What is a "Real" Argument?[*]
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ABSTRACT: Numerous informal logicians and argumentation theorists restrict their theorizing to what they call "real" arguments. But is there a clear distinction to be made between "real" and "non-real" arguments? Here I explore four possible accounts of the alleged distinction and argue that none can serve the theoretical uses to which the distinction is most often put.

KEYWORDS: argument, actual, contrived, counterexample, everyday, genuine, hypothetical, informal logic, natural, specialized.

1. INTRODUCTION

Informal logic has a predilection for focusing on "real" arguments. For example, Leo Groarke writes, "In keeping with the emphasis on real argument, I will discuss musical argument in the context of examples of actual argument" (Groarke 2003a, p. 419). David Hitchcock writes, "Theorizing about arguments often suffers from a lack of attention to actual arguments" (Hitchcock 1998, p. 15). In some cases, the very nature of informal logic is tied up with this focus. For example, in early writings on the subject, Ralph Johnson and Tony Blair characterize informal logic in part as "a focus on the actual natural language arguments used in public discourse, clothed in their native ambiguity, vagueness and incompleteness" (Blair and Johnson 1980, p. x). Trudy Govier writes: "What is strange is that in view of these substantial gaps between real arguments and the subject matter of formal logic, formal logic is still widely regarded as having something to offer to the non-specialist" (Govier 1987, p. 2) and "To speak of informal logic is not to contradict oneself but to acknowledge what should be obvious: that the understanding of natural arguments requires substantive knowledge and insight not captured in the rules of axiomatized systems" (Govier 1987, p. 204). In other words, real or natural arguments are not the subject matter of formal logic, but rather what Govier calls "practical logic". Ralph Johnson, for example, takes these passages from Govier as grounds for attributing to her the view that "informal logic is the logic of real arguments" (Johnson 1999, p. 268 [see also 2000, p. 121]). Finally, Johnson puts one of the vices of "formal logic" as "the virtual disappearance from the mandate of logic of the focus on real arguments" (Johnson 2000, p. 105).

I am not an informal logician—though admittedly, I am not sure what it would take to be one. I am, however, very interested in understanding the nature of arguments and in producing a general theory of arguments. So my question here is—does the notion of "real" argument have any place in a general theory of argument? Put another way, is

the concept of a "real" argument a theoretically significant one? To answer this question it is necessary to try to understand what "real" arguments are.

In section 2, I examine four possibilities for what a "real" argument is—a genuine argument, an actual argument, an everyday argument, or a natural argument. I argue that each possibility faces difficulties. In section 3, I discuss the theoretical uses to which the notion of "real" argument is put and argue that none of the four main candidates can serve these purposes. I conclude that the concept of a "real" argument is not a theoretically significant concept.

2. FOUR OPTIONS FOR "REAL" ARGUMENT

So what is a "real" argument? According to Johnson, "How to characterize this realm is a difficult matter. As we saw, Govier (1987) used various phrases to refer to it: 'naturally occurring arguments,' 'natural argumentation,' 'real arguments.' Others have used phrases such as 'mundane argument' or 'everyday argument'" (Johnson 2000, p. 92). Yet more phrases I would add to this list include 'actual arguments' (Govier 1987, p. 4; Blair and Johnson 1980, p. 4), 'marketplace arguments' (Gilbert 2002, p. 22), 'real-life arguments', and 'ordinary arguments'. Given all these possibilities and given differences amongst theorists in the use of these phrases, I shall, for the sake of clarity and brevity, focus on four possible distinctions that one might be trying to demarcate by appeal to "real" arguments, viz., genuine versus non-genuine, actual versus hypothetical, everyday versus specialized, and natural versus contrived.

Option 1: Real arguments are genuine arguments as opposed to non-genuine arguments.

