made by a speaker. That commitment is understood in terms of what is *attributed* to the speaker as much as what the speaker acknowledges. That is, it is from the perspective of the audience's attributions that meaning should be understood. Of course, a speaker can assert commitments that they are not *entitled* to make, and thus be called upon by the audience to provide reasons that justify the assertion or entitle the speaker to it (Brandom 2000:193). It is part of an audience's task, in the processes of communication, to police such assertions by judging when entitlements exist and insisting on reasons when in doubt.

This more dynamic view of "argument" (in contrast to the static view examined above) is closely related to that which can be extracted from Aristotle. Adopting a rhetorical perspective on argumentation involves the recognition that an argument's purpose and not just its structure must be part of its definition. By that I mean, we have been used to defining an argument as a

series of statements (minimally two), at least one of which (the premise) provided support for another (the conclusion), *and* it has the goal of persuading an audience. Bringing the audience into the conceptual field marks the engagement with rhetoric and the rich collection of ideas available from that tradition. But as we have seen, there is still a tendency to separate out the "structural" part of the definition and treat arguments in the static way, as mere products. To repeat what was said earlier, this effectively tears the product from the process in which it was produced and pins it down for review and assessment, like a butterfly on a display board—colorful, perhaps, but also lifeless. When the argument is then analyzed this is done on its own terms and without sufficient regard for the situation that produced it, along with the participants involved in that situation. Treating arguments in this detached, static way amounts to a failure to recognize the dynamic nature of what is involved.

Stephen Toulmin hinted at what was at stake when he wrote: "An argument is like an organism" (1958:87). In saying this he meant that it has parts, an integrated structure. Toulmin's statement recalls the Aristotle of the *Poetics* (1984), describing the work of art like an organism, with head, body and tail. But, importantly, Aristotle also judged it to be like an animal because it was alive, another animated thing among animated things. The *Poetics*, with its demand for probable and necessary sequences in plots, evinces reasonableness here at the heart of the poetic—a moving train of logic. But if the poetic has a movement, so too must logic itself: logic has a life, and its structures have internal movement. This sense needs to be transported to the study of argumentation. An argument is alive; it is a message of activated potential. In terms of particularly important Aristotelian terms that capture the way he conceived natural and social objects, an argument is a potentiality (*dunamis*) and two actualities (*energeia*).

The relationship between these terms is complicated. Aristotle used it famously in *De Anima*, or 'On the Soul' (1984), as a way to

capture the interactions of the parts of a human being (body and soul): 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.

In argumentation, the first actuality is achieved in the movement within an argument from the premises to the conclusion (while there is not yet any uptake, any adoption (literally) of the claim involved). This internal movement already indicates the way in which an argument is alive with action, dynamic on its own terms. There is a movement from premises to conclusion that the mind follows, or, in Pinto's terms, is invited to follow. This is the level of inferencing, of the illative core. The second actuality is in the audience, the one that adopts ideas in the process of "uptake." This uptake is a complicated matter that cannot be fully explored here. It depends on many variables, including the arguer's skill at recognizing the audience and the means of persuasion available for that audience.

We might see, then, that as a type of discourse an argument is both an 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. Or at least the arguer has access to such features, many of which are to be found in the wealth of ideas available in the rhetorical tradition.

6. CONCLUSIONS

The static sense of argument sees arguments as products with no essential connection to the argumentative situation from which they arose. They are inert pieces of discourse, connected statements that can be judged "good" or "bad" merely in terms of their structures. (This is clearly the case with the traditional model

and, as we have seen, still the case generally with informal logic models).

By contrast, the dynamic sense of argument sees arguments as social events, personalized by those engaged in them. They are alive with meaning and movement, and should only be judged "good" or "bad" in light of consideration of the entire argumentative situation (including the participants).

It has to be said that dealing with arguments was much simpler on the traditional model. There was less to worry about and more was within the evaluator's control. But there was also a lot that was lost or overlooked. As a case in point, we might return to the example from the Trump speech and discuss it further.

The main claim of the argument was that "we" must act against this organized terror. The scope of the "we" determines the audience for the argument, against which its reasonableness must be tested. In so far as the entire speech was a call for partnerships between the US and Middle Eastern states, then this fits within that scope, identifying the agents who are being called on to act, and who would be expected to find the outcome undesirable.

Support for this claim was gathered in the chain of slippery slope reasoning. This argument needs to be an acceptable instance of the scheme. The first critical question that asks whether the causal links are plausible should be answered in the affirmative for the argument to have objective strength. Still, what we are judging here is the movement *within* the argument. Does it flow according to what is cogent? Does it move the mind from link to link in a reasonable fashion so that any reasonable person would be expected to follow the flow and see the connections between the parts of the argument? It is not my intention to provide a detailed analysis here, other than to suggest that it is reasonable to expect that terrorism, if unchecked, will engulf peaceful societies in violence, and that the futures of many (if not many generations) will thereby be squandered. And from this it is reasonable to believe that the leaders, given who they are and

their belief systems (which again takes us beyond the propositions), being addressed will expect judgment from those parties listed.

Is this enough to encourage uptake? Is it an effective argument? The second movement, beyond the propositions, involves the audience. Although, we have already seen that this audience was implicated in the initial judgment (suggesting that, as with Johnson's dialectical tier, the distinction here between internal and external is largely academic). Informal logicians have been fond of talking about evaluation as if we can assess any argument as if we were the audience (consider Johnson and Blair's examples noted earlier). But to judge uptake, to assess the dialogical aspect that theorists like Bakhtin and Brandom are interested in, we need to consider who will receive and act on this. Who is the potential audience that can be actualized (moved to reflection and action) by the argument? We need to clarify the "we" and then consider the appropriateness of the language, the style of the argument, and even the manner of delivery, in light of that "we". Because we are here positioning ourselves, as much as is possible, in that audience's perspective. In this light, some of the hyperbole becomes relevant (the choice of "engulfed" and the "many generations," for example). It gives presence to the claims, bringing them before the eyes with conceptual vividness. The individuals find themselves addressed in a personal way. The gradatio in the fourth premise contributes to this, with its movement from our people, to history, and then to god, building the impact of the undesirable outcome, which in turn calls for individual reflection, judgment and action. The argument moves people to action (uptake) insofar as it is effective in addressing them, and it is designed to accomplish that effectiveness.

In terms of the prospects for developing informal logic itself: As I suggested earlier, a more dynamic conception of argument better prepares informal logic for dealing with the argumentative possibilities of narratives and visuals. In raising questions about

visual and narrative arguments, bringing the audience into the discussion and exploring potential "uptakes" expands our study of argumentative strategies. How are different media better suited to certain issues and situations, if they are? If we must "reduce" anything that is to be considered an argument to the basic propositions of the traditional model, then the prospects of understanding the different strategies used (in advertizing or propaganda, for example) are constrained before they even begin. More modern conceptions of argument, like the one I have discussed here, take us beyond those constraints to a wider arena of possibilities.

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