Just as genuine diamonds are diamonds and non-genuine diamonds are not, genuine arguments are arguments and non-genuine arguments are not arguments at all. The distinction between genuine and non-genuine arguments is clearly theoretically significant. The distinction shows up in numerous debates in argumentation theory. For example, debate has raged over whether texts without a dialectical tier component are not genuine arguments (Groarke 2002; Hitchcock 2002; Johnson 2002; Tindale 2002). Also, the debates about whether works of art or music can be arguments (Groarke 2003b; Johnson 2003) or whether the performance of a judo flip can be an argument (Gilbert 2003) are attempts to distinguish genuine from non-genuine arguments.

Argumentation theorists may not stop at just genuine versus non-genuine, for it may turn out that some of the non-genuine arguments are similar enough to bona fide arguments that care must be taken to distinguish the genuine ones from the pseudo ones. We might even call particular uses of the pseudo arguments, i.e., ones used deliberately to deceive someone into thinking an argument has been presented when in fact it has not, fake arguments. Appeal to pseudo arguments and fake arguments would be theoretically relevant to argumentation theory as part of demarking genuine arguments from non-genuine arguments.

Given the genuine/non-genuine distinction, the focus on "real" arguments is just an insistence that a correct argument theory should be a theory of arguments and not include non-arguments in the mix. In other words, previous theorists are wrong about what arguments are and we need, instead, to focus on "real", i.e., genuine arguments.

Though clearly theoretically useful, the distinction between genuine and non-genuine or between genuine and pseudo arguments is not, I strongly suspect, the distinction informal logicians are trying capture by the notion of "real" arguments. For example, Govier gives the following example from Copi: "Any author is successful if and only if he is well read. All authors are intellectuals. Some authors are successful but not well read. Therefore all intellectuals are authors" (Govier 1987, p. 4) as the sort of thing that is not a real argument. Granted, it may be stilted and not a normal sort of expression we expect to come across in our everyday lives, but one would be hard pressed to argue that the sentences do not express at least the core of an argument. After all, the sentence 'For all numbers n, if n is even and n is prime, then n is both divisible by and equal to 2' may be stilted and not the normal sort of expression we expect to come across, even in standard mathematical situations, but it is still a sentence.

Clearly the genuine versus non-genuine argument distinction is theoretically significant. Equally clearly, the distinction is a significant source of disagreement and debate such that if the real/unreal distinction is the genuine/non-genuine distinction, then resolving the matter will be far beyond what can be accomplished in a single short paper. Hence, for the remainder of this paper I shall assume that the issue is whether, within the class of genuine arguments, there is a theoretically significant distinction to be made between the "real" genuine arguments and the "non-real" genuine arguments.

Option 2: Real arguments are everyday arguments as opposed to specialized arguments.

For example, Johnson and Blair write: "By informal logic we mean to designate a branch of logic which is concerned to develop non-formal standards … for the analysis … of argumentation in everyday discourse" (Johnson and Blair 1987, p. 147). That there is a rough and ready distinction to be made between everyday and specialized arguments cannot be denied—one can easily begin by suggesting that the former occur quite often in debates about which movie to go see, letters to the editor, or on talk shows, etc., whereas the latter are to be found in the books and journals of the various specialized academic disciplines. That the rough distinction is theoretically useful, however, is far from obvious.

Firstly, argumentation theorists/informal logicians hardly restrict themselves to the "everyday" side of the rough everyday/specialized divide. For example, Johnson, in *Manifest Rationality*, points out that "real arguments, such as is the focal point of the theory developed in this book, complete with their core and dialectical trappings, will appear too erudite, too talky, or too rational to make an appearance on Oprah" (Johnson 2000, p. 18). Also, in *The logic of real arguments*, Alec Fisher asserts that the "focus of interest is not so much on everyday reasoning as on theoretical argument" (Fisher 1988, p. vii).

Secondly, the rough and ready "distinction" between everyday and specialized arguments is more likely to be a continuum of cases rather than a neat partitioning. But if arguments are more everyday or less everyday, more specialized or less specialized, then, unless we want to talk of more real and less real arguments, we cannot use the everyday/specialized continuum to demarcate the class of "real" arguments. Certainly, a similar point has been made about another version of the everyday/specialized distinction—what is often called the practical/theoretical distinction.

According to Robert Craig, Jonsen and Toulmin (1988) distinguish Theory from Practice on the grounds that they characteristically involve different kinds of argumentation. Theory employs formal arguments in which particular conclusions are deduced logically from universal principles. Practice, in contrast, employs informal or practical arguments which "involve a wider range of factors than formal deductions and are read with an eye to their occasion of use" (Craig1996, p. 461). Perhaps then real arguments are the arguments of practice. Consider that Govier's preferred term in her *Problems in Argument Analysis and Evaluation* is "practical logic". But as Craig points out, Jonsen and Toulmin acknowledge that Theory and Practice are ideal types that mark the extreme ends of a continuum (Clark 1996, p. 462). Clark goes on to argue that, "Theory is essentially involved in the highly informal argumentative discourses of everyday life, no less than Practice is essentially involved in the most rigorously, formal, scientific disciplines" (Clark 1996, p. 463).

Option 3: Real arguments are actual arguments as opposed to hypothetical arguments.

According to C.L. Hamblin, " 'If P, then Q' is not a real argument at all, but only a hypothetical argument. It says that a certain hypothetical statement P, which I am not now making, would serve, if I were to invoke it, as a premises for a possible conclusion Q; but the argument remains hypothetical because I do not, or not necessarily, now argue this way. A real argument has real premises and conclusion, not hypothetical ones" (Hamblin 1970, p. 233). Ralph Johnson writes of Hamblin's work that "he stressed the importance of dealing with real arguments as opposed to imagined or hypothetical or artificially constructed ones" (Johnson 2000, p. 101).

If the distinction between actual and hypothetical arguments is to serve as the grounds for demarcating the class of "real" arguments, then we need to know what the difference between actual and hypothetical arguments is. Unfortunately, there are several possibilities and little agreement. Firstly, one might hold that actual arguments are arguments with premises that have been actually asserted rather than merely supposed "for the sake of argument". But several informal logicians object to this restriction as itself unwarranted. For example, Fisher writes:

> Arguments employing suppositions are common enough in theoretical contexts— in mathematics, in the physical sciences, the biological sciences, social studies and philosophy—… so we must explain carefully how to handle suppositions in argument analysis if we are not to leave a serious gap (Fisher 1988, p. 83; see also Walton 1996, pp. 11-15).

In addition, this restriction would seemingly remove any *reductio ad absurdum* or arguments for the induction clause in a mathematical induction from the realm of interest—yet such arguments have clearly been of interest to informal logicians.

Secondly, one might hold that actual arguments are arguments that have actually been made as opposed to ones that merely could be made (see Fohr 1980, p. 6). On this account the *reductios* that have been made are actual arguments and so in the realm of interest. Unfortunately, this attempt at actual arguments excludes all those arguments that have been used merely as examples to establish a particular point. For example, Govier uses the following as a counterexample to the claim that all arguments are explanations:

"(1) Jones is a Liberal. (2) Jones is fat. (3) Jones is a bachelor. Therefore, (4) Jones is a fat, Liberal bachelor. Therefore, (5) There are fat Liberal bachelors" (Govier 1987, p. 164) and Walton uses the following as a counterexample to Van Eemeren and Grootendorst's proposal for distinguishing linked from convergent arguments: "Bob likes red a lot. Linda thought she saw Bob, and it looked like he was wearing a red tie. Therefore, Bob is wearing a red tie" (Walton 1996, p. 136). Neither Govier nor Walton actually argue for the conclusions of these arguments—the arguments are merely used as counterexamples. But if the definition of actual arguments is expanded to include these uses of examples to illustrate the truth or falsity of certain theoretical claims about arguments, then surely the definition will let in those very arguments that Govier and Johnson and Blair were seeking to exclude, viz., "series of statements constructed by logicians to illustrate their principles and techniques" (Govier 1987, p. 4) and "those which are invented just in order to serve as examples" (Blair and Johnson 1980, p. 27 n. 20).

Even without a clear notion of what a hypothetical argument is, from the perspective of producing an adequate theory of argument, we should be very wary of excluding non-actual arguments, for we will sometimes appeal to non-actual arguments in our explanations. For example, one might consider a whole set of possible arguments for a position one wants to advocate, but advance and defend only two or three of them. Assuming that no one has ever advanced the remaining arguments in the set, they are not actual, at least in the sense that they have never been (and, we might suppose, never will be) offered to change an audience's attitudes concerning the position. But we might ask *why* the left-overs were rejected and presumably the answer might be that they are clearly bad arguments and would have failed if offered.

Consider also that our theory of natural phenomena needs to cover not only the actual instances, but the purely possible instances as well. Even if all salt were suddenly to vanish from the universe (which would be quite disastrous for us), our physical theory still needs to be able to say what would happen if a hypothetical batch of salt were to be placed in a cup of water. Similarly we want an adequate theory of arguments to be able to say what would (or would likely) happen if hypothetical argument X were advanced in hypothetical situation S to hypothetical audience A.

Option 4: Real arguments are natural arguments as opposed to contrived arguments.

For example, according to Fisher the objects of concern are "real arguments—not the 'made-up' kind with which logicians usually deal. They originate from various sources ranging from classic texts to newspapers" (Fisher 1988, p. 15). According to Govier,

> an actual argument is simply an argument, a piece of discourse or writing in which someone tries to convince others (or himself) of the truth of a claim by citing reasons on its behalf. I speak of actual arguments because I do not wish to speak of the contrived arguments—series of statements constructed by logicians to illustrate their principles and techniques (Govier 1987, p. 4).

In one sense all arguments are contrived—the real question is for what purpose are they contrived. Some are contrived as attempts to convince some audience of

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something. Some are contrived as exemplifications of particular general forms or patterns of reasoning—either valid or fallacious. Some are contrived as counterexamples to particular parts of various theories of arguments. Some are contrived as exercises for logic textbooks—symbolic, informal, etc.

Presumably it is the first use that is meant as the primary use of natural arguments—arguments constructed to convince/persuade/change the acceptance level of some audience of something. But consider that arguments that may at one time have been contrived for the purpose of convincing an audience may now be used solely as examples or counterexamples; whereas arguments that may have been originally contrived as examples may actually be used to argue for a given position. If the class of natural arguments is composed of those arguments contrived for the purpose of convincing, then the former would be natural arguments despite their 'quaint' appearance now and the latter contrived arguments despite their current usage. If natural arguments are defined as those arguments that have ever been used to convince, then the natural/contrived distinction just becomes a variant of the actual/hypothetical distinction already discussed.

Perhaps the difficulty can be avoided by defining the natural arguments as those that could reasonably be used to convince an audience of something. The problem now is to specify what counts as "reasonably used" in such a way that the sorts of arguments that Govier, and Johnson and Blair, and others rail against will in fact be excluded. This problem is especially acute if one can find examples of especially bad or especially artificial sounding cases that have been actually used to argue a point, for then a strong case can be made that lots of other arguments like them could also be so used. Indeed, the case of especially bad arguments poses a special problem since any adequate theory of arguments will, regardless of whether the bad argument could ever be plausibly used to argue with or not, need to be able to account for the badness of the argument. After all, the "obvious" badness of the argument will explain the lack of plausible use rather than the other way around.

Before turning to an examination of the possible theoretical uses of the "real" arguments demarcation, let me point out that there are also combinations of these options in the literature. For example, Blair and Johnson (1980), who lead the charge to focus on "real" arguments, describe natural arguments as "arguments that have actually been used to try to persuade people, the sorts of arguments the student will encounter outside the classroom" (Blair and Johnson 1980, p. 13) and part of "actual, everyday persuasive discourse" (Blair and Johnson 1980, p. 14). In addition, they write:

> We need a term to refer … to arguments actually used in a first-order way to attempt to convince—and moreover used without self-consciousness about the 'nature' or 'structure' of some ideal argument. The term 'natural arguments' will then distinguish such arguments from those which are invented just in order to serve as examples, and also (for the most part) from those which are self-consciously framed according to an explicit model of argument (such as arguments with numbered premises sometimes found in philosophy journal articles) (Blair and Johnson 1980, p. 27 n. 20).

Here we can see elements of all three of the previous distinctions: actually used to convince, not invented just to serve as examples, found in everyday sources outside the classroom. On this account real arguments just are arguments that are neither contrived

nor theoretical nor hypothetical. Put another way, real arguments would then just be actual, everyday natural arguments. Unfortunately, this proposal, along with any other combinatorial proposal, will just inherit the defects of each individual option.

3. THEORETICAL USES OF "REAL" ARGUMENTS?

There seem to be three primary uses of the appeal to "real" arguments: (i) to demarcate the subject matter of informal logic (often as opposed to the subject matter of formal logic); (ii) to defend one's own theory against counterexamples; and (iii) to show the inadequacy of either formal logic or formal deductive logic as theories of argument.

  None of the distinctions discussed in the previous section will support use (i). Anyone interested in arguments is interested in genuine arguments, whether he or she is an informal logician or not. Informal logicians certainly do not have a monopoly on genuine arguments and do not agree amongst themselves what counts as a genuine argument. Hence, genuine arguments cannot demarcate the subject matter of informal logic. As we have already seen, different theorists focus on different parts of the everyday/theoretical continuum, so everyday arguments cannot demarcate the subject matter of informal logic. The actual/hypothetical distinction suffers from both defects—there is no agreement amongst theorists on where to draw the line and theorists take as their area of study both actual and hypothetical arguments. Finally, the distinction between natural and contrived arguments ultimately seems to depend on the use to which an argument is put—natural arguments are the ones for which the conclusion is actually or could be actually argued. But as many theorists have suggested, arguments have many legitimate uses, one of which may be convincing/persuading/changing the attitude of an audience of/toward the conclusion. But the debate over the various uses of arguments cannot even be a debate within informal logic if the subject matter of informal logic is demarcated by appeal to arguments used in one particular way. In addition, as we saw in the case of actual and natural arguments above, many informal logicians use so-called "contrived" cases for valid theoretical purposes and so if we restrict informal logic to natural arguments, then these theoretical purposes will not be served.

  Indeed, one of the uses the appeal to real arguments is sometimes put is to defend one's own theory against counterexamples. For example, Robert Yanal, in defense of his theory of how to distinguish linked from convergent arguments, claims that purported counterexamples such as "It is raining. The wind is blowing. So, either Rembrandt painted *The Polish Rider* or Rembrandt did not paint *The Polish Rider*" (Yanal 1991, p. 142) are not necessarily arguments on the grounds that they are not arguments in the "informal logic or ordinary language sense of argument", i.e., they are not "the giving of evidence for something of the presenting of reasons to believe something" (Yanal 1991, p. 143).

  Yanal's rejection of proposed counterexamples is legitimate if the distinction he is appealing to is the genuine/non-genuine distinction. Putting forward a non-genuine argument as a counterexample to a theoretical principle meant to cover arguments is obviously a non-starter. The success of such a defense, however, depends upon having a generally agreed upon account of genuine arguments which we do not have. But given that Yanal is appealing to the informal logic sense of argument, perhaps Yanal means to claim that while the counterexample is a genuine argument it is not a "real" argument and

the linked/convergent distinction is only meant to apply to "real" arguments. The success of this strategy also depends on a clear and theoretically sound distinction between "real" and "non-real" arguments, which we again do not have.[1]

In addition, as we have seen, restricting ourselves to cases of the giving of evidence or the presenting of reasons removes our ability to explain why someone who actually argued with argument A passed up arguments B, C, and D. More generally, given no clear demarcation of "real" arguments, defending one's theory by claiming it is just a theory of "real" arguments runs dangerously close to committing the very sin that I suspect, at least in part, motivated the distinction in the first place—namely, tailoring the arguments to the theory rather than the theory to the arguments. After all, one could always reject a proposed counterexample by saying one's theory was not designed to accommodate that type of argument, with the net result being that the type of arguments that the theorist accepts as legitimate are just those that accord with the theory.

Finally, what of appealing to the distinction to argue that formal logic is inadequate as a significant part of a theory of argument, presumably on the grounds that formal logic cannot adequately deal with "real" arguments? One would be hard pressed to argue that there are no everyday, non-contrived, actual arguments such that "formal" logic (whatever that is) has no significant role in analyzing or evaluating them. For example, consider the following brief exchange:

Arthur: "Either we keep the money or we have to figure out how to return it."
Sam: "Keeping it is not an option."
Arthur: "So, we have to figure out how to return it."

At the very least, the acceptability of Arthur's reasoning is demonstrable via so-called "formal" methods. But if the claim is not that there are no everyday, non-contrived, actual arguments that formal logic has something useful to say about, but merely that there are at least some such arguments, then no special class of "real" arguments is required to show the inadequacy of formal logic. More specifically, if only some "real" arguments constitute counterexamples to the adequacy of formal logic, then it is the features shared by the subset of counterexamples that are relevant and not the features that allegedly demarcate arguments as "real".

Perhaps the theoretical significance of "real" arguments can be defended by making the stronger claim that formal logic could not play a significant role in any adequate theory of argument because it cannot accommodate any "real" argument. While there certainly are hints of this strong thesis in the literature, I am highly skeptical that this thesis can be vindicated without either trivializing what is meant by 'real argument' or 'formal logic' or placing the bar on what counts as a significant role unacceptably high. For example, one could define 'real argument' to mean just those arguments that formal logic cannot accommodate or define 'formal logic' in such a way that (i) nothing counts as a formal logic or (ii) the only things that count as formal logics are things that

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[1] In fact, in this particular case, since Yanal's linked/convergent distinction is ultimately based on relationships amongst the various conditional probabilities of the conclusion given the premises individually and as groups, it is hard to see how these relationships can legitimately be expected to be well-behaved only in, and so restricted to, cases in which the premises constitute the giving of evidence or the presenting of reasons to believe something. (Elsewhere I have shown that the relationships are not even well-behaved for Yanal's canonical cases. See Goddu, 2003.)

no one has ever suggested would or could play the needed role. But what remains to be seen, and what is clearly beyond the scope of what can be accomplished here, is whether any significant sense can be given to 'real argument' and 'formal logic' that vindicates the strong claim.

4. CONCLUSION

Given the seemingly close association between informal logic and "real" arguments, one might take my repudiation of the notion of "real" arguments as a repudiation of informal logic itself. No such repudiation is intended or accomplished. If, as I have argued, there is no clear and theoretically useful class of "real" arguments, then we should not attempt to define informal logic in terms of such class. How we should understand informal logic is not my concern here, though there are plenty of alternative candidates. For example, in recent work David Hitchcock suggests understanding informal logic in terms of the sorts of questions it takes as primary rather than in terms of some class of arguments (Hitchcock, 2007).

Nor should this paper be taken as impugning the motivations for attempts to demarcate a class of real arguments. Hitchcock's worry, quoted at the beginning of this paper, that "theorizing about arguments often suffers from a lack of attention to actual arguments" is a legitimate worry even if there is no theoretically significant class of "real" arguments. A theory that primarily appeals to trivial or overly contrived or imagined[2] cases as exemplars of the theory (or even worse, tailors itself to fit such cases) runs the serious risk of being a trivial and inconsequential theory. Any adequate theory must be able to account for *all* legitimate cases, whether trivial or consequential or actual or hypothetical or everyday or specialized, etc.

Unless a clearer notion of "real" argument than the ones surveyed here is forthcoming, a general theory of argument has no good reason to demarcate a class of "real" arguments that is a subset of the class of genuine arguments. On the one hand, assuming there are counterexamples to the adequacy of formal logic as part of an adequate theory of argument, no appeal to a class of "real" arguments seems required to identify these counterexamples. On the other hand, none of the primary candidates for "real" arguments, viz., everyday arguments or actual arguments or natural arguments, can support either a clearly demarcated subject matter for informal logic or an adequate defense against counterexamples to one's preferred theory. Thus, instead of focusing on an alleged class of "real" arguments, I would recommend focusing on the theoretically significant and challenging problem of distinguishing those entities that are genuine arguments from those that are not.[3]

REFERENCES

Blair, J. A. and R. Johnson (Eds.) (1980). *Informal Logic: The First International*

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[2]Michael Scriven and Tony Blair, in different conversations, cited the over-reliance on trivial (Scriven) or imagined (Blair) cases in formal logic (or at least formal logic as it was being presented in the standard textbooks) as a primary motivation for the shift to informal logic.

[3] An earlier version of this paper was read at OSSA, 2007. I am grateful to the participants in that section for their useful comments, questions, and suggestions.

Symposium. Point Reyes: Edgepress.

Craig, R. T. (1996). "Practical-Theoretical Argumentation". *Argumentation* 10, 461-474.

Fisher, A. (1988). *The logic of real arguments*. Cambridge: Cambridge University Press.

Gilbert, M. (2003). "But why call it an Argument?: In Defense of the Linguistically Inexplicable". In J. A. Blair, *et al*. (Eds.), *Informal Logic @25: Proceedings of the Windsor Conference*. CD-ROM, Windsor, ON: OSSA.

Gilbert, M. (2002). "Effing the Ineffable: The Logocentric Fallacy in Argumentation".

Goddu, G.C. (2003). "Against the "Ordinary Summing" Test for Convergence". *Informal Logic* 23, 215-236.
   Argumentation 16, 21-32.

Govier, T. (1987). *Problems in Argument Analysis and Evaluation*. Dordrecht-Holland: Foris Publications.

Groarke, L. (2003a). "Are Musical Arguments Possible?" In F.H. van Eemeren, *et al*. (Eds.), *Proceedings of the 5th International Conference on Argumentation.* Amsterdam: Sic Sat, 419-423.

Groarke, L. (2003b). "Why do argumentation theorists find it so difficult to recognize visual arguments?" In J. A. Blair, *et al*. (Eds.), *Informal Logic @25: Proceedings of the Windsor Conference*. CD-ROM, Windsor, ON: OSSA.

Groarke, L. (2002). "Johnson on the Metaphysics of Argument". *Argumentation* 16, 277-286.

Hitchcock, D. (2007). "Informal Logic and the Concept of Argument". In D.M. Gabbay, P. Thagard, and J. Woods (Series Eds.) and D. Jaquette (Vol. Ed.), *Handbook of the Philosophy of Science: Vol. 5. Philosophy of Logic*, Amsterdam: Elsevier B.V., 101-129.

Hitchcock, D. (2002). "The Practice of Argumentative Discussion". *Argumentation* 16, 287-298.

Hitchcock, D. (1998). "Does the Traditional Treatment of Enthymemes Rest on A Mistake?" *Argumentation* 12, 15-37.

Johnson, R. H. and J. A. Blair (1987). "The Current State of Informal Logic and Critical Thinking". *Informal Logic* 9, 147-51.

Johnson, R. H. (2003). "Why 'Visual' Arguments aren't Arguments". In J. A. Blair, *et al*. (Eds.), *Informal Logic @25: Proceedings of the Windsor Conference*. CD-ROM, Windsor, ON: OSSA.

Johnson, R. H. (2002). "Manifest Rationality Reconsidered: Reply to my Fellow Symposiats". *Argumentation* 16, 311-333.

Johnson, R. H. (2000). *Manifest Rationality*. Mahwah, NJ: Lawrence Erlbaum and Associates.

Johnson, R. H. (1999). "The Relation Between Formal and Informal Logic". *Argumentation* 13, 265-274.

Jonsen, A. R. and S. Toulmin (1988). *The Abuse of Casuistry: A History of Moral Argument*. Berkeley: University of California Press.

Tindale, C.W. (2002). "A Concept Divided: Ralph Johnson's Definition of Argument". *Argumentation* 16, 299-309.

Walton, D. (1996). *Argument Structure: A Pragmatic Theory*. Toronto: University of Toronto Press